Inês M.L. Azevedo

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Education

Ph.D., 2009. Engineering & Public Policy, Carnegie Mellon University
M.Sc., 2009. Innovation & Management of Technology, IST Technical University of Lisbon
B.Sc., 2004. Environmental Engineering, IST Technical University of Lisbon

Employment History

Stanford University

2024 – present	Professor, Department of Energy Science & Engineering
	Professor (courtesy), Department of Civil & Environmental Engineering
	Professor (courtesy), Department of Earth System Sciences
2023 – 2024	Associate Professor (0%), Global Envir. Policy, Social Sciences Division
	Associate Professor (courtesy), Department of Civil & Environmental Eng.
2019 – 2024	Associate Professor, Department of Energy Science & Engineering

Carnegie Mellon University (CMU)

2017 – 2019	Full Professor, Department of Engineering & Public Policy
2014 – 2017	Associate Professor, Department. of Engineering & Public Policy
2013 – 2014	Assistant Professor, Department of Engineering & Public Policy
2010 – 2013	Assistant Research Professor, Department of Engineering & Public Policy
2009 – 2010	Research Engineer, Department of Engineering & Public Policy

Other Key Affiliations

2024 – present	Principal Investigator & Executive Director for DOE EARNEST ($23 million)
2022 – present	Nova School of Business Portugal, Visiting Professor
2019 – present	Senior Fellow, Woods Institute for the Environment, Stanford University
2020 – present	Senior Fellow, Precourt Institute for Energy, Stanford University
2010 – 2023	Co-Director and Co-PI, Center for Climate & Energy Decision Making, CMU
2016 – 2019	Affiliated Senior Research Fellow, Leeds University, UK
2015 – 2017	Affiliated Researcher, Lawrence Berkeley National Laboratory

Awards, Prizes, Honors

2026:	Inducted Member, Sigma Xi, The Scientific Honor Society
2021:	Terman Fellow Award, Stanford University
2021:	Gabilan Faculty Fellow Award, Stanford University
2017:	C3E Women in Clean Energy Research Award
2017:	Philip L. Dowd Fellowship Award, Carnegie Mellon University
2016:	Selected speaker, Federation of American Scientists Symposium
2014:	World Economic Forum Award Young Scientists Under 40, China
2013:	CMU's College of Engineering Dean's Early Career Fellowship

Scientific Advisory Roles

2022 – present:	Joint American Association for the Advancement of Science (AAAS) & American Bar Association National Conference of Lawyers & Scientists Committee
2023:	Scientific Council, Fundação para a Ciência e a Tecnologia, Portugal
2021 – present:	Advisory Committee, Sloan Foundation, Energy & Environment
2021 – present:	Climate Change & AI Academic Advisory Board: CC&AI is non-profit catalyzing work at the intersection of climate change & machine learning. https://www.climatechange.ai
2021 – 2025:	Macro-Energy Systems (MES) Steering Committee. MES is a research community effort led by several faculty and students working on energy systems analysis. https://www.macroenergysystems.org/
2016 – 2019:	US DOE Hydrogen & Fuel Cell Tech. Advisory Committee
2016 – 2018:	US Association for Energy Economics Council
2013 – 2021:	Pecan Street Research Data Board

Editorial Roles

2021 – present:	Executive Editorial Board, *Environmental Research: Climate*
2020 – present:	Editorial Board, *Energy & Climate Change*
2019 – present:	International Advisory Board, *Energy Policy*
2021:	Senior Editor, *Energy Policy*
2018 – 2023:	Editorial Board, *Annual Reviews of Environment and Resources*
2017 – 2025:	Executive Editorial Board, *Environmental Research Letters*
2015 – 2017:	Editorial Board, *Environmental Research Letters*

Publications

Peer-Review Journal Articles

*+ identified students and postdoctoral advisees working under my mentorship/supervision; * denotes papers where I am the corresponding author. For the last 6+ years, I have used the practice in my group that the senior author/lab group lead is listed last unless noted otherwise below.*

1. Singh, K.+, & Azevedo, I.M.L.*, (2025). Assessing the potential for solar development on coal mine land in India. Environmental Research Letters, 20, 114072.
2. Angliviel De La Beaumelle, N.+, & Azevedo, I.M.L.*, (2025). Techno-economic assessment of floating wind in California. Environmental Research Letters, 20, 114066.
3. Singh, M.+, Cain, B., & Azevedo, I.M.L., (2025). Retail rate design for decarbonized and resilient electricity systems. Progress in Energy, 7 (4), 043001.
4. Angliviel De La Beaumelle, N.+, Tehranchi, K.+, Simoncini, M., Shittu, E., & Azevedo, I.M.L.,* (2025). Floating offshore wind on the US west coast: An expert elicitation. Environmental Research Letters, 20, 114034.
5. Suri, D.+, de Chalendar, J., & Azevedo, I. M.L.*, (2025). Assessing the real implications for CO_2 as generation from renewables increases. *Nature Communications*, *16*(1), 7124.
6. Horing, J.+, Shivaran, R.+, & Azevedo, I.M.L.,*, (2025). Perceptions of wildfire risks and adaption behaviour in California. Environmental Letters: Climate, 4 (1), 015010.
7. Singh, K.+, Lobell, D. B., & Azevedo, I.M.L., (2025). Quantifying the impact of air pollution from coal-fired electricity generation on crop productivity in India. Proceedings of the National Academy of Sciences, 122(6), e2421679122.
8. Kawano, A., Kelp, M., Qiu, M., Singh, K.+, Chaturvedi, E., Dahiya, S., Azevedo, I.M.L. & Burke, M., (2025). Improved daily $PM_{2.5}$ estimates in India reveal inequalities in recent enhancement of air quality. Science Advances, 11(4).
9. Machala, M.L., Chen, X., Bunke, S.P., Forbes, G., Yegizbay, A., de Chalendar, J.A., Azevedo, I.M.L., Benson, S. & Tarpeh, W.A., 2025. Life cycle comparison of industrial-scale lithium-ion battery recycling and mining supply chains. Nature Communications, 16(1), p.988.
10. Hennessy, E. M.+, Scown, C. D., & Azevedo, I.M.L. (2024). The health, climate, and equity benefits of freight truck electrification in the United States. *Environmental Research Letters*, *19*(10), 104069.
11. Hennessy, E. M., Singh, M., Saltzer, S., & Azevedo, I.M.L., (2024). Pathways to zero emissions in California's heavy-duty transportation sector. *Environmental Research: Infrastructure and Sustainability*, *4*(3), 035001.
12. Powell, S.+, Martin, S.+, Rajagopal, R., Azevedo, I.M.L, & de Chalendar, J. (2024), Future-proof rates for controlled electric vehicle charging: comparing multi-year impacts of different emission factor signals, Energy Policy. 190, 114131.

13. Singh, K.+, Peshin, T.+, Sengupta, S.+, Thakrar, S.K., Tessum, C.W., Hill, J.D., Luby, S.P., & Azevedo I.M.L.*, (2024) Air Pollution Mortality from India's Coal Power Plants: Unit-level Estimates for Targeted Policy, Environmental Research Letters, 19 (6), 064016.
14. Hennessy, E.+, & Azevedo, I.M.L.*, (2024). Emerging environmental justice issues at the intersection of transportation and electricity systems. Perspective, Progress in Energy.
15. Singh, M.+, Tessum, C.W., Marshall, J., & Azevedo, I.M.L.*, (2024), Distributional impacts of fleet-wide change in light duty transportation: mortality risks of $PM_{2.5}$ emissions from electric vehicle and tier 3 conventional vehicles, Environmental Research Letters.
16. Peshin, T.+, Sengupta, S.+, Thakrar, S.K., Singh, K.+, Hill, J., Apte, J.S., Tessum, C.W., Marshall, J.D., & Azevedo, I.M.L.*, (2024). Air quality, health, and equity impacts of vehicle electrification in India, Environmental Research Letters, 19 (2), 024015.
17. Singh, M.+, Yuksel, T., Michalek, J, & Azevedo, I.M.L.*, (2024) Ensuring greenhouse gas reductions from electric vehicles compared to hybrid gasoline vehicles requires a cleaner US electricity grid. Nature Scientific Reports, 14 (1), 1639.
18. Angliviel de La Beaumelle, N+., Blok, K., de Chalendar, J. A., Clarke, L., Hahmann, A. N., Huster, J.+, ... & Azevedo, I.M.L., (2023). The global technical, economic, and feasible potential of renewable electricity. Annual Reviews of Environment & Resources, 48(1), 419-449.
19. Shivaram, R.+, & Azevedo, I.M.L.*, How COVID-19 altered energy and energy-relevant household resource consumption inequitably in the United States, (2023) Environmental Research Letters, 18 (8), 084023
20. Qiu M.+, Ratledge, N, Azevedo, I.M.L., Diffenbaugh, N.S., Burke, M., (2023). Drought impacts on the electricity system, emissions, and air quality in the western US, PNAS, 120 (28).
21. Sengupta, S.+, Thakrar, S. K+., Singh, K. +, Tongia, R., Hill, J. D., Azevedo, I.M.L.*, & Adams, P.J. (2022). Inequality in air pollution mortality from power generation in India. Environmental Research Letters, 18(1), 014005.
22. Sengupta, S. +, Adams, P. J., Deetjen, T. A. +, Kamboj, P., D'Souza, S., Tongia, R., & Azevedo, I.M.L.*, (2022). Subnational implications from climate and air pollution policies in India's electricity sector. Science, 378(6620).
23. Mohan, A.+, Sengupta, S. +, Vaishnav, P., Tongia, R., Ahmed, A., & Azevedo, I.M.L., (2022). Sustained cost declines in solar PV and battery storage needed to eliminate coal generation in India. Environmental Research Letters, 17(11), 114043.
24. Powell, S.+, Cezar, G.V. +, Min, L., Azevedo, I.M.L.*, & Rajagopal, R.*, (2022) Charging infrastructure access and operation to reduce the grid impacts of deep electric vehicle adoption. Nature Energy, 7(10), 932-945.
25. Peshin, T. +, Sengupta, S.+, & Azevedo, I.M.L.*, (2022). Should India move towards vehicle electrification? Assessing life-cycle greenhouse gas and criteria air pollutant emissions of alternative and conventional fuel vehicles in India. Environmental Science & Technology., 56(13), 9569-9582.
26. Sengupta, S.+, Spencer, T., Rodrigues, N., Pachouri, R., Thakare, S., Adams, P., Tongia, R., & Azevedo, I.M.L.*, (2022). Current and future estimates of marginal emission factors for Indian power generation. Environmental Science & Technology, 13, 9237-9250.

27. Hennessy, E.+, de Chalendar, J., Benson, S., & Azevedo, I.M.L., (2022). Distributional health impacts of electricity imports in the United States. Environmental Research Letters, 17(6), 064011.
28. Wörner, A.+, Tiefenbeck, V., Wortmann, F., Meeuw, A., Ableitner, L., Fleisch, E., & Azevedo, I.M.L., (2022). Bidding on a peer-to-peer energy market: A field study. Information Systems Research, 33(3), 794-808.
29. DeAngelo+, J., Azevedo, I.M.L., Bistline, J, Clarke, L., Luderer, G, Byers, E, & Davis, S.J. (2021). Net-zero CO_2 emissions energy systems in scenarios. Nature Energy, 12(1), 6096.
30. Sherwin, E.D.+, Meyer, R. M., & Azevedo, I.M.L., (2022). Limitations of econometric evaluation of nonrandomized residential energy efficiency programs: A case study of Northern California rebate programs. Environmental Data Science, 1.
31. Whiston, M.M.+, Azevedo, I.M.L., Litster, S., Samaras, C., Whitefoot, K. S., & Whitacre, J. F. (2022). Expert elicitation on paths to advance fuel cell electric vehicles. Energy Policy, 160, 112671.
32. Whiston, M.M.+, Azevedo, I.M.L., Litster, S., Samaras, C., Whitefoot, K.S., & Whitacre, J. F. (2021). Paths to market for stationary solid oxide fuel cells: Expert elicitation and a cost of electricity model. Applied Energy, 304, 117641.
33. Baker, E., Goldstein, A. P., & Azevedo, I.M.L., (2021). A perspective on equity implications of net zero energy systems. Energy and Climate Change, 2, 100047.
34. Azevedo, I.M.L., Bataille, C., Bistline, J., Clarke, L., & Davis, S., Net-zero emissions energy systems: what we know and do not know, Energy and Climate Change 2, 100049.
35. Balasubramanian S.+, Domingo N.G.+, Hunt N.D., Gittlin M., Colgan K.K., Marshall J.D., Robinson A.L., Azevedo I.M.L., Thakrar S.K., Clark M.A., Tessum C.W., & Hill, J.D. (2021). The food we eat, the air we breathe: a review of the fine particulate matter-induced air quality health impacts of the global food system. Environmental Research Letters 16 (10):103004.
36. Saunders*, H.D., Roy, J.*, Azevedo*, I.M.L., Chakravarty, D., Dasgupta, S., de la Rue du Can, S., Druckman, A., Fouquet, R., Grubb, M., Lin, B., Lowe, R., Madlener, R., McCoy, D.L., Mundaça, L., Oreszczyn, T., Sorrell, S., Stern, D., Tanaka, K., & Wei, T. (2021). Energy efficiency: what has research delivered in the last 40 years? Annual Review of Environment and Resources, 46.
37. De La Maza, C.+, Davis, A., & Azevedo, I.M.L. (2021). Welfare analysis of the ecological impacts of electricity production in Chile using the sparse multinomial logit model, Ecological Economics 184, 107010.
38. Adekanye, O.G.+, Davis, A., & Azevedo, I.M.L. (2021). Do LED lightbulbs save natural gas? Interpreting simultaneous cross-energy program impacts using electricity and natural gas billing data. Environmental Research Communications, 3(1), 015003.
39. Goteti, N.S.+, Hittinger, E., Sergi, B.+, & Azevedo, I.M.L., (2021). How does new energy storage affect the operation and revenue of existing generation? Applied Energy, 285, 116383.
40. Bruchon+, M.B., Michalek, J.J., & Azevedo, I.M.L. (2021). Effects of air emission externalities on optimal ridesourcing fleet electrification and operations. Environmental Science & Technology, 55(5), 3188-3200.

41. Ward, J. W. +, Michalek, J. J., Samaras, C., Azevedo, I.M.L., Henao, A., Rames, C., & Wenzel, T. (2021). The impact of Uber and Lyft on vehicle ownership, fuel economy, and transit across US cities. Iscience, 24(1), 101933.
42. Whiston, M.M.+, Azevedo, I.M.L., Lister, S., Samaras, C., Whitefoot, K.S., Whitacre, J., (2021). Hydrogen storage for fuel cell electric vehicles: Expert elicitation and a levelized cost of driving model, Environmental Science & Technology, 55, 1, 553-562.
43. Clark, M.A. Domingo, N.G.G.+, Colgan, K., Thakrar, S.K.+, Tilman, D., Lynch, J., Azevedo, I.M.L., & Hill, J.D., (2020). Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets, Science, 370 (6517), 705-708.
44. Cardoso, J., Silva, V.B., Eusébio, D., Azevedo, I.M.L., & Tarelho, L, (2020). Techno-economic analysis of forest biomass blends gasification for small-scale power production facilities in the Azores, Fuel, 279, 118552.
45. Sergi, B.+, Azevedo, I.M.L., Davis, S. J., & Muller, N. Z. (2020). Regional and county flows of particulate matter damage in the US. Environmental Research Letters, 15(10), 104073.
46. Diffenbaugh, N.S., Field , C.B. , Appel, E.A. Azevedo, I.M.L., Baldocchi, D.D., Burke, M., Burney, J.A., Ciais, P., Davis, S. J., Fiore, A.M., Fletcher, S.M, Hertel, T.W., Horton D.E., Hsiang, S.M, Jackson, R.B., Jin, X., Levi, M., Lobell, D.B., McKinley, G.A., Moore, F.C., Montgomery, A., Nadeau, K.C., Pataki, D.E., Randerson, J.T., Reichstein, M., Schnell, J.L., Seneviratne, S., I., Singh, D., Steiner, A.L., & Wong- Parodi, G., (2020). The COVID-19 lockdowns: a window into the Earth System. Nature Reviews Earth & Environment, 1(9), 470-481.
47. Sherwin, E.D.+, & Azevedo, I.M.L., (2020). Characterizing the association between low-income electric subsidies and the intra-day timing of electricity consumption. Environmental Research Letters, 15(9), 094089.
48. Deetjen, T.A.+, & Azevedo, I.M.L., (2020). Climate and health benefits of rapid coal-to-gas fuel switching in the US power sector offset methane leakage and production cost increases. Environmental Science & Technology, 54(18), 11494-11505.
49. Thakrar, S.K. +, Balasubramanian, S., Adams, P.J, Azevedo, I.M.L., Muller, N.Z., Pandis, S.N., Polasky, S., Pope, C.A., Robinson, A.L., Apte, J.S., Tessum, C.W., Marshall, J.D., * Hill, J.D., (2020). Reducing mortality from air pollution in the United States by targeting specific emission sources. Environmental Science & Technology Letters, 7(9), 639-645.
50. Sergi, B. J.+, Adams, P. J., Muller, N. Z., Robinson, A. L., Davis, S. J., Marshall, J. D., & Azevedo, I.M.L., (2020). Optimizing emissions reductions from the US power sector for climate and health benefits. Environmental Science & Technology, 54(12), 7513-7523.
51. Tong, F. +, & Azevedo, I.M.L., (2020). What are the best combinations of fuel-vehicle technologies to mitigate climate change and air pollution effects across the United States? Environmental Research Letters, 15(7), 074046.
52. Adekanye, O.G. +, Davis, A., & Azevedo, I.M.L., (2020). Federal policy, local policy, and green building certifications in the U.S., Energy and Buildings, 209, 109700.
53. Lamy, J., de Bruin, W.B., Azevedo, I.M.L., & Morgan, M.G., (2020). Keep wind projects close? A case study of distance, culture, and cost in offshore and onshore wind energy siting. Energy Research & Social Science, 63, 101377.
54. Glasgo, B., Khan, N., Azevedo, I.M.L., (2020). Simulating a residential building stock to support regional efficiency policy, Applied Energy, 261, 114223.

55. Mayfield+, E., Cohon, J, Muller, N., Azevedo, I.M.L., & Robinson, A.L., (2019). Quantifying the social equity state of an energy system: Environmental and labor market equity of the shale gas boom in Appalachia, Environmental Research Letters, 124072.
56. Thind+, M.P.S., Tessum, C.W., Azevedo, I.M.L., & Marshall, J.D., (2019). Fine particulate air pollution from electricity generation in the US: health impacts by race, income, and geography. Environmental Science & Technology, 53(23), 14010-14019.
57. Lesic, V.+, Glasgo, B., Azevedo, I.M.L.*, Krishnamurti, T. Bruine de Bruin, W., & Davis, M. (2019). Comparing consumer perceptions of appliances' electricity use to appliances' actual direct-metered consumption. Environmental Research Communications, 1(11), 111002.
58. Mayfield, E.N.+, Cohon, J.L., Muller, N.Z., Azevedo, I.M.L., & Robinson, A.L., (2019). Cumulative environmental and employment impacts of the shale gas boom. Nature Sustainability, 2(12), 1122-1131.
59. Tschofen, P.,+, Azevedo, I.M.L., & Muller, N.Z., (2019). Fine particulate matter damages and value added in the US economy, Proceedings of the National Academy of Sciences, 116(40), 19857-19862.
60. Deetgen, T. +, & Azevedo, I.M.L.*, (2019). Reduced-order dispatch model for simulating marginal emissions factors for the United States power sector. Environmental Science & Technology, 53 (17)..
61. Ward, J.W.+, Michalek, J.J, Azevedo, I.M.L., Samaras, C., & Ferreira, P., (2019). Effects of on-demand ridesourcing on vehicle ownership, fuel consumption, vehicle miles traveled, and emissions per capita in U.S. States, Transportation Research Part C, Volume 108, 289-301 .
62. Donti, P. +, Kolter, J.Z., & Azevedo, I.M.L.*, (2019). How much are we saving after all? Characterizing the effects of commonly varying assumptions on emissions and damage Estimates in PJM. Environmental Science & Technology.
63. Whiston, M. +, Azevedo, I.M.L., Lister, S., Whitefoot, K.W., Samaras, C., & Whitacre, J.F., (2019). Meeting U.S. solid oxide fuel cell targets, Joule, 3 (9), 2060-2065.
64. Helveston, J.P. +, Seki, S.M. +, Min, J. +, Fairman, E, Boni, A.A., Michalek, J.J., & Azevedo, I.M.L., (2019), Choice at the pump: measuring preferences for lower-carbon combustion fuels. Environmental Research Letters, 14 (8), 084035.
65. Sun, X.+, Gingerich, D.B.+, Azevedo, I.M.L.*, & Mauter, M.S.*, (2019). Trace element mass flow rates from US coal fired power plants, Environmental Science & Technology, 53, 5585−5595.
66. Jenn, A. +, Azevedo, I.M.L., & Michalek, J., (2019). Alternative-fuel-vehicle policy interactions increase U.S. greenhouse gas emissions. Transportation Research Part A: Policy and Practice, 124, 396-407.
67. Whiston, M. +, Azevedo, I.M.L., Lister, S., Whitefoot, K.W., Samaras, C., & Whitacre, J.F., (2019). Expert assessments of cost and expected future performance of proton exchange member fuel cell for vehicles, Proceedings of the National Academy of Sciences, 116 (11) 4899-4904.
68. Hanus, N. +, Wong-Parodi, G, Vaishnav, P, Darghouth, N., & Azevedo, I.M.L.*, (2019). Solar PV as a mitigation strategy for the U.S. education sector, Environmental Research Letters, 14(4), 4004.

69. Sergi, B.+, Azevedo, I.M.L., Xia, T., Davis, A., & Xu, J., (2019). Support for emissions reductions based on immediate and long-term pollution exposure in China, Ecological Economics, 158, 26-33.

70. De La Maza, C. +, Davis, A., Gonzalez, C., & Azevedo, I.M.L.*, (2019). Understanding cumulative risk perception from judgments and choices: An application to flood risks, Risk Analysis, 39(2).

71. Tong. F.+, Jaramillo, P., & Azevedo, I.M.L., (2018). Economic viability of a natural gas refueling infrastructure for long-haul yrucks. Journal of Industrial Systems, 25(1), 04018039.

72. Markolf, S.A. +, Matthews, H.S., Azevedo, I.M.L., & Hendrickson, C., (2018). The implications of scope and boundary choice on the establishment and success of metropolitan greenhouse gas reduction targets in the United States, Environmental Research Letters, 13(12) 4015.

73. Masnadi, M.S., El-Houjeiri, H.M., Schunack, D., Li, Y., Englander, J.G., Badahdah, A., Monfort J-C, Anderson, J.E., Wallington, T. H., Bergerson, J. A., Gordon, D., Koomey, J., Przesmitzki, S. Azevedo, I. L., Bi, X.T., Duffy, J.E., Heath, G.A., Keoleian, G.A., McGlade, C., Meehan, D.N., Yeh, S., You, F., Wang, M., & Brandt, A.R., (2018). Global carbon intensity of crude oil production, Science 361 (6405), 851-853.

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75. Davis, S.D., Lewis, N.S, Shaner, M., Aggarwal, S., Arent, D., Azevedo, I.M.L., Benson, S.M, Bradley, T., Brouwer, J., Chiang Y-M, Clack, C.T.M., Cohen, A., Doig, S., Edmonds, J, Fennell, P., Field, CB., Hannegan, B., Mathias Hodge, B., Hoffert, M.I, Ingersoll, E., Jaramillo, P,. Lackner, K.S., Lynd, L.R., Mach, K.J, Mastrandrea, M., Ogden, J., Peterson P.F., Sanchez, D.L., Sperling, D., Stagner, J., Trancik, J.E., Yang, C-S, & Caldeira, K., (2018). Net zero emissions energy systems, Science, Vol. 360, Issue 6396, eaas9793, DOI:10.1126/science.aas9793

76. Glasgo, B.+, Hendrickson, C., & Azevedo, I.M.L., (2018). Expert assessments on the future of direct current in buildings, Environmental Research Letters, 13(7), 4004.

77. Schivley, G. +, Samaras C., & Azevedo, I.M.L., (2018). Emissions intensity of the U.S. power system, Environmental Research Letters, 13(6), 4018.

78. Lam, L. +, Branstetter, L., & Azevedo, I.M.L.*, (2018). A Sunny Future: Expert Elicitation of China's Solar Photovoltaic Technologies, Environmental Research Letters, 13 (3) 034038.

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80. Sherwin, E. +, Azevedo, I.M.L.*, & Henrion, M., (2018). Estimations of year-to-year volatility and unpredictability of the United States energy system, Nature Energy, 1.

81. Lesic, V.+, Bruine de Bruin, W., Davis, M., Krishnamurti, T., & Azevedo, I.M.L.* (2018). What are consumers's perceptions of energy use and energy savings? Environmental Research Letters, 13 (3).

82. Prata, R. +, Carvalho, P., & Azevedo, I.M.L., (2018). Distributional costs of wind energy production in Portugal under the liberalized Iberian Market regime, Energy Policy, 113, 500-512.

83. Lamy, J.+, & Azevedo, I.M.L., (2018). Do tidal stream energy projects offer more value than offshore wind farms? A case study in the United Kingdom, accepted, Energy Policy, 113, 28-40.

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85. Trutnevyte, E., & Azevedo, I.M.L., (2017). Induced seismicity hazard and risk by enhanced geothermal systems: an expert elicitation approach. Environmental Research Letters, 13 (3), 034004.

86. Thind, M.P.S. +, Wilson, E., Azevedo, I.M.L., & Marshall, J., (2017). Marginal emissions factors for electricity generation in the midcontinent ISO, Environmental Science & Technology, 51 (24), 14445-14452.

87. Gilbraith N.+, I.L, Jaramillo, P., Azevedo, I.M.L.*, (2017). Quantifying the capacity value of natural gas energy efficiency measures in New England, Utilities Journal.

88. Hittinger, E., & Azevedo, I.M.L., (2017). Estimating the quantity of wind and solar required to displace storage-induced emissions, Environmental Science & Technology, 51 (21), 12988-12997.

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92. Lam, L.+, Branstetter, L., & Azevedo. I.M.L., (2017). Not all patents are created equal: wind innovation in China, Energy Policy, 106, 588-599.

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94. Glasgo, B. +, Hendrickson, C., & Azevedo, I.M.L., (2017). Using advanced metering infrastructure to characterize residential energy use, The Electricity Journal, 30 (3), 64-70 (reviewed only by the editor).

95. Welle, P.+, Azevedo, I.M.L.*, Doney, S., & Small, M., (2017). Estimating the effect of multiple environmental stressors on coral bleaching and mortality, PlosOne, 2(5): e0175018.

96. Gingerich, D.+, Sun, X.+, Behrer, P., Azevedo, I.M.L., & Mauter, M., (2017). Spatially resolved air-water emissions tradeoffs improve regulatory impact analysis for electricity generation. Proceedings of the National Academy of Sciences, 114 (8), 1862-1867.

97. Markolf, S.+, Matthews, H.S., Azevedo, I.M.L., & Hendrickson, C.T., (2017). An integrated approach for estimating greenhouse gas emissions from 100 US metropolitan areas, Environmental Research Letters, 12, 024003.

98. Peña, I. +, Azevedo, I.M.L.*, & Ferreira, L.M., Was it worth it? (2017). A review of Portuguese wind policies and technology diffusion. Energy Policy, 103, 193–202.

99. Horner+, N., Shehabi, A., & Azevedo, I.M.L. (2016). Known unknowns: indirect energy effects of information and communication technology. Environmental Research Letters, 11,10.

100. Lam, L.+, Branstetter, L., & Azevedo, I.M.L., (2016). China's wind electric and cost of carbon mitigation are more expensive than anticipated. Environmental Research Letters, 11, 8.

101. Glasgo, B.+, Azevedo, I.M.L., & Hendrickson, C., (2016). How much electricity can we save by using direct current circuits in homes? Understanding the potential for electricity savings and assessing feasibility of a transition towards DC powered buildings. Applied Energy, 180, 66–75.

102. Lamy, J.+, Jaramillo, P., Azevedo, I.M.L., & Wiser, R., (2016). Should we build wind farms close to load or invest in transmission to access better wind resources in remote areas? A case study in the MISO region. Energy Policy, 96, 341-350.

103. Horner, N.+, & Azevedo, I.M.L., (2016). Power usage effectiveness in data centers: overloaded and underachieving. The Electricity Journal, 29, 61-69. (reviewed only by the editor)

104. Yuksel, T.+, Tamayao, M-A. +, Hendrickson, C., Azevedo, I.M.L., & Michalek, J., (2016). Effect of regional grid mix, driving patterns and climate on the comparative carbon footprint of gasoline and plug-in electric vehicles in the United States. Environmental Research Letters, 11, 044007.

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108. Tong, F. +, Azevedo, I.L., & Jaramillo, P., (2015). A Comparison of life cycle greenhouse gases from natural gas pathways for light-duty vehicles. Energy and Fuels, 29 (9), 6008-6018.

109. Gillingham, K., Jenn, A.+, & Azevedo, I.M.L., (2015). Heterogeneity in the response to gasoline prices: evidence from Pennsylvania and implications for the rebound effect. Energy Economics, 52 (1).

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113. Jenn, A. +, Azevedo, I.M.L.*, & Fischbeck, P., (2015). How do we fund our roads? A case of decreasing revenue from electric vehicles. Journal of Transportation Research Part A: Policy and Practice, 74, 136-147.

114. Hittinger, E., & Azevedo, I.M.L., (2015). Bulk energy storage increases US electricity system emissions. Environmental Science & Technology, 49 (5), 3203-3210.

115. Posen, I.D. +, Griffin, W.M., Matthews, H.S., & Azevedo, I.M.L., (2015). Changing the renewable fuel standard to a renewable material standard: bio-ethylene case study. Environmental Science & Technology, 49 (1), 93-102.

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119. Azevedo, I.M.L.* (2014). Energy efficiency and rebound effects: a review. Annual Reviews of Environment and Resources, 39.

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122. Thomas, B.+, & Azevedo, I.M.L.*, (2014). Should policy-makers allocate funding to vehicle electrification or end-use energy efficiency as a strategy for climate change mitigation and energy reductions? Rethinking electric utilities efficiency programs. Energy Policy, 67, 28-26.

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137. Blackhurst M.+, Azevedo, I.M.L., Matthews, H.S., & Hendrickson, C.T. (2011). Designing building energy efficiency programs for greenhouse gas reductions. Energy Policy. 39 (9), 5269-5279.

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140. Azevedo, I.M.L.*, Morgan, M.G., & Lave, L., (2011). Residential and regional electricity consumption in the US and EU: how much will higher prices reduce CO_2 emissions? The Electricity Journal, 24 (1), 1040-6190. (reviewed only by the editor)

141. Azevedo, I.M.L.*, Morgan, M.G., & Morgan, F., (2009). The transition to solid-state lighting. The Proceedings of the IEEE, 97 (3).

Key technical reports

2023: **U.S. National Climate Assessment**, Lead Author, Mitigation Chapter.

2022: **Intergovernmental Panel on Climate Change (IPCC)**, Assessment Report 6 (AR6), Working Group III, Lead Author.

2020: **U.S. National Academy of Sciences**, National Research Council, Author & Committee Member. Report on Reducing the fuel consumption and greenhouse gas emissions of medium and heavy-duty vehicles, phase 2, final report.

2014: **U.S. National Academy of Sciences**, National Research Council, Author & Committee Member. Report on Reducing the fuel consumption and greenhouse gas emissions of medium- and heavy-duty vehicles, phase two, first report.

2013: **U.S. National Academy of Sciences**, National Research Council. Author & Committee Member. Report on Assessment of Solid-State Lighting

Journal editorial letters

Ashok, G., Tomich, T.P., Agrawal, A., Allouche, J. Azevedo, I.M.L., Bakarr, M.I.., Jannuzzi G., et al. (2022). The Great Intergenerational Robbery: A Call for Concerted Action Against Environmental Crises. Annual Review of Environment and Resources 47 (2022). Editorial letter.

Thomas, S., Henggeler Antunes, C, Azevedo, I.M.L., Madlener, R., Yeh, S., Zhou, P, Du, H., & Goutte, S., Recent developments at Energy Policy. Energy Policy 159 (2021). Editorial letter.

Azevedo, I., Bataille, C., Bistline, J., Clarke, L., & Davis, S. (2021). Introduction to the special issue on Net-Zero Energy Systems. Energy and Climate Change, 2, 100066. Editorial letter.

Other technical reports, contributions in books, and other writings

1. Article: Azevedo, I.M.L., Jenkins, J., Karplus, V., Michaelson, M., & Victor, D., (2020). The paths to net zero, Foreign Affairs (not peer-reviewed - reviewed and edited by Foreign Affairs).
2. Book chapter: 2023 “Interdisciplinary Research on Climate and Energy Decision Making, 30 years of research on Global Change – Research and Teaching in Environmental Studies”, edited by M. Granger Morgan, Routledge.
3. Book chapter: 2019 “Theory and Practice in Policy Analysis” Contributing author to Chapter 19 (Science & Technology Advice to Government).

4. Science outreach/communication: Morgan, M. G., Vaishnav, P., Dowlatabadi, H., & Azevedo, I.M.L. (2017). Rethinking the social cost of carbon dioxide. Issues in Science and Technology, 33(4), 43-50.
5. Report: Shehabi, A., Smith, S.J., Sartor, D.A., Brown, R.E., Herrlin, M., Koomey, J.G., Masanet, E.R., Horner, N., Azevedo, I.M.L., & Lintner, W. (2016). United States Data Center Energy Usage Report. LBNL.
6. Report: Azevedo, I.M.L., Sonnberger, M., Thomas, B., Morgan, G., & Renn, O., (2013). The Rebound Effect: Implications of Consumer Behaviour for Robust Energy Policies. International Risk Governance Council.
7. Policy brief: Contributor to "Managing Variable Energy Resources to Increase Renewable Electricity's Contribution to the Grid – A Policy Maker Guide". Report from the Wilton Scott Institute for Energy Innovation, Carnegie Mellon University (2013).
8. Report: Azevedo, I.M.L., Jaramillo, P., Rubin, E., & Yeh, S., (2013). Modeling technology learning for electricity supply technologies. Phase II report for the Electric Power Research Institute.
9. Report: Azevedo, I.M.L., Jaramillo, P., Rubin, E., & Yeh, S., (2013). Modeling technology learning for electricity supply technologies. Phase I report for the Electric Power Research Institute.
10. Report: Global Energy Assessment, (2012). Lead contributing author to "Chapter 16: Trends and transitions in energy systems", International Institute for Applied Systems Analysis (IIASA).
11. Report: Stadler, M., Marnay, C., Azevedo, I.M.L, Komiyama, R., & Lai, J., (2009). The open-source stochastic building simulation tool SLBM and its capabilities to capture uncertainty of policymaking in the U.S. building sector. LBNL-1884E. May 2009.

Full proceedings in conferences and symposia

1. Sergi, B., Adams, P., Muller, N., Robinson, A., Davis, S., & Azevedo, I.M.L., (2018). Integrating climate and health objectives to inform clean energy siting in capacity expansion modeling. Energy Policy Research Conference, Boise, ID, September 6-7.
2. Donti, P.L., Azevedo I.M.L., & Kolter J.Z. (2018) Inverse optimal power flow: assessing the vulnerability of power grid data, Modeling the Physical World: Perception, Learning, and Control Workshop at NeurIPS 2018, Montreal, Canada. December 7.
3. Donti, P.L., Azevedo I.M.L., & Kolter J.Z. (2018) Inverse optimal power flow: assessing the vulnerability of power grid data, AI for Social Good Workshop at NeurIPS 2018, Montreal, Canada. December 8.
4. Glasgo, B., Azevedo, I.M.L., & Hendrickson, C., (2017). Understanding the value of information in residential building simulation: Comparing simulated and actual building loads at the circuit level. 9th International Conference on Energy Efficiency in Domestic Appliances and Lighting, Irvine, CA, September 13-15.
5. Hanus, N., Wong-Parodi, G., Azevedo, I.M.L., & Davis, A. (2017). PV technical potential in the United States with a focus on non-profit buildings and the associated regional health and environmental benefits. 9th International Conference on Energy Efficiency in Domestic Appliances and Lighting, Irvine, CA, USA. September 13-15.

6. Sherwin, E.D., & Azevedo, I.M.L. (2017). Do low-income electric subsidies make electricity consumption more peaky? Energy Efficiency in Domestic Appliances and Lighting, Irvine, California. September 13-15.
7. Sherwin, E.D., & Azevedo, I.M.L. (2017). Do low-income electric subsidies change electricity consumption behavior? International Energy Program Evaluation Conference, Baltimore, Maryland. August 8-10.
8. Sherwin, E.D., Azevedo, I.M.L., & Meyer, R.M. (2017). Characterization of utility programs' enrollment by income and region, European Council for an Energy Efficient Economy Summer Study, Hyeres, France. May 29-June 3.
9. Horner, N., Azevedo, I.M.L., Sicker, D., & Agarwal, Y. (2016). Dynamic data center load response to variability in private and public electricity costs, IEEE International Conference on Smart Grid Communications, Sydney, Australia, November 6-9, 2016.
10. Baptista, P.C., Azevedo, I.M.L., & Farias, I.L., (2012). ICT solutions in transportation systems: estimating the costs, benefits, and environmental impacts in the Lisbon region, 15th Edition of the European Working Group on Transportation, Paris, France, September 10-12, 2012.
11. Abreu, J., Azevedo, I.M.L., & Pereira, F. (2011). A contribution for a better understanding of the residential sector electricity demand, Proceedings of the European Energy Efficiency Council (ECEEE) Summer Study, France, June 6-11, 2011.
12. Azevedo, I.L., (2007). Energy efficiency and conservation: a bright idea with solid-state lighting? European Council for an Energy Efficient Economy (ECEEE) Summer Study, June 4-9, 2007.
13. Lam, L., Azevedo, I.M.L., & Branstetter, L., (2014). The unsustainable rise of the Chinese wind turbine manufacturing industry. NBER conference on The Economics of Environmental Protection in China.

Conference presentations with peer-reviewed abstracts

My group and I provided **~140 presentations** at conferences that required **peer-reviewed abstracts.** List can be provided upon request.

Invited Seminars / Keynote Addresses

*Note: To limit length, this list includes only invited talks **since 2016**. The list of previous talks **can be provided upon request**.*

1. Invited seminar speaker, Net Zero Program, Stanford University. October 27th, 2025.
2. **Keynote Speaker** for the Association of Natural and Environmental Research Economics (AERNA) Spanish Portuguese Conference. September 4th – 6th, 2024. https://www.aerna2024.com
3. Invited seminar speaker. University of Wisconsin-Madison Julian E. Mack **Distinguished Lectures**. Department of Physics. https://www.physics.wisc.edu/mack-lectures/#speakers
4. Invited seminar speaker. University of Maryland, Earth System Science Interdisciplinary Center. Feb 5th, 2024. https://essic.umd.edu/welcome-to-the-spring-2024-essic-seminar-series/
5. Invited seminar speaker, SLAC, October 9th, 2023.
6. Invited seminar speaker, Joint Degree Program in Social Science and Social Policy, Princeton University October 3rd, 2023.
7. Invited seminar speaker, Princeton School for Public and International Affairs (SPIA), Princeton University, October 2nd, 2023
8. Panel (moderator), C3E Women in Clean Energy, MIT, September 28th, 2023.
9. Invited speaker, IIT Workshop, IIT Bombay, India, September 6th.
10. **Keynote speaker**, Energy Generation Leadership Program, Stanford U., April 20th, 2023.
11. Invited seminar speaker, Chevron Flexibility Mechanisms Evaluation Network, Feb. 2nd, 2023.
12. **Invited Keynote Speaker**, NeurIPS Tackling Climate Change with ML, Dec. 9th, 2022.
13. Invited seminar speaker, Bren School of Envir. Science & Manag., UCSB, Oct. 31st, 2022.
14. Invited seminar speaker, Deep Decarbonization Initiative, UC San Diego, Oct. 26th, 2022.
15. Plenary Session Speaker, panel on Energy Justice, USAEE, Houston, Texas, Oct. 24th, 2022.
16. Invited panel speaker for the U.S. DOE Better Buildings Residential Network, Aug. 11th, 2022.
17. Invited seminar speaker, Economics Series, Nova Business School, Portugal, July 12th, 2022.
18. Invited seminar speaker, Smart Grid Seminar, Stanford University, April 28th, 2022.
19. Invited seminar speaker, Energy Seminar, University of Texas Austin, April 26th, 2022.
20. Invited seminar speaker, Smart Grid Seminar, Stanford University, October 28th, 2021.

21. Invited seminar speaker, Energy Graduate Group, UC Davis, October 15th, 2021.
22. Invited speaker, Environmental Studies seminar series, UC Santa Cruz, Oct. 11th, 2021.
23. Invited speaker, Sustainable Development seminar series, Columbia U., October 4th, 2021.
24. Invited seminar speaker, Public Policy Graduate Program, Stanford U., September 29th, 2021.
25. Invited seminar speaker, Dep. of Energy Resources Engineering, Stanford U., May 3rd, 2021.
26. Invited speaker, short talk, StorageX meeting, Stanford U., March 23rd, 2021.
27. Invited seminar speaker, Center European Economic Research, Manheim U., Mar. 22nd, 2021.
28. Invited seminar speaker, Dep. of Energy Resources Engineering, March 11th, 2021.
29. Invited speaker, Electric Energy Systems & Optim. workshop, Georgia Tech, Dec. 10th, 2020.
30. Keynote speaker, Smart Cities International Symposium, Incheon National U., Dec. 16th, 2020.
31. Invited panelist, C3E Women in Clean Energy Symposium and Awards, December 8th, 2020.
32. Invited talk, AGU Innovative Session, December 2nd, 2020.
33. Invited talk, Stanford CARS Annual Meeting, Stanford U., November 11th, 2020.
34. Plenary symposium speaker, Encontro para a Ciência, Lisbon, Portugal, November 3rd, 2020.
35. Invited seminar speaker, University of British Columbia, Dec. 3rd, 2020.
36. Invited seminar speaker, Pennsylvania State University, October 22nd, 2020.
37. Invited seminar speaker, University of Washington, October 15th, 2020.
38. Invited seminar speaker, Energy Resources Group, UC Berkeley, October 14th, 2020.
39. Moderator, panel on Macro Energy Systems, Stanford University, September 28th, 2020.
40. Invited presentation, PIE Council Meeting. Stanford University, Aug. 25th, 2020.
41. Invited panel presentation, Rensselaer Polytechnic Institute, March 5th, 2020.
42. Invited seminar speaker, Dep. of Civil and Env. Eng, , UC Berkeley, February 28th, 2020.
43. Invited workshop speaker, New Mexico Decarbonization, Santa Fé Institute, Feb. 27th, 2020.
44. Panel participant, Stanford Energy Dialogues - Energy Demand, Stanford U. Jan. 21st, 2020.
45. Invited seminar speaker, Lawrence Berkeley National Laboratory, November 13th, 2019.
46. Invited speaker, CARS Annual Meeting, Stanford University, November 7th, 2019.

47. Invited seminar speaker, Energy Institute seminar, Stanford University, October 21st, 2019.
48. Presenter, Chevron Leaders meeting, Stanford University, October 14th, 2019
49. Invited seminar speaker, Rice University, 2019
50. Invited speaker, Energy @ Stanford & SLAC, Stanford University, 2019.
51. Invited Keynote Lecture at University of Pittsburgh at Greensburg, April 16th, 2019.
52. Opening plenary session speaker, Mascaro Envir. Sustainability Conference, Apr. 7th-9th, 2019
53. Invited speaker, Oak Ridge Annual Meeting Council for Sponsoring Inst., March 5th, 2019.
54. Invited speaker, Encontros da Ciência, Portugal, July 2nd, 2018.
55. Invited speaker, IIASA & RITE Workshop, Nara, September 25th, 2018.
56. Invited speaker, Imperial University, June 29th, 2018.
57. Invited speaker, Academy on Sustainability & Technology, ETH Zurich June 1st, 2017.
58. Invited panel speaker, CMU Energy Week, March 31st, 2017.
59. Invited speaker, PA Env. Council, Paths for Pennsylvania's Electricity Future, Mar, 15th, 2017.
60. Invited seminar speaker, Dep. Energy & Resources Engineering, Stanford U. March 13th, 2017.
61. Invited speaker, Colloquia, Center for Energy Policy & Econ., ETH Zurich, Dec. 16th, 2016.
62. Invited speaker, Colloquia, Institute of Science, Tech. & Policy, ETH Zurich, Dec. 13th, 2016.
63. Invited speaker, Behavioral Colloquium, ETH Zurich, December 13th, 016.
64. Invited seminar speaker, Science, Technology, & Environ. Policy, Princeton U., Dec. 5th, 2016.
65. Invited speaker, iTeam seminar, Carnegie Mellon U. December 2nd, 2016.
66. Invited Seminar, School of Global Policy & Strategy, UC San Diego, October 26th, 2016.
67. Invited speaker, Federation of American Scientists Symposium, September 28th, 2016.
68. Invited seminar speaker, U.C. Irvine, September 21st, 2016.
69. Invited presentation, Aspen Global Change Institute, August 1st, 2016.
70. Invited seminar speaker, Inst. for Atmospheric & Climate Science ETH Zurich, May 5th, 2016.
71. Invited talk, 1st Steinbrenner Annual Meeting, Carnegie Mellon U. April 22th, 2016.
72. Invited talk, Electricity Conference, UT Austin, April 21st, 2016.
73. Invited speaker, Andy Talk, 1st Energy Week at Carnegie Mellon University March 13th, 2016.

Mentoring

At Stanford University, I advise students in several graduate programs: Energy Science & Engineering (ESE, formerly ERE); the Emmett Interdisciplinary Program in Environment & Resources (E-IPER); and the Department of Civil & Environmental Engineering (CEE). Dep. Management Science & Engin. (MS&E); Department of Mechanical Engineering (ME).

At Carnegie Mellon University, I advised PhD students in the Department of Engineering and Public Policy (EPP) and in the Department of Civil & Environmental Engineering (CEE).

All students and graduates listed are/were either primarily advised by me or jointly co-advised unless noted as "second. advisor" (meaning that I served as secondary advisor, with other colleagues being the primary advisor).

Current team of graduate student advisees and postdoctoral fellows

1. Henry Daniels-Koch, Master student, CEE, 2025 – present
2. Jasmine Blust, Master student, ESE, 2025 – present
3. Victoria Dinov, Master student, ESE, 2025 – present
4. Asia Zhang, Master student, ESE, 2024 – present
5. Dimitri Saad, PhD student, ESE, 2022 – present (second. advisor)
6. Kamran Tehranchi, Master student (2022) and now PhD student, CEE, 2023– present
7. Dhruv Suri, PhD student, ESE, 2023 – present
8. Anela Arifi, PhD candidate, E-IPER, 2021 – present (second. advisor)
9. Dr. Edgar Virgüez, Research Engineer, ESE, 2025 - present
10. Dr. Will McNeil, Energy Post-Doctoral Fellow, 2025 - present
11. Dr. Nils Angliviel de la Beaumelle, Researcher, 2025 – present
12. Dr. Lisa Rennels, Energy Post-Doctoral Fellow, 2024 - present

Graduated PhDs

1. Dr. Kirat Singh, PhD, E-IPER, Stanford University, 2025.
2. Dr. Kiran Chawla, PhD, E-IPER, Stanford University, 2025.
3. Dr. Nils Angliviel de la Beaumelle, PhD, CEE, Stanford University, 2025.
4. Dr. Ranjitha Shivaram, PhD, E-IPER, Stanford University, 2024.
5. Dr. Madalsa Singh, PhD, ESE, Stanford University, 2024.
6. Dr. Tapas Peshin, PhD, ESE, Stanford University, 2023.
7. Dr. Nora Hennessy, PhD, ESE, Stanford University, 2023.
8. Dr. Patricia Levi, PhD, MS&E, 2021, Stanford University, (second. advisor), 2023.
9. Dr. Siobhan Powell, PhD, ME, Stanford University, (second. advisor), 2022.
10. Dr. Peter Tschofen, PhD, EPP, Carnegie Mellon University, (second. advisor), 2023

11. Dr. Priya Donti, self-defined PhD (CS & EPP), Carnegie Mellon University, 2022.
12. Dr. Shayak Sengupta, PhD, EPP, Carnegie Mellon University, 2021,
13. Dr. Matt Bruchon, PhD, EPP, (second. advisor), Carnegie Mellon University, 2021,
14. Dr. Jake Ward, PhD, EPP, Carnegie Mellon University, 2019.
15. Dr. Oluwatobi Adekanye, PhD, EPP, Carnegie Mellon University, 2019.
16. Dr. Xiaodi (Daniel), PhD, EPP, Carnegie Mellon University, 2019.
17. Dr. Brian Sergi, PhD, EPP, Carnegie Mellon University, 2019.
18. Dr. Evan Sherwin, PhD, EPP, Carnegie Mellon University, 2019.
19. Dr. Vedran Lesic, Ph.D., Leeds University (second. advisor).
20. Dr. Greg Schivley, PhD, CEE, (second. advisor), Carnegie Mellon University, 2018.
21. Dr. Cristobal de la Maza, PhD, EPP, Carnegie Mellon University, 2018.
22. Dr. Nichole Hanus, PhD, EPP, (second. advisor), Carnegie Mellon University, 2018
23. Dr. Brock Glasgo, PhD, EPP, Carnegie Mellon University, 2017.
24. Dr. Long Lam, PhD, EPP, Carnegie Mellon University, 2017.
25. Dr. Julian Lamy, PhD, EPP, Carnegie Mellon University, 2016.
26. Dr. Fan Tong, PhD, EPP, Carnegie Mellon University, 2016.
27. Dr. Nathaniel Horner, PhD, EPP, Carnegie Mellon University, 2016.
28. Dr. Nathaniel Gilbraith, PhD, EPP, Carnegie Mellon University, 2015.
29. Dr. Sam Markolf, PhD, CEE, (sec. advisor), Carnegie Mellon University, 2015.
30. Dr. Russell Meyer, PhD, EPP, Carnegie Mellon University, 2014.
31. Dr. Jihoon Min, PhD, EPP, Carnegie Mellon University, 2014.
32. Dr. Ivonne Peña-Cabra, PhD, EPP, Carnegie Mellon University, 2014.
33. Dr. Alan Jenn, PhD, EPP, Carnegie Mellon University, 2014.
34. Dr. Ahmed Abdulla, PhD, EPP, Carnegie Mellon University, 2014.
35. Dr. Huimin Tan, PhD, EPP, Carnegie Mellon University, 2013.
36. Dr. Catherine Izard, PhD, CEE, (sec. advisor), Carnegie Mellon University, 2013
37. Dr. Daniel Wiesmann, Ph.D., MIT-Portugal, University de Técnica de Lisboa, 2013.
38. Dr. Brinda Thomas, PhD, EPP, Carnegie Mellon University, 2012.
39. Dr. Kyle Siler-Evans, PhD, EPP, Carnegie Mellon University, 2012.
40. Dr. Michael Blackhurst, PhD, CEE, (sec. advisor) Carnegie Mellon University, 2011.

Graduated MSc students

41. Dhruv Suri (MSc), ESE, 2023
42. Jon Huster (MSc), ERE, 2022

Previous Post-doctoral fellows and Research Scientists/Engineers

Dr. Thomas Deetjen (2018-2019)
Dr. Michael Whiston (2016-2019)
Dr. Brock Glasgo (2017-2018)
Dr. Fan Tong (2016-2017)
Dr. Nat Horner (2016)
Dr. Patrícia Baptista (IST-Portugal, 2014-2015)
Dr. Jihoon Min (2015)
Dr. Ahmed Abdulla (2014-2015)
Dr. Alan Jenn (2014-2015)
Dr. Brinda Thomas (2013)

Leadership and Service

Leadership in Large Research Efforts

- Lead PI and Executive Director for the **U.S. Department of Energy (DOE)-funded University Consortium on Grid Resilience, EARNEST**. Goals of the project: 1) To understand the current state of the U.S. electricity sector regarding reliability, resiliency, affordability, distributional and environmental consequences; 2) To develop generalizable open-source data products, tools, and models that will support grid decisions; 3) To test the suitability of these tools in real-world settings under a decision under uncertainty framework; 4) To equip an interdisciplinary highly skilled workforce that can tackle the emerging challenges of the grid of the future; and 5) To work with, and learn from, stakeholders as to provide realistic solutions for the electric grid of the future. EARNEST has as sub-awardees 15 universities, 3 U.S. national laboratories, the Electric Power Research Institute, and the National Rural Electric Cooperative Association. The project includes 85 senior researchers and faculty, and 46 graduate students.
- I served as lead Principal Investigator, co-PI Principal Investigator, and co-Director for the **Center for Climate and Energy Decision Making** (www.cedmcenter.org), anchored at Carnegie Mellon University, from 2010 to 2019. Together with Prof. M Granger Morgan, and a strong team of colleagues that valued interdisciplinary approaches that are required to address complex systems problems, I developed and implemented the strategic vision for the center and raised $11 million in funding. CEDM's goal was to address energy and climate change problems through interdisciplinary approaches and to train the next generation of researchers to deliver solutions that realize a world with a sustainable, low-carbon energy system. Our CEDM team of researchers trained more than 93 graduate students, published 330+ peer-reviewed articles, held 90+ invited speaker seminars, and conducted numerous educational and outreach activities for policymakers, industry stakeholders, and the public in Asia, Europe, and the Americas.

Service in Graduate Program Evaluations

2019: External reviewer, Transportation Technology & Policy Graduate Program, UC Davis

2018: Reviewer, evaluation of the Institute for Science & Technology Policy, ETH-Zurich

Research Proposal Reviewer

Reviewer, proposals submitted to the following international science foundations: Swiss National Science Foundation (2018); Dutch Social Sciences and Physical Sciences Technology Foundation STW (2013); the Portuguese Foundation for Science and Technology (2012)

Reviewer for the U.S. NSF: Environmental Sustainability program (2019); Science of Science and Innovation Policy program (2016); Site visit evaluation New Mexico Experimental Program to Stimulate Competitive Research (2016); Graduate Research Fellowships in Economics (2016)

Service in Professional Research Conferences and Workshops

Note: From 2015 onwards. Information for prior years can be provided upon request.

2020:	Steering Committee, Macro-Energy Systems Workshop, Stanford U.
2017, 2019:	Program Committee, International Conference on Energy Efficiency in Domestic Appliances & Lighting (EEDAL).
2016, 2018, 2020:	Program Committee, European Conference on Behavior & Energy Efficiency (BEHAVE).
2015, 2017:	Program Committee, Energy for Sustainability (Portugal).
2015, 2016, 2017:	Program Committee, Behavior, Energy & Climate Change Conference.
2018 – 2021:	Behavior, Energy & Climate Change Advisory Committee

University Service

Service for the University at Large / Cross-Cutting Efforts

2023, 2024:	University Committee on Funding for Energy Research & Education
2022 – *present*:	Member of the Search committee, Energy Postdoctoral Fellows
2021 – 2024:	Co-Director, Bits & Watts Initiative
2021:	Precourt Institute for Energy Director Search Committee
2020 – 2021:	E-IPER PhD Admissions Committee
2021 – *present*:	Member, Executive Committee, E-IPER
2020 – *present*:	Member, Sustainability Science & Practice Committee
2020, 2021:	Reviewer for Research Proposals, Woods Institute for the Environment

Service for the Doerr School of Sustainability, Stanford University

2025 — *present*:	Committee Member, Climate Initiative
2025 — *present*:	Search Committee, Climate Science, tenure line
2023 – *present*:	DSS Budget Committee
2022 – 2024:	Search Committee Chair, Nature-Based Climate Solutions, tenure line
2022 – 2023:	Search committee, DEI Postdoctoral Fellowship Program
2021 – 2023:	Diversity, Equity & Inclusion Advisory Council
2021 – 2022:	Transitional Leadership Team for Stanford's new Sustainability School
2020 – 2022:	Respectful Community Committee
2020 – 2021:	Inaugural Search Committee, DEI SE3 Postdoctoral Fellowship Program

Service for the Department of Energy Science and Engineering, Stanford University

2019 – present:	Member of the Graduate Standing Committee
2020 – 2023:	Associate Chair, Diversity, Equity & Inclusion
2019 – 2022:	Member of the Graduate Student Admissions Committee

Service at Carnegie Mellon University

2017 – 2018:	Evaluation Committee of the Dean of the College of Engineering.
2017:	College of Engineering promotion & tenure ad-hoc committee reviewing all promotion & tenure cases
2016 – 2019:	College of Engineering Research Ecosystem Committee
2016:	Reviewer for Dowd Fellowship applications
2013 – 2019:	Eng. & Public Policy Graduate Curriculum Committee
2013 – 2015:	Search Committee for a tenure track search in social sciences
2014 – 2015:	Search Committee for a tenure track search in innovation

Service in PhD Dissertation Defenses

In addition to the students listed above that I advised or co-advised directly, I served in ~20 PhD defense committees.