BENJAMIN D. LEIBOWICZ, PH.D.
Associate Professor
Banks McLaurin Fellowship in Engineering
Graduate Program in Operations Research and Industrial Engineering
Walker Department of Mechanical Engineering
The University of Texas at Austin

ETC 5.128D
204 E. Dean Keeton St., Stop C2200
Austin, TX 78712

(512) 475-9550
bleibowicz@utexas.edu
http://sites.utexas.edu/leibowicz/

CONTENTS

ACADEMIC POSITIONS

The University of Texas at Austin	Associate Professor (with tenure)	2022 – Present
	Banks McLaurin Fellowship in Engineering	2023 – Present
	Assistant Professor	2016 – 2022

- *Primary appointment:*
  - Graduate Program in Operations Research and Industrial Engineering
  - Walker Department of Mechanical Engineering
- *Other appointments:*
  - Lyndon B. Johnson School of Public Affairs (by courtesy)
  - Energy and Earth Resources Graduate Program

Visiting Positions

Visiting Scholar	University of Chicago, Institute for Mathematical and Statistical Innovation	June – July 2024

EDUCATION

Stanford University	Management Science and Engineering	Ph.D.	June 2016
Stanford University	Management Science and Engineering	M.S.	June 2013
Harvard University	Physics (magna cum laude, Economics minor)	A.B.	May 2011

RESEARCH INTERESTS

Applications: energy and environment, energy systems, public policy, technological change, sustainable cities, infrastructure resilience

Methods: optimization, systems analysis, economic modeling, game theory, equilibrium modeling, stochastic control

OTHER PROFESSIONAL EXPERIENCE

Research Assistant	Stanford University Energy Modeling Forum	Stanford, CA	2012 – 2016
Peccei Award Fellow	International Institute for Applied Systems Analysis	Laxenburg, Austria	2014 – 2015
Young Scientists Summer Program Fellow	International Institute for Applied Systems Analysis (fellowship from National Academy of Sciences)	Laxenburg, Austria	2013
Research Assistant	Harvard University Center for the Environment	Cambridge, MA	2008 – 2010
Research in Industrial Projects for Students Fellow	Zuse Institute Berlin (fellowship from Institute for Pure and Applied Mathematics)	Berlin, Germany	2010
Research Experience for Undergraduates Fellow	Dalian University of Technology (fellowship from National Science Foundation)	Dalian, China	2009
Simons Summer Research Fellow	Stony Brook University	Stony Brook, NY	2006

HONORS AND AWARDS

Individual Awards

Editors' Choice Paper	*Socio-Economic Planning Sciences*	2024
Best Publication Award in Environment and Sustainability	Section on Energy, Natural Resources, and the Environment (ENRE), Institute for Operations Research and the Management Sciences (INFORMS)	2024
Best Advisor	Mechanical Engineering Graduate Student Board (MEGSB), The University of Texas at Austin	2023
Banks McLaurin Fellowship in Engineering (endowed faculty fellowship)	The University of Texas at Austin	2023
Runner Up, Early Career Best Paper Award	Section on Energy, Natural Resources, and the Environment (ENRE), Institute for Operations Research and the Management Sciences (INFORMS)	2021
Outstanding Young Investigator Award	Energy Systems Division, Institute of Industrial and Systems Engineers (IISE)	2020
Walker Scholar	Walker Department of Mechanical Engineering, The University of Texas at Austin	2019
Peccei Award	International Institute for Applied Systems Analysis	2014
Young Scientists Summer Program Fellowship	National Academy of Sciences	2013
School of Engineering Fellowship	Stanford University	2011
Research in Industrial Projects for Students Fellowship	Institute for Pure and Applied Mathematics	2010
Research Experience for Undergraduates Fellowship	National Science Foundation	2009
Simons Summer Research Fellowship	Stony Brook University	2006

Selected Awards Won by Supervised Students

Best Student Paper Award	Energy Systems Division, Institute of Industrial and Systems Engineers (IISE) (student: Connor Colombe)	2025
Runner Up, Dennis J. O'Brien USAEE Best Student Paper Award	United States Association for Energy Economics (USAEE) (student: Abdullah Albeladi)	2024
Dennis J. O'Brien USAEE Best Student Paper Award	United States Association for Energy Economics (USAEE) (student: Connor Colombe)	2023
P.E.O. Scholar Award	P.E.O. Sisterhood (student: Rachel Moglen)	2023
Mickey Leland Energy Fellowship	Department of Energy, Office of Fossil Energy (student: Erick Jones)	2020

Runner Up, Dennis J. O'Brien USAEE Best Student Paper Award	United States Association for Energy Economics (USAEE) (student: Baturay Calci)	2019
Full Fellowship	The National Graduate Education for Minorities (GEM) Consortium (student: Erick Jones)	2018

PUBLICATIONS

Notes: Underlined author name = supervised UT Austin student. [P] = supervised postdoctoral researcher.

A. Refereed Journal Papers (59)

[59] Maynor, K., Leibowicz, B.D., Bickel, J.E. Optimal resource allocation between the ideation and evaluation phases of the innovation process. ***The Engineering Economist***, accepted.

[58] Daigle, H., Castellanos, S., Leibowicz, B.D., Ravikumar, A.P., Waxman, A., 2025. Making carbon management work — navigating technical and policy uncertainty towards a net-zero future. ***Environmental Research Communications*** 7, 122502. DOI: 10.1088/2515-7620/ae2c3f

[57] Hebel, N.J., Leibowicz, B.D., Carvallo, J.P., 2025. Cost-benefit analysis of electricity resilience projects: State of the art and gap analysis. ***Current Sustainable/Renewable Energy Reports*** 12, 28. DOI: 10.1007/s40518-025-00278-5

[56] Olmstead, S.M., Leibowicz, B.D., Mason, C.F., Waxman, A.R., Grubert, E., Huber-Rodriguez, H.R., Stemmler, J., 2025. How to design better incentives for carbon capture and storage in the United States. ***Proceedings of the National Academy of Sciences*** 122, e2404677122. DOI: 10.1073/pnas.2404677122

[55] Moglen, R.L., Leibowicz, B.D., Kwasinski, A., 2025. The value of coordination for restoring power and wireless networks. ***Reliability Engineering & System Safety*** 256, 110771. DOI: 10.1016/j.ress.2024.110771

[54] Liu, D., Leibowicz, B.D., Bard, J.F., Zhu, Y., Guo, Y., Shao, Y., 2025. Optimal investment planning for production networks with fixed production profiles. ***Computers & Operations Research*** 176, 106955. DOI: 10.1016/j.cor.2024.106955

[53] Ma, H., Leibowicz, B.D., Hasenbein, J.J., 2025. Optimal sampling strategy for probability estimation: An application to the Agricultural Quarantine Inspection Monitoring program. ***Risk Analysis*** 45, 1410-1427. DOI: 10.1111/risa.17669

[52] Moglen, R.L., Leibowicz, B.D., Kwasinski, A., Cruse, G., 2024. Optimal restoration of power infrastructure following a disaster with environmental hazards. ***Socio-Economic Planning Sciences*** 95, 101974. DOI: 10.1016/j.seps.2024.101974

- **Editors' Choice Paper, Socio-Economic Planning Sciences, October 2024**

[51] Colombe, C., Leibowicz, B.D., Mendoza, B.R., 2024. The effects of policy uncertainty and risk aversion on carbon capture, utilization, and storage investments. ***Energy Policy*** 192, 114212. DOI: 10.1016/j.enpol.2024.114212

- **Dennis J. O'Brien USAEE Best Student Paper Award, 2023**

[50] Calci, B., Leibowicz, B.D., Bard, J.F., Jayadev, G.G., 2024. A bilevel approach to multi-period natural gas pricing and investment in gas-consuming infrastructure. ***Energy*** 303, 131754. DOI: 10.1016/j.energy.2024.131754

[49] Sambasivam, B.[P], Colombe, C., Hasenbein, J., Leibowicz, B.D., 2024. Optimal resource placement for electric grid resilience via network topology. ***Reliability Engineering & System Safety*** 245, 110010. DOI: 10.1016/j.ress.2024.110010

[48] Leibowicz, B.D., Zhang, N., Carvallo, J.P., Larsen, P.H., Carr, T., Baik, S., 2024. The importance of capturing power system operational details in resource adequacy assessments. ***Electric Power Systems Research*** 228, 110057. DOI: 10.1016/j.epsr.2023.110057

[47] Moglen, R.L., Chawla, K.P., Levi, P., Sun, Y., Phillips, O., Leibowicz, B.D., Jenkins, J.D., Grubert, E.A., 2023. The state of macro-energy systems research: Common critiques, current progress, and research priorities. ***iScience*** 26, 106325. DOI: 10.1016/j.isci.2023.106325

[46] Leibowicz, B.D., Sanstad, A.H., Zhu, Q., Larsen, P.H., Eto, J.H., 2023. Electric utility valuations of investments to reduce the risks of long-duration, widespread power interruptions, part II: Case studies. ***Sustainable and Resilient Infrastructure*** 8, 203-222. DOI: 10.1080/23789689.2022.2138163

[45] Sanstad, A.H., Leibowicz, B.D., Zhu, Q., Larsen, P.H., Eto, J.H., 2023. Electric utility valuations of investments to reduce the risks of long-duration, widespread power interruptions, part I: Background. ***Sustainable and Resilient Infrastructure*** 8, 311-322. DOI: 10.1080/23789689.2022.2148450

[44] Moglen, R.L., Barth, J., Gupta, S., Kawai, E., Klise, K., Leibowicz, B.D., 2023. A nexus approach to infrastructure resilience planning under uncertainty. ***Reliability Engineering & System Safety*** 230, 108931. DOI: 10.1016/j.ress.2022.108931

[43] Rueda, V., Young, M.H., Faust, K., Rateb, A.M., Leibowicz, B.D., 2022. System dynamics modeling in local water management: Assessing strategies for the city of Boerne, Texas. ***Water*** 14, 3682. DOI: 10.3390/w14223682

[42] Kawai, E., Ozawa, A., Leibowicz, B.D., 2022. Role of carbon capture and utilization (CCU) for decarbonization of industrial sector: A case study of Japan. ***Applied Energy*** 328, 120183. DOI: 10.1016/j.apenergy.2022.120183

[41] Jayadev, G., Leibowicz, B.D., Bard, J.F., Calci, B., 2022. Risk-averse stochastic bilevel programming: An application to natural gas markets. ***Computers & Industrial Engineering*** 169, 108151. DOI: 10.1016/j.cie.2022.108151

[40] Jayadev, G., Leibowicz, B.D., Bard, J.F., Calci, B., 2022. Strategic interactions between liquefied natural gas and domestic gas markets: A bilevel model. ***Computers & Operations Research*** 144, 105807. DOI: 10.1016/j.cor.2022.105807

[39] Motalebi, S., Barnes, T., Lu, L., Leibowicz, B.D., Niet, T., 2022. The role of U.S.-Canada electricity trade in North American decarbonization pathways. ***Energy Strategy Reviews*** 41, 100827. DOI: 10.1016/j.esr.2022.100827

[38] Bourque, C.M., Clarno, K.T., Leibowicz, B.D., 2022. High-level fuel fabrication facility designs from discrete-event simulation. ***Annals of Nuclear Energy*** 168, 108893. DOI: 10.1016/j.anucene.2021.108893

[37] Zhu, Q., Leibowicz, B.D., Busby, J.W., Shidore, S., Adelman, D.E., Olmstead, S.M., 2022. Enhancing policy realism in energy system optimization models: Politically feasible decarbonization pathways for the United States. ***Energy Policy*** 161, 112754. DOI: 10.1016/j.enpol.2021.112754

[36] Jones, E.C., Leibowicz, B.D., 2022. Climate risk management in agriculture using alternative electricity and water resources: A stochastic programming framework. ***Environment Systems and Decisions*** 42, 117-135. DOI: 10.1007/s10669-021-09838-8

[35] Brozynski, M.T., Leibowicz, B.D., 2022. A multi-level optimization model of infrastructure-dependent technology adoption: Overcoming the chicken-and-egg problem. ***European Journal of Operational Research*** 300, 755-770. DOI: 10.1016/j.ejor.2021.10.026

- **INFORMS ENRE Best Publication Award in Environment and Sustainability, 2024**

[34] Zhu, Q., Leibowicz, B.D., 2022. A Markov decision process approach for cost-benefit analysis of infrastructure resilience upgrades. ***Risk Analysis*** 42(7), 1585-1602. DOI: 10.1111/risa.13838

[33] Waxman, A.R., Corcoran, S., Robison, A., Leibowicz, B.D., Olmstead, S.M., 2021. Leveraging scale economies and policy incentives: Carbon capture, utilization & storage in Gulf clusters. ***Energy Policy*** 156, 112452. DOI: 10.1016/j.enpol.2021.112452

[32] Calci, B., Leibowicz, B.D., Bard, J.F., Jayadev, G., 2021. Incorporating learning-by-doing into mixed complementarity equilibrium models. ***Computers & Industrial Engineering*** 159, 107472. DOI: 10.1016/j.cie.2021.107472

[31] Carvallo, J.P., Zhang, N., Leibowicz, B.D., Carr, T., Galbraith, M., Larsen, P.H., 2021. Implications of a regional resource adequacy program for utility integrated resource planning. ***The Electricity Journal*** 34, 106960. DOI: 10.1016/j.tej.2021.106960

[30] Bandyopadhyay, A., Leibowicz, B.D., Webber, M.E., 2021. Solar panels and smart thermostats: The power duo of the residential sector? ***Applied Energy*** 290, 116747. DOI: 10.1016/j.apenergy.2021.116747

[29] Calci, B., Leibowicz, B.D., Bard, J.F., 2022. North American natural gas markets under LNG demand growth and infrastructure restrictions. ***The Energy Journal*** 43 (2), 17-40. DOI: https://doi.org/10.5547/01956574.43.2.bcal

- **Runner Up, Dennis J. O'Brien USAEE Best Student Paper Award, 2019**

[28] Kamei, M., Wangmo, T., Leibowicz, B.D., Nishioka, S., 2021. Urbanization, carbon neutrality, and Gross National Happiness: Sustainable development pathways for Bhutan. ***Cities*** 111, 102972. DOI: 10.1016/j.cities.2020.102972

[27] Jones, E.C., Leibowicz, B.D., 2021. Co-optimization and community: Maximizing the benefits of distributed electricity and water technologies. ***Sustainable Cities and Society*** 64, 102515. DOI: 10.1016/j.scs.2020.102515

[26] Naeini, M.E., Leibowicz, B.D., Bickel, J.E., 2020. Can you trust a model whose output keeps changing? Interpreting changes in the social cost of carbon produced by the DICE model. ***Environment Systems and Decisions*** 40, 301-320. DOI: 10.1007/s10669-020-09783-y

[25] Carvallo, J.P., Zhang, N., Murphy, S.P., Leibowicz, B.D., Larsen, P.H., 2020. The economic value of a centralized approach to distributed resource investment and operation. ***Applied Energy*** 269, 115071. DOI: 10.1016/j.apenergy.2020.115071

[24] Bandyopadhyay, A., Leibowicz, B.D., Beagle, E.A., Webber, M.E., 2020. As one falls, another rises? Residential peak load reduction through electricity rate structures. ***Sustainable Cities and Society*** 60, 102191. DOI: 10.1016/j.scs.2020.102191

[23] Brozynski, M.T., Leibowicz, B.D., 2020. Markov models of policy support for technology transitions. ***European Journal of Operational Research*** 286, 1052-1069. DOI: 10.1016/j.ejor.2020.03.066

[22] Leibowicz, B.D., 2020. Urban land use and transportation planning for climate change mitigation: A theoretical framework. ***European Journal of Operational Research*** 284, 604-616. DOI: 10.1016/j.ejor.2019.12.034

- **Runner Up, INFORMS ENRE Early Career Best Paper Award, 2021**

[21] Waxman, A.R., Khomaini, A., Leibowicz, B.D., Olmstead, S.M., 2020. Emissions in the stream: Estimating the greenhouse gas impacts of an oil and gas boom. ***Environmental Research Letters*** 15, 014004. DOI: 10.1088/1748-9326/ab5e6f

[20] Jayadev, G., Leibowicz, B.D., Kutanoglu, E., 2020. U.S. electricity infrastructure of the future: Generation and transmission pathways through 2050. ***Applied Energy*** 260, 114267. DOI: 10.1016/j.apenergy.2019.114267

[19] Zhu, Q., Leibowicz, B.D., 2020. Vehicle efficiency improvements, urban form, and energy use impacts. ***Cities*** 97, 102486. DOI: 10.1016/j.cities.2019.102486

[18] Phathanapirom, U.B., Haas, D.A., Leibowicz, B.D., 2020. A game-theoretic approach to nuclear fuel cycle transition analysis under uncertainty. ***Annals of Nuclear Energy*** 137, 107112. DOI: 10.1016/j.anucene.2019.107112

[17] Zhang, N., Leibowicz, B.D., Hanasusanto, G.A., 2020. Optimal residential battery storage operations using robust data-driven dynamic programming. ***IEEE Transactions on Smart Grid*** 11, 1771-1780. DOI: 10.1109/TSG.2019.2942932

[16] Jones, E.C., Leibowicz, B.D., 2019. Contributions of shared autonomous vehicles to climate change mitigation. ***Transportation Research Part D: Transport and Environment*** 72, 279-298. DOI: 10.1016/j.trd.2019.05.005

[15] Leibowicz, B.D., Punjabi, K., O'Shaughnessy, E., Margolis, R., 2019. Rules of the rooftop: Platform design and price reductions in an online solar photovoltaic marketplace in the United States. ***Energy Research & Social Science*** 48, 194-204. DOI: 10.1016/j.erss.2018.10.010

[14] Leibowicz, B.D., Lanham, C.M., Brozynski, M.T., Vázquez-Canteli, J.R., Castillo Castejón, N., Nagy, Z., 2018. Optimal decarbonization pathways for urban residential building energy services. ***Applied Energy*** 230, 1311-1325. DOI: 10.1016/j.apenergy.2018.09.046

[13] Brozynski, M.T., Leibowicz, B.D., 2018. Decarbonizing power and transportation at the urban scale: An analysis of the Austin, Texas Community Climate Plan. ***Sustainable Cities and Society*** 43, 41-54. DOI: 10.1016/j.scs.2018.08.005

[12] Deetjen, T.A., Conger, J.P., Leibowicz, B.D., Webber, M.E., 2018. Review of climate action plans in 29 major U.S. cities: Comparing current policies to research recommendations. ***Sustainable Cities and Society*** 41, 711-727. DOI: 10.1016/j.scs.2018.06.023

[11] Leibowicz, B.D., 2018. Policy recommendations for a transition to sustainable mobility based on historical diffusion dynamics of transport systems. ***Energy Policy*** 119, 357-366. DOI: 10.1016/j.enpol.2018.04.066

[10] Vitter, J.S., Berhanu, B., Deetjen, T.A., Leibowicz, B.D., Webber, M.E., 2018. Optimal sizing and dispatch for a community-scale potable water recycling facility. ***Sustainable Cities and Society*** 39, 225-240. DOI: 10.1016/j.scs.2018.02.023

[9] Leibowicz, B.D., 2018. Welfare improvement windows for innovation policy. ***Research Policy*** 47, 390-398. DOI: 10.1016/j.respol.2017.12.009

[8] Leibowicz, B.D., 2018. The cost of policy uncertainty in electric sector capacity planning: Implications for instrument choice. ***The Electricity Journal*** 31, 33-41. DOI: 10.1016/j.tej.2017.12.001

[7] Leibowicz, B.D., 2017. Effects of urban land-use regulations on greenhouse gas emissions. ***Cities*** 70, 135-152. DOI: 10.1016/j.cities.2017.07.016

[6] Leibowicz, B.D., Krey, V., Grubler, A., 2016. Representing spatial technology diffusion in an energy system optimization model. ***Technological Forecasting and Social Change*** 103, 350-363. DOI: 10.1016/j.techfore.2015.06.001

[5] Leibowicz, B.D., 2015. Growth and competition in renewable energy industries: Insights from an integrated assessment model with strategic firms. ***Energy Economics*** 52, 13-25. DOI: 10.1016/j.eneco.2015.09.010

[4] Wilkerson, J.T., Leibowicz, B.D., Turner, D.D., Weyant, J.P., 2015. Comparison of integrated assessment models: Carbon price impacts on U.S. energy. ***Energy Policy*** 76, 18-31. DOI: 10.1016/j.enpol.2014.10.011

[3] Leibowicz, B.D., 2014. Evaluation of post-Fukushima Japanese electricity strategies: A stochastic simulation model. ***International Journal of Energy Research*** 38, 1578-1598. DOI: 10.1002/er.3181

[2] Leibowicz, B.D., Roumpani, M., Larsen, P.H., 2013. Carbon emissions caps and the impact of a radical change in nuclear electricity costs. ***International Journal of Energy Economics and Policy*** 3, 60-74.

[1] Leibowicz, B.D., Abbot, D.S., Emanuel, K., Tziperman, E., 2012. Correlation between present-day model simulation of Arctic cloud radiative forcing and sea ice consistent with positive winter convective cloud feedback. ***Journal of Advances in Modeling Earth Systems*** 4, M07002. DOI: 10.1029/2012MS000153

B. Refereed Journal Papers Submitted and Under Revision (11)

[11] Albeladi, A., Leibowicz, B.D. Coordination problems and incentive pass-through in carbon capture, utilization, and storage development. Submitted.

- **Runner Up, Dennis J. O'Brien USAEE Best Student Paper Award, 2024**

[10] Albeladi, A., Leibowicz, B.D. Optimal policy portfolios to promote carbon capture. Submitted.

[9] Blandford, S.K., Leibowicz, B.D. Optimal transmission system repair considering distribution system damage and evacuations. Under revision at *Reliability Engineering & System Safety*.

[8] Bickel, J.E., Colombe, C., Leibowicz, B.D. The QFlex distribution. Submitted.

[7] Colombe, C., Leibowicz, B.D. Optimal subsidies for carbon capture: A Stackelberg game analysis. Submitted.

- **Finalist, IISE Energy Systems Division Best Student Paper Award, 2025**

[6] Kumar, Y., Bollapragada, R., Leibowicz, B.D. Efficient mathematical programming formulation and algorithmic framework for optimal camera placement. Submitted.

[5] Leibowicz, B.D. Optimal technology adoption subsidies with consumer switching costs and strategic firms. Submitted.

[4] Liu, D., Leibowicz, B.D., Bard, J.F., Chatzos, M., Merakli, M., Shao, Y. Optimal investment planning for multi-period production networks with adjustable production profiles. Submitted.

[3] Lu, L., Lyu, J., Leibowicz, B.D., Moglen, R.L., Zhang, N. Designing electric vehicle charging infrastructure to enable disaster evacuation. Submitted.

[2] Ma, H., Leibowicz, B.D., Hasenbein, J.J. A comparison of change point detection methods for pest outbreak detection. Submitted.

[1] Sambasivam, B.[P], Bhaskar, A., Kockelman, K.M., Leibowicz, B.D. Economic and environmental impacts of electric vehicle smart-charging programs on the U.S. power sector. Under revision at *npj Sustainable Mobility and Transport*.

C. Refereed Conference Proceedings (10)

[10] Bandyopadhyay, A., Conger, J.P., Beagle, E.A., Webber, M.E., Leibowicz, B.D., 2020. Energetic and economic potential for load control for residential customers in Austin, TX. *Proceedings of the ASME 2020 International Mechanical Engineering Congress & Exposition*. DOI: 10.1115/IMECE2020-23114

[9] Bourque, C.M., Thompson, C.J., Clarno, K.T., Leibowicz, B.D., 2020. Coupling simulation technologies to assist nuclear fuel fabrication facility design. *Proceedings of the 2020 American Nuclear Society Winter Meeting*. DOI: 10.13182/T123-33395

[8] Jayadev, G., Leibowicz, B.D., Kutanoglu, E., 2019. U.S. electricity infrastructure of the future: Generation and transmission pathways through 2050. *Proceedings of the 37th USAEE/IAEE North American Conference*.

[7] Bandyopadhyay, A., Conger, J.P., Webber, M.E., Leibowicz, B.D., 2019. A decision support tool for distributed solar and storage investments: A case study in Austin, TX. *Proceedings of the ASME 2019 International Mechanical Engineering Congress & Exposition*. DOI: 10.1115/IMECE2019-11068

[6] Bandyopadhyay, A., Ramirez-Meyers, K., Wikramanayake, E.D., Leibowicz, B.D., Webber, M.E., Bahadur, V., 2019. A capacity planning model for microgrids in rural India. *Proceedings of the ASME 2019 International Mechanical Engineering Congress & Exposition*. DOI: 10.1115/IMECE2019-11707

[5] Leibowicz, B.D., 2017. The cost of policy uncertainty in electric sector capacity planning: Implications for instrument choice. *Proceedings of the 35th USAEE/IAEE North American Conference*.

[4] Leibowicz, B.D., 2017. Effects of urban land-use regulations on greenhouse gas emissions. *Proceedings of the 2017 International Energy Workshop*.

[3] Leibowicz, B.D., 2016. Technology-push, demand-pull, and strategic R&D investment. *Proceedings of the 34th USAEE/IAEE North American Conference*.

[2] Leibowicz, B.D., 2015. Growth and competition in renewable energy industries: Insights from an integrated assessment model with strategic firms. *Proceedings of the 33rd USAEE/IAEE North American Conference*.

[1] Leibowicz, B.D., 2013. Representing international technology spillovers in a computable general equilibrium energy-economic model. *Proceedings of the 2013 International Energy Workshop*.

D. Technical Reports (7)

[7] Carvallo, J.P., Zhang, N., Leibowicz, B.D., Carr, T., Baik, S., Larsen, P.H., 2023. A guide for improved resource adequacy assessments in evolving power systems: Institutional and technical dimensions. *Lawrence Berkeley National Laboratory Technical Report*.

[6] King, C.W., Rhodes, J.D., Zarnikau, J., Lin, N., Kutanoglu, E., Leibowicz, B.D., Niyogi, D., Rai, V., Santoso, S., Spence, D., Tompaidis, S., Zhu, H., Funkhouser, E., Austgen, B., 2021. The Timeline and Events of the February 2021 Texas Electric Grid Blackouts. *The University of Texas at Austin Energy Institute.*

[5] Carvallo, J.P., Zhang, N., Leibowicz, B.D., Carr, T., Galbraith, M., Larsen, P.H., 2020. Implications of a regional resource adequacy program on utility integrated resource planning: Study for the Western United States. *Lawrence Berkeley National Laboratory Technical Report*.

[4] Sanstad, A.H., Zhu, Q., Leibowicz, B.D., Larsen, P.H., Eto, J.H., 2020. Case studies of the economic impacts of power interruptions and damage to electricity system infrastructure from extreme events. *Lawrence Berkeley National Laboratory Technical Report*.

[3] Hall, J., Kuo, S., Ruiz-Juri, N., Machemehl, R., Baumanis, C., Leibowicz, B.D., Olmstead, T., 2019. An overview of methods for safety improvement project selection. *The University of Texas at Austin Center for Transportation Research*, Strategic Safety Improvements project, final report to City of Austin.

[2] Leibowicz, B.D., Punjabi, K., O'Shaughnessy, E., Margolis, R., 2018. Effects of platform design on the customer experience in an online solar PV marketplace. *National Renewable Energy Laboratory Technical Report* 6A20–71178.

[1] Grubler, A., Leibowicz, B.D., Krey, V., Bento, N., Riahi, K., 2014. Lessons learned from technology diffusion in the past for future scenarios — integrating the influence of costs, size, and market characteristics into integrated assessment models. *RITE-IIASA* collaborative study, Alternative pathways toward sustainable development and climate stabilization (ALPS) II project, final report.

PRESENTATIONS

A. Invited Lectures, Seminars, and Panels

[36] Leibowicz, B.D., 2025. **Panelist:** Future Readiness and Strategic Coordination. *UT Austin Portugal 2025 Colloquium: Resilience of the Electrical Systems in Portugal and Texas*, Austin, TX.

[35] Leibowicz, B.D., 2025. **Panelist:** Energy 101: Beginner's Guide to the Big Picture. *Texas Energy Summit*, Austin, TX.

[34] Leibowicz, B.D., 2025. **Panel Moderator:** 45Q, 45V, Design & Implementation of Federal Incentives for Carbon Management in the New Administration. *Economic & Policy Priorities for Carbon Management Workshop*, Washington, DC.

[33] Leibowicz, B.D., 2025. Technology integration and systems analysis. *2025 Carbon Management Summit*, Washington, DC.

[32] Leibowicz, B.D., 2025. **Panelist:** Grids (Micro and Macro). *Texas Defense Research Workshop 2025: Energy*, Washington, DC.

[31] Leibowicz, B.D., 2025. Optimal subsidies for carbon capture: A Stackelberg game analysis. *Department of Management Science and Statistics, University of Texas at San Antonio*, San Antonio, TX.

[30] Leibowicz, B.D., 2025. Optimal subsidies for carbon capture: A Stackelberg game analysis. *Department of Civil & Systems Engineering, Johns Hopkins University*, Baltimore, MD.

[29] Leibowicz, B.D., 2024. A guide for improved resource adequacy assessments in evolving power systems: Institutional and technical dimensions. *2024 China-US Academic Dialogue on Green Power Development*, hosted by *Tsinghua University*, *China Energy Research Society*, and *Energy Foundation China*, Beijing, China.

[28] Leibowicz, B.D., 2024. The full greenhouse gas emissions impacts of demand-side mitigation strategies in general equilibrium. *Institute for Mathematical and Statistical Innovation, University of Chicago*, Chicago, IL.

[27] Leibowicz, B.D., 2024. Sampling design for random inspections. *Cross-Border Threat Screening and Supply Chain Defense DHS Center of Excellence – Biennial Review Meeting*, Washington, D.C.

[26] Leibowicz, B.D., 2023. Sampling design for random inspections. *Cross-Border Threat Screening and Supply Chain Defense DHS Center of Excellence – Annual Meeting*, Washington, D.C.

[25] Leibowicz, B.D., 2022. Multi-agent optimization models of natural gas markets. *ExxonMobil Modeling, Optimization, and Data Science (MODS) Group*, virtual seminar.

[24] Leibowicz, B.D., 2022. My climate change mitigation research at IIASA: Past and present. *International Cooperation for Global Challenges: 50 Years of Building Research Bridges at IIASA*, hosted by the *International Institute for Applied Systems Analysis* and the *National Academy of Sciences*, Boston, MA.

[23] Leibowicz, B.D., 2022. **Panel Moderator:** Beyond the Least Cost Paradigm. *Macro-Energy Systems Speaker Series*, virtual panel.

[22] Leibowicz, B.D., Busby, J.W., 2022. Sectoral feasibility of greenhouse gas mitigation and clean energy transitions. *UT Energy Week*, virtual conference.

[21] Leibowicz, B.D., 2021. Cost-benefit analysis of infrastructure resilience upgrades: Theoretical, computational, and empirical advances. *Department of Engineering Systems and Environment, University of Virginia*, Charlottesville, VA.

[20] Leibowicz, B.D., 2021. **Panelist:** Getting Started in Public Sector Operations Research. *INFORMS Section on Public Sector Operations Research*, INFORMS Annual Meeting, Anaheim, CA.

[19] Leibowicz, B.D., 2021. **Panel Moderator:** Technology Pathways: Fork in the Road? *UT Energy Week*, Austin, TX (virtual due to COVID-19).

[18] Leibowicz, B.D., 2020. **Panelist:** "Smart" is the Word of the Hour – Let's Talk Smart Homes, Smart Buildings and Smart Communities. *Electrification 2020: International Conference & Exposition*, hosted by the *Electric Power Research Institute*, Charlotte, NC (**canceled** due to COVID-19).

[17] Leibowicz, B.D., Carvallo, J.P., Carr, T., Galbraith, M., 2020. Implications of a regional resource adequacy program on utility integrated resource planning (team presentation). *Western Interstate Energy Board*, public webinar.

[16] Leibowicz, B.D., 2020. The economic value of a centralized approach to distributed resource investment and operation. *Georgia Tech Energy Systems and Optimization Workshop*, Atlanta, GA (virtual due to COVID-19).

[15] Leibowicz, B.D., 2020. **Panelist:** Macro-Energy Systems: Toward a New Discipline. *Stanford University Energy Seminar*, Stanford, CA (virtual due to COVID-19).

[14] Leibowicz, B.D., 2020. **Panel Moderator:** Critiques of Macro-Energy Systems Research and Our Responses as a Field. *Stanford University Macro-Energy Systems Workshop*, Stanford, CA (virtual due to COVID-19).

[13] Leibowicz, B.D., 2020. Optimal U.S. electricity infrastructure investment pathways through 2050. *Asia Pacific Energy Research Center Annual Conference*, Tokyo, Japan (virtual due to COVID-19).

[12] Leibowicz, B.D., 2020. U.S. electricity infrastructure of the future: Generation and transmission pathways through 2050. *Strategic Energy Analysis Center, National Renewable Energy Laboratory*, Golden, CO (virtual seminar).

[11] Leibowicz, B.D., 2020. Decarbonizing the U.S. energy economy: Importance of the demand side. **Panelist:** Policy and Business Implications of a Green New Deal. *UT Energy Week*, Austin, TX.

[10] Leibowicz, B.D., 2020. Urban land use and transportation planning for climate change mitigation: A theoretical framework. *Department of Industrial and Systems Engineering Graduate Seminar, University of Tennessee*, *Knoxville*, Knoxville, TN.

[9] Leibowicz, B.D., 2020. Urban land use and transportation planning for climate change mitigation: A theoretical framework. *IIASA-RITE International Workshop Towards Improved Understanding, Concepts, Policies, and Models of Energy Demand, International Institute for Applied Systems Analysis*, Laxenburg, Austria.

[8] Leibowicz, B.D., 2019. Beyond the building: Residential electrification and affordable housing in their broader energy and urban contexts. **Panelist:** The Customer Experience. *The Electrification Experience*, hosted by the *Electric Power Research Institute* and *CPS Energy*, San Antonio, TX.

[7] Leibowicz, B.D., 2019. Sustainable Development Goals 7 and 11: Affordable and clean energy in a context of rapid urbanization. **Panelist:** Sustainable Development Goals for Cities. *Sustainable Built Environment Conference*, Tokyo, Japan.

[6] Leibowicz, B.D., 2019. Urban land use and transportation planning for climate change mitigation: A theoretical framework. *Institute for Global Environmental Strategies*, Hayama, Japan.

[5] Leibowicz, B.D., 2019. Robust data-driven dynamic programming and applications in energy storage. *Idaho National Laboratory*, Idaho Falls, ID.

[4] Leibowicz, B.D., 2018. Cities and global change: Trends, policy developments, and research directions. *International Institute for Applied Systems Analysis*, Laxenburg, Austria.

[3] Leibowicz, B.D., 2017. Integrated systems modeling of energy, the economy, and the environment. *Sandia National Laboratories*, Albuquerque, NM.

[2] Leibowicz, B.D., 2017. Effects of urban land-use regulations on greenhouse gas emissions. *U.S. Green Building Council, Central Texas Chapter*, Austin, TX.

[1] Leibowicz, B.D., 2015. Technology-push, demand-pull, and strategic R&D investment. *Stanford University Environmental and Energy Policy Analysis Center*, Stanford, CA.

B. Technical Presentations at Conferences (only showing presentations since 2020)

[76] Albeladi, A., Leibowicz, B.D., 2025. Optimal Policy Portfolios to Promote Carbon Capture. *INFORMS Annual Meeting*, Atlanta, GA.

[75] Bickel, E., Colombe, C., Leibowicz, B.D., 2025. Qflex: a Quantile Basis Expansion Framework for Flexible Probability Distributions. *INFORMS Annual Meeting*, Atlanta, GA.

[74] Leibowicz, B.D. 2025. Consumer-driven climate mitigation: An analytical general equilibrium framework. *INFORMS Annual Meeting*, Atlanta, GA.

[73] Leibowicz, B.D., Albeladi, A., 2025. Coordination problems and incentive pass-through in carbon capture, utilization, and storage development. *Commodity and Energy Markets Association Annual Meeting*, Houston, TX.

[72] Colombe, C., Leibowicz, B.D., 2025. Optimal subsidies for carbon capture: A Stackelberg game analysis. *IISE Annual Conference*, Atlanta, GA. **Winner of the IISE Energy Systems Division Best Student Paper Award.**

[71] Leibowicz, B.D., Zhang, N., Carvallo, J.P., Larsen, P.H., Carr, T., Baik, S., 2025. The importance of capturing power system operational details in resource adequacy assessments. *IISE Annual Conference*, Atlanta, GA.

[70] Albeladi, A., Leibowicz, B.D., 2024. Coordination problems and incentive pass-through in carbon capture, utilization, and storage development. *41st USAEE/IAEE North American Conference*, Baton Rouge, LA. **Runner Up for the 2024 Dennis J. O'Brien USAEE Best Student Paper Award**.

[69] Kumar, Y., Bollapragada, R., Leibowicz, B.D., 2024. Optimizing camera placement in critical environments: A simulation optimization approach. *INFORMS Annual Meeting*, Seattle, WA.

[68] Colombe, C., Leibowicz, B.D., 2024. Optimal subsidies for carbon capture and storage. *INFORMS Annual Meeting*, Seattle, WA.

[67] Moglen, R.L., Leibowicz, B.D., Kwasinski, A., 2024. The value of coordination for restoring power and wireless networks. *INFORMS Annual Meeting*, Seattle, WA.

[66] Ma, H., Leibowicz, B.D., Hasenbein, J., 2024. Optimal sampling strategy for probability estimation: An application to the Agricultural Quarantine Inspection Monitoring program. *INFORMS Annual Meeting*, Seattle, WA.

[65] Leibowicz, B.D., Albeladi, A., 2024. Coordination problems and incentive pass-through in carbon capture, utilization, and storage development. *INFORMS Annual Meeting*, Seattle, WA.

[64] Colombe, C., Leibowicz, B.D., Mendoza, B., 2024. The effects of policy uncertainty and risk aversion on carbon capture, utilization, and storage investments. *Assessing Policy Strategies for Scaling Carbon Capture and Storage in the United States*, Austin, TX.

[63] Colombe, C., Leibowicz, B.D., Mendoza, B., 2023. The effects of policy uncertainty and risk aversion on carbon capture, utilization, and storage investments. *40th USAEE/IAEE North American Conference*, Chicago, IL. **Winner of the 2023 Dennis J. O'Brien USAEE Best Student Paper Award**.

[62] Albeladi, A., Leibowicz, B.D., 2023. Coordination problems and incentive pass-through in carbon capture, utilization, and storage development. *INFORMS Annual Meeting*, Phoenix, AZ.

[61] Moglen, R., Leibowicz, B.D., Kwasinski, A., Cruse, G., 2023. Optimal restoration of power infrastructure following a disaster with environmental hazards. *INFORMS Annual Meeting*, Phoenix, AZ.

[60] Sambasivam, B.P, Colombe, C., Hasenbein, J., Leibowicz, B.D., 2023. Optimal resource placement for electric grid resilience via network topology. *INFORMS Annual Meeting*, Phoenix, AZ.

[59] Leibowicz, B.D., Colombe, C., Mendoza, B., 2023. The effects of policy uncertainty and risk aversion on carbon capture, utilization, and storage investments. *INFORMS Annual Meeting*, Phoenix, AZ.

[58] Moglen, R., Leibowicz, B.D., Kwasinski, A., Cruse, G., 2022. Restoration and recovery of interdependent infrastructure after a nuclear detonation. *INFORMS Annual Meeting*, Indianapolis, IN.

[57] Colombe, C., Leibowicz, B.D., 2022. Tax credit uncertainty and carbon capture infrastructure development. *INFORMS Annual Meeting*, Indianapolis, IN.

[56] Zhu, Q., Leibowicz, B.D., Busby, J.W., Shidore, S., Adelman, D.E., Olmstead, S.M., 2022. Enhancing policy realism in energy system optimization models: Politically feasible decarbonization pathways for the United States. *INFORMS Annual Meeting*, Indianapolis, IN.

[55] Leibowicz, B.D., 2022. Redefining resource adequacy in modern power systems. *INFORMS Annual Meeting*, Indianapolis, IN.

[54] Zhu, Q., Leibowicz, B.D., Busby, J.W., Shidore, S., Adelman, D.E., Olmstead, S.M., 2022. Enhancing policy realism in energy system optimization models: Politically feasible decarbonization pathways for the United States. *Macro-Energy Systems Workshop*, Stanford, CA.

[53] Leibowicz, B.D., Zhu, Q., Busby, J.W., Shidore, S., Adelman, D.E., Olmstead, S.M., 2022. Enhancing policy realism in energy system optimization models: Politically feasible decarbonization pathways for the United States. *IISE Annual Conference*, Seattle, WA.

[52] Moglen, R., Barth, J., Gupta, S., Kawai, E., Leibowicz, B.D., Klise, K., 2021. A nexus approach to infrastructure resilience planning under uncertainty. *INFORMS Annual Meeting*, Anaheim, CA.

[51] Calci, B., Leibowicz, B.D., Bard, J.F., Jayadev, G., 2021. Multi-period pricing under price history dependent investments in consumption infrastructure: An application in natural gas sector. *INFORMS Annual Meeting*, Anaheim, CA.

[50] Lu, L., Zhang, N., Leibowicz, B.D., 2021. Designing electric vehicle charging infrastructure to enable disaster evacuation. *INFORMS Annual Meeting*, Anaheim, CA.

[49] Leibowicz, B.D., Calci, B., Bard, J.F., Jayadev, G., 2021. Incorporating learning-by-doing into mixed complementarity equilibrium models. *INFORMS Annual Meeting*, Anaheim, CA.

[48] Moglen, R., Klise, K., Leibowicz, B.D., 2021. Water infrastructure resilience: A case study in the U.S. Virgin Islands. *IISE Annual Conference*, Montreal, Canada (virtual due to COVID-19).

[47] Leibowicz, B.D., Calci, B., Bard, J.F., Jayadev, G., 2021. Incorporating learning-by-doing into mixed complementarity equilibrium models. *IISE Annual Conference*, Montreal, Canada (virtual due to COVID-19).

[46] Bourque, C.M., Thompson, C.J., Clarno, K.T., Leibowicz, B.D., 2020. Coupling simulation technologies to assist nuclear fuel fabrication facility design. *2020 American Nuclear Society Winter Meeting*, Chicago, IL (virtual due to COVID-19).

[45] Jayadev, G., Leibowicz, B.D., Bard, J.F., Calci, B., 2020. Strategic interactions between liquefied natural gas and domestic gas markets: A bilevel model. *INFORMS Annual Meeting*, National Harbor, MD (virtual due to COVID-19).

[44] Zhu, Q., Leibowicz, B.D., 2020. Sectoral greenhouse gas mitigation in the U.S. *INFORMS Annual Meeting*, National Harbor, MD (virtual due to COVID-19).

[43] Moglen, R., Klise, K.A., Leibowicz, B.D., 2020. Water infrastructure resilience: A case study in the U.S. Virgin Islands. *INFORMS Annual Meeting*, National Harbor, MD (virtual due to COVID-19).

[42] Calci, B., Leibowicz, B.D., Bard, J.F., Jayadev, G., 2020. A complementarity-based equilibrium model with endogenous technological change and an application to natural gas markets. *INFORMS Annual Meeting*, National Harbor, MD (virtual due to COVID-19).

[41] Leibowicz, B.D., Brozynski, M.T., 2020. A bilevel optimization model of infrastructure-dependent technology adoption: Overcoming the chicken-and-egg problem. *INFORMS Annual Meeting*, National Harbor, MD (virtual due to COVID-19).

[40] Leibowicz, B.D., 2020. Urban land use and transportation planning for climate change mitigation: A theoretical framework. *IISE Annual Conference*, New Orleans, LA (virtual due to COVID-19).

[39] Zhang, N., Leibowicz, B.D., Hanasusanto, G.A., 2020. Optimal residential battery storage operations using robust data-driven dynamic programming. *MIT A+B Applied Energy Symposium*, Cambridge, MA (virtual due to COVID-19).

* Not shown: all presentations given prior to 2020.

C. Other Invited Workshop Participation

[3] **Participant**. *Cybersecurity Manufacturing Innovation Institute (CyManII) Roadmap Workshop*, virtual event, 2021.

[2] **Participant** and **Commentator**. *Workshop on Accelerating Climate-Mitigating Technology Development and Deployment*, College Park, MD, 2018. Convened by Harvard Kennedy School and University of Maryland.

[1] **Participant**. *Sandia National Laboratories Academic Alliance Faculty Field Day*, Livermore, CA, 2018.

GRANTS AND CONTRACTS

EXTERNAL RESEARCH FUNDING				
Role and Co-Investigators	**Title**	**Sponsor**	**Grant Total (My Share)**	**Grant Period**

Senior Investigator* (Internal LOA PI)	LEAP-HI: Smart Sensing and Forecasting of Water Quality in the Water Distribution Network For Protection of Public Health	National Science Foundation	$56,249 ($56,249)	8/2025 – 5/2026
Co-PI H. Daigle (PI), A. Ravikumar (Co-PI), A. Waxman (Co-PI), S. Castellanos (Co-PI)	Engineering the Carbon Management System	Saudi Aramco	$433,233 ($86,647)	7/2025 – 6/2027
PI	Applied Research and Development to Support Resilience Valuation and Planning	Lawrence Berkeley National Laboratory	$800,350 ($800,350)	10/2024 – 8/2027
Co-PI J. Bard (PI)	Project Portfolio Optimization with Fixed Production Profile	ExxonMobil Upstream Research Company	$450,000 ($225,000)	9/2022 – 8/2025
PI J. Hasenbein (Co-PI)	Sampling Design for Random Inspections	Department of Homeland Security (via Texas A&M)	$250,000 ($125,000)	11/2022 – 1/2025
Co-PI C. Werth (PI), D. Eaton (Co-PI), A. Huang (Co-PI), P. Sela (Co-PI)	NRT-INFEWS: Graduate Student Education: Reducing Energy Barriers for Novel Water Supply Use in Sustainable Agriculture	National Science Foundation	$2,999,999 ($600,000)	9/2018 – 8/2025
PI	Economic Impact of Nuclear Detonations: The Nuclear Economic Consequence Analysis Tool (NECAT)	Defense Threat Reduction Agency (via University of Southern California)	$405,342 ($405,342)	9/2021 – 1/2025
Co-PI S. Olmstead (PI), A. Waxman (Co-PI), C. Mason (Co-PI)	The Economics of Scaling Carbon Capture, Utilization, and Storage	Alfred P. Sloan Foundation	$849,981 ($212,495)	6/2021 – 7/2025
PI	LBNL Electricity Markets and Policy Group	Lawrence Berkeley National Laboratory	$296,927 ($296,927)	3/2019 – 3/2025
Co-PI J. Bard (PI), T. Edgar (Co-PI)	Energy Market Dynamic Modeling	ExxonMobil Upstream Research Company	$619,508 ($206,503)	6/2018 – 5/2022
Senior Investigator*	Services Necessary to Design, Develop, and Test Mechanical Designs for Application at LANL	Los Alamos National Laboratory	$73,438 ($73,438)	1/2019 – 12/2020
Co-PI A. Waxman (PI), S. Olmstead (Co-PI)	Strategies for Mitigating Climate Impacts of Gulf Coast Industrial Facilities	The Cynthia and George Mitchell Foundation	$62,851 ($20,950)	3/2019 – 12/2019
Senior Investigator*	Strategic Safety Improvements	City of Austin	$2,000 ($2,000)	5/2019 – 10/2019
		Subtotal: External Funding	**$7,299,878 ($3,110,901)**	

INTERNAL RESEARCH FUNDING				
Role and Co-Investigators	**Title**	**Sponsor**	**Grant Total (My Share)**	**Grant Period**
Co-PI H. Daigle (PI), A. Waxman (Co-PI)	Engineering the Carbon Management System Through Technology and Policy Optimization	UT Austin Energy Institute	$100,000 ($33,333)	5/2025 – 8/2026
Co-PI H. Daigle (PI), A. Ravikumar (Co-PI), S. Castellanos (Co-PI), A. Waxman (Co-PI)	Developing Critical Research Tools to Evaluate Carbon Management Technologies	UT Austin Office of the VPR, Bold Inquiry Incubator Project	$20,000 ($4,000)	9/2024 – 8/2025
Co-Lead Q. Huang (Co-Lead)	Data-Driven View Planning for 3D Reconstruction	UT Austin Office of the VPR, Associate Professor X Project	$99,914 ($50,300)	1/2023 – 12/2023
Co-PI K. Kockelman (PI)	Smart Charging (and Discharging) of BEVs for Lower Grid Emissions and Better Grid Performance	UT Austin Energy Institute	$60,000 ($30,000)	9/2022 – 8/2023
PI	Low Demand Levers for Climate Mitigation: Amplification Through Economic Upstream Effects and Spillovers	Texas Global Faculty Research Seed Grants	$9,800 ($9,800)	1/2022 – 12/2022
PI J. Hasenbein (Co-PI)	Micro-to-Macro Systems Modeling	UT Austin Energy Institute	$55,000 ($27,500)	11/2021 – 11/2022
Co-Lead J. Busby (Co-Lead), D. Adelman (Member) S. Olmstead (Member)	Sectoral Feasibility of Greenhouse Gas Mitigation and Clean Energy Transitions	UT Austin Energy Institute	$245,000 ($61,250)	1/2020 – 6/2022
PI	Designing Electric Vehicle Charging Infrastructure to Enable Disaster Evacuation	UT Austin Department of Mechanical Engineering Seed Grant Program	$20,000 ($20,000)	1/2021 – 8/2021
PI	Walker Scholar Award	UT Austin Department of Mechanical Engineering	$20,000 ($20,000)	4/2019 – 8/2021
Senior Investigator*	Energy Infrastructure of the Future	UT Austin Energy Institute	$51,635 ($51,635)	1/2018 – 5/2019
		Subtotal: Internal Funding	**$681,349 ($307,818)**	
ALL RESEARCH FUNDING				
		Grand Total: All Funding	**$7,981,227 ($3,418,719)**	

** For these projects, Dr. Leibowicz was allocated the listed funding to conduct specific research as part of a broader project with more collaborators and a larger budget.*

SERVICE TO THE PROFESSION

Memberships in Professional Societies

Member	Institute of Industrial and Systems Engineers (IISE)	
Senior Member	Institute for Operations Research and the Management Sciences (INFORMS)	
Member	International Association for Energy Economics (IAEE)	
Member	United States Association for Energy Economics (USAEE)	

Elected Leadership Positions

President	INFORMS Section on Energy, Natural Resources, and the Environment (ENRE)	2024 – Present
President-Elect	INFORMS Section on Energy, Natural Resources, and the Environment (ENRE)	2022 – 2024
Secretary-Treasurer	INFORMS Section on Energy, Natural Resources, and the Environment (ENRE)	2020 – 2022
Director	IISE Energy Systems Division	2020 – 2022

Other Leadership Positions

Board of Directors Member (formerly Steering Committee)	Macro-Energy Systems Society	2020 – Present

Editorial Service

Editorial Board Member	*Energy Sources, Part B: Economics, Planning, and Policy*	2019 – Present

Conference Organization

Conference Leadership

Organizing Committee Member (Sponsored Sessions Co-Chair)	*INFORMS Annual Meeting*, Phoenix, AZ	2023
Conference Executive Committee Member	*40th USAEE/IAEE North American Conference*, Chicago, IL	2023
Program Committee Member	*Macro-Energy Systems Workshop*, Stanford, CA	2022
Steering Committee Member	*Stanford University Macro-Energy Systems Workshop*, Stanford, CA (virtual due to COVID-19)	2020
Scientific Committee Member	*Sustainable Built Environment Conference*, Tokyo, Japan	2019
Co-Organizer	*Sandia-UT Energy Collaboration Workshop*, Austin, TX	2018

Cluster / Track Chair

Track Co-Chair	Energy Systems track, *IISE Annual Conference*, Montreal, Canada (virtual due to COVID-19)	2021
Cluster Chair	ENRE — Energy and Climate cluster, *INFORMS Annual Meeting*, National Harbor, MD (virtual due to COVID-19)	2020
Cluster Co-Chair	ENRE — Energy cluster, *INFORMS Annual Meeting*, Seattle, WA	2019
Cluster Chair	Energy and Climate cluster, *INFORMS Annual Meeting*, Phoenix, AZ	2018

Cluster Chair	Energy and Climate cluster, *INFORMS Annual Meeting*, Houston, TX	2017

Session Chair

ENRE Awards Session, INFORMS Annual Meeting, Atlanta, GA	2025
Industrial Decarbonization I: Carbon Capture and Hydrogen, INFORMS Annual Meeting, Seattle, WA	2024
Electric Reliability and Resilience, INFORMS Annual Meeting, Seattle, WA	2024
ENRE Awards Session, INFORMS Annual Meeting, Phoenix, AZ	2023
Oil, Gas, and the Future of Energy, INFORMS Annual Meeting, Phoenix, AZ	2023
Electric Reliability and Resilience, INFORMS Annual Meeting, Phoenix, AZ	2023
ENRE Awards Session, INFORMS Annual Meeting, Indianapolis, IN	2022
Energy Infrastructure Network Optimization, INFORMS Annual Meeting, Indianapolis, IN	2022
ENRE Awards Session, *INFORMS Annual Meeting*, Anaheim, CA	2021
Macro-Energy Systems: Energy Infrastructure Resilience, *INFORMS Annual Meeting*, Anaheim, CA	2021
Energy Modeling Platform for North America — Supporting Worldwide Open Modeling Efforts, *INFORMS Annual Meeting*, Anaheim, CA	2021
Energy Systems Track Best Paper Competition, *IISE Annual Conference*, Montreal, Canada (virtual due to COVID-19)	2021
Optimization in Energy and Resource Systems, *IISE Annual Conference*, Montreal, Canada (virtual due to COVID-19)	2021
Critiques of Macro-Energy Systems Research and Our Responses as a Field (panel organizer and moderator), *Stanford University Macro-Energy Systems Workshop*, Stanford, CA (virtual due to COVID-19)	2021
The Challenges of Going Green: Solutions for Utilities and Firms, *INFORMS Annual Meeting*, Seattle, WA	2019
Energy Demand Analysis, *37th USAEE/IAEE North American Conference*, Denver, CO	2019
The Future of Energy: A Systems Perspective, *INFORMS Annual Meeting*, Phoenix, AZ	2018
Demand Modeling, *International Energy Workshop*, Gothenburg, Sweden	2018
Energy and Climate Themes in Transportation, *INFORMS Annual Meeting*, Houston, TX	2017
Systems Modeling Approaches to Energy Analysis, *INFORMS Annual Meeting*, Houston, TX	2017
Future Pathways and Uncertainties, *International Energy Workshop*, College Park, MD	2017
Energy III, *INFORMS Annual Meeting*, Nashville, TN	2016

Award Chair and Committees

Committee Member	Career Achievement Award, IISE Energy Systems Division	2024
Chair	Outstanding Young Investigator Award, IISE Energy Systems Division	2022
Chair	Best Paper Award Competition, Energy Systems Track, *IISE Annual Conference*	2021

Grant Proposal Review Service
Alfred P. Sloan Foundation
ConTex Collaborative Research Grants
National Science Foundation
UT Austin Energy Institute

Journal Referee Service
Applied Energy
Cities
Economics of Energy & Environmental Policy
Energies
Energy
Energy and Buildings
Energy and Climate Change
Energy Economics
Energy Policy
Energy Research and Social Science
Energy Sources, Part B: Economics, Planning, and Policy
Energy Systems
Environment International
Environmental Modelling and Software
Environmental Research Letters
Environmental Science & Technology
European Journal of Comparative Economics
European Journal of Operational Research
Frontiers in Energy
IEEE Access
IEEE Transactions on Energy Markets, Policy, and Regulation
IEEE Transactions on Power Systems
IISE Transactions
INFORMS Journal on Computing
International Journal of Electrical Power and Energy Systems
International Journal of Energy Sector Management
International Journal of Production Research
Journal of Cleaner Production
Journal of Environmental Management
Journal of Planning Education and Research
Journal of the Association of Environmental and Resource Economists
Management Science
Nature Climate Change
Nature Energy
Operations Research
Optimization and Engineering
PLoS ONE
Reliability Engineering & System Safety
Research Policy
Risk Analysis
Socio-Economic Planning Sciences
Sustainable and Resilient Infrastructure
Sustainable Cities and Society
Technological Forecasting and Social Change
The Energy Journal
The Engineering Economist

Transportation Research Part D: Transport and Environment
Utilities Policy

Advisory Committees and Working Groups

Member	Policies on Weatherization and Electric Reliability (POWER) Committee, UT Energy Institute	2021
Member	Working Group on Multisector Impacts of Energy Transitions, Multisector Dynamics	2020 – 2022
Steering Committee Member	Austin Climate Equity Plan, City of Austin	2019 – 2021
Academic Advisory Group Member	Carbon Reduction Assessment of New Enterprises (CRANE), Prime Coalition	2019 – 2020

SERVICE TO THE UNIVERSITY

Graduate School	Generative AI and Graduate Education Working Group	2025 – Present
Walker Department of Mechanical Engineering	Awards Committee	2025 – 2026
	New Faculty Launch Committee: Hairong Wang	2025 – 2026
	Department Chair Reappointment Committee	2025
	Faculty Search Committee (ORIE Subcommittee)	2024 – 2025
	Faculty Search Committee (ORIE Subcommittee)	2023 – 2024
	Building Renovation Committee	2022 – 2023
	Faculty Search Committee	2021 – 2022
	Faculty Mentor, Career Gateway Electives (Industrial Engineering and Management)	2019 – Present
	Member, Graduate Student Recruiting Committee	2016 – 2022
Graduate Program in Operations Research and Industrial Engineering	Communications and Outreach Coordinator	2022 – Present
	Graduate Student Recruiting Coordinator	2016 – 2022

STUDENT AND POSTDOCTORAL SUPERVISIONS

Ph.D. Supervisions Completed

[12] Albeladi, Abdullah	"Game-Theoretic and Stochastic Optimization Models for Energy Policy and Planning" *Placement:* Assistant Professor (tenure track), King Abdulaziz University, Saudi Arabia	12/2025	Operations Research and Industrial Engineering	The University of Texas at Austin
[11] Liu, Donghao *Co-supervisor*: Jonathan Bard	"Optimization of Budgeted Investment Planning for Multi-Period, Multi-Facility, and Multi-Product Systems" *Placement:* Algorithm Engineer – Operations Research, Beijing Boson Quantum Technology	12/2025	Operations Research and Industrial Engineering	The University of Texas at Austin

[10] Moglen, Rachel	"Disaster Preparedness and Restoration of Interconnected Infrastructure Systems" *Placement:* Integrated Energy Systems Modeler/Research Staff Level 3, Electric Power Research Institute	5/2024	Operations Research and Industrial Engineering	The University of Texas at Austin
[9] Zhang, Nan	"Optimization Tools for Emerging Challenges in Power Systems" *Placement:* Research Scientist, Amazon Lab126	5/2022	Operations Research and Industrial Engineering	The University of Texas at Austin
[8] Calci, Baturay *Co-supervisor*: Jonathan Bard	"Natural Gas Market Applications of Multi-Agent Optimization" *Placement:* Applied Scientist II, Uber	5/2022	Operations Research and Industrial Engineering	The University of Texas at Austin
[7] Jones, Erick	"Multi-System Optimization: Intermittent Production, Flexible Demand, Emerging Technologies" *Placement:* Assistant Professor (tenure track), UT Arlington	8/2021	Operations Research and Industrial Engineering	The University of Texas at Austin
[6] Jayadev, Gopika *Co-supervisor:* Jonathan Bard	"Optimization Approaches for Energy Infrastructure Network Design" *Placement:* Machine Learning Scientist, Apple	5/2021	Operations Research and Industrial Engineering	The University of Texas at Austin
[5] Zhu, Qianru	"Operations Research Models of Climate Change Mitigation and Adaptation at Diverse Scales" *Placement:* Engineer/Scientist II, Electric Power Research Institute	5/2021	Operations Research and Industrial Engineering	The University of Texas at Austin
[4] Naeini, Milad *Co-supervisor:* J. Eric Bickel	"Uncertainty in Cost-Benefit Analysis of Climate Policy: Climate-Economy Model Evaluation and Extension" *Placement:* Data Scientist, Circle K	5/2021	Operations Research and Industrial Engineering	The University of Texas at Austin
[3] Bandyopadhyay, Arkasama *Co-supervisor:* Michael Webber	"Techno-Economic Methods for Analyzing the Energetic and Economic Effects of Solar, Storage, and Demand Response" *Placement:* Research Assistant Professor, Texas A&M University	8/2020	Mechanical Engineering	The University of Texas at Austin
[2] Brozynski, Max	"Operations Research Models of Technology Transitions and the Role of Policy Support" *Placement:* Senior Consultant, Echelon Analytics	5/2020	Operations Research and Industrial Engineering	The University of Texas at Austin

[1] Phathanapirom, Urairisa "Birdy" *Co-supervisor:* Derek Haas	"Autonomous Decision Making in Fuel Cycle Simulators using a Game Theoretic Approach" *Placement:* Postdoctoral Research Associate, Oak Ridge National Laboratory	12/2018	Mechanical Engineering	The University of Texas at Austin

M.S. Supervisions Completed

[11] Pimentel, Aidan *Co-supervisor*: Eric Bickel	"Hydrogen Supply Chain Optimization for Industrial Stationary Combustion Decarbonization Under U.S. Federal Policy Incentives"	5/2024	Operations Research and Industrial Engineering	The University of Texas at Austin
[10] Lu, Le "Helen"	"Designing Electric Vehicle Charging Infrastructure to Enable Disaster Evacuation"	8/2022	Operations Research and Industrial Engineering	The University of Texas at Austin
[9] Corcoran, J. Sean	"Perceptions of Risk in Increasingly Capital-Intensive Electricity Grids: Measuring the Impacts of Accurate Cost of Capital Representation on Planning for Future Energy Systems" *Director's Award for Best Energy and Earth Resources M.S. Theses*	5/2022	Energy and Earth Resources	The University of Texas at Austin
[8] Morton, Ella *Co-supervisor:* Shadi Goodarzi	"Optimizing Hydrogen Production Capacity and Day Ahead Market Bidding for a Wind Farm"	12/2021	Operations Research and Industrial Engineering	The University of Texas at Austin
[7] Ramthun, Eli *Co-supervisor:* David Adelman	"Winds of Change: Assessing Direct and Indirect Effects of Variable Renewable Energy Growth on the ERCOT Market"	12/2021	Energy and Earth Resources	The University of Texas at Austin
[6] Kawai, Eiji	"The Role of Carbon Capture and Utilization in Industrial Sector Decarbonization: A Case Study of Japan"	5/2021	Energy and Earth Resources	The University of Texas at Austin
[5] Bourque, Cade *Co-supervisor:* Kevin Clarno	"Production Through Simulation: Using Simulation Technologies to Create and Evaluate Nuclear Fuel Fabrication Facility Designs"	12/2020	Mechanical Engineering	The University of Texas at Austin
[4] Speetles, Brittany *Co-supervisor:* Michael Webber	"Representative Day Selection in Capacity Expansion Modeling"	5/2020	Mechanical Engineering	The University of Texas at Austin
[3] Lanham, Christopher	"Optimal Decarbonization Pathways for Urban Residential Building Energy Services" *Director's Award for Best Energy and Earth Resources M.S. Theses*	5/2018	Energy and Earth Resources	The University of Texas at Austin

[2] Tutton, Peter *Co-supervisor:* Susan Hovorka	"Carbon Capture and Storage Network Optimization Under Uncertainty" *Director's Award for Best Energy and Earth Resources M.S. Theses*	5/2018	Energy and Earth Resources	The University of Texas at Austin
[1] Punjabi, Kunal*	"Effects of Platform Design on Solar PV Prices in an Online Marketplace"	12/2017	Operations Research and Industrial Engineering	The University of Texas at Austin

** This student completed an M.S. report rather than an M.S. thesis.*

Postdoctoral Supervisions Completed

[1] Sambasivam, Balasubramanian *Co-supervisors:* John Hasenbein Kara Kockelman	*Placement:* Assistant Professor (tenure track), Mahindra University, India	11/2021 – 11/2023	The University of Texas at Austin

Ph.D. Supervisions in Progress

A. Students admitted to candidacy and/or passed Ph.D. qualifying exam

[6] Blandford, Stephen – Operations Research and Industrial Engineering

[5] Colombe, Connor — Operations Research and Industrial Engineering

[4] Hebel, Nina – Operations Research and Industrial Engineering

[3] Kumar, Yash – Operations Research and Industrial Engineering (co-supervisor: Raghu Bollapragada)

[2] Ma, Huidi — Operations Research and Industrial Engineering (co-supervisor: John Hasenbein)

[1] Maynor, Katrina — Operations Research and Industrial Engineering (co-supervisor: J. Eric Bickel)

B. Students preparing to take Ph.D. qualifying exam

[1] Johnston, Wyatt – Operations Research and Industrial Engineering

M.S. Supervisions in Progress

[1] Xu, Libo – Operations Research and Industrial Engineering (co-supervisor: Lina Sela)

Ph.D. Committees Completed

Operations Research and Industrial Engineering — 11

- Baris Bilir, 2025
- Ashutosh Shukla, 2024
- Brent Austgen, 2024
- Colin Small, 2023
- Ai Zhao, 2023
- Xiangyi Fan, 2023
- Joshua Woodruff, 2020
- Andrew Beck, 2020
- Jia Guo, 2020
- Zachary Smith, 2019
- Chris Hadlock, 2017

Mechanical Engineering — 9

- Nick Willems, 2022

- Anna Schleifer, 2021
- Neal Mann, 2020
- Samuel Johnson, 2019
- Sam Aminfard, 2018
- William Gurecky, 2018
- Kazunori Nagasawa, 2018
- Thomas Deetjen, 2018
- Scott Vitter, 2018

Electrical and Computer Engineering – 1

- Saadallah Kaasir, 2022

Public Policy — 1

- Cale Reeves, 2019

M.S. Committees Completed

Energy and Earth Resources — 7

- Julia Skrovan, 2024
- Vianey Rueda, 2021
- Meiyan Chen, 2021
- Eli Ramthun, 2021
- Sergio Leon Marquez, 2020
- Mark Reid, 2019
- Dinuk Prathaj Haputhanthri, 2017

Undergraduate Research Supervisions

Undergraduate Honors Theses — 2

- Morgan Santoni-Colvin, 2021
- Pranav Nair, 2020

Undergraduate Research Assistantships (paid) — 3

- Leah Dubiel, 2022 – 2023
- Benjamin Mendoza, 2021 – 2022
- Elena Koung, 2020 (co-supervisor: Kevin Clarno)

ME 377K Projects — 1

- Anmol Mathur, 2019

ME Freshman Introduction to Research in Engineering (FIRE) Projects – 4

- Spring 2024, Fall 2024, Spring 2025, Fall 2025

Other Research Supervisions

Other Graduate Research Assistantships (paid) – 2

- Yumeng Zou (Economics), Fall 2025 (co-supervisor: Andrew Waxman)
- Andrew Ball (Energy and Earth Resources), Fall 2024

TEACHING

ORI 390Q.8 (formerly ORI 397): Systems Modeling (new course)

Many of the most pressing policy challenges of our time transcend traditional disciplinary boundaries and necessitate the use of systems models to analyze possible solutions. This course shows how methodological approaches from operations research and industrial engineering can be applied to construct such models. Particular emphasis is devoted to models that combine concepts from engineering, economics, natural sciences, and policy. The featured models showcase a broad range of methodological approaches, such as optimization, simulation, dynamic programming, decision analysis, stochastic processes, and dynamical systems. Example applications are drawn from fields including energy and climate change, health policy, transportation, and national

security. More generally, the course trains students to build mathematical models that represent complex real-world problems.

- Taught in 2017, 18, 19, 20, 21, 22, 23

ORI 390R.1: Applied Probability

Concepts of probability and mathematical statistics; application of these analytical methods to planning and evaluation of research and industrial experimentation. Basic probability theory, combinatorial analysis of random phenomena, conditional probability and independence, parametric families of distributions, expectation, distributions of functions of random variables, limit theorems.

- Taught in 2016, 18, 19, 20, 21, 22, 23, 25

ORI 384 (formerly ORI 397): Emerging Trends in ORIE

This course introduces students to the full breadth of ORIE research areas by bringing in distinguished seminar speakers working at the forefront of various methodologies and application domains. These speakers include professors from other universities; researchers from national laboratories and research institutes; practitioners who use ORIE methods in the private sector; and occasionally, experts from the UT community. The course emphasizes information literacy, effective written communication of research concepts, critical analysis of academic research, direct engagement with ORIE researchers, and active preparation for thesis and dissertation research.

- Taught in 2018, 23

ME 353: Engineering Finance

Evaluating the financial impact of engineering decisions. Comparing alternatives with cash flow analysis considering rate of return, inflation, and taxes, with emphasis on analyzing risk. Managing complex projects with activity scheduling and resource allocation considering cash flows. Methods include probabilistic analysis and simulation.

- Taught in 2017, 19, 20, 22, 23, 25

IN THE MEDIA

In the News – Examples of Research Coverage and Expert Quotes

Public Utility Commission adopts reliability standards for ERCOT power grid following 2021 freeze. ***The Daily Texan***, September 11, 2024.

Do gas exports help or hurt American prices? ***The Hill***, February 17, 2024.

ME ORIE Student Wins Best Paper at the US Association of Energy Economics Conference. ***UT ORIE***, December 4, 2023.

New Berkeley Lab report provides guidance to conduct enhanced resource adequacy assessments that support reliable decarbonization. ***Lawrence Berkeley National Laboratory***, October 17, 2023.
Researchers Eye New Ways to Prevent Agricultural Pests from Entering U.S. ***UT Cockrell School of Engineering***, April 4, 2023.

Red voters for green energy? Conservatives say they support solar and wind power too. ***USA Today*** and ***Yahoo***, June 10, 2022.

UT assistant professor to conduct research abroad with Texas Global grant. ***The Daily Texan***, February 10, 2022.

Longer, more frequent outages afflict the U.S. power grid as states fail to prepare for climate change. ***Washington Post***, October 24, 2021.

Why not bury all our power lines? ***NPR Marketplace***, September 1, 2021.

UT report shines light on man-made portions of February power crisis. ***Austin American-Statesman***, July 14, 2021.

A Federal Tax Credit Could Incentivize (and Accelerate) the Reduction of Greenhouse Gas Emissions. ***UT News***, July 14, 2021.

UT Austin researchers report on what went wrong during winter storm. ***Fox 7 Austin***, July 13, 2021.

UT report: Failure of natural gas system 'exacerbated' winter storm blackouts. ***Houston Chronicle***, July 13, 2021.

Sheila Olmstead, Andrew Waxman, Ben Leibowicz lead team awarded $850,000 to study the economics of carbon capture and storage. ***UT LBJ School***, June 18, 2021.

UW, University of Texas-Austin Study Barriers to Carbon Capture, Use, Storage. ***University of Wyoming News***, June 18, 2021.

True Cost of Major Power Outages Remains a Mystery, Report Finds. ***UT News***, March 1, 2021.

Berkeley Lab report investigates the implications of a regional resource adequacy program on utility integrated resource planning. ***Lawrence Berkeley National Laboratory***, December 4, 2020.

Gulf Coast oil and gas expansion will generate half a billion annual tons of emissions in U.S.: report. ***Houston Chronicle***, January 15, 2020.

Cheap Natural Gas Could Add 500 Million Tons to U.S. Emissions. ***Bloomberg***, January 14, 2020.

U.S. greenhouse gases to billow on Gulf Coast petrochemicals charge: study. ***Reuters***, January 14, 2020.

Oil, gas infrastructure build-out in US Gulf to dramatically increase GHG emissions: study. ***S&P Global Platts***, January 14, 2020.

Oil and Gas Boom, Industrial Growth Could Mean Significant New Climate Emissions, Study Finds. ***UT News***, January 14, 2020.

National Science Foundation Research Traineeship on Food-Energy-Water Systems Kicks Into High Gear. ***UT ORIE***, October 11, 2019.

CRANE Software Project Launches to Address Gap in Climate Impact Assessment Solutions for Early-Stage Investors. ***Prime Coalition***, June 12, 2019.

Construction changes are key to decarbonizing Austin's residential areas. ***The Daily Texan***, October 16, 2018.

What's the Optimal Way to Reduce Emissions in Residential Buildings? ***Greentech Media***, October 4, 2018.

National Science Foundation Awards $3M for Sustainable Agriculture Education Project. ***UT ORIE***, September 21, 2018.

Research Spotlight. ***UT Energy Institute***, April 27, 2018.

Op-Eds

[11] Leibowicz, B.D. Bipartisan infra plan not perfect, but it's a good start on climate change. *Infrastructure Investor*, June 30, 2021.

[10] Leibowicz, B.D. Wind power reliability — low expectations are OK. *Austin American-Statesman*, February 25, 2021.

[9] Leibowicz, B.D. Don't blame wind energy for the crisis. *San Antonio Express-News*, February 23, 2021.

[8] Leibowicz, B.D., Farhat, K. How Amazon can use its HQ2 search to boost clean energy. *Dallas Morning News*, March 15, 2018.

[7] Leibowicz, B.D., Farhat, K. How Amazon's HQ2 could advance the clean energy economy. *Austin American-Statesman*, March 13, 2018.

[6] Farhat, K., Leibowicz, B.D. Can Amazon make us greener? *Houston Chronicle*, March 7, 2018.

[5] Leibowicz, B.D. Uncertain effects with driverless vehicles. *San Antonio Express-News*, December 9, 2017.

[4] Leibowicz, B.D. Shared autonomous vehicles could do more harm than good. *Austin American-Statesman*, November 29, 2017.

[3] Leibowicz, B.D. With right policies, cities can curb climate change. *Houston Chronicle*, June 28, 2017.

[2] Leibowicz, B.D. Cities can work on climate change – with the right policies. *Austin American-Statesman*, June 19, 2017.

[1] Leibowicz, B.D. U.S. Cities Don't Need the Paris Accord to Fight Climate Change. *Fortune*, June 13, 2017.

CONSULTING

Senior Advisor	FTI Consulting	2022 – 2024

VITA

Dr. Benjamin D. Leibowicz is an Associate Professor at The University of Texas at Austin, where he holds the endowed Banks McLaurin Fellowship in Engineering. His primary appointment is in the Operations Research and Industrial Engineering graduate program, which is administered through the Walker Department of Mechanical Engineering. Dr. Leibowicz also holds a courtesy appointment in the Lyndon B. Johnson School of Public Affairs and supervises student research in the Energy and Earth Resources graduate program.

Dr. Leibowicz develops mathematical models and methods to improve decision-making on energy and environmental policy and strategy. His primary research interests are energy systems, energy and climate policy analysis, integrated assessment modeling, technological change, and sustainable cities. He approaches these topics from an interdisciplinary perspective and develops modeling frameworks that combine methods from optimization, systems analysis, economic modeling, game theory, and stochastic control.

Dr. Leibowicz has published in many of the leading journals in his research areas including *The Energy Journal*, *Energy Economics*, *Energy Policy*, *European Journal of Operational Research*, *Risk Analysis*, *IEEE Transactions on Smart Grid*, and *Research Policy*. He is the current President of the INFORMS Section on Energy, Natural Resources, and the Environment (ENRE). Dr. Leibowicz has served as an elected Board Member of both the INFORMS ENRE section and the IISE Energy Systems Division. He also serves on the Editorial Board of *Energy Sources, Part B: Economics, Planning, and Policy* and on the Steering Committee of the Macro-Energy Systems community.

Prior to joining UT Austin, Dr. Leibowicz received both PhD and MS degrees in Management Science and Engineering from Stanford University, and earned a BA in Physics with a minor in Economics from Harvard University. While working toward his PhD, he was a research fellow in the Energy and Transitions to New Technologies programs at the International Institute for Applied Systems Analysis.

Citizenship: United States
Birthplace: New York, NY, USA