TONY G. REAMES

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EDUCATION

Ph.D. Public Administration, University of Kansas, 2014

MEM Engineering Management, Kansas State University, 2005

B.S. Civil Engineering, North Carolina Agricultural & Technical State University, 2002

PROFESSIONAL EXPERIENCE

Academic Appointments		
2014-Present	University of Michigan	
	Assistant Professor, School for Environment and Sustainability	
	Postdoctoral Fellow, School for Environment and Sustainability	
Sum 2012	Haskell Indians Nations University	
	Mentor, Haskell Environmental Research Studies (HERS) Institute	
2011-2012	University of Kansas	
	Graduate Research Assistant, Institute for Policy & Social Research	
	Graduate Teaching Assistant, School of Public Affairs and Administration	
2006-2010	University of Missouri-Kansas City	
	Instructor, College of Arts and Sciences, Military Science Program	
Other Professional Experience		
2007-2011	City of Lee's Summit, MO	
	Staff Engineer, Development Engineering Group	
2006-2007	TranSystems Corporation. Kansas City, MO	
	Project Engineer, Rail Team	
2006-2010	United States Army Reserves	
2002-2006	United States Army	
	Operations Officer, Fort Jackson, SC	
	Risk Management Coordinator, Fort Riley, KS	
	Construction/Combat Engineer, Fort Riley, KS and Iraq	
	University ROTC Recruiting Operations Officer, Duke and NC Central Universities	
2002	SC Department of Health & Environmental Control, Columbia, SC	
	Hydrogeologist	

GRANTS

External funding

2020	National Science Foundation. "SCC-IRG Track 1: Reducing Barriers to Residential Energy
	Security through an Integrated Case-management, Data-driven, Community-based Approach."
	(\$2.1M. PI)
2020	Michigan Donastmant of Environment Creat Labor & Energy (ECLE) "Clean Energy fo

2020 Michigan Department of Environment, Great Lakes & Energy (EGLE). "Clean Energy for Low-Income Communities Accelerator (CELICA) in Michigan, Phase III." (\$13,768. PI)

2020 Walker-Miller Energy Services/Ameren Illinois Company. "Diverse Customer Engagement in Clean Energy." (\$62,548. PI)

2019 Natural Resources Defense Council. "Study on Energy Burdens and Evictions." (\$14,727. PI)

2019 **National Institutes of Health**. "Evidence to improve heat warming effectiveness in reducing morbidity and mortality." (\$663,000. Co-I, PI: Gregory Wellenius)

- 2018 Harvard University/JPB Foundation. "Exploring Associations between Temperature Exposure, Housing Quality, and Health During the Winter in Energy Poor Households." (\$240,000. PI)
- 2018 Alfred P. Sloan Foundation. "Profiling Households in the Energy Efficiency Financing Doughnut Hole." (\$57,524. PI)
- 2016 **Department of Energy/National Renewable Energy Lab**. "Unlocking Widespread Solar Adoption: Understanding Preferences of Low- to Moderate-Income Households to Create Scalable, Sustainable Models." (\$1.3M. Co-PI, PI: Benjamin Sigrin, NREL)

Internal funding – University of Michigan

- 2019 **Graham Sustainability Institute Catalyst Grant**. "The Cumulative Economic Burden of Air Pollution Health Impacts and Energy Inefficiency under Different Energy Mix Scenarios in Southeast Michigan." (\$10,000. Co-PI, PI: Carina Gronlund)
- 2019 **Poverty Solutions Initiative**. "Detroit Communities Reducing Energy and Water (D-CREW)." (\$50,000. Co-PI, PI: Marie O'Neill)
- 2019 **MICHR- Pathway to Independence Award**. "Assessing Respiratory, Cognitive, and Mental Health Benefits of Energy Efficiency Upgrades in Detroit, MI." (\$75,000. Co-I, PI: Marie O'Neill)
- 2019 **Graham Sustainability Institute Catalyst Grant**. "Expanding renewable energy policy initiative." (\$10,000. Co-PI w/Sarah Mills & Barry Rabe)
- 2019 **M- Cubed**. "Energy justice, housing and health in a changing climate." (\$60,000. Co-PI w/Marie O'Neill & Carina Gronlund)
- 2018 **Poverty Solutions Initiative**. "Eliminating the Path to Energy Poverty: A Multi-State Analysis of Equity in Energy Efficiency Investments." (\$20,000. PI)

AWARDS AND FELLOWSHIPS

- 2020 Michigan Clean Energy Leaders Project
- 2019 Midwest Energy News 40 under 40
- 2019 Grist.org 50 Fixers
- 2019 Oakland County Michigan Elite 40 under 40
- 2018 JPB Environmental Health Fellows Program. Harvard University, 2018-2021
- 2016 ECO:nomics Investing in the Future of Energy Fellow. Wall Street Journal, 2016
- 2013 Institute for Policy & Social Research Doctoral Research Fellow. U. of Kansas, 2013-2014
- 2011 National Science Foundation Integrative Graduate Education and Research Traineeship (IGERT) Climate Change Humans and Nature in the Global Environment (C-CHANGE) Fellowship. University of Kansas, 2011-2014
- 2009 Thomas Page & Barbara Kester Scholarship. University of Kansas, 2009-2011
- 2009 Myron D. Calkins Scholarship. American Public Works Association Kansas City Metro Chapter, 2009-2011
- 2006 Maurine Allison O'Bannon Memorial Scholarship. Kansas State University, 2006-2007
- 2001 Dwight D. Eisenhower Transportation Fellow. NC A&T State University, 2001-2002
- 2000 Southeastern Transportation Center Scholar. NC A&T State University, 2000-2001

PUBLICATIONS

Journal Articles

19. Zimmerman, M. & **Reames, T.G.** (accepted Nov. 2020) Where the Wind Blows: Exploring Barriers and Opportunities to Renewable Energy Development on United States Tribal Lands. *Energy Research and Social Science*.

18. Reames, T. G. (2020). A call for authentic Black engagement in the academy and beyond. *Nature Human Behaviour*, 1-1

17. Raissi, S., & **Reames, T. G.** (2020). "If we had a little more flexibility." perceptions of programmatic challenges and opportunities implementing government-funded low-income energy efficiency programs. *Energy Policy*, *147*, 111880. <u>https://doi.org/10.1016/j.enpol.2020.111880</u>

16. Wright, N. S., & **Reames, T.G.** (2020). Unraveling the Links between Organizational Factors and Perceptions of Community Sustainability Performance: An Empirical Investigation of Community-Based Nongovernmental Organizations. *Sustainability*, *12*(12), 4986. <u>https://doi.org/10.3390/su12124986</u>

15. **Reames, T. G.** (2020). Distributional disparities in residential rooftop solar potential and penetration in four cities in the United States. *Energy Research & Social Science*, 69, 101612. https://doi.org/10.1016/j.erss.2020.101612

14. **Reames, T.G.** Blackmar, J. M., and Pierce, J.C. (2020). Teaching the Three E's of Sustainability through Service-Learning in a Professional Program. *New Directions for Teaching and Learning*. https://doi.org/10.1002/tl.20374

13. Bednar, D.J., and **Reames, T.G.** (2020). Recognition of and response to energy poverty in the United States. *Nature Energy*. <u>https://doi.org/10.1038/s41560-020-0582-0</u>

12. Jenkins, K., Stephens J., **Reames, T.G.**, and Hernandez, D. (2020). "Enhancing an impactful agenda for energy justice research." *Energy Research and Social Science*. 67, 101510. <u>https://doi.org/10.1016/j.erss.2020.101510</u>

11. Forrester, S. and **Reames, T.G.** (2020). "Understanding the residential energy efficiency coverage gap and market potential for alternative financing." *Applied Energy*. 260, 114307. <u>https://doi.org/10.1016/j.apenergy.2019.114307</u>

10. Ziegler, T.B., Coombe, C.M., Rowe, Z.E., Clark, S.J., Gronlund, C.J., Lee, M., Palacios, A., Larsen, L.S., **Reames, T.G.**, Schott, J., Williams, G.O. & O'Neill, M. (2019). Shifting from "Community-Placed" to "Community-Based" Research to Advance Health Equity: A Case Study of the Heatwaves, Housing, and Health: Increasing Climate Resiliency in Detroit (HHH) Partnership. *International Journal of Environmental Research and Public Health*, 16(18), 3310. https://doi.org/10.3390/ijerph16183310

9. Sanchez, L., & **Reames, T. G.** (2019). Cooling Detroit: A socio-spatial analysis of equity in green roofs as an urban heat island mitigation strategy. *Urban Forestry & Urban Greening*, 44, 126331. https://doi.org/10.1016/j.ufug.2019.04.014

8. Fortier, M. O. P., Teron, L., **Reames, T. G.**, Munardy, D. T., & Sullivan, B. M. (2019). Introduction to evaluating energy justice across the life cycle: A social life cycle assessment approach. *Applied energy*, *236*, 211-219. <u>https://doi.org/10.1016/j.apenergy.2018.11.022</u>

7. **Reames, T. G.**, & Bravo, M. A. (2019). People, place and pollution: Investigating relationships between air quality perceptions, health concerns, exposure, and individual-and area-level characteristics. *Environment international*, *122*, 244-255. <u>https://doi.org/10.1016/j.envint.2018.11.013</u>

6. Chang, C. Y. A., Gao, Z., Kaminsky, A., & **Reames, T. G.** (2018). Michigan Sustainability Case: Revisiting the Three Gorges Dam: Should China Continue to Build Dams on the Yangtze River? *Sustainability: The Journal of Record*, *11*(5), 204-215. <u>https://doi.org/10.1089/sus.2018.29141.cyac</u>

5. Reames, T. G., Reiner, M. A., & Stacey, M. B. (2018). An incandescent truth: Disparities in energyefficient lighting availability and prices in an urban US county. *Applied energy*, 218, 95-103. <u>https://doi.org/10.1016/j.apenergy.2018.02.143</u>

4. Bednar, D. J., **Reames, T. G.**, & Keoleian, G. A. (2017). The intersection of energy and justice: Modeling the spatial, racial/ethnic and socioeconomic patterns of urban residential heating consumption and efficiency in Detroit, Michigan. *Energy and Buildings*, *143*, 25-34. <u>https://doi.org/10.1016/j.enbuild.2017.03.028</u>

3. **Reames, T. G.** (2016). Targeting energy justice: Exploring spatial, racial/ethnic and socioeconomic disparities in urban residential heating energy efficiency. *Energy Policy*, *97*, 549-558. <u>https://doi.org/10.1016/j.enpol.2016.07.048</u>

2. Reames, T. G. (2016). A community-based approach to low-income residential energy efficiency participation barriers. *Local Environment*, 21(12), 1449-1466. <u>https://doi.org/10.1080/13549839.2015.1136995</u>

1. Pierce, J., Lovrich, N., Johnson, B., **Reames, T.**, & Budd, W. (2014). Social capital and longitudinal change in sustainability plans and policies: Us cities from 2000 to 2010. *Sustainability*, 6(1), 136-157. https://doi.org/10.3390/su6010136

Edited Volumes, Chapters and Special Issues

White-Newsome, J., and **Reames, T.G.** (forthcoming) Special Issue on Redefining Resilience and Equity in the Time of Climate Change. *Environmental Justice*. https://www.liebertpub.com/doi/full/10.1089/env.2020.29002.cfp

Jackson, A., Martin, C., **Reames, T.G.**, and Van Zandt, S. (forthcoming) Special Issue on Housing Policy and Climate Change. *Housing Policy Debate*. <u>https://think.taylorandfrancis.com/housing-policy-and-climate-change-housing-policy-debate/</u>

Bouzarvski, S., Fuller, S. and Reames, T.G. (forthcoming) Handbook on Energy Justice. Elgar.

Sidortsov, R and Reames, T.G. (forthcoming) Handbook on Energy Security. Routledge.

Daley, D. and **Reames, T**. (2015). Public participation and environmental justice: Access to federal decisionmaking. In editor Konisky, David, *Failed Promises: Evaluating the Federal Government's Response to Environmental Justice*. MIT Press.

Eckerd, A. and **Reames, T**. (2012). Urban renaissance or invasion: Planning the development of a simulation model of gentrification. In editor Desai, Anand, *Simulations for Policy Inquiry*. New York: Springer. 83-100.

Reports and Other Publications

Reames, T. G. (2020). <u>A call for authentic Black engagement in the academy and beyond.</u> *Nature Human Behaviour*, 1-1.

(2019). <u>Solar with Justice: Strategies for Powering Up Under-Resources Communities and Growing an</u> <u>Inclusive Solar Market</u>. Clean Energy States Alliance: Montpelier, VT.

Reames, T. G. (2019). <u>Addressing Equity with State-level Residential Solar Energy Policies</u>. Center for Local, State, and Urban Policy: Ann Arbor, MI.

Reames, T.G., Stacey, M.B., Zimmerman, M. (2019). <u>A Multi-State Analysis of Equity in Utility- Sponsored</u> <u>Energy Efficiency Investments for Residential Electric Customers</u>. Urban Energy Justice Lab and UM Poverty Solutions: Ann Arbor, MI.

Kay, C., Markley, K., Sahai, M., Askew-Merwin, C., Rockowitz, D., and **Reames, T.G.** (2018). <u>Household</u> <u>water security in metropolitan Detroit: Measuring the affordability gap</u>. Urban Energy Justice Lab and UM Poverty Solutions: Ann Arbor, MI.

Stacey, M.B. and **Reames, T.G.** (2017). <u>Social Equity in State Energy Policy: Indicators for Michigan's</u> <u>Energy Efficiency Programs</u>. Urban Energy Justice Lab: Ann Arbor, MI.

Reames, T.G. (2017). <u>Improving the effectiveness of federal energy assistance for low-income households</u>. Scholars Strategy Network.

Reames, T. (2013). <u>Environmental impacts of urbanization: Policy implications for local warming in Nuuk,</u> <u>Greenland</u>. In editor Hansen, Klaus, Rasmus Ole Rasmussen and Ryan Weber, *Proceedings from the First International Conference on Urbanisation in the Arctic 28- 30 August 2012*. Nordregio.

MEDIA COVERAGE OF RESEARCH

- 2020 <u>Today we're officially out of the Paris Agreement. Now what?</u> Centered, by Katie Pyzyk. November 4, 2020.
- 2020 <u>"Born for This": Meet the First Black Woman to Launch a Community Solar Company.</u> Vogue, by Yessenia Funes. October 27, 2020
- 2020 <u>Profiles in the fight for environmental justice: Dr. Tony Reames.</u> Planet Detroit, by Biba Adams. October 15, 2020.

2020	Report: Low-Income City Residents Face High Energy Burden. U.S. News, by Elliott Davis. September 10, 2020.
2020	<u>S&P podcast: Energy sector grapples with growing environmental justice movement.</u> S&P Global, by Allison Good. August 17, 2020.
2020	This prof is shedding light on energy injustice — and how to fix it. Grist, by Adrienne Day. July 30, 2020.
2020	<u>Clean energy programs can help address some racial disparities, advocates say.</u> Energy News Network, by Kathiann M. Kowalski. July 2, 2020.
2020	Racial disparities persist in electric service. Is 'willful blindness' to blame? Energy News Network, by Kathiann M. Kowalski. July 1, 2020.
2020	<u>Fighting climate change isn't just an environmental issue — it's a social justice issue too.</u> The Rising, by Emily Dao. June 4, 2020.
2020	DTE, Consumers report on shutoffs, actions to protect vulnerable customers under MPSC order. Planet Detroit, by Jena Brooker & Nina Ignaczak. May 1, 2020.
2020	Fighting Energy Injustice and Coronavirus in African American Communities. GreentechMedia, by Julia Pyper. April 30, 2020.
2020	Michigan environmental justice council to take on energy access and pollution. Energy News Network, by Andy Balaskovitz. February 10, 2020.
2020	<u>Issues Of The Environment: The Relationship Between Environmental Justice And Winter Health.</u> WEMU, by David Fair. January 15, 2020.
2019	Neighborhoods With More People of Color Pay Higher Energy Bills. City Lab, by Brentin Mock. November 25, 2019.
2019	San Jose Becomes the Largest City in the US to Ban New Natural Gas Lines. Earther, by Yessenia Funes. September 19, 2019.
2019	<u>Climate Resilience on Detroit's East Side</u> . Belt Magazine, by Nina Misuraca Ignaczak. September 13, 2019.
2019	In Detroit, a legacy of inequality creates obstacles to clean energy. Energy News Network, by Biba Adams. May 29, 2019.
2019	Energy revolution must give low-income communities better access to affordable technologies. The Energy Mix. May 28, 2019.
2019	Why Low-Income Households Need to Be Part of the Clean Energy Revolution. Yale Environment 360, by Katherine Bagley. May 16, 2019.
2019	<u>Energy-efficient LED bulbs often cost more in poor neighborhoods.</u> Yale Climate Connections. May 8, 2019.
2019	<u>A Look at Climate Change and Why Black People Will Be Among Those Hardest Hit</u> . BlacDetroit, by Paris Giles. May 1, 2019.
2018	Energy access is not created equal. This Ann Arbor organization is trying to change that. Concentrate Magazine, by Jaishree Drepaul-Bruder. October 31, 2018.
2018	<u>Applications for energy assistance to be open all year starting Oct. 1</u> . Michigan News, by Maya Goldman. September 28, 2018.
2018	Energy-Efficient Light Bulbs Harder to Find, More Expensive in High-Poverty Neighborhoods. Greentech Media, by Justin Gerdes. May 21, 2018.
2018	<u>Going green is harder for Detroit's low-income communities</u> . Grist.com, by Greta Jocham. May 9, 2018.
2018	Access to energy-efficient lighting varies with poverty levels. The University Record, by Jim Erickson. April 11, 2018.
2017	Wealthy benefit most from Michigan's energy savings plans, study finds. Bridge Magazine, by Andy Balaskovitz. December 14, 2017.
2017	In Michigan, study shows utility energy savings mostly benefit wealthier customers. Midwest Energy News, by Andy Balaskovitz. December 13, 2017.
2017	How the Urban Energy Justice Lab is opening new households to LIHEAP, Weatherization, and energy assistance help. LIHEAP.org, by Jake Brown. October 31, 2017.

- 2016 <u>How Detroit's Climate Change Activists are Using Science to Plan for a Warmer City.</u> ModelDMedia.com, by Nina Ignaczak. October 31, 2016.
 2017 The Detail of the Plan is a science of the Plan is science of the Plan is a science of the Plan
- 2015 <u>The EPA has a plan to protect vulnerable communities. Will it work?</u> Grist.org, by Brentin Mock. April 27, 2015.

TEACHING EXPERIENCE

University of Michigan:	EAS 525 Energy Justice
	EAS 605/BA 605/Arch 527 Green Development
University of Kansas:	PUAD 825 Urban Policy and Administration PUAD 694 Sustainability and Civic Engagement
University of Missouri-	MIL-SCI 116 Foundations of Leadership
Kansas City:	MIL-SCI 126 Leadership Theory and Decision Making
	MIL-SCI 216 Individual Leadership
	MIL-SCI 226 Leadership and Teamwork

STUDENT SUPERVISION

Graduate Students		
<u>Ph.D. (Chair)</u>		
2020-	Karl Hoesch	
2016-	Dominic Bednar	
<u> Ph.D. (</u>	<u>Committee Member)</u>	
2018-	Lixi Liu	
<u>Master's</u>	<u>s Thesis (Chair)</u>	
2019-	Gabriel Gadsden	
2019-	Jordan Larson	
2019-	Amanda Farthing (co-chaired with w/Michael Craig)	
2018-	Sacha-Rose Phillips	
2017-	Michael Reiner	
2018	Lino Sanchez. Cooling Detroit: A Socio-Spatial Analysis of Equity in Green Roofs as an Urban Heat Island	
	Mitigation Strategy	
2018	Shiva RaissiCharmakani. A Programmatic Assessment of the U.S. Department of Energy Low-Income	
	Weatherization Assistance Program	
2016	Dominic Bednar. The Intersection of Energy and Justice: Exploring the Spatial, Racial, and Socioeconomic	
	Patterns of Residential Heating Affordability, Consumption and Efficiency in Wayne County, Michigan	
<u>Master's</u>	<u>s Thesis (Committee Member)</u>	
2019	Eloise Reid. Overpriced and Underwater: Green Gentrification in Gentilly, New Orleans	
<u>Master's</u>	s Project and Practicum	
2020-	Kate Hutchins	
2020	Matt Haugen, Kanchan Swaroop, Sydney Troost, Samantha VanDyke, and Sabrina Vivian. Building	
	Energy Democracy into City Commitments for 100% Renewable Energy	
2018	Eric Krostich. Energy Efficiency in the Built Environment: Using Three Project-Based Strategies to Make Real-	
	World Impact	
2018	Nalin Bhatai. Design of a Cost-effective, Modular, and Energy-efficient Home	
2018	Caillin Buchanan, Tyler Fitch, Benny Jeong, and Anna Lenhart. (Dow Sustainability Fellows) Get Free:	
	Understanding the potential for Community Solar Power in Highland Park	
2018	Christopher Askew-Merwin, Cria Kay, Kely Markley, Dahlia Rockowitz, and Malavika Sahai.	
	Roadmap to Water Security	
2017	Reema Abi-Akar, Gabriel Jones, and Yi Tang. An Analysis of Waste Management and Zero Waste in	
	Detroit, Michigan (co-advised w/Greg Keoleian)	

2016 Brian La Shier, Junhong Liang, Chayatach Pasawongse, Gianna Petito, and Whitney Smith. *Improving Institutional Access to Clean Energy Incentives through Research and Education* (co-advised w/Paul Mohai)

Undergraduate PitE Honor's Thesis

- 2020 Ashley Mark. Helping David Defeat Goliath: Coalition Building to Achieve Procedural Justice in Utility Integrated Resource Planning
- 2020 Michael Zimmerman. Overcoming Barriers to Wind Energy Development: A Case Study Analysis of Native American Projects
- 2019 Nicholas Simon. Policy Proposal for Low- to Moderate-Income (LMI) Community Solar Programs in the American Sunbelt Region

PRESENTATIONS

Conferences

2020	Ross Energy Week University of Michigan, Virtual November 16-20, 2020, Energy justice panel
2020	Residential Net Zero Energy Conference. October 20-22, 2020. Energy equity. Virtual
2020	15th Annual Michigan Forum on Economic Regulatory Policy "Panel-Michigan Powerty Taskforce: Has

- 2020 15th Annual Michigan Forum on Economic Regulatory Policy. "Panel -Michigan Poverty Taskforce: How energy services and programs can address poverty in Michigan." Institute of Public Utilities, Michigan State University, East Lansing, MI (February 21, 2020).
- 2020 Michigan University-Wide Sustainability & Environment (MUSE) Conference 2020 (w/ Sabrina Vivian, Matt Haugen, Kanchan Swaroop, Sydney Troost, and Samantha VanDyke). "*Mapping Pathways of City Commitments to 100% Renewable Energy*." University of Michigan, Ann Arbor, MI. (February 20-22, 2020).
- 2019 7th Annual HBCU Climate Change Conference. "Energy Justice in an Era of Climate Change Concern." New Orleans, LA (November 13-16, 2019).
- 2019 iSEE Congress. "The Intersection of Energy & Climate Justice: Spatial, Racial, and Socioeconomic Disparities in Mitigation and Adaptation Strategies." University of Illinois at Urbana-Champaign. (September 24-25, 2019).
- 2019 2nd International Conference on Energy Research and Social Science (w/Dominic Bednar). "Assessing the spatial and temporal dimensions of U.S. household energy deprivation: Constructing a multidimensional energy vulnerability index." Arizona State University (May 28-31, 2019).
- 2019 2nd International Conference on Energy Research and Social Science (w/Sabrina Vivian). "Solar for all: evaluating and guiding implementation of a low-income solar program." Arizona State University (May 28-31, 2019).
- 2019 2nd International Conference on Energy Research and Social Science (w/Sydney Forrester). "Understanding the Residential Energy Efficiency Coverage Gap and Market Potential for Alternative Financing." Arizona State University (May 28-31, 2019).
- 2019 4th Annual Network of Early Career Researchers in Sustainability Transitions (NEST) Conference (w/ Sabrina Vivian). "Solar for All: Evaluating and Guiding a Low-Income Solar Program." Lisbon, Portugal (April 4-5, 2019).
- 2019 Urban Affairs Association Conference. "American Residential Energy Inequities Across Race, Class and Place." Los Angeles, CA (April 24-27, 2019).
- 2019 Urban Affairs Association Conference (w/ Dominic Bednar). "Assessing the Spatial and Temporal Dimensions of U.S. Household Energy Deprivation: Constructing a Multidimensional Energy Vulnerability Index." Los Angeles, CA (April 24-27, 2019).
- 2018 Public Health Flint Task Force Water Summit. University of Michigan. "Household Water Security in Metropolitan Detroit." October 2, 2018.
- 2018 Energy Policy Research Conference (w/ Ben Stacey). "A Multi-State Analysis of Equity in Energy Efficiency Investments." Boise, ID (September 6-7, 2018).
- 2018 Energy Policy Research Conference (w/ Sydney Forrester). "Profiling Households in the Energy Efficiency Doughnut Hole." Boise, ID (September 6-7, 2018).
- 2018 American Society for Public Administration (w/ Shiva Raissicharmakani). "Overcoming Barriers to Energy Justice: How Policy and Practice Nuances Help Community Action Agencies Implement Low-Income Weatherization." Denver, CO (March 9-13, 2018).

- 2017 Environmental Justice in the Anthropocene Symposium (w/ Ben Stacey & Michael Reiner). Colorado State University. "Just Bulbs: Exploring the Spatial, Racial, and Socioeconomic Disparities in Urban Energy Efficiency Access and Affordability." April 24-25, 2017.
- 2017 Urban Affairs Association Conference. "Green Cures for Urban Ills: Environmental Sustainability and Community Change." Minneapolis, MN (April 19-22, 2017).
- 2017 1st International Conference on Energy Research and Social Science (w/Michael Reiner & Ben Stacey). "The Incandescent Truth: Socioeconomic Disparities in Energy Efficient Technology Access and Affordability." Melia Sitges, Spain (April 2-5 2017).
- 2017 1st International Conference on Energy Research and Social Science (w/Dominic Bednar). "The intersection of Energy and Justice: Exploring the spatial, racial and socioeconomic patterns of residential heating affordability, consumption and efficiency in Wayne County, Michigan." Melia Sitges, Spain (April 2-5 2017).
- 2016 Workshop on New Directions in the Analysis of Environmental Justice. Duke University. "Exploring Energy (In)Justice: Issues of Affordability, Efficiency & Community." August 22-24, 2016.
- 2016 Policy History Conference. "From Oil Crisis to Economic Crisis: 40 Years of American Energy Conservation and Assistance." Nashville, TN (June 1-4, 2016).
- 2016 Urban Affairs Association Conference. "I Can't Breathe'- Race, Class, Place and Disparities in Air Quality Perceptions." San Diego, CA (March 16- 20, 2016).

Invited Talks

- 2020 NARUC Energy and Race panel. December 10, 2020
- 2020 UM SEAS Alumni Event: Faculty "Back to Class" Series. December 9, 2020
- 2020 American Association of Black in Energy panel. December 8, 2020
- 2020 Michigan Public Service Commission Low-income Working Group. December 3, 2020
- 2020 UM Ross Energy Club Energy Week Energy Justice Panel. November 17, 2020
- 2020 Dartmouth Talk November 18, 2020
- 2020 Our Energy Policy Energy Justice Panel. October 28, 2020
- 2020 EPA Energy Equity Speaker Series. October 22. 2020
- 2020 Equity and Clean Energy Webinar, Slipstream and Customers First. October 6, 2020
- 2020 LIFE Webinar Series. NYSERDA July 16, 2020
- 2020 Webinar: Tackling Energy Poverty Domestic and International Strategies, Challenges and Insights. Carnegie Mellon University. July 9, 2020
- 2020 DDCSP Research Seminar July 8, 2020
- 2020 SEEDS Webinar. National Renewable Energy Lab. "solar paper" June 12, 2020
- 2020 Assessing Health Impacts of DTE's 15-Year Energy Plan. Michigan Environmental Justice Coalition. May 27, 2020
- 2020 Michigan Environmental Council. May 15, 2020
- 2020 Exelon Utilities Low- to Moderate-Income Summit. "Energy Justice" April 28, 2020.
- 2020 Michigan Research and Discovery Scholars program. January 22, 2020.
- 2019 School of the Earth, Ocean, and Environment Seminar. University of South Carolina. 'Exploring Residential Energy (In)Justice across Race, Class, and Place." November 21, 2019.
- 2019 Slipstream Board of Directors Annual Retreat. "Exploring Residential Energy (In)Justice Across Race, Class, and Place." Madison, WI. October 28, 2019.
- 2019 Energy Efficiency Institute Seminar. University of California- Davis. "Exploring Residential Energy (In)Justice across Race, Class, and Place." October 4, 2019.
- 2019 Environmental Studies Seminar. College of Environmental Science & Forestry, State University of New York. "Toward Energy Justice: Exploring the Production and Persistence of Residential Urban Energy Disparities." March 7, 2019.
- 2019 Clean Energy States Alliance, Solar Equity Meeting. Atlanta, GA. January 29-30, 2019.
- 2019 Environmental and Water Resources Engineering Seminar. University of Michigan. "Exploring the Production and Persistence of Residential Energy Disparities." January 25, 2019.
- 2018 Geography Research Seminar. University of Manchester. "American Residential Energy Inequities Across Race, Class and Place." November 25, 2018.

- 2018 National Socio-Environmental Synthesis Center (SESYNC) Seminar. University of Maryland. "The Production and Persistence of Urban Energy Disparities at the intersection of Place, Race & Class." October 9, 2018.
- 2018 TURN End Shutoffs for Healthy Communities convening. Oakland, CA. "Why Energy Insecurity/Energy Justice matters for public health." May 16-18, 2018.
- 2017 Environmental Studies Departmental Colloquium. New York University. "Toward Energy Justice: Exploring the Production and Persistence of Urban Residential Disparities." March 3, 2017.
- 2017 Environmental Policy Seminar. School of Public and Environmental Affairs, Indiana University Bloomington. "*Toward Energy Justice: Exploring the Production and Persistence of Urban Residential Disparities.*" February 24, 2017.
- 2016 Return to the Roost. School of Public Affairs and Administration, University of Kansas. "Toward Energy Justice: Exploring the Production and Persistence of Urban Residential Disparities." November 29, 2016.
- 2016 Environmental Policy Seminar. Nicholas Institute for Environmental Policy Solutions, Duke University. "The Intersection of Energy and Equity in Urban America: Exploring Disparities in Residential Energy Efficiency." February 4-5, 2016.

Keynotes

- 2020 Michigan Energy Innovators Gala. November 12, 2020, Virtual
- 2019 Midwest Energy Solutions Conference. Feb 21-22, 2019. Chicago, IL
- 2018 American Association of Blacks Inaugural Energy Ball. September 29, 2018. Detroit, MI
- 2018 Network for Energy, Water and Health in Affordable Buildings (NEWHAB) and Energy Efficiency for All (EEFA) Annual Convening. May 22, 2018. Detroit, MI

Guest Lectures

- 2020 Energy and Race (Kinslow & Hummel) Stanford. (October 27, 2020)
- 2020 Summer Enrichment Water Access and Affordability in Metro Detroit w/ Drs. Hughes & Stolper (July 27, 2020).
- 2020 Energy Efficiency. (Chant) Vermont Law School (July 10, 2020).
- 2020 Being an Environmentalist While Black, w/Drs. Taylor & Butt. U of Michigan (June 10, 2020).
- 2020 EAS615: Renewable Electricity & the Grid (Craig), U of Michigan (April 7, 2020).
- 2019 EAS 510 The Science and Practice of Social Change (Lemos), U. of Michigan (Dec. 2 & 4, 2019).
- 2019 Introduction to Sustainability (Rumsey), University of Northern Iowa (October 24, 2019).
- 2019 Introduction to Public Administration, (Gaynor), University of Cincinnati (October 7, 2019).
- 2019 RCSSCI 360.003/ENVIRON 302.001 Energy Justice and Activism (Bednar), U of M (Jan 23, 2019).
- 2018 NRE 510 The Science and Practice of Social Change (Arvai), U. of Michigan (October 31, 2018).
- 2017 UC 327/427, University of Michigan (November 16, 2017).
- 2017 NRE 510 The Science and Practice of Social Change, University of Michigan (October 23, 2017).
- 2017 Energy Systems, SUNY College of Environmental Science and Forestry (October 11, 2017).
- 2017 PUBPOL 475 Oil & Gas Policy in the US, University of Michigan (January, 19, 2017).
- 2016 NRE 510 The Science and Practice of Social Change, University of Michigan (October 31, 2016).
- 2016 NRE 501 Technology and Community Sustainable Development, U of M (September 19, 2016).

PROFESSIONAL SERVICE

Reviewer

Journal (number of papers): Applied Energy (1); Elementa: Science of the Anthropocene (1); Energy Efficiency (1); Energy Policy (4); Energy Research & Social Science (6); International Journal of Environmental Research and Public Health (1); Journal of Community Practice (1); Nature Energy (1); Resources, Conservation & Recycling (2); Review of Policy Research (1); Sociological Forum (1); Sustainability (3)

Sustainability Topic Editor Board

Grants:

- 2019 Poverty Solutions Faculty Development Grant, University of Michigan
- 2018 Poverty Solutions 2019 Faculty Grants Competition, University of Michigan

- 2017 NC Sea Grant, North Carolina State University
- 2016 Graham Sustainability Institute Catalyst Grants, University of Michigan

Professional Meetings:

- 2020 Association for Public Policy Analysis and Management (APPAM). 2020 APPAM International Conference. Toronto, Canada
- 2019 Public Management Research Conference. University of North Carolina- Chapel Hill, 2019

Organizing Professional Meetings:

2018 Just Transitions Initiative Conference. Edinburgh, Scotland, 2019

University Service – University of Michigan

University Library Advisory Council School for Environment & Sustainability: PhD Admissions Committee (2019-) Detroit Initiative Committee (2019-) Masters Project Task Force (2019) Scholarship Committee (2018) Faculty Advisor: GRID Alternatives Students for Sustainable Energy People of the Global Majority for the Environment (PGMent)

Professional Affiliations

American Political Science Association Association for Public Policy Analysis and Management American Society of Civil Engineers American Society for Public Administration Domicology Network, Michigan State University Scholars Strategy Network Urban Affairs Association U.S. Green Building Council University of Michigan: Center for Sustainable Systems Center for Local, State and Urban Policy (CLOSUP) Detroit Community-Academic Urban Research Center (Detroit-URC) Energy Institute Graham Sustainability Institute **Poverty Solutions Initiative** Science, Technology, and Public Policy (STPP) Program Heatwaves, Housing, and Health (HHH) Partnership

Public Service

State Appointments

Michigan Department of Environment, Great Lakes, and Energy, Advisory Council for Environmental Justice (MAC-EJ)

Michigan Department of Health and Human Services, Weatherization Policy Advisory Committee Michigan Public Service Commission, Energy Waste Reduction Low Income Workgroup

Local Government

Green Task Force, Detroit Climate Action Committee, Housing and Neighborhoods Subgroup City of Detroit, Housing Efficiency Working Group

Nonprofit Appointments Ecology Center, Board of Directors Institute for Energy Innovation (IEI), Board of Directors Green Home Institute, Board of Directors

CONSULTING EXPERIENCE

- 2020 Ecoworks, City of Detroit Climate Strategy Implementation
- 2020 City of Ann Arbor, Aging in Place Efficiently
- 2019 GRID Alternatives, TNC/Electric Vehicle Equity Project
- 2018 Clean Energy States Alliance (CESA), Solar Equity report consultant
- 2018 City of Ann Arbor, MI Equity Scan of Climate Action Plan

CERTIFICATIONS & SKILLS

Certifications:	2015- Diversity, Equity, and Inclusion Certificate, University of Michigan
·	2013- Graduate Certificate in Environmental Studies, University of Kansas
	2009- Professional Engineering License (PE), Missouri Registration
	2002- Waste Management Certification, NC Agricultural and Technical State University
Software:	ArcMap; STATA; ATLAS.ti; Qualtrics; Microsoft Products; Google Products