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RESEARCH INTERESTS

Energy systems analysis, environmental impacts of renewable energy integration and energy storage, industrial ecology, life cycle assessment, anthropogenic material flows

ACADEMIC POSITIONS

- 2017- Associate Professor, Department of Civil, Construction & Environmental Engineering, North Carolina State University
- 2017- Adjunct Professor, School for Environment & Sustainability, University of Michigan
- 2014-2017 Assistant Professor, School of Natural Resources & Environment, University of Michigan
Core Faculty: Center for Sustainable Systems
- 2012-2014 Assistant Research Scientist, School of Natural Resources & Environment, University of Michigan

EDUCATION

- 2007 **Ph.D.**, Yale University, Chemical and Environmental Engineering
Dissertation: “Material flows and energy use in anthropogenic metal cycles,” *distinguished rating*
Chair: Thomas Graedel
Outstanding Doctoral Dissertation Award from the Association of Environmental Engineering and Science Professors (AEESP) & CH2MHill
- 2004 **M.S.**, Yale University, Chemical and Environmental Engineering
- 2001 **B.S.**, Clarkson University, Department of Chemical Engineering, Environmental Engineering Concentration; *Highest University Honors*

OTHER PROFESSIONAL EXPERIENCE

- 2007-2012 Principal Consultant, PA Consulting Group, Global Energy Practice, Cambridge, MA
- 2006-2007 Project Manager, Hawaii Island Sustainable Energy Initiative, The Kohala Center, Kamuela, HI
- 2002 Environmental Health & Safety Co-op, Cargill Corn Milling Operations, Cedar Rapids, IA

PROFESSIONAL AFFILIATIONS

- International Society for Industrial Ecology (ISIE)
- Association of Environmental Engineering and Science Professors (AEESP)
- Institute for Operations Research and the Management Sciences (INFORMS)

ARTICLES IN PREPARATION

- Macmillan, M., **Johnson, J.X.**, *The Potential for Emissions Reductions with Residential Demand Response*
- Hollingsworth, J., Copeland, B., **Johnson J.X.**, *Are E-Scooters Polluters?*
- Forrester, S., **Johnson, J.X.**, *Impacts of Climate Change and Economic Growth on Air Conditioning in Brazil*

- Luo, Q., Garcia Menendez, F., **Johnson, J.X.**, *Grid-Connected Energy Storage to Reduce Human Health Impacts*
- Mitchell-Ward, N., **Johnson, J.X.**, *Improving Land Use Efficiency for Fixed-Tilt Utility-Scale Solar*
- Alfaro, J., Miller, S., **Johnson, J.X.**, *Understanding the Decision between Centralized and Decentralized Generation with Renewable Energy for Rural Electrification Using Agent-Based Model*
- Ryan, D., **Johnson, J.X.**, *Determining Power System Capacity Value of Steam-Constrained Cogeneration*

REFEREED PUBLICATIONS

Google Scholar: Total citations – 866; h-index – 15

35. Mueller, K.E., Thomas, J.T., **Johnson, J.X.**, DeCarolis, J.F., Call, D. F., An Environmental Life Cycle Assessment of Salinity Gradient Energy Recovery Using Reverse Electrodialysis, in review, 2018.
34. Arbabzadeh, M., Sioshansi, R., Keoleian, G., **Johnson, J.X.**, *The role of energy storage in deep decarbonization of electricity production in California*, revise and resubmit, 2019.
33. Neema, B., **Johnson, J.X.**, *Carbon Mitigation Potential of Grid Scale Battery Energy Storage for Peak Load Shaving Application*, revise and resubmit, 2019.
32. Hollingsworth, J., Ravishankar, E., O'Connor, B., **Johnson, J.X.**, DeCarolis, J., *Environmental and Economic Impacts of Greenhouse-Integrated Solar Photovoltaics*, revise and resubmit, 2019.
31. Keskar, A., Anderson, D., **Johnson, J.X.**, Hiskens, I., Mathieu, J. *Experimental investigation of the additional energy consumed by building HVAC providing grid ancillary services*, in press, Energy Efficiency, 2019.
30. Liang, S., Qu, S., Zhao, Q., Zhang, X., Daigger, G., Newell, J., Miller, S., **Johnson, J.X.**, Love, N., Zhang, L., Yang, Z., Xu, M., *Quantifying the Urban Food-Energy-Water (FEW) Nexus: The Case of the Detroit Metropolitan Area*, in press, Environmental Science & Technology, 2019.
29. Ryan, N.A., Lin, Y., Mitchell-Ward, N., Mathieu, J., **Johnson, J.X.**, *Use-Phase Drives Lithium-Ion Battery Life Cycle Environmental Impacts When Used for Frequency Regulation*, Environmental Science & Technology, 52 (17), 10163-10174, 2018.
28. Ryan, N.A., **Johnson, J.X.**, Keoleian, G.A., Lewis, G., *Decision Support Algorithm to Guide Method Selection for Quantifying Emissions from Electricity Consumption*, Journal of Industrial Ecology 22 (6), 1318-1330, 2018.
27. Lin, Y., Mathieu, J., **Johnson, J.X.**, Hiskens, I.A., Backhaus, S., *Explaining Inefficiencies in Commercial Buildings Providing Power System Ancillary Services*, Energy and Buildings, 152: 216-226, 2017.
26. **Johnson, J.X.**, *Location or Insolation: the Importance of Siting in Emissions Mitigation from Solar Photovoltaics*, WIREs Energy and Environment, 6: 1-11, 2017.
25. Forrester, S., Zaman, A. Mathieu, J., **Johnson, J.X.**, *Policy Barriers for Multiple Services from Energy Storage*, Electricity Journal, 30: 50-56, 2017. [Editorial review]
24. Arbabzadeh, M., Keoleian, G.A., **Johnson, J.X.**, *Parameters Driving Environmental Performance of Energy Storage Systems Across Grid Applications*, Journal of Energy Storage, 12: 11-28, 2017.
23. Novacheck, J., **Johnson, J.X.**, *Diversifying Wind in Real Power Systems*, Renewable Energy, 106: 177-185, 2017.
22. Alfaro, J.F., Miller, S.A., **Johnson, J.X.**, Riolo, R.R., *Agent Based Modeling for Stakeholder Engagement and Decision Making in Electricity System Planning*, Energy Policy, 101: 317–331, 2017.

21. Ryan, N., Keoleian, G.A., **Johnson, J.X.**, *Comparative Assessment of Models and Methods to Calculate Grid Electricity Emissions*, Environmental Science & Technology, 50(17): 8937–8953, 2016.
20. Chiang, A., Keoleian, G., Moore, M.R., **Johnson, J.X.**, *Emission Abatement Costs and Benefits of Siting an Offshore Wind Farm: A Spatial Analysis of Lake Michigan*, Ecological Economics, 130: 263-276, 2016.
19. Good, J., **Johnson, J.X.**, *Impact of Inverter Loading Ratio on Solar Photovoltaic System Performance*, Applied Energy, 177: 475–486, 2016.
18. Lin, Y., **Johnson, J.X.**, Mathieu, J., *Emissions Impacts of Using Distributed Energy Storage for Power System Reserves*, Applied Energy, 168: 444-456, 2016.
17. Arbabzadeh, M., **Johnson, J.X.**, Keoleian, G.A., Rasmussen, P., Thompson, L., *Twelve Principles for Green Energy Storage in Grid Applications*, Environmental Science & Technology, 50(2): 1046-1055, 2016.
16. **Johnson, J.X.**, Novacheck, J., *The Impact of Coal Plant Retirements on Emissions Mitigation from Renewable Portfolio Standards*, The Electricity Journal, 28 (8): 59–68, 2015. [Editorial review]
15. Novacheck, J., **Johnson, J.X.**, *The Environmental and Cost Implications of Solar Energy Preferences in Renewable Portfolio Standards*, Energy Policy, 86: 250-261, 2015.
14. **Johnson, J.X.**, Novacheck, J., *Emissions Reductions from Expanding State-Level Renewable Portfolio Standards*, Environmental Science & Technology, 49(9): 5318-5325, 2015.
13. Arbabzadeh, M., **Johnson, J.X.**, De Kleine R., Keoleian, G.A., *Vanadium redox flow batteries to reach greenhouse gas emissions targets in an off-grid configuration*, Applied Energy, 146: 397-408, 2015.
12. **Johnson, J.X.**, De Kleine R., Keoleian, G.A., *Assessment of Energy Storage for Transmission-Constrained Wind*, Applied Energy, 124: 377–388, 2014.
11. **Johnson, J.X.**, McMillan, C.A., Keoleian, G.A., *Evaluation of Life Cycle Assessment Recycling Allocation Methods: The Case Study of Aluminum*, Journal of Industrial Ecology, 17 (5): 700–711, 2013.
10. **Johnson, J.**, Chertow, M., *Climate Stabilization Wedges in Action: A Systems Approach to Energy Sustainability for Hawaii Island*, Environmental Science & Technology, 43(7): 2234-2240, 2009.
9. **Johnson, J.**, Reck, B., Wang, T., Graedel, T.E., *The Energy Benefit of Stainless Steel Recycling*, Energy Policy, 36 (1): 181-192, 2008.
8. **Johnson, J.**, Graedel, T.E., *The “Hidden” Trade of Metals in the United States*, Journal of Industrial Ecology, 12 (5/6): 739-751, 2008.
7. Wang, T., Mao, J., **Johnson, J.**, Reck, B., Graedel, T.E., *Anthropogenic Metal Cycles in China*, Journal of Material Cycles and Waste Management, 10 (2): 188-197, 2008.
6. **Johnson, J.**, Harper, E.M., Lifset, R., Graedel, T.E., *Dining at the Periodic Table: Metals Concentrations as They Relate to Recycling*, Environmental Science & Technology, 41(5): 1759-1765, 2007.
5. **Johnson, J.**, Schewel, L., Graedel, T.E., *The Contemporary Anthropogenic Chromium Cycle*, Environmental Science & Technology, 40 (22): 7060-7069, 2006.
4. Harper, E.M., **Johnson, J.**, Graedel, T.E., *Making Metals Count: Applications for Material Flow Analysis*, Environmental Engineering Science, 23 (3): 493-506, 2006.
3. **Johnson, J.**, Gordon, R.B., Graedel, T.E., *Silver Cycles: The Stocks and Flows Project, Part 3*, JOM: Journal of the Minerals, Metals, and Materials Society, 58 (2): 34-38, 2006.
2. **Johnson, J.**, Jirikowic, J., Bertram, M., van Beers, D., Gordon, R.B., Henderson, K., Klee, R.J., Lanzano, T., Oetjen, L., Graedel, T.E., *Contemporary Anthropogenic Silver Cycle: A Multilevel Analysis*, Environmental Science & Technology, 39 (12): 4655-4665, 2005. [Featured on cover]

1. **Johnson, J.**, Bertram, M., Henderson, K., Jirikowic, J., Graedel, T.E., *The Contemporary Asian Silver Cycle: One-Year Stocks and Flows*, Journal of Material Cycles and Waste Management, 7 (2): 93-103, 2005.

CONFERENCE PROCEEDINGS

6. Kern, A., Mège, O., **Johnson, J.X.**, Mathieu, J., Environmental Impacts of Using Energy Storage Aggregations to Provide Multiple Services, Proceedings of the Hawaii International Conference on Systems Science (HICSS). Wailea, Maui, HI, January, 2019.
5. Keskar, A., Anderson, D., **Johnson, J.X.**, Hiskens, I., Mathieu, J. Experimental investigation of the additional energy consumed by building HVAC providing grid ancillary services, 2018 ACEEE Summer Study on Energy Efficiency in Buildings, Pacific Grove, CA, August 13, 2018.
4. Afshari, S., Wolfe, J., Nazir, M. Hiskens, I.A., **Johnson, J.X.**, Mathieu, J.L., Lin, Y., Barnes, A.K., Geller, D.A., Backhaus, S.N., *An Experimental Study of Energy Consumption in Buildings Providing Ancillary Services*, IEEE Integrated Smart Grid Technologies Conference (IGST), 2017.
3. Lin, Y., Mathieu, J., **Johnson, J.X.**, *Stochastic optimal power flow formulation for environmental dispatch strategy with energy storage*, IEEE 19th Power Systems Computation Conference (PSCC), 2016.
2. Lin, Y., Hiskens, I., Backhaus, S., **Johnson, J.X.**, Mathieu, J. *Explaining inefficiencies in buildings providing ancillary services*, 2016 ACEEE Summer Study on Energy Efficiency in Buildings, August 2016.
1. **Johnson, J.**, Chertow, M., *A Systems Approach to Energy Sustainability in Hawai'i County*, IEEE Proceedings of the 42nd Hawaii International Conference on System Sciences, Waikoloa, Hawaii, 2009.

NON-REFEREED PUBLICATIONS

- o Decarolis, J., Dulaney, K., Fell, H., Galik, C., **Johnson, J.**, Kalland, S., Lu, N., Lubkeman, D., Panzarella, I., Proudlove, A., Rodrigo de Queiroz, A., Tang, W., Alrushoud, A., Gambino, C., Meng, Y., Liang, M., Liu, S., Mulcahy, D., Sodano, D., Soutendijk, D., Sun, L., Energy Storage Options for North Carolina, prepared for the NC Policy Collaboratory, Energy Policy Council, and the Joint Legislative Commission on Energy Policy, December 2018.
- o **Johnson, J.**, Novacheck, J., Barteau, M., Lyon, T., Expanding the Renewable Portfolio Standard for Michigan: A Study, University of Michigan Energy Institute, January 2015.
- o **Johnson, J.**, Chertow, M., Davies, M., Gagne, C., Hausfather, Z., Lippert, D., Analysis and Recommendations for the Hawaii County Energy Sustainability Plan, The Kohala Center, 2007.
- o **Johnson, J.**, book review for "Transforming Sustainability Strategy into Action: The Chemical Industry", Ecological Economics, 61: 194-195, 2007.
- o **Johnson, J.**, Leistra, D., Opton-Himmel, J., Smith, M., Baseline Energy Analysis for Hawaii Island, sponsored and distributed by the Kohala Center, Kamuela, Hawaii, 2006.

FUNDING AND AWARDS

- o Department of Energy, (PI: S. Kiliccote), IDREEM: Impact of Demand Response on short and long term building Energy Efficiency Metrics, 2018-2021, **\$1,700,000**.
- o North Carolina Policy Collaboratory, Co-PI (PI: J DeCarolis), North Carolina Energy Storage Study, 2017-2018, **\$195,000**.
- o Eco-Industrial Park Planning: Identifying Partner Industries, Co-PI (with T. Aziz and A. Fox), 2018, **\$10,000**.

- University of Michigan Office of Research and Rackham Graduate School: Distinguished Faculty & Grad Student Seminars Program, Co-PI (PI: J. Mathieu), Emerging Topics in Sustainable Electric Power Systems, 2016-2017, **\$15,000**.
- National Science Foundation: Environmental Sustainability, Co-PI (PI: M. Xu), UNS: U.S.-China: Integrated Systems Modeling of Food-Energy-Water (FEW) Nexus for Urban Sustainability, 2016-2020, **\$499,990**.
- National Science Foundation: Environmental Sustainability, PI (Co-PI: J. Mathieu), Environmental Impacts of Using Distributed Energy Storage for Power System Reserves, 2015-2018, **\$310,000**.
- University of Michigan, Transforming Learning for a Third Century Program, Co-PI (with 18 others), Transforming Sustainability Education and Case-Based Teaching, 2015-2018, **\$1,595,749**.
- University of Michigan Energy Institute, with J. Mathieu, Assessing the Environmental Impacts of Providing Power System Reserves with Demand Response and Distributed Energy Storage – Grant Renewal, 2015, **\$40,000**.
- University of Michigan, M-Cubed, Co-PI (with J. Mathieu, I. Hiskens), Improving the Energy Efficiency of Buildings Participating in Power System Ancillary Services, 2015-2016, **\$60,000**.
- U.S.-China Clean Energy Research Center, Co-PI (with G. Keoleian), Electricity and Material Sourcing Scenario Analysis to Guide Vehicle Technology Strategies Implementation Proposal, 2015, **\$68,000**.
- 5 Lakes Energy, PI, A Dynamic Tool for Evaluating Carbon Mitigation Options from Existing Power Plants in Michigan, Phase II, 2015, **\$54,251**.
- University of Michigan Energy Institute, with J. Mathieu, Assessing the Environmental Impacts of Providing Power System Reserves with Demand Response and Distributed Energy Storage, 2014, **\$40,000**.
- The Energy Foundation and 5 Lakes Energy, PI, A Dynamic Tool for Evaluating Carbon Mitigation Options from Existing Power Plants in Michigan, 2014, **\$45,622**.
- University of Michigan Energy Institute, PI, Evaluation of Alternative Design Considerations for Renewable Portfolio Standards, 2014, **\$45,200**.
- National Science Foundation: Sustainable Energy Pathways Program, Co-PI (by invitation; PI: L. Thompson), Non-Aqueous Redox Flow Battery Chemistries for Sustainable Energy Storage, 2012-2016, **\$1,750,000**.
- University of Michigan: Rackham Centennial Fellowship, Student Support – Josh Novacheck, Environmental Impacts of Various Renewable Grid Integration, 2013, **\$6,000**.
- Association of Environmental Engineering and Science Professors (AEESP) & CH2MHill Outstanding Doctoral Dissertation Award, 2007, **\$1,000**.
- International Precious Metals Institute: Student Award, 2004, **\$1,500**.
- Intel Award for Environmental Innovation, 2002.

PRESENTATIONS [* = INVITED; # = KEYNOTE]

- 2019: Hawaii International Conference on System Sciences
- 2018: State Energy Conference of North Carolina*, International Symposium for Sustainable Systems and Technology (x3); ACEEE Summer Study on Energy Efficiency in Buildings; INFORMS Conference; Center for Energy Education*, NC State EWC Seminar*
- 2017: ASME Power and Energy Conference; University of Michigan Emerging Topics in Sustainable Electric Power Systems Seminar Series; INFORMS; International Society for Industrial

- Ecology/International Symposium for Sustainable Systems and Technology (x4); Association of Environmental Engineering and Science Professors (x3)
- 2016: INFORMS; ACEEE Summer Study on Energy Efficiency in Buildings; IEEE 19th Power Systems Computation Conference; EPRI ENV-Vision*; International Symposium for Sustainable Systems and Technology (x4)
 - 2015: Golisano Institute of Sustainability, Rochester Institute of Technology*; Electrochemical Society (ECS) Meeting; Energy Policy Research Conference; International Society for Industrial Ecology (x3); Association of Environmental Engineering and Science Professors; International Symposium for Sustainable Systems and Technology (x2); Engineering Sustainability
 - 2014: IEEE Power & Energy Society General Meeting; EPA Carbon Standards Technical Meeting*; International Symposium for Sustainable Systems and Technology (x2); University of Michigan – SNRE*; University of Michigan – Env Eng*; Purdue University*
 - 2013: Yale University*; Midland American Chemical Society Fall Scientific Meeting #
 - 2012: University of Michigan – SNRE
 - 2009: Columbia University*; Massachusetts Institute of Technology*; University of California Santa Barbara*; Hawaii International Conference on System Sciences
 - 2007: National Research Council of the National Academies*
 - 2006: Gordon Research Conference on Industrial Ecology; International Stainless Steel Forum; CHROMIUM*
 - 2005: International Society for Industrial Ecology; National Science Foundation Conference on Biocomplexity in the Environment
 - 2004: Gordon Research Conference on Industrial Ecology
 - 2001: International Waste Education and Research Consortium

TEACHING

North Carolina State University

- CE297/CE250: Sustainable Infrastructure (Fall 2017, 2018)
- CE497/CE596: Renewable Energy & the Grid (Spring 2019)
- CE796: Environmental Life Cycle Assessment (Spring 2018)

University of Michigan

- NRE615: Renewable Electricity & the Grid (Winter 2015, 2016, 2017)
- NRE550/STRAT566: Systems Thinking for Sustainable Development & Enterprise (Winter 2016, 2017)
- Dow Sustainability Academy – Executive Education at Ross School of Business (2017)
- Guest lectures: ESE501 (Fall 2014, Fall 2015, Fall 2016); CEE567 (Winter 2015); ENG100 (Fall 2013); UROP (Summer 2015)

Yale University

- FES500: Greening the Industrial Facility, Teaching Fellow, two semesters
- FES300: Technology and Environment, Teaching Fellow, one semester
- CENG120: Introduction to Environmental Engineering, Teaching Fellow, one semester

PUBLISHED TEACHING CASES

5. Kraus, A., Mashburn, B., **Johnson, J.X.**, *Green Mountain Power & Tesla Powerwall: Innovation within a Conservative Industry*, Michigan Sustainability Case, 2016.

4. Szczepanik, B., Cole, D., Neema, B., Taddei Arriola, P.D., **Johnson, J.X.**, *A Radioactive Decision: Should DTE Energy Build Fermi III?*, Michigan Sustainability Case, 2016.
3. Golrokian, M., Ilayian, R., **Johnson, J.X.**, *Ohio Renewable Energy Portfolio Standard Freeze*, Michigan Sustainability Case, 2016.
2. Miranda-Blackney, T., Cui, Y., Santiago, A., Talbot, J., **Johnson, J.X.**, *Renewable Energy at the National Aquarium*. WDI Publishing, case 1-430-451, 2016.
1. Ryan, D., Bednar, D., Cecco, L., MV Reddy, P., **Johnson, J.X.**, *Evading the Death Spiral: Minnesota's Value of Solar Tariff*. WDI Publishing, case 1-430-450, 2015.

STUDENT ADVISEES

Doctoral students

- Aditya Keskar, Environmental Engineering, North Carolina State University, September 2018 to present
- (Co-chair) Qian Luo, Environmental Engineering, North Carolina State University, September 2018 to present
- (Co-chair) Nicole Ryan, School of Natural Resources & Environment, University of Michigan, September 2016 to present
- (Co-chair) Maryam Arbabzadeh, School of Natural Resources & Environment, University of Michigan, September 2013 to 2018; recipient of Dow Doctoral Fellowship, Barbour Scholarship (declined), and Rackham Pre-doctoral Fellowship

Doctoral student committees

- Morteza Taiebat, University of Michigan, September 2016 to present
- Vineet Raichur, Design Science Program, University of Michigan, August 2015

Post-doctoral fellows

- Sina Afshari, 2016-2017, currently: Ecosense Lighting
- Yashen Lin, 2014-2016, currently: National Renewable Energy Laboratory

Master's theses

- (Co-Chair) Danny Sodano, Civil, Construction, & Environmental Engineering, 2018-present
- (Co-Chair) Sydney Forrester, School for Environment and Sustainability, September 2016 to present
- (Co-Chair) Joseph Hollingsworth, Civil, Construction, & Environmental Engineering, 2017-present
- (Co-Chair) Kate Mueller, Civil, Construction, & Environmental Engineering, 2017-2018
- (Chair) Bhuvan Neema, School for Environment and Sustainability, November 2015 to 2017
- (Chair) Xinwei Li, School of Natural Resources & Environment, December 2015-2017, currently: doctoral student at UC Davis
- (Chair) Dan Ryan, School of Natural Resources & Environment and Ross School of Business, January 2015-2017, currently: Associate at EDF Renewable Energy
- (Co-Chair) Nicole Ryan, School of Natural Resources & Environment and Mechanical Engineering, 2015-2016, currently: doctoral student at University of Michigan
- (Chair) Shreyas Vangala, School of Natural Resources & Environment, 2015-2016, currently: Strategy Analyst at New York Power Authority
- (Chair) Joshua Novacheck, Mechanical Engineering and School of Natural Resources & Environment, University of Michigan, January 2013 to December 2014; recipient of the Dow Masters Fellowship; currently: Electricity System Research Engineer at the National Renewable Energy Laboratory

Master's projects

- Southeast Michigan Regional Energy Office, Municipal Street Lighting Consortium: Deshpande, Durand, Liang, Liu, McGinnis, 2015-2016
- SunEdison Solar Strategies: Heidenreich, Serron, Kletter, Underwood, Azgaldov, Dahagama, Wolff, 2014-2015
- Transportation Solutions to Reduce Fossil Fuel Dependence on Hawaii Island: Madrazo, Epstein, McManamon, Medina, Wen, 2013-2014

SELECTED SERVICE

- North Carolina State University Energy Collaborative, Organizing Committee (2017-present)
- International Symposium on Sustainable Systems and Technology (ISSST) Organizing Committee (2017-present), Program Co-Chair (2016-present), and Leadership Committee (2014-present)
- Civil, Construction & Environmental Engineering (CCEE) Environmental, Water Resources & Coastal Engineering Symposium Committee: Faculty Member (2017-present)
- CCEE Publicity Committee: Faculty Member (2017-present)
- Committee member: President Schlissel's Committee on Greenhouse Gas Reduction, 2014-2017.
- Committee member: UM Central Power Plant Expansion Committee, 2016-2017.
- Judge in Renewable Energy Case Competition, Ross School of Business, University of Michigan, 2012, 2014-2016
- Advisor for University of Michigan Social Venture Fund, 2014-2017.
- Committee member: Scholarship (SNRE, Dow Sustainability Fellows), 2016-present
- Committee member: School for Environment and Sustainability Transition Team - Administrative Structures, 2016-present
- Erb Institute Teaching Case Judge, 2014.
- Dow Sustainability Project Advisor, Value of Solar in Michigan, 2014.
- Reviewer: National Science Foundation, Environmental Science & Technology, Nature Energy, Energy Policy, Journal of Industrial Ecology, Applied Energy, Landscape and Urban Planning, PLOS One

PRESS

- Ouzts, E., "Study: Batteries are coming to N.C., but how many, how soon depends on policy" *Energy News Network*, January 8, 2019.
- Anderson, H. "North Carolina panel bullish on energy storage", *Daily Energy Insider*, December 10, 2018.
- Shipman, M., "Report spells out options for energy storage in North Carolina" *WRAL TechWire*, December 5, 2018.
- Boraks, D., "Duke Energy Making \$500 Million Bet On Battery Storage", *WFAE*, October 31, 2018.
- Magill, B., "Fluence, Battery Makers to Gain as Arizona Considers Storage Goal" *Bloomberg Environment*, February 8, 2018.
- Maloney, P., "First do no harm: Michigan researchers publish storage sustainability guidelines" *Utility Dive*, February 22, 2016.
- Balaskovitz, A., "Michigan researchers issue guidelines for sustainable energy storage" *Midwest Energy News*, February 19, 2016.
- Allington, A., "States wavering on standards for renewable energy" *National Public Radio, Marketplace*, July 24, 2015.

- Balaskovitz, A., “Natural gas or renewables? New model helps states decide” *Midwest Energy News*, March 23, 2015.
- Balaskovitz, A., “Energy policy takes center stage in state Legislature this year” *MiBiz*, March 1, 2015.
- Ignaczak, N., “Can we power the Mitten with energy freedom?” *Concentrate*, February 11, 2015.
- WEMU News, interview on Michigan Renewable Portfolio Standard, January 20, 2015.
- Tsao, S., “Study: Higher Michigan RPS would boost wind, solar,” *Argus Media*, January 14, 2015.
- WKAR Public Media, interview on Michigan Renewable Portfolio Standard, *Current State*, January 13, 2015.
- Balaskovitz, A., “Michigan study shows ‘modest’ costs to expand renewables” *Midwest Energy News*, January 13, 2015.
- Balaskovitz, A., “‘A tale of two peninsulas’: Can Michigan’s grid be unified?” *Midwest Energy News*, November 20, 2014.
- Balaskovitz, A., “Biomass key to Upper Peninsula’s future renewable portfolio” *Midwest Energy News*, October 28, 2014.
- WKAR Public Media, interview on Presque Isle Power Plant retirement, *Current State*, October 21, 2014.
- Balaskovitz, A., “Will EPA carbon rules push Michigan harder on clean energy?” *Midwest Energy News*, July 1, 2014.
- Johnson, J., “Greener energy for Michigan: study examines impact, cost of increased RPS targets”, University of Michigan, Planet Blue, *The Conversation*, June 20, 2014.
- Reed, E., “Will The EPA Take Your Job?” *Main Street*, June 23, 2014.
- Matheny, K., “New coal rules: Good news on Michigan jobs, or bad news on electricity rates?” *Detroit Free Press*, June 2, 2014.
- Neuhauser, A., “State of the Union Preview: Energy and the Environment - Experts weigh in on what Obama may say on energy and environmental policy” *U.S. News & World Report*, January 28, 2014.