

# Zoë L. Ketola

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## EDUCATION

- In Progress*      Doctor of Philosophy, Energy and Environmental Policy  
Joseph R. Biden, Jr. School of Public Policy and Administration  
University of Delaware  
Unidel Distinguished Graduate Fellow  
Sustainable Places Research Group  
Center for Research in Wind  
Advisor: Dr. Nina David
- 2023      Master of Science, Environmental and Energy Policy  
Department of Social Sciences  
Michigan Technological University  
Thesis: *Accepting Change: Facets of Acceptance & Sustainable Redevelopment*  
Co-Advisors: Dr. Chelsea Schelly & Dr. Roman Sidortsov
- 2020      Bachelor of Science, Engineering – Systems Engineering  
Department of Engineering Fundamentals  
Michigan Technological University  
Minors: Environmental Studies, Business
- 2018      Renewable Energy Innovation & Sustainability Course  
Reykjavik University, Iceland

## RESEARCH EXPERIENCE

- 2023 – Present      *Graduate Research Assistant - Sustainable Places Research Group*  
Conducted and collaborated on diverse research tasks, including interview protocol creation and administration, survey design and analysis, and community meeting observation in various communities for projects focused on offshore wind development, equity and justice, and regional planning and collaboration.

Current projects include:

- Energy Justice Indicators: Measuring Community Effects of Offshore Wind Energy Development
  - *Funded by US Department of Energy (DOE)*
- Community Perceptions of Energy Justice in Offshore Wind Development
  - *Funded by National Oceanic and Atmospheric Administration (NOAA) and Delaware Sea Grant (DESG)*
- Equity & Justice in Comprehensive Planning

Website: <https://sites.udel.edu/ninadavid/students-in-the-sustainable-places-research-super-group/>

- 2023 *Graduate Research Fellow - Energy Service Security for Public Health Resilience*  
Administered and analyzed qualitative, semi-structured interviews to public health stakeholders throughout the Western Upper Peninsula of Michigan.
- 2021 – 2023 *Graduate Research Assistant – Social Implications of Genetically Improved Trees, USDA-AFRI*  
Performed social acceptance literature review, conducted initial focus group among forest landowners, and designed landowner survey with project leaders and members from forestry and social sciences.
- 2022 *Graduate Research Assistant – Community geographies of the slate landscapes of Northwest Wales*  
Conducted semi-structured interviews with the public throughout Northwestern Wales to understand views on the slate UNESCO World Heritage site.
- 2019 *Undergraduate Research Project – Special Topics in Sustainable Mining*  
Performed analysis on upstream tailings dam functions, failures, and regulation under faculty advisor.
- 2019 *Undergraduate Research Assistant – PUSH, Mines for Energy Storage*  
Performed background research and calculations relevant to using decommissioned mines for hydro-pump storage.
- 2018 *Seminar in Sustainability – AutoDrive Challenge Sustainability Report*  
As a team of seven, conducted a literature review, designed, and led one of two focus groups, and assisted in design of a university survey regarding the implications of autonomous electric vehicles in rural communities.
- 2018 *Undergraduate Research Assistant – L'Anse Community Solar*  
Compiled information on possibly applicable solar tax incentives for L'Anse community solar project.

## PUBLICATIONS

### Journal Articles

Rhodes, M., Hannum, K., Ketola, Z. *Annals of the Association of American Geographers (Special Issue on National Parks and Protected Places)*. (2025). Managing the Imagined Spatialities of Protected Sites: (Un)Bounding Industrial World Heritage via Mental Maps.

<https://doi.org/10.1080/24694452.2025.2464803>

Ketola, Z., Schelly, C., Rouleau, M., Kulheim, C. *Society and Natural Resources*. (2025). Assessing Perceptions of Genetically Improved Tree Species Among Family Forest Owners (FFO) in Michigan, Minnesota, and Wisconsin. <https://doi.org/10.1080/08941920.2024.2440727>

Tiwari, S., Ketola, Z., Schelly, C., Boyer-Cole, E. *Rural Sociology*. (2024). Energy Service Security for Public Health Resilience: Perceptions and Concerns in the Western Upper Peninsula of Michigan.

<https://doi.org/10.1111/ruso.12571>

Ketola, Z., Tiwari, S., Schelly, C. (2024). *Sustainable Earth Reviews*. How forcing community resilience in rural communities harms sustainable development. <https://doi.org/10.1186/s42055-024-00071-0>

## Reports

Tiwari, S., Ketola, Z., Schelly, C., Boyer-Cole, E. (2023). Energy Service Security for Public Health Resilience in Michigan's Western Upper Peninsula. *Natural Hazards Center Public Health Disaster Research Report Series*, 28. University of Colorado Boulder. <https://hazards.colorado.edu/public-health-disaster-research/energy-service-security-for-public-health-resilience-in-michigans-western-upper-peninsula>

Sidortsov, R., Tiwari, S., Scarlett, T., Dyresan, A., Watkins, D. (2021). \* PUSHing for Storage: A Case for Repurposing Decommissioned Mines for Pumped Underground Storage Hydro (PUSH) in the United States, report to Sloan Foundation. <https://www.ketl.info/post/push-report-released>

\*Section 5, contributing author

## Other Publications

Ketola, Z., Lytle, W., Schelly, C., Rudnicki, M., Kelley, M. (2022). Perspectives on the social license of the forest products industry from rural Michigan, United States. *WikiJournal of Science*.

\*Peer reviewed

## In Progress

David, N., Ketola, Z., Hassanzadehkermanshahi, K., Oluoch, K. Crossing lines: Equity in a Regional Network of Comprehensive Plans. To be submitted to *Local Environment: The International Journal of Justice and Sustainability*.

Ketola, Z., Ruscetta, L., Korein, E., Paye-Layleh, L., David, N., Firestone, J. It Is What It Is: Cognitive & Affective Responses Regarding Offshore Wind.

## CONFERENCE PARTICIPATION

### Presentations

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| 2024 | <u>Ketola, Z.</u> , David, N., Hassanzadehkermanshahi, K., Oluoch, K. (2024). Crossing lines: Equity in a Regional Network of Comprehensive Plans. (2024). Association of Collegiate Schools of Planning 64th Annual Conference, Seattle, Washington. |
| 2024 | Hassanzadehkermanshahi, K., David, N., <u>Ketola, Z.</u> (2024). Assessing Delaware's State Strategies: Managing Urban Sprawl and Shaping Development in Sussex County. University of Delaware Coast Day, Lewes, Delaware.                            |
| 2024 | Ketola, Z., David, N., Braine, M., Hassanzadehkermanshahi, K. (2024). "Bridging" the City: Community Perspectives on Capping I-95 in Wilmington, Delaware. 2024 International Conference on Urban Affairs, New York City, New York.                   |
| 2023 | <u>Ketola, Z.</u> , Schelly, C., Rouleau, M., Kulheim, C. (2023). Understanding   |

Perceptions on Genetic Improvement of Tree Species Among Family Forest Owners. International Association of Society and Natural Resources Annual Conference, Portland, Maine.

- 2023      Ketola, Z., Tiwari, S., Schelly, C., Boyer-Cole, E. (2023). Energy Service Security for Public Health Resilience. World Social Science Association Annual Conference, Tempe, Arizona.
- 2022      Ketola, Z., Schelly, C., Rouleau, M., Kulheim, C. (2022). Social Acceptability for Genetically Improved Trees in the United States Midwest. International Association of Society and Natural Resources Annual Conference, San Jose, Costa Rica.
- 2022      Rhodes, M., Hannum, K., Juip, J., Juip, L., Ketola, Z., Batterson, B., Maze, T., Mueflehe, W. (2022). Scalar sustainability in UNESCO's industrial heritage: community geographies of the slate landscapes of Northwest Wales. TCCIH: Industrial Heritage Reloaded, Montréal, Quebec, Canada.

#### **Panels**

- 2022      Understanding the Role of Sustainability in Education: The Student Perspective, International Association of Society and Natural Resources Annual Conference, June 2022 (San Jose, Costa Rica).

#### **FUNDING AWARDS**

- 2023 – Present      Unidel Distinguished Graduate Scholar Award, University of Delaware
- 2023      Great Lakes Research Center Student Travel Grant, Michigan Technological University
- 2023      Graduate Student Government Conference Presenting Grant, Michigan Technological University
- 2022      Research Travel Grant, Michigan Technological University Department of Social Sciences
- 2021      Research Travel Grant Michigan Technological University Department of Social Sciences
- 2020      "Social implications of genetically improved trees: Assessing public and forest owner attitudes, risk perceptions, and willingness to adopt," USDA-AFRI, Graduate Research Assistantship

#### **PROFESSIONAL SERVICE**

- 2024      *Association of Collegiate Schools of Planning*  
Conference Volunteer

2024 – Present	<i>Biden School Student Association</i> Vice-President
2023 – Present	<i>University of Delaware Climate Fellows</i> Vice-President
2021 – 2023	<i>Association of Students for People, Environments, and Nature</i> President
2021 – 2023	<i>International Association of Society and Natural Resources (IASNR)</i> Student Member Social Media Committee Instagram Liaison
2016 – 2023	<i>Society of Women Engineers</i> Member 2019 Michigan Technological University Evening with Industry Co-Chair
2019 – 2020	<i>Michigan Department of State, Collegiate Student Advisory Task Force</i> Michigan Technological University representative
2017 – 2019	<i>American Association of University Women – Michigan, Student Advisory Council</i> Upper Peninsula representative

## **TEACHING**

2021 – 2022	<i>Learning with Academic Partners (LEAP) Leader</i> Michigan Technological University ENG 4905, Senior Design
2019 – 2020	<i>Learning with Academic Partners (LEAP) Leader</i> Michigan Technological University ENG 1505, Introduction to Systems Engineering ENG 2505, Low Fidelity Systems Modeling

## **ADDITIONAL PROFESSIONAL EXPERIENCE**

2022	<i>Interconnection &amp; Incentives Intern, GreenStruxure</i> Performed energy analyses for industrial sites in 4 US states to assess microgrid potential. Completed interconnection and incentive applications for sites as required to meet state and federal requirements. Implemented standardization tools, such as engineering interconnection forms, to streamline application processes.
2020 – 2021	<i>Project Engineer I, Systems Control</i> Oversaw manufacturing of electrical substation control houses from project start to finish, performing state and national code and electrical reviews, material selection, and project specific support as necessary.

Coordinated project requirements and changes with customer, manufacturing floor, and other engineering teams to ensure customer specifications and applicable codes were met.

## **CERTIFICATES**

2023	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   Understanding and Ending Gender-Based Violence in Fieldwork
2023	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   Reciprocity in Hazards and Disaster Research
2023	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   Social Vulnerability and Disasters
2022	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   Broader Ethical Considerations for Hazards and Disaster Researchers
2022	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   Collecting and Sharing Perishable Data
2022	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   Conducting Emotionally Challenging Research
2022	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   Cultural Competence in Hazards and Disaster Research
2022	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   Disaster Mental Health
2022	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   IRB Procedures and Extreme Events Research
2022	CONVERGE Training Module   Natural Hazards Center at University of Colorado – Boulder   Public Health Implications of Hazards and Disaster Research

## **SKILLS**

ArcGIS | Atlas.ti | AutoCAD | Dedoose | NVivo | Stella Architect | SimaPro | SPSS Statistics | JMP | VOSViewer