## Zoē L. Ketola

Environmental and Energy Policy Program Social Sciences Department Michigan Technological University Academic Office Building 1400 Townsend Dr Houghton, MI 49931

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#### **EDUCATION**

2023 MS, Michigan Technological University

Department of Social Sciences

Environmental & Energy Policy, 4.0/4.0 GPA

Public Policy Certificate, 4.0/4.0 GPA

Thesis Title: Acceptance and Sustainable Redevelopment: The role of acceptance in

ecosystem service and landscape development

Co-Advisors: Dr. Chelsea Schelly, Dr. Roman Sidortsov

2020 BS, Michigan Technological University

Department of Engineering Fundamentals

Engineering – Systems Engineering, 3.63/4.0 GPA

Minors: Environmental Studies, Business

2018 Renewable Energy Innovation & Sustainability Course

Reykjavik University, Iceland

## **PUBLICATIONS & PUBLICATIONS, IN PROGRESS**

### Journal Papers, Accepted

Ketola, Zoē, Lytle, Will, Schelly, Chelsea, Rudnicki, Mark, Kelley, Matthew. (2022). Perspectives on the social license of the forest products industry from rural Michigan, United States. WikiJournal of Science.

#### **Journal Papers, In Progress**

Ketola, Zoē, Schelly, Chelsea, Rouleau, Mark, Kulheim, Carsten. Sustainable Restoration of Ecosystem Services: The Social Acceptance of Using Genetically Improved Trees.

Ketola, Zoē. Social Acceptance of Sustainable Redevelopment: Reutilizing Post-Industrial Infrastructure and Its Role in Renewable Energy Adoption.

#### **Reports**

Sidortsov, Roman; Tiwari, Shardul; Scarlett, Timothy; Dyresan, Ana; Watkins, David (2021).\* PUSHing for Storage: A Case for Repurposing Decommissioned Mines for Pumped Underground Storage Hydro (PUSH) in the United States, report to Sloan Foundation. Accessible here: https://www.ketl.info/post/push-report-released \*Section 5, contributing author

#### **CONFERENCE PARTICIPATION**

#### **Presentations**

- "Social Acceptability for Genetically Improved Trees in the United States Midwest,"
  International Association of Society and Natural Resources Annual Conference, June 2022 (San Jose, Costa Rica).
- "Scalar sustainability in UNESCO's industrial heritage: community geographies of the slate landscapes of Northwest Wales," TCCIH: Industrial Heritage Reloaded, August 2022 (Montréal, Quebec, Canada).

Co-presented: Mark Rhodes, Kathryn Hannum, James Juip, Larissa Juip, Brooke Batterson, Tim Maze, and Wandipa Muelefhe

2019 "A Look at Tailings Management Updates." Upper Peninsula Society for Mining, Metallurgy, & Exploration Section Fall Meeting at Michigan Technological University, October 2019 (Houghton, MI, USA).

## **Panels Organized**

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).

#### **CERTIFICATES**

2022

Disaster Mental Health

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

CONVERGE Training Module | Natural Hazards Center at University of Colorado – Boulder |

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 RESEARCH EXPERIENCE 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 - 2023Graduate 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. **FUNDING AWARDS** 2023 Great Lakes Research Center Student Travel Grant, Michigan Technological University 2023 Graduate Student Government Conference Presenting Grant, Michigan Technological University

Research Travel Grant, Michigan Technological University Department of Social Sciences

2022

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	
2021 – 2023	Association of Students for People, Environments, and Nature President
2021 – 2023	International Association of Society and Natural Resources (IASNR)  Student Member
	Social Media Committee Instagram Liaison
2016 – 2023	Society of Women Engineers  Member
	2019 Michigan Technological University Evening with Industry Co-Chair
2019 – 2020	Michigan Department of State, Collegiate Student Advisory Task Force  Michigan Technological University representative
2018 – 2020	National Residence Hall Honorary  Member
2017 – 2019	American Association of University Women – Michigan, Student Advisory Council Upper Peninsula representative
TEACHING	
2019 – 2020	Learning with Academic Partners (LEAP) Leader ENG 1505, Introduction to Systems Engineering ENG 2505, Low Fidelity Systems Modeling
ADDITIONAL PROFESSIONAL EXPERIENCE	
2020 - 2021	Project Engineer I, Systems Control
	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.
2022	Interconnection & Incentives Intern, GreenStruxure

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

Implemented standardization tools, such as engineering interconnection forms, to streamline

### **ADDITIONAL PROFICIENCIES**

federal requirements.

application processes.

# AutoCAD | MicroStation | Stella Architect | SimaPro | SPSS Statistics | MATLAB

# **LANGUAGES**

English: Native speaker