



GRAHAM SUSTAINABILITY INSTITUTE

CENTER FOR EMPOWERING COMMUNITIES
UNIVERSITY OF MICHIGAN

Grounded in cutting-edge social science and deep community engagement, the Center for EmPowering Communities harnesses the expertise of the University of Michigan to support communities across the urban-rural spectrum as they leverage decarbonization opportunities to advance their goals and enhance their quality of life.

Established by the Graham Sustainability Institute in 2023, the Center for EmPowering Communities (EPC) is led by Sarah Mills to support local communities navigating large renewable energy projects in their land use plans and zoning ordinances.

EPC has grown from a Michigan-focused initiative to a nationally recognized leader in community sustainability and renewable energy planning. Starting with the development of the nation's first zoning database and a statewide survey of local government officials, EPC's work informed the creation of Michigan's "Catalyst Communities" program. This partnership with Michigan's Department of Environment, Great Lakes, and Energy helps local governments achieve their sustainability goals through education, resources, and technical support. EPC's innovative approach caught national attention, leading to Department of Energy funding to expand its zoning database across the Midwest. Today, tools like the IIJA/IRA Tracker further showcase EPC's commitment to community-focused sustainability solutions.

Since its launch, EPC has forged interdisciplinary collaborations with faculty across the University of Michigan, as well as researchers and practitioners nationwide. EPC's focus on informing policy, community engagement practices, and renewable energy project design is now expanding to shape the next generation of decarbonization solutions through applied research, network and capacity building, and resource creation.

Solar panel. Photo by torstensimon of Pixabay.

PLANNING AND ZONING

EPC's planning and zoning work encompasses a wide swath of the Great Lakes region. Through its six-state energy zoning database, comprehensive guidebooks, and on-demand technical assistance, EPC provides local governments and communities with key information to navigate the evolving energy landscape. The center also offers strategic guidance to Michigan's Department of Environment, Great Lakes, and Energy (EGLE) and its partners in advancing the Renewable Energy Academy, a hub for resources, tools, and experts in the field.

Great Lakes Energy Zoning Database: This project catalogs renewable energy zoning ordinances across Michigan and five other Great Lakes states, supporting communities undergoing rezoning, developers seeking partner communities, and academics engaging in community-based research.

Planning & Zoning for Solar Energy Systems: This guide helps Michigan communities address solar energy system (SES) siting in planning policies and zoning regulations, offering guidance on integrating SES into various landscapes and sample ordinance language.

Planning & Zoning for Battery Energy Storage Systems: This guide helps Michigan communities incorporate battery energy storage systems (BESS) into local zoning, offering sample zoning language for all scales of BESS and strategies for siting large scale BESS projects in light of the new state siting law.

Renewable Energy Academy: EPC partners with EGLE to offer strategic guidance and support for incorporating clean energy into local planning and zoning. The Renewable Energy Academy provides tailored resources, training, and individual technical assistance for local officials.

Renewable Energy Planning with the Michigan Association of Planning (MAP): EPC collaborates with MAP to provide renewable energy education to planners and planning students through workshops, renewable energy site tours, and educational events focused on large-scale renewable energy projects.

Community Convenings on PA 233 Implementation: EPC partners with local government associations to help communities navigate Michigan's PA 233 siting law, offering ongoing support and resources for policy updates under the new regulations.

STATE-LEVEL POLICY WORK

EPC's state-level policy work helps inform balanced and equitable approaches to renewable energy development, particularly with respect to siting policy. Within Michigan, this includes science-based advocacy and helping to guide the implementation of PA 233, Michigan's new renewable energy siting law. Beyond Michigan, EPC advances principles of equitable siting policy USDA, DOE, and state actors across the country.

Michigan's New Renewable Energy Siting Law: Michigan's Public Act (PA) 233 of 2023 revised the permitting process for large-scale renewable energy projects. EPC is creating guides and sample ordinances to help communities understand the law's impact.

Informing MPSC Implementation Plans for PA 233: Sarah Mills and Madeleine Krol submitted five policy memos to the Michigan Public Service Commission on implementing PA 233, with recommendations on public input, decommissioning, emergency response, and more.



Solar panel on a balcony. Photo by Franz Bachinger of Pixabay.

Policy Recommendations for Renewable Energy Development in Michigan: EPC's recommendations emphasize the importance of including all Michigan communities in the renewable energy transition and advocate for policy changes that improve the viability of smaller-scale solutions.

Equitable Approaches to Clean Energy Siting: EPC proposes a balanced approach to renewable energy siting that advances statewide renewable energy goals while valuing local decisionmaking and community priorities, inviting both urban and rural communities to contribute to—and benefit from—the renewable energy transition.

Renewables Property Tax Toolkit: This toolkit helps Midwestern communities and renewable energy advocates calculate the economic benefits of renewable energy, clarifying wind and solar tax laws and providing state-specific tax calculators.

America's Clean Energy Future: Finding the Right Balance for Your State: Hosted by the State Legislative Leadership Foundation, this summit convened state leaders, energy experts, and policymakers to discuss pathways to a sustainable energy future. Sarah Mills highlighted the role of rural communities in the clean energy transition and how state policies can facilitate equitable renewables deployment.

USDA/DOE Collaboration Opportunities—Renewable Energy Siting: Sarah Mills submitted policy recommendations to the USDA and DOE on large-scale renewable energy projects' impacts on rural communities, emphasizing the need for better community engagement, research on local impacts, and funding for community-driven planning processes.

ENGAGED RESEARCH ON LARGE-SCALE RENEWABLES

To better address the concerns of communities facing the potential impacts of large-scale renewable energy projects, EPC supports innovative community-based research, surveys, and analysis. EPC also hosts events that bring together the perspectives, knowledge, and insights of practitioners and researchers in the field.

Community-Centered Solar Development: This multifaceted research project helps communities shape solar developments in alignment with their values. EPC led a nationwide survey of solar farm neighbors to analyze concerns, benefits, and challenges of existing projects and contributed to a guidebook to facilitate community conversations about large-scale solar.

Farmers vs. Lakers: This study assessed community opposition to wind farms in the Midwest through a survey of energy professionals, identifying key factors like farming practices and landscape characteristics that influence public support or opposition.

2022 Extension and Renewables Convening: This convening brought together Extension professionals, energy developers, and researchers to discuss Extension's role in facilitating renewable energy planning in rural communities.

The Science of Siting Clean Energy: This two-part workshop, co-hosted with the Clean Air Task Force, convened researchers and practitioners spanning clean energy siting and community acceptance. The workshop identified four paradigm-shifting opportunities to support just decisionmaking and accelerate renewable energy deployment.

EGLE CATALYST COMMUNITIES PARTNERSHIP

A comprehensive program helping communities across Michigan make a just transition to decarbonization, the Catalyst Communities Initiative—in partnership with EGLE—offers education, training, and technical resources. The Catalyst Leadership Circle (CLC), CLC Fellowship, and Sustainable Towns programs, developed and run by EPC, assist communities in reaching sustainability goals while training a pipeline of students for impactful careers in sustainability.

Catalyst Leadership Circle: Launched in response to local government leaders' request for support in advancing climate and clean energy goals, the CLC provides municipal leaders with peer-sharing, networking, and curated resources.

Catalyst Leadership Circle Fellowship: The CLC Fellowship provides competitive internships for graduate students to assist Michigan's leading local governments with sustainability projects. Fellows help communities advance climate and energy goals and create templates for use by other communities.

Sustainable Towns: This program provides undergraduate students course credit to assist Michigan local governments in becoming certified Michigan Green Communities. Students assist community leaders in establishing sustainability baselines, developing goals, and implementing action plans.

The Center for EmPowering Communities is dedicated to advancing equitable, community-centered approaches to renewable energy and decarbonization. By integrating research, engagement, and practical tools, EPC addresses today's energy challenges while empowering communities to build a sustainable, prosperous future. As the clean energy transition progresses, EPC will continue to provide resources and guidance to ensure decarbonization efforts are inclusive and beneficial for communities across the urban-rural spectrum.



Solar farm. Photo by Samuel Faber of Pixabay.