EGLE Energy Services Meeting Communities Where They Are

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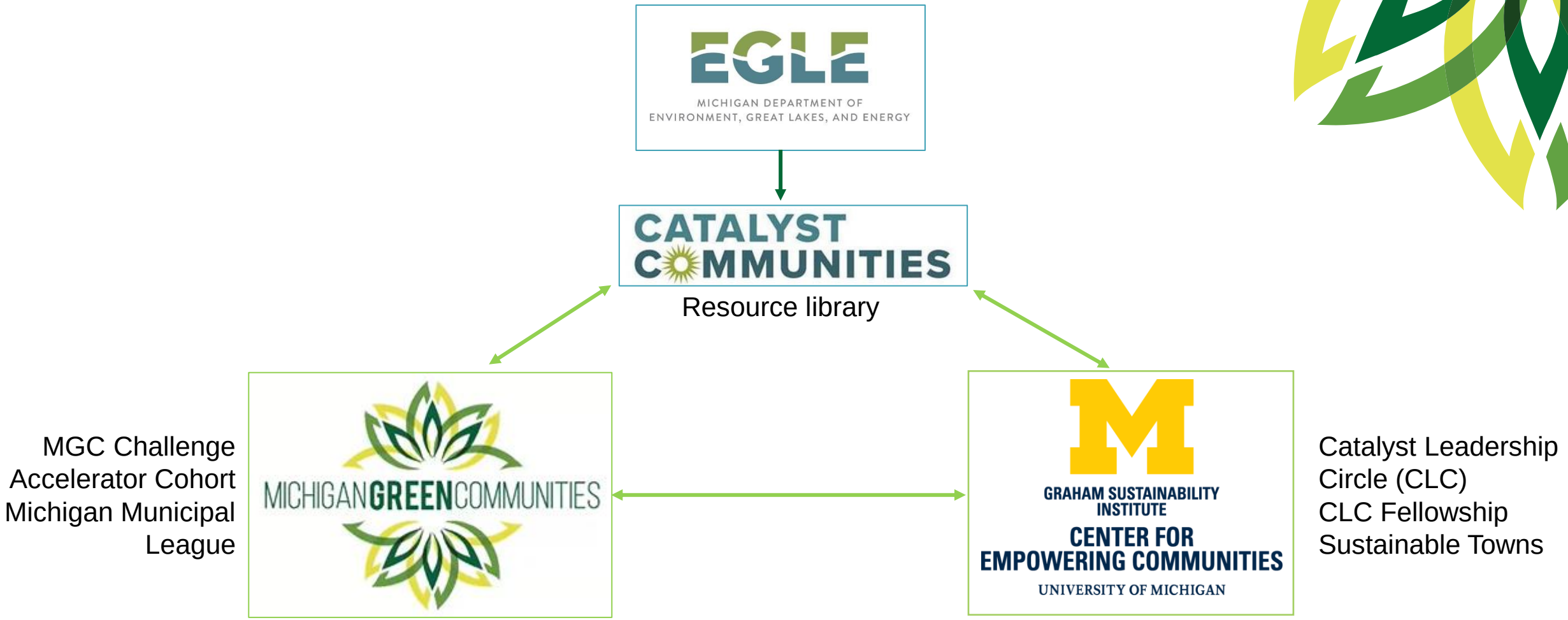
MICHIGANGREENCOMMUNITIES

A Family of Programs



MGC Challenge
Accelerator Cohort
Michigan Municipal League

Catalyst Leadership Circle (CLC)
CLC Fellowship
Sustainable Towns

MICHIGAN **GREEN** COMMUNITIES

What is MGC?

A sustainability benchmarking, networking, & technical assistance program for municipalities & counties

Accelerate environmentally sustainable actions by communities **to enhance Michigan's livability & economic competitiveness** in the 21st century global green economy

MICHIGAN GREEN COMMUNITIES CHALLENGE

Benefits to Participating

- Free technical assistance
- Access to a peer network
- Easily create a roadmap of sustainability actions that work for your community

MGC Challenge Certification

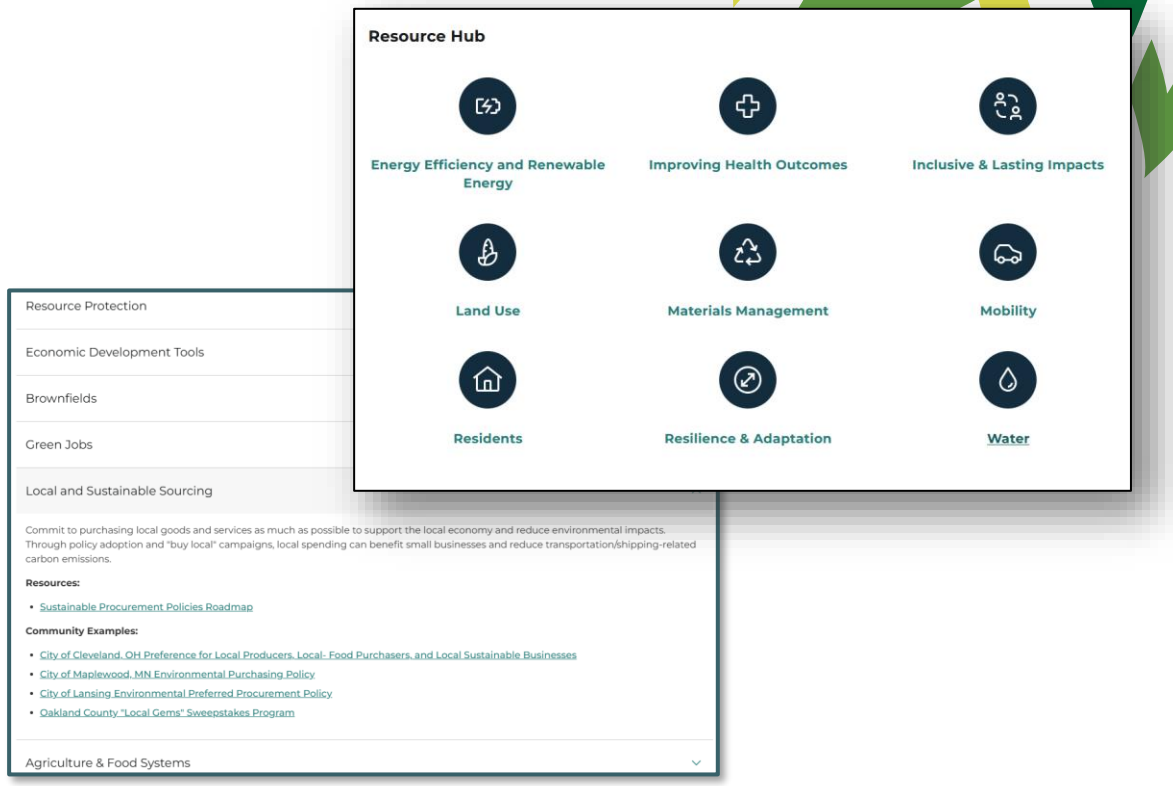
MICHIGAN GREEN COMMUNITIES CHALLENGE

Bronze	20
Silver	60
Gold	100
Platinum New!	175 plus metrics

MGC Challenge Categories

CATALYST COMMUNITIES

1. Planning for Inclusive & Lasting Impacts
2. Climate Resilience & Adaptation
3. Energy Efficiency & Renewable Energy
4. Responsibly Managing Materials
5. Sustainable Land Use & Economic Development
6. Improving Health Outcomes
7. Protecting & Conserving Water Resources
8. Support Clean & Inclusive Mobility
9. Inspire & Mobilize Residents



Energy Efficiency & Renewable Energy

Sample Action Items:

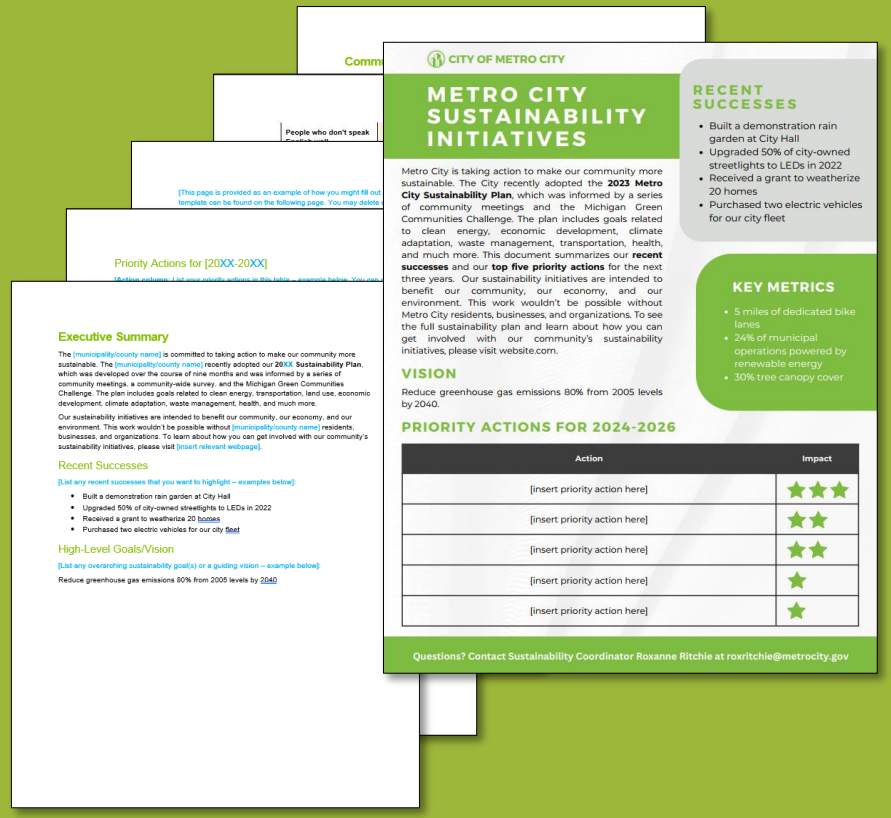
1. Conduct energy audits on municipal/county facilities.

8. Adopt policies and/or ordinances that support renewable energy projects on private property.

10. Develop plan to upgrade/retrofit municipal/county buildings to improve energy efficiency.

21. Create and offer residents and/or businesses an opportunity to participate in a community renewable energy project (e.g. community solar park) if possible.

Template Sustainability Plan Resource Kit



migreencommunities.com/plan

MICHIGAN GREEN COMMUNITIES

www.migreencommunities.com

Accelerator Cohort

Bronze & Silver

- Focused modules, topics selected by participants
  - Green stormwater infrastructure, materials management, sustainable purchasing, energy auditing, resiliency planning
- Monthly workshops, 3-4 months at a time
- Subject matter experts, consultants, small group & one-on-one support

For Silver, Gold, & Platinum

Catalyst Leadership Circle (CLC)

- Meets every other month, usually virtually
- Biweekly resource email

CLC Fellowship

- Grad students from across the state help CLC Members complete advanced sustainability projects
- Project deliverables are shared on the Catalyst Communities resource hub and graham.umich.edu/clcf

Sustainable Towns

Connects local governments with U-M students to expand office capacity and elevate community sustainability efforts using MGC as a framework

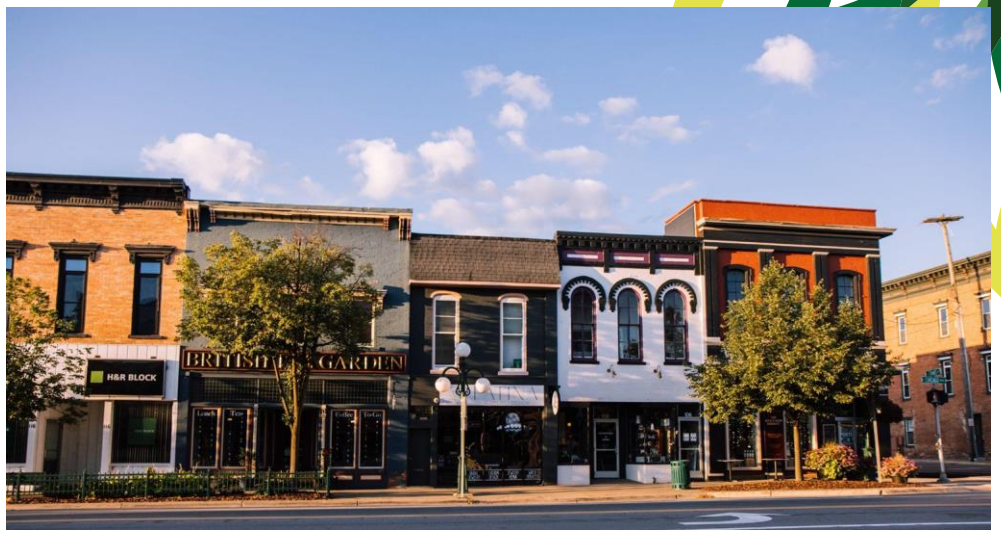
Sustainable Towns

Semester 1:

- Students establish your community's sustainability baseline
- Help you identify sustainability goals
- Develop short-term work plans

Semester 2:

- Students further scope & implement these priority projects
- Position you for easy MGC Challenge submission & continued technical assistance



graham.umich.edu/project/sustainable-towns

bitly

Right Now: Energy Navigators Technical Assistance

- Rural & remote communities
- 10 - 40 hours TA from GPI
- Energy planning, funding strategy, and more
- Complete intake by July 15
- See handout

Sign up for June 4 webinar

https://bit.ly/3GI4mtP

Takeaways

Create MGC account/find your login credentials

Download templates at migreencommunities.com/plan

Visit Catalyst Communities

June 4 Energy Planning Webinar

Contact Information

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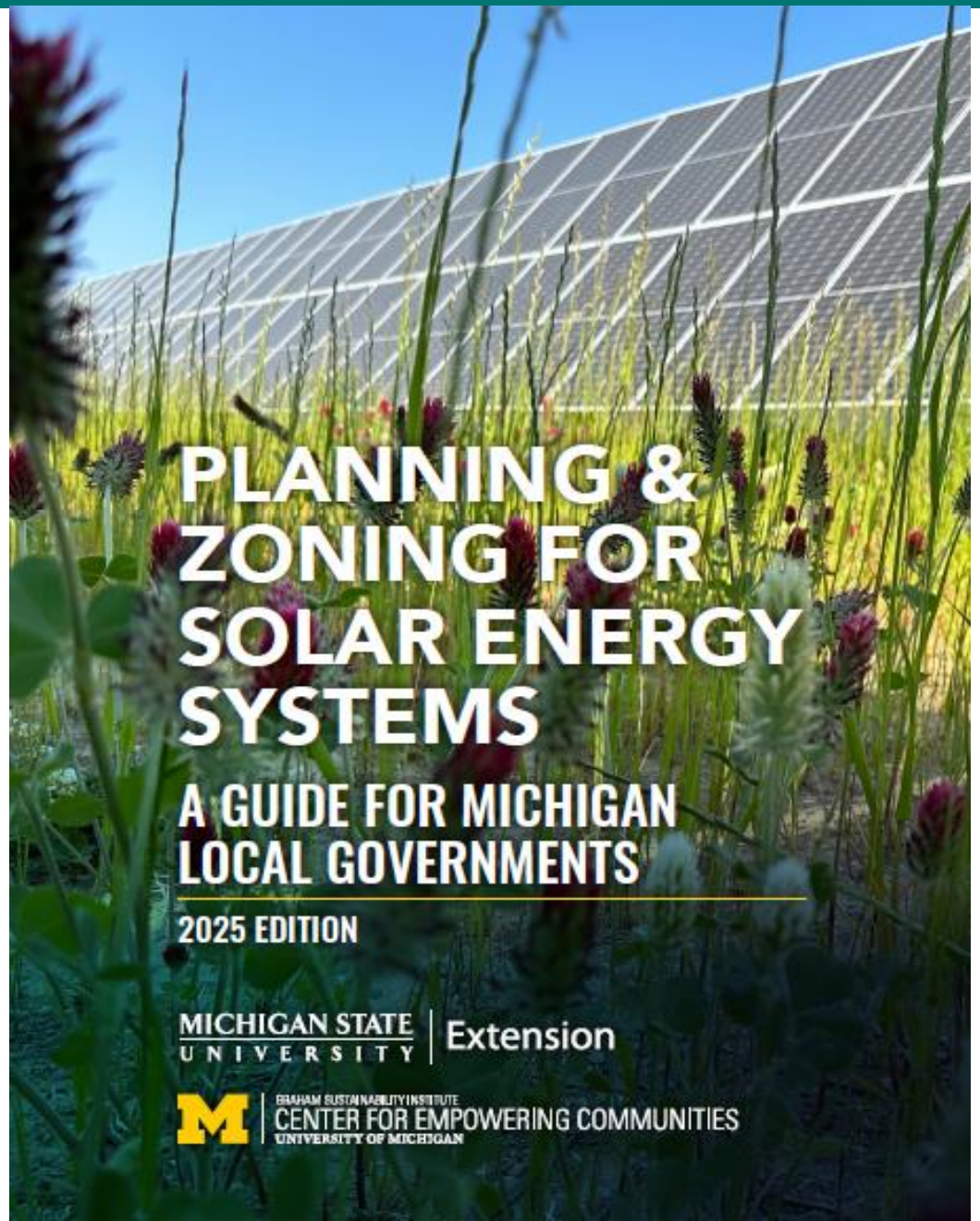
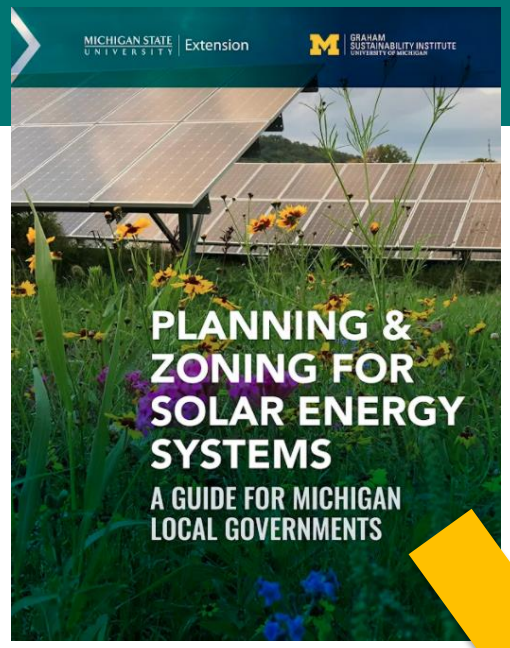
Drum Roll Please....



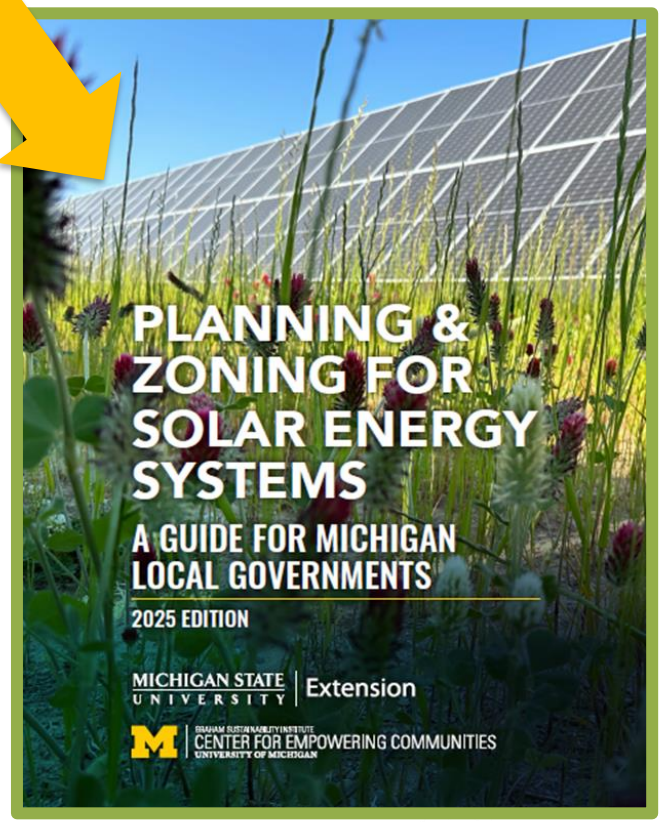
Updated Resource!

extension.msu.edu/solarzoning



2022

2025



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What's changed? Legislation!

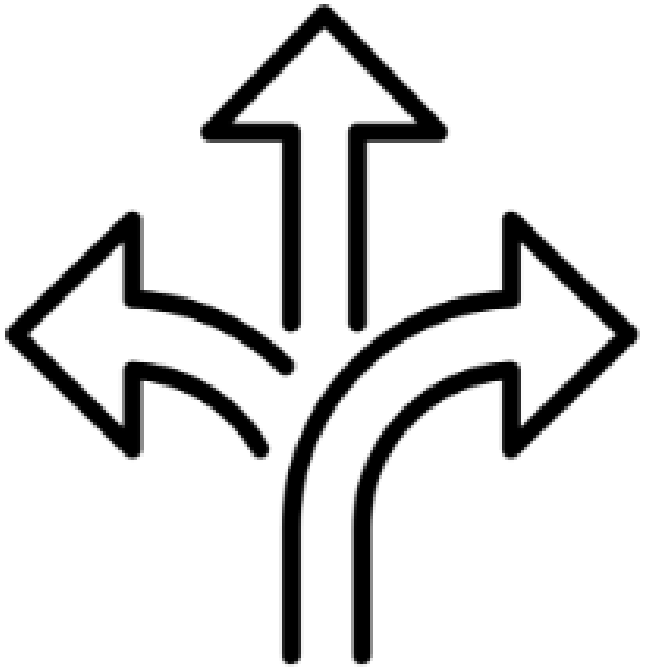
- **PA 235 of 2023-** 50% energy from renewables by 2030, 60% by 2035
  - Increases distributed energy generation cap to 10%
- **PA 233 of 2023-** MPSC certification option for permitting utility scale projects (CREO, Workable Ordinance)
- **PA 108 of 2023-** Payment in Lieu of Taxes (PILT) option for utility scale solar projects (may opt for standard depreciation)
- **PA 230 of 2023-** Solar panels permitted on land enrolled in PA 116, when conditions are met
- **PA 68 of 2024:** Homeowners Associations (HOA) cannot completely ban solar panels

More on PA 233

- 50 MW+ for solar (200+ acres)
- New decision paths for zoning
- **All other scales are still local!**

CREO: Compatible Renewable Energy Ordinance CREO

MPSC: Michigan Public Service Commission



WIO: Workable Incompatible Ordinance

Comparison of Zoning Pathways

- Pros and cons for each option
- Detailed table comparing:
  - Permitting Process
  - Location Control
  - Setbacks
  - Height
  - Sound
  - Screening
  - Groundcover
  - Decommissioning

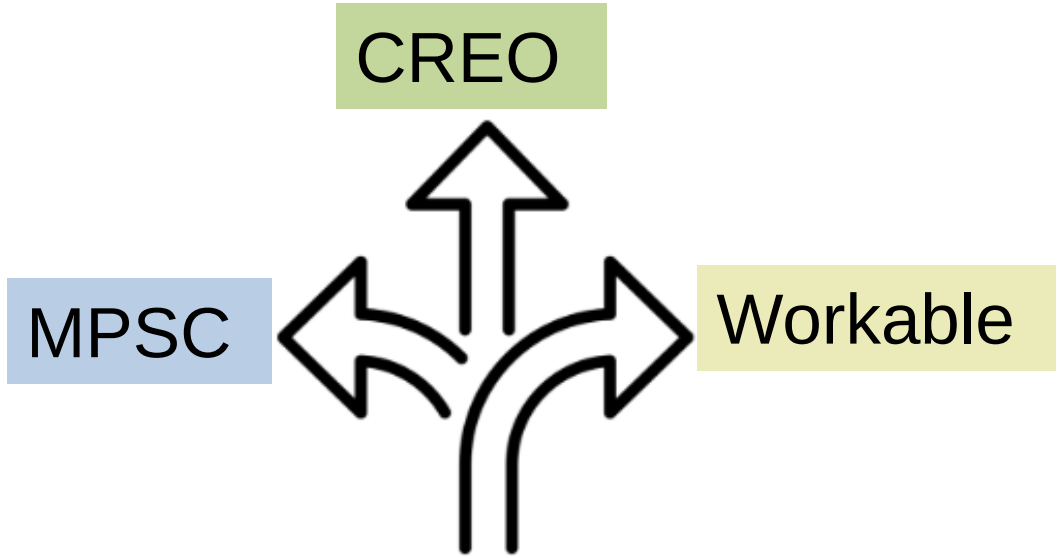


Table 3. Comparison of Zoning Items Between Zoning Pathways for Large SES

	Compatible Renewable Energy Ordinance (CREO)	MPSC	Workable Incompatible Ordinance (WIO)
Process	Use by right with site plan review by Zoning Administrator or Planning Commission **[A]**	Michigan Public Service Commission (MPSC) contested case **[B]**	Use by right with site plan review or special land use (SLU)
Location Control	All districts (General Provisions) **[A]**	Sec. 226(7)(f), Sec. 225(1)(n) All districts + Evaluation Criteria: 1) Will not unreasonably diminish prime farmland/ farmland devoted to specialty crops. 2) Shall consider feasible alternative development locations. 3) Shall consider the impact on local land use, including the % of land dedicated to energy generation.	Locally designated zoning districts or overlay as long as it provides ample and suitable land for development **[C, D]**

2025: New size classifications, suggested thresholds

Accessory: roof, ground mounted

Small: up to 5 MW

Medium: 5-50 MW

Large: over 50 MW

Example Zoning District	Resource Production / Agricultural	Low-Density Residential	Commercial / Office	Industrial	Medium-Density Residential	Mixed Use
Roof Mounted	P	P	P	P	P	P
Accessory Ground Mounted	P	P	P	P	P	P
Principal Use (Small) (e.g., up to 5 MW)	SPR	SPR/SLU	SPR	SPR	SPR/SLU	SPR
Principal Use (Medium) (e.g., 5-50 MW)	SLU	SLU	SLU	SPR/SLU	X	X
Principal Use (Large) (e.g., over 50 MW)	See Page XX for discussion of options in light of PA 233					

P = Permitted (zoning standards apply); **SPR** = Site Plan Review; **SLU** = Special Land Use; **X** = Not Permitted

Solar is Scalable:

Urban to Natural Landscapes

Solar Energy System Type	Natural	Rural	Urban	General Urban
Accessory Roof Mounted				
Accessory Ground Mounted				
Principal Use (Small)				
Principal Use (Large)				

Figure 1. Examples of Solar Energy System Types Across Different Geographies

Solar Energy System Type	Natural	Rural	Urban	General Urban
Accessory Roof Mounted				
Accessory Ground Mounted				
Principal Use (Small/Medium)				
Principal Use (Large)				

Figure 1 shows the type and scale of SES that exhibit predominant factors for compatibility in a given setting.

New Issues or Deeper Dives

- Zoning pathways-utility scale
- Dual siting with BESS, wind, solar
- Stormwater
- Ecovoltaics and agrivoltaics
- Residential scale (HOA, wall, roof, building integrated systems)
- Utilizing some definitions and options under PA 233

Sample Zoning Ordinance Language

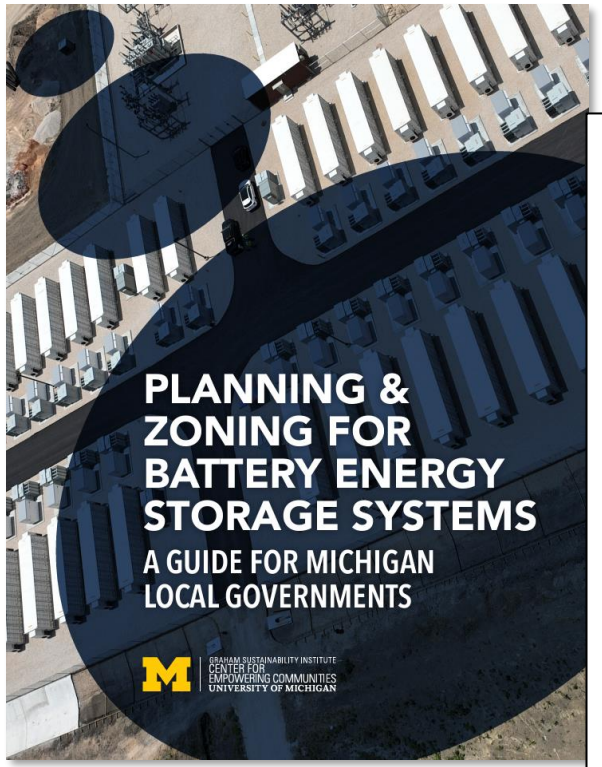
ZONING

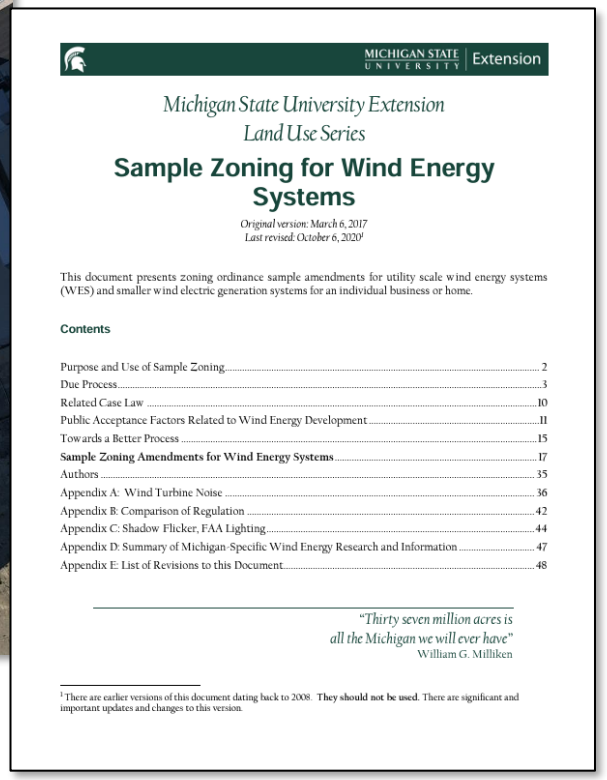
- All scales (small to large SES)
- General Provisions to SLU
- Fill in the blank options
  - Key local decision points
  - Suggestions
  - Local customization required
  - Commentary

SITE PLAN REVIEW (SPR)

- Sample ordinance language
- New (2025)
  - Stormwater Plan
  - Grading Plan
  - Complaint Resolution Plan

Planning and Zoning Resources: Battery Energy Storage Systems (BESS), Wind Energy (update 2026), Solar





MICHIGAN STATE UNIVERSITY | Extension

Michigan State University Extension
Land Use Series

Sample Zoning for Wind Energy Systems

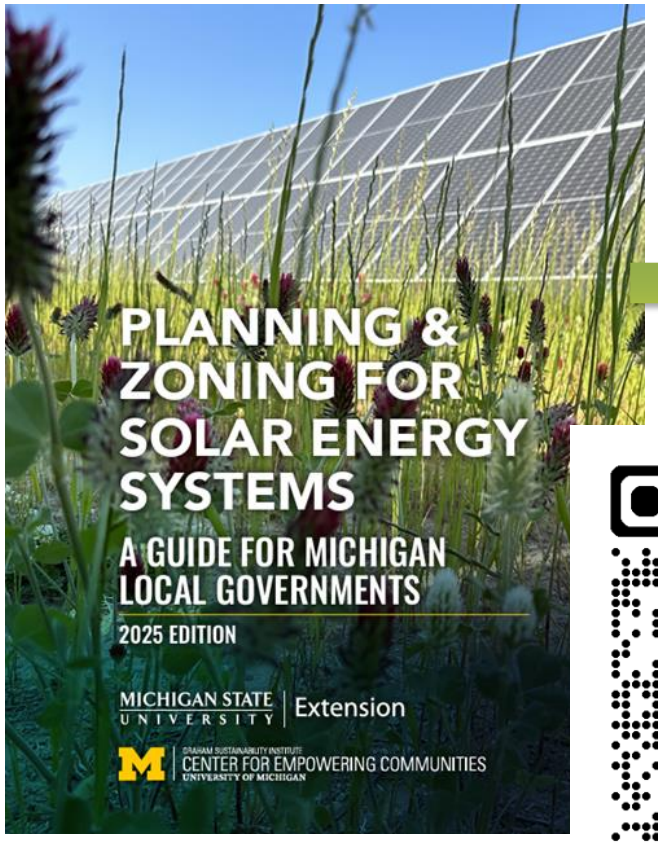
Original version: March 6, 2017
Last revised: October 6, 2020[1]

This document presents zoning ordinance sample amendments for utility scale wind energy systems (WES) and smaller wind electric generation systems for an individual business or home.

Contents

"Thirty seven million acres is all the Michigan we will ever have"
William G. Milliken

[1] There are earlier versions of this document dating back to 2008. **They should not be used.** There are significant and important updates and changes to this version.



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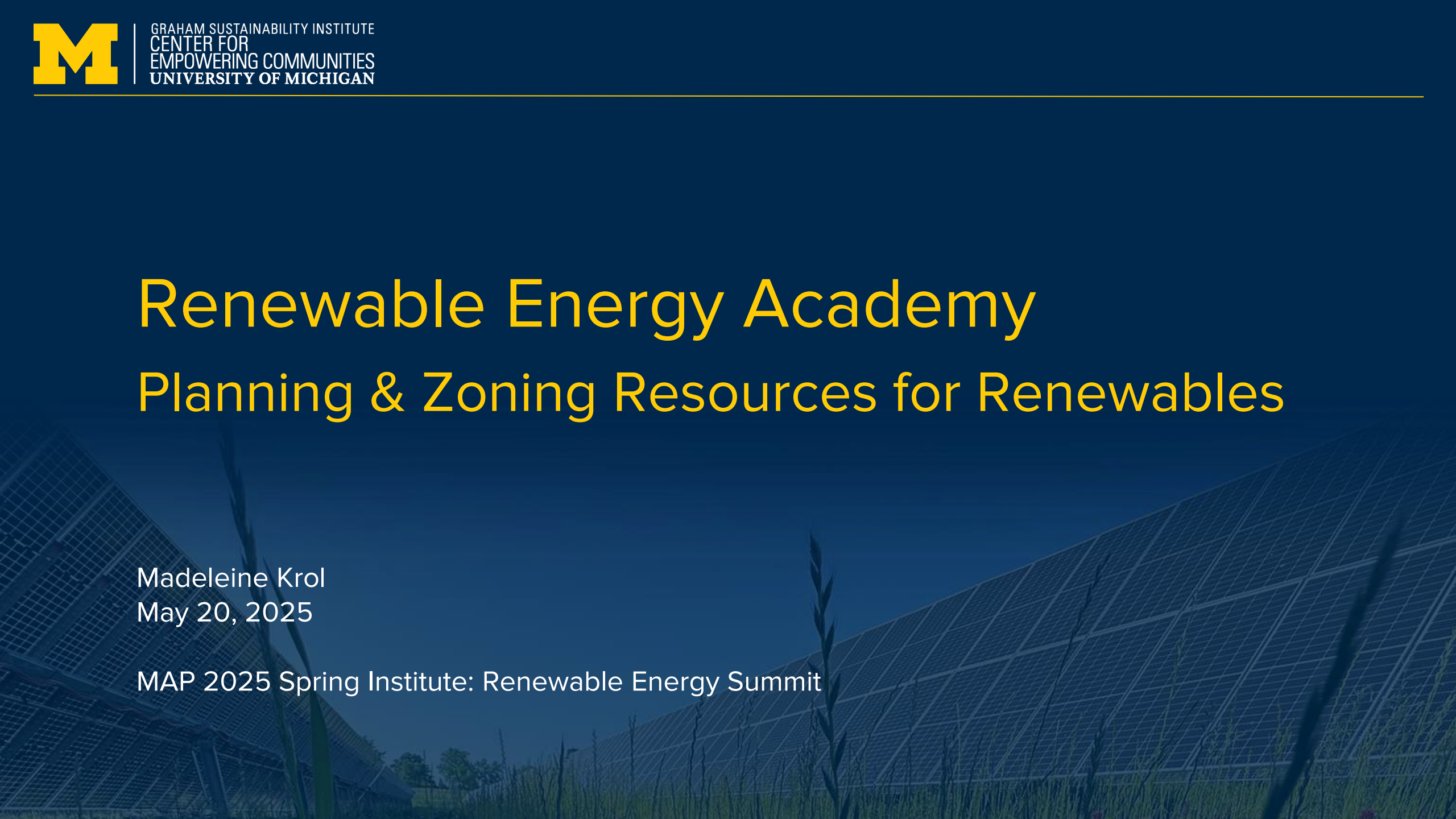
Renewable Energy Academy

Planning & Zoning Resources for Renewables

Madeleine Krol
May 20, 2025

MAP 2025 Spring Institute: Renewable Energy Summit



What is the Renewable Energy Academy?

- REA is a one-stop-shop hub for large-scale renewable energy

- Offers a suite of resources to aid in the process of planning and zoning for renewable energy
  - Tailored training, webinars, workshops, connecting to experts & peers
  - Resources, guides, tools
  - Individual technical assistance for local officials and planners

Renewable Energy Academy Partners

EGLE
MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

GRAHAM SUSTAINABILITY
INSTITUTE
CENTER FOR
EMPOWERING COMMUNITIES
UNIVERSITY OF MICHIGAN

MSU EXTENSION

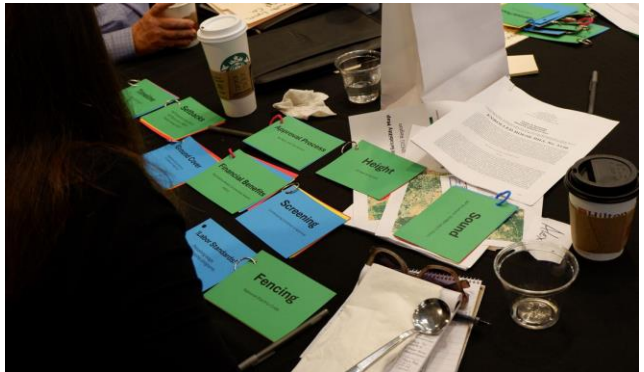
APA
MI

5 lakes
energy

GRAHAM SUSTAINABILITY INSTITUTE
CENTER FOR EMPOWERING COMMUNITIES
UNIVERSITY OF MICHIGAN

REA Workshop Series on PA 233

- 9 (of 14) regions; 320+ participants from local government representing 110+ jurisdictions;
  - Two additional workshops for planning consultants with MAP!
  - Recorded version of the workshop
- Basics of planning and zoning for large-scale solar, wind, battery storage
- Overview of the Act and zoning options for local govs
- Guided activities, peer-to-peer sharing

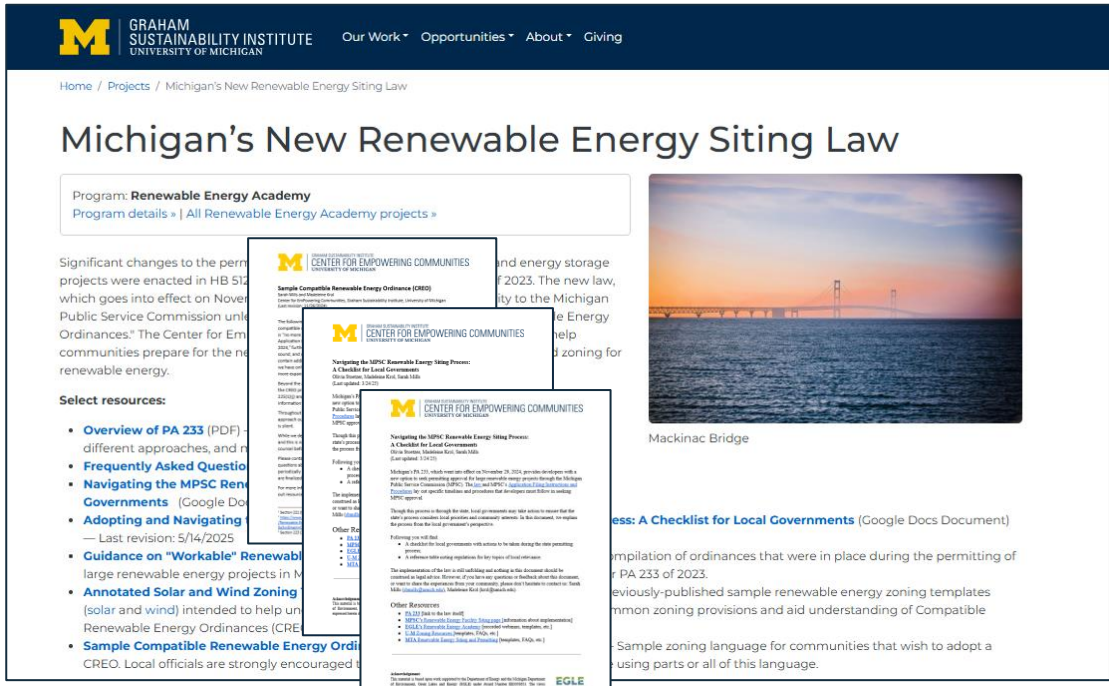


Join us after the keynote luncheon:
Playing Your Cards Right – Navigating Permitting for Large Renewables

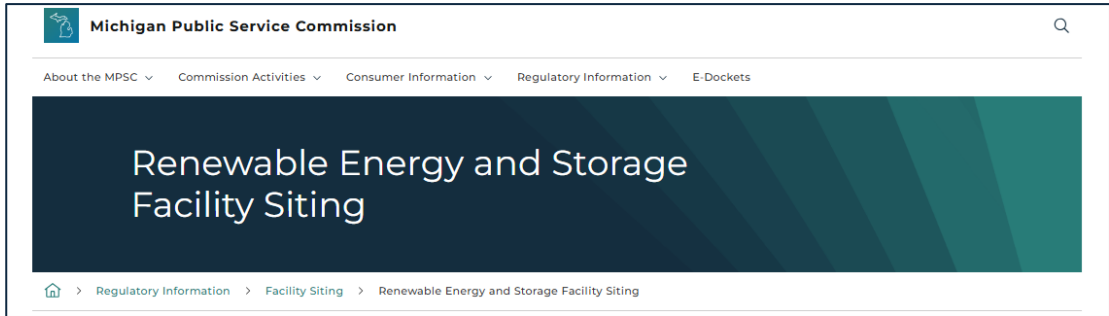
Resources on PA 233

- Overview of PA 233 slide deck & FAQs
- Checklists for local governments navigating:
  - the MPSC permitting process
  - the Compatible Renewable Energy Ordinance (CREO) Process
- Zoning resources:
  - Data on “Workable” Ordinances
  - Sample solar, battery storage language, annotated wind template (MSUE)
  - Sample CREO

- More resources on MPSC’s page!



graham.umich.edu/project/MI-energy-siting



Individual training

6-part series with NEMCOG

- Introduction to Planning and Zoning for Renewables
- Advanced Training
- Four Zoning Nuts-and-Bolts Mini Workshops

Washtenaw County Resiliency Office

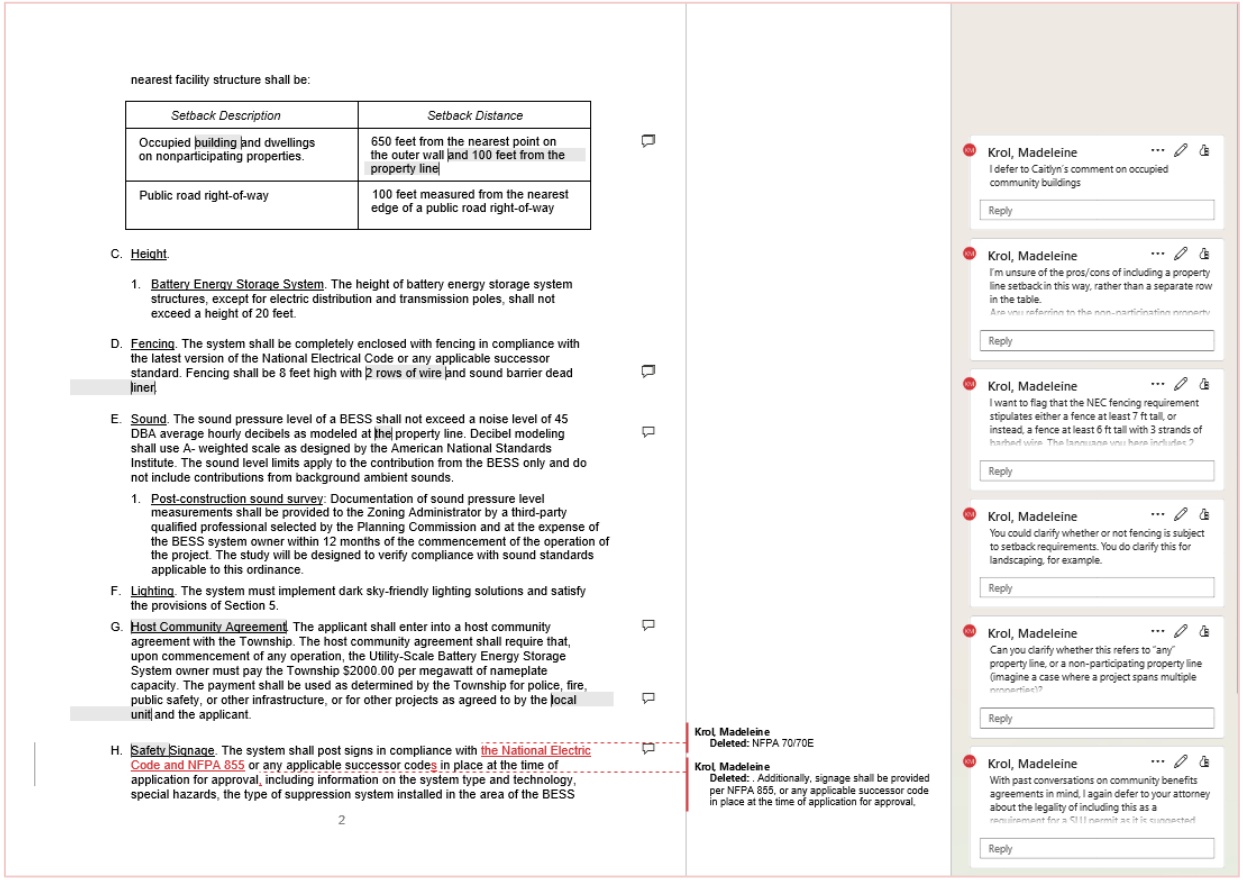
- Upcoming workshop on battery storage and solar, developing sample ordinance for the county

Training for local officials:

- Battery storage, solar, wind?
- PA 233, zoning, planning?
- Who else is collaborating?

Review of zoning ordinances

- Comparing it to sample ordinance, PA 233
- How does this fit with planned goals?
- What's your intent? What message is this sending to developers?



nearest facility structure shall be:

Setback Description	*Setback Distance*
Occupied building and dwellings on nonparticipating properties.	650 feet from the nearest point on the outer wall and 100 feet from the property line
Public road right-of-way	100 feet measured from the nearest edge of a public road right-of-way

C. Height.

1. Battery Energy Storage System. The height of battery energy storage system structures, except for electric distribution and transmission poles, shall not exceed a height of 20 feet.

D. Fencing. The system shall be completely enclosed with fencing in compliance with the latest version of the National Electrical Code or any applicable successor standard. Fencing shall be 8 feet high with 2 rows of wire and sound barrier dead liner.

E. Sound. The sound pressure level of a BESS shall not exceed a noise level of 45 DBA average hourly decibels as modeled at the property line. Decibel modeling shall use A- weighted scale as designed by the American National Standards Institute. The sound level limits apply to the contribution from the BESS only and do not include contributions from background ambient sounds.

1. Post-construction sound survey: Documentation of sound pressure level measurements shall be provided to the Zoning Administrator by a third-party qualified professional selected by the Planning Commission and at the expense of the BESS system owner within 12 months of the commencement of the operation of the project. The study will be designed to verify compliance with sound standards applicable to this ordinance.

F. Lighting. The system must implement dark sky-friendly lighting solutions and satisfy the provisions of Section 5.

G. Host Community Agreement. The applicant shall enter into a host community agreement with the Township. The host community agreement shall require that, upon commencement of any operation, the Utility-Scale Battery Energy Storage System owner must pay the Township $2000.00 per megawatt of nameplate capacity. The payment shall be used as determined by the Township for police, fire, public safety, or other infrastructure, or for other projects as agreed to by the local unit and the applicant.

H. Safety Signage. The system shall post signs in compliance with the National Electric Code and NFPA 855 or any applicable successor codes in place at the time of application for approval, including information on the system type and technology, special hazards, the type of suppression system installed in the area of the BESS

2

Krol, Madeleine
Deleted: NFPA 70/70E

Krol, Madeleine
Deleted: . Additionally, signage shall be provided per NFPA 855, or any applicable successor code in place at the time of application for approval,

Krol, Madeleine
I defer to Caitlyn's comment on occupied community buildings
Reply

Krol, Madeleine
I'm unsure of the pros/cons of including a property line setback in this way, rather than a separate row in the table.
Are you referring to the non-participating property
Reply

Krol, Madeleine
I want to flag that the NEC fencing requirement stipulates either a fence at least 7 ft tall, or instead, a fence at least 6 ft tall with 3 strands of barbed wire. The language you have includes 2
Reply

Krol, Madeleine
You could clarify whether or not fencing is subject to setback requirements. You do clarify this for landscaping, for example.
Reply

Krol, Madeleine
Can you clarify whether this refers to "any" property line, or a non-participating property line (imagine a case where a project spans multiple properties)?
Reply

Krol, Madeleine
With past conversations on community benefits agreements in mind, I again defer to your attorney about the legality of including this as a requirement for a SLU permit as it is suggested
Reply

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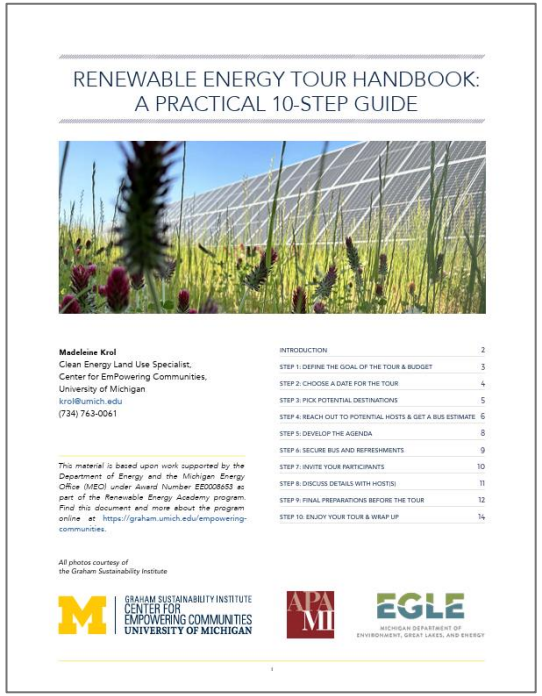
CENTER FOR EMPOWERING COMMUNITIES
UNIVERSITY OF MICHIGAN

Renewable energy site tours

- Bus tours with MAP since 2022
  - Lansing Tour with Ingham and Eaton Counties
  - Northern Michigan Tour with NEMOG
- Plan your own with 10-step handbook
- Next tour planned for August!


RENEWABLE ENERGY TOUR HANDBOOK:
A PRACTICAL 10-STEP GUIDE

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This material is based upon work supported by the Department of Energy and the Michigan Energy Office (MEO) under Award Number EE0008653 as part of the Renewable Energy Academy program. Find this document and more about the program online at https://graham.umich.edu/empowering-communities.

All photos courtesy of the Graham Sustainability Institute

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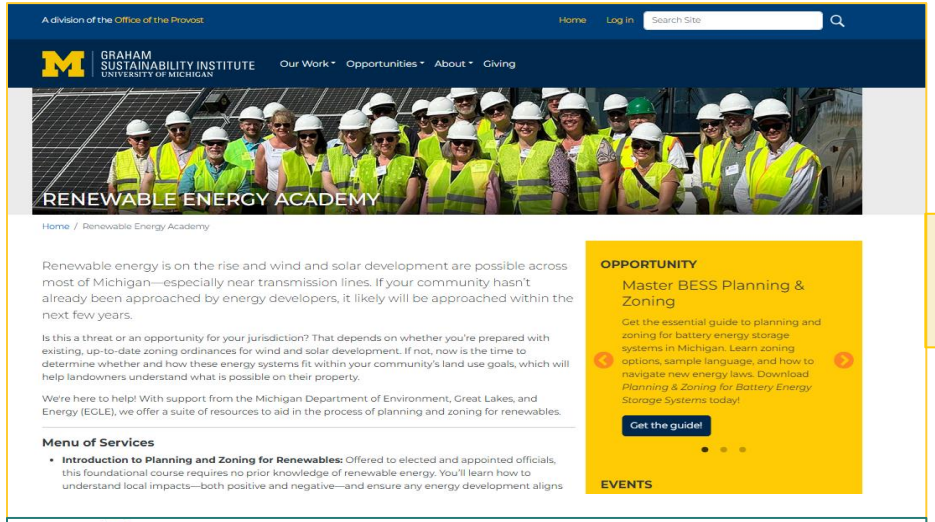
EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Resources



graham.umich.edu/rea

michigan.gov/egle/about/organization/materials-management/energy

Renewables Ready Communities Award

Questions?

Reach out to me!

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