GRAHAM SUSTAINABILITY INSTITUTE
CENTER FOR EMPOWERING COMMUNITIES
UNIVERSITY OF MICHIGAN

What the New Renewable Energy Siting Legislation Means for Michigan Local Governments

March 14, 2025

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Center for EmPowering Communities

- Background in planning and sustainability at local gov. level
- Research on land use policy for renewable energy, community impacts
- Funding from State Energy Office in EGLE
  - Facilitate planning & zoning
  - Training, resources, review draft ordinances, bus tours, FAQs, connect you to MSU-Extension, …
  - Provide state-based data
  - Present pros and cons

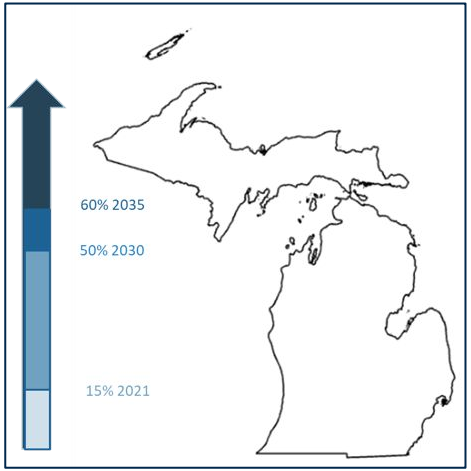
The scope

Our goal: Help communities prepare for the new renewable energy siting landscape

- Renewable Portfolio Standard of 50% by 2030
- Clean Energy and Jobs Package: PA 233, 234, 235

The “big picture” of renewable energy is out of scope

- Valid conversations happening statewide
- Significant federal movement
- 75+ jurisdictions filed a lawsuit to challenge MPSC’s interpretation of PA 233
  - Court of Appeals: MPSC can continue processing applications until court decision



Why so much activity?

Increasing demand from consumers, cities, corporations

Efficiency improvements, cost reductions, and decreased fuel dependency have made renewables cheap.

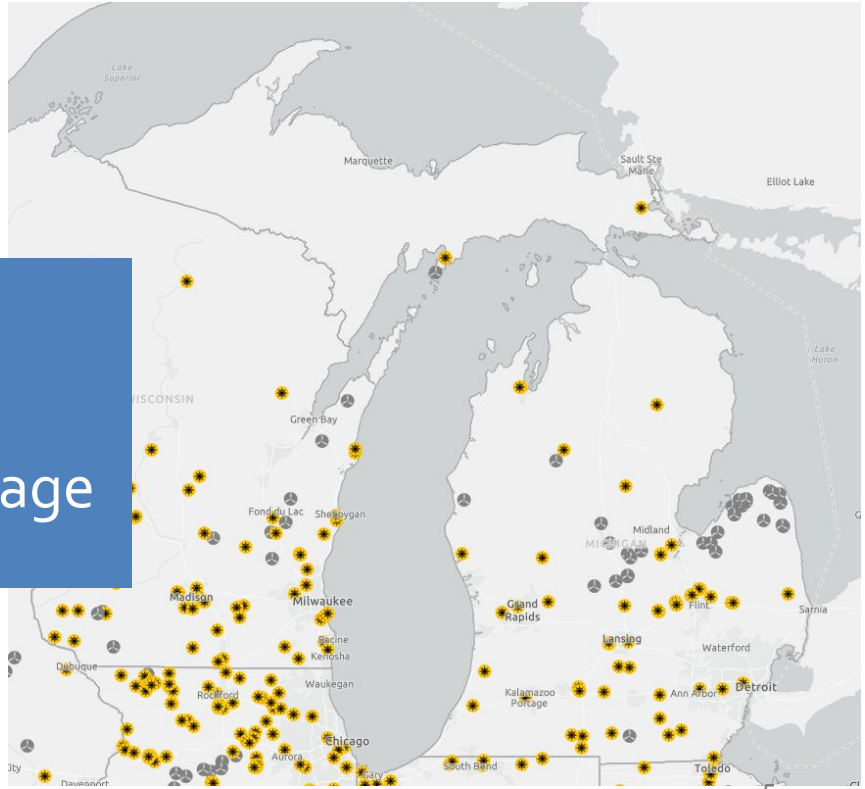
Even prior to new legislation, electricity *purchasers* (utilities) were calling for a 4x increase in renewables.

Consumers (2021) IRP
Up to 80,000 acres by 2040

DTE (2022 IRP)
Up to 65,000 acres by 2042

Utility-Scale Existing Projects

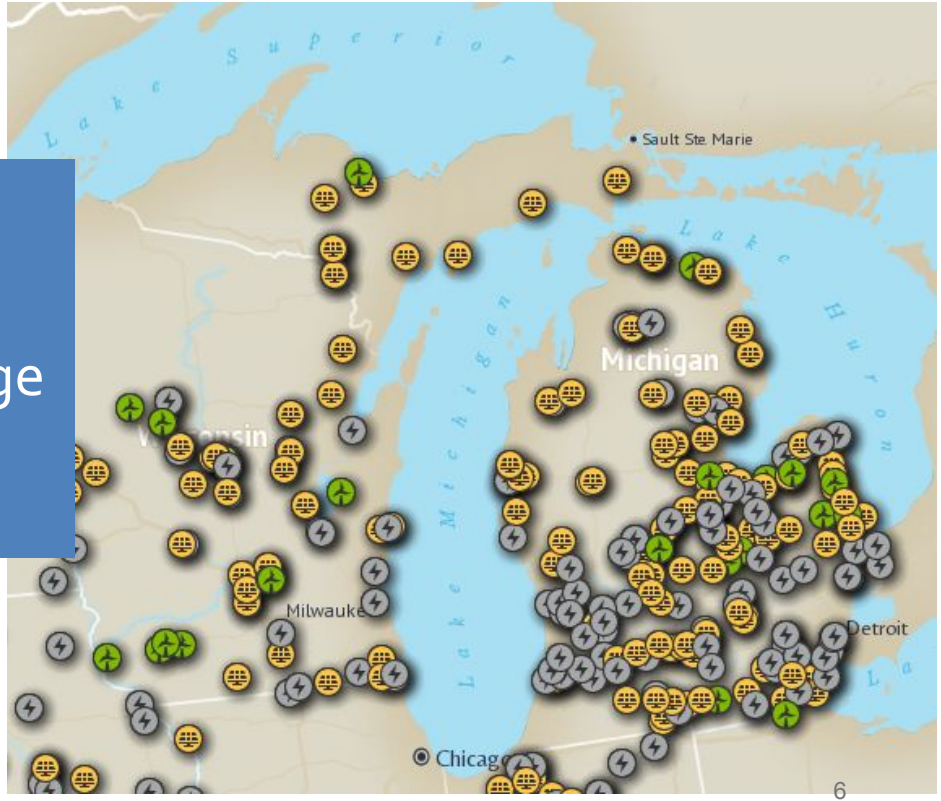
3,800 MW Wind
996 MW Solar
1 MW Battery Energy Storage



Source: U.S. Energy Information Administration, Renewable Electricity Infrastructure and Resources Dashboard, February 7, 2025: https://eia.maps.arcgis.com/apps/dashboards/77cde239acfb494b81a00e927574e430

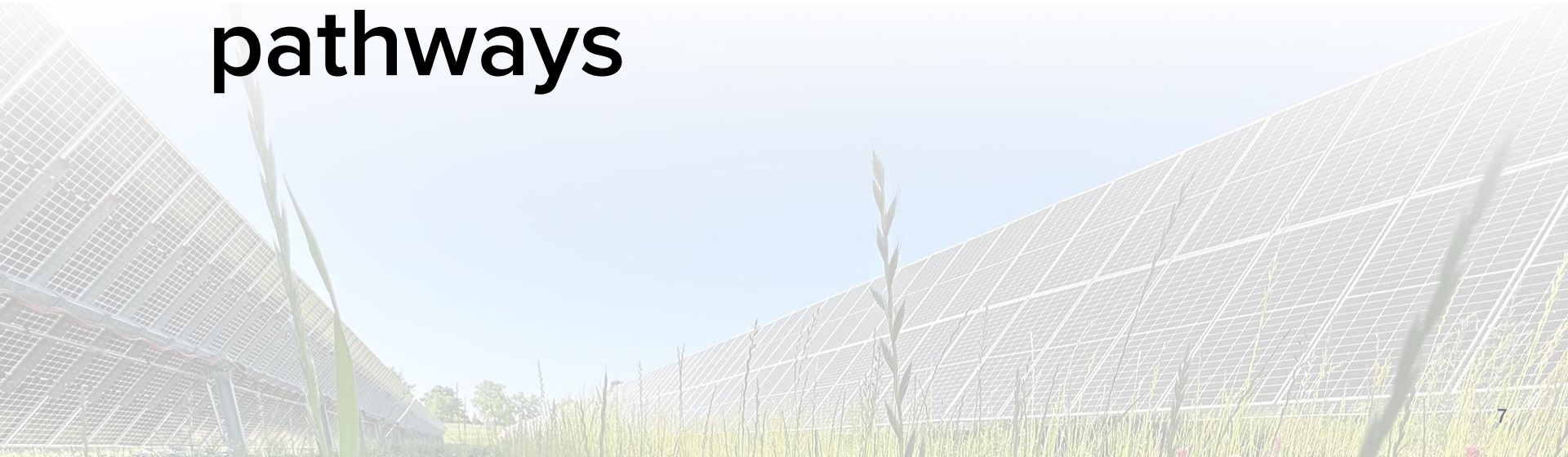
Utility-Scale Projects Under Consideration

3,140 MW Wind
17,930 MW Solar
14,395 MW Battery Energy Storage
3,290 MW Hybrid



Source: MISO Generator Interconnection Queue, February 7, 2025: https://www.misoenergy.org/planning/resource-utilization/GI_Queue/

PA 233 and permitting pathways



Public Act 233 of 2023

Creates an **option** for developers to ask the Michigan Public Service Commission (MPSC) to permit a grid-connected renewable energy project if an affected local unit does not have a "compatible renewable energy ordinance" (CREO), among other triggers.

This option is present as of Nov. 29th, 2024.

Solar Energy: 50 MW nameplate capacity	**Energy Storage:** 50 MW nameplate capacity with an energy discharge capability of 200+ MWh	**Wind Energy:** 100 MW nameplate capacity

1.	A developer is not **required** to go to MPSC. They may stay local even if there is an "incompatible" ordinance.
2.	Once at permitting, project already has a **voluntary landowner host**. No eminent domain.

Exception: A city or village is exempt IF the energy facility is located entirely within a city or village, AND IF the city or village is the owner of the participating property, is a developer of the facility, or owns an electric utility that will take service from the energy facility.

Renewables Ready Communities Award (RRCA)

- PA 233, developers must pay communities for State siting ($2,000/MW), which may disincentivize communities from updating their ordinances. Alone, this was a lose-lose — local govt. loses permitting authority *and* developer loses time and money. A grant from the State for local permitting balances this**,** incentivizing ordinance updates and increasing the value for developers to stay local.

- The RRCA provides up to $5,000/MW to permitters and hosts of utility-scale renewable energy projects of the same size as PA 233 that underwent **local permitting** after Oct 2023. No deadline.

Four permitting pathways

INCOMPATIBLE
Developer *can* call MPSC

Compatible Renewable Energy Ordinance (CREO)

Local ordinance constrained by PA 233 Sec. 226(8).

Projects will be cheap and easy to build.

State-Level Certification (MPSC)

Subject to PA 233 requirements + 21 minimum conditions + evaluation criteria (like impact on farmland).
Projects will have permissive standards but strong due diligence and enforcement.

Workable Ordinance

Projects permitted through local zoning ordinance. Stricter than CREO, but will inherently make room for renewables.
Ideally stays local.
No two are the same.

Unworkable Ordinance

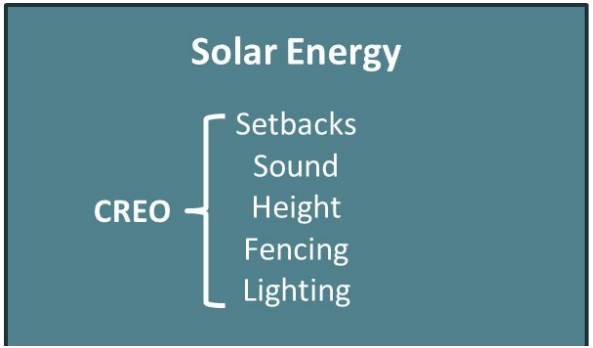
Projects subject to township zoning conditions. Too strict for reasonable development.
An unworkable ordinance will *very likely* result in an MPSC project.

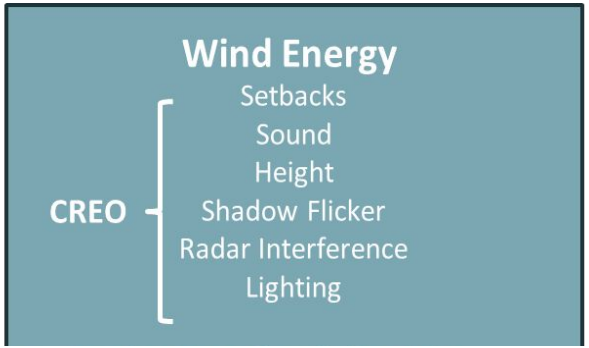
Why “workable” ordinances can work

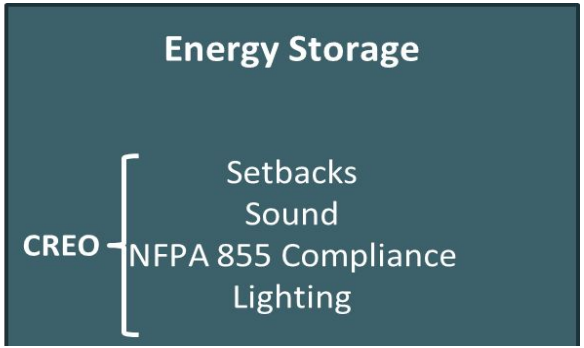
- PA 233 gives developers a backstop of certainty for difficult cases, but it won’t be the first choice. MPSC siting is more expensive, time intensive, and unpopular
  - $2,000/MW Host Community Agreement; $75,000 intervenor funds; 365 days, and more

- **Our opinion:** For most developers, CREO will be the top preference for its cheap & quick process … but next is a workable local ordinance. Only when it becomes “unworkable” will a developer call MPSC, which is time-intensive & costly
  - Nationwide surveys of developers show that state-processes are perceived as generally more expensive and resulting in fewer local benefits
  - Not true for all developers. MPSC certification can still be a highly viable option

What's in a CREO? Sec.226(8)







- This approach represents the most conservative interpretation of a CREO
- Notice a lot of absences, anything more than this is probably incompatible
- The numbers themselves are usually quite permissive; see Act

What's in an MPSC project? Sec.226(8) + Conditions

Solar Energy

CREO
- Setbacks
- Sound
- Height
- Fencing
- Lighting

- **Screening**
- **Vegetative Ground Cover**
- **Underground Facilities**
- **Sound Study + Compliance**
- **Pre-Operation Emergency Response Training + Ongoing upon request**

Wind Energy

CREO
- Setbacks
- Sound
- Height
- Shadow Flicker
- Radar Interference
- Lighting

- **Regular Reporting of Electricity Produced**
- **Sound Study + Compliance**
- **Shadow Flicker Study + Compliance**
- **Pre-Construction Reception Study + Restoration of any Lost Reception Level**
- **Pre-Operation Emergency Response Training + Ongoing upon Request**

Energy Storage

CREO
- Setbacks
- Sound
- NFPA 855 Compliance
- Lighting

- **Sound Study + Compliance**
- **Annual BESS Emergency Response Training**

See our Checklist for Local Governments Navigating the MPSC Process

Why

INCOMPATIBLE
Developer *can* call MPSC

CREO

- Interested in hosting renewables; want to be first in line
- Guarantees that the *process* stays local, albeit performatively
  - Risk for cross-jurisdictional projects
- Minimal municipal workload
- RRCA

MPSC

- Comfortable with the MPSC's process and conditions
- Low municipal workload
- Host Community Agreement and intervenor funds
- Passes accountability to the State

Workable

- More zoning preferences than CREO; still makes room for renewables
- If conversations are flexible and in good faith, unlikely for a developer to call MPSC
- Maintains local process and RRCA

Unworkable

- Expresses *all* community preferences
- Lower workload than "Workable"
- Likely receives all MPSC path Why/Why Nots

Why not

INCOMPATIBLE
Developer *can* call MPSC

CREO

- Cannot add more preferences; denying a compatible project voids CREO
- Penalties for "false CREO"
- Depends on neighbors

MPSC

- Cannot add more preferences
- Strong MPSC conditions, no case precedent yet
- No RRCA
- No local process

Workable

- Requires well-informed ordinance soon
- Context dependency means more work in future
- Risk of being called incompatible

Unworkable

- High risk of losing local process and shifting to MPSC, incurring those "Why nots"
- May turn away local-oriented developers

How

INCOMPATIBLE
Developer *can* call MPSC

CREO

- Pass a zoning ordinance no more restrictive than the standards laid out in Sec. 226(8) of PA 233

(The most conservative interpretation of a CREO)

MPSC

- Don't pass or update your ordinance
- Once project is proposed, request MPSC to require developer to obtain certificate (by contacting MPSC Executive Secretary and Staff)

Workable

- Start with MPSC process; add and/or trim to workability with local priorities
- Pass well-informed ordinance & show willingness to converse
- Don't claim compatibility and prepare to amend

Unworkable

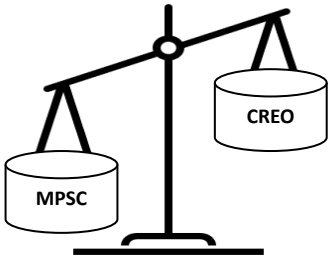
- Pass or maintain the incompatible ordinance
- Say you don't have a CREO and have no intent of amending the ordinance further
- Formally request developer to permit the project locally

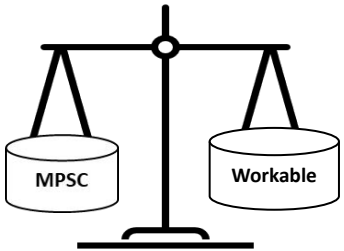
Workability is a balance

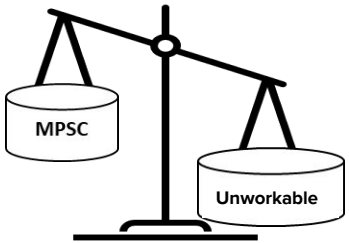
To create a balanced, workable ordinance that works for your community *and* a developer:

Starting from the MPSC's Standards, Conditions, and Process:

- Rank the standards and conditions in order of importance to your community
- Identify the zoning item(s) you would change to reflect more of your community's preferences
  - Consult with municipal attorney, planning professionals, and available data
- Identify the standards and conditions you'd be willing to give up/soften
  - This frees up some wiggle room for community preferences while maintaining balance







Guidance on what's worked before

C. Commercial SES are permitted by issuance of a special use permit and approval of a final site plan by the Planning Commission in the A-1, A-1½, A-2, M-1, and M-2 districts. An application for special use permit and final site plan shall contain information required pursuant to Article 12 for special use permit approval, Article 14 for final site plan approval, and other information as required in this section and in this Ordinance.

3. General Standards. The following standards shall apply to all Private and Commercial SES unless otherwise specifically noted:

A. Design Safety Certification. The safety of the design of all private and commercial SES shall be certified by a Professional Engineer acceptable to the Zoning Administrator. The standard for certification shall be included with the application for development.

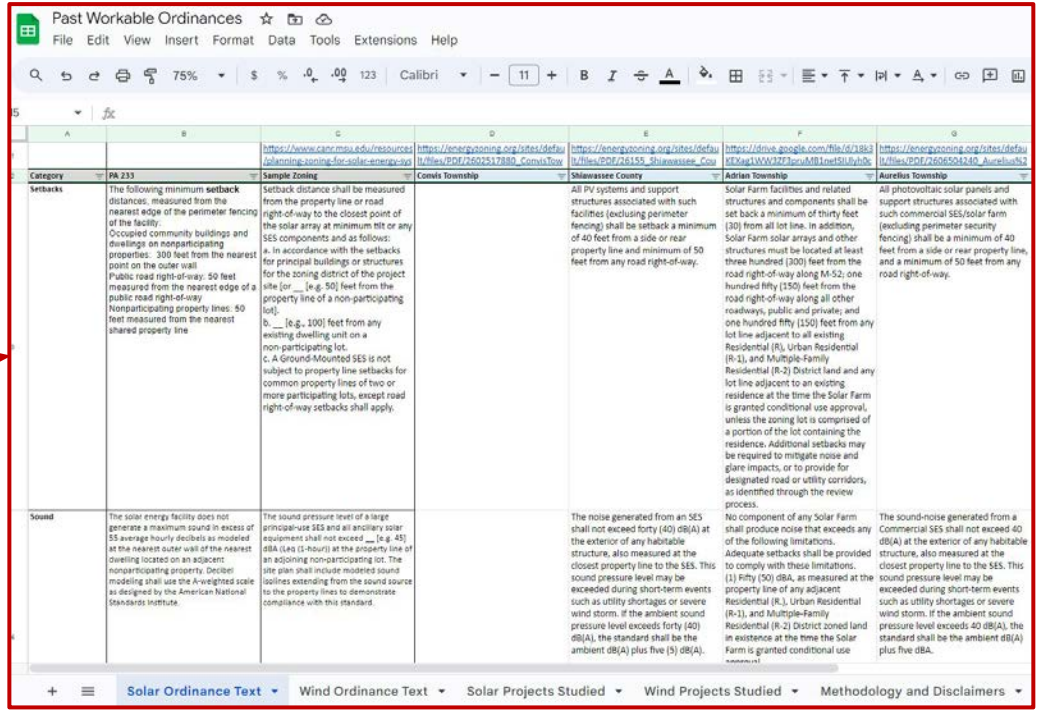
B. Electrical and Building Codes. All electrical compartments, storage facilities, wire conduit, interconnections with utility companies and interconnections with private structures will conform to national and local electrical codes. All SES shall comply with local building permit requirements.

C. Compliance with County Ordinances. Private and commercial SES shall be in compliance with all Ordinance requirements and other applicable ordinances, rules and regulations.

D. Setbacks. All Photovoltaic (PV) systems and support structures associated with such facilities (excluding perimeter fencing) shall be setback a minimum of forty (40) feet from a side or rear property line and a minimum of fifty (50) feet from any road right-of-way.

E. Height. All PV systems and support structures associated with such facilities shall be restricted to a maximum height of sixteen (16) feet when oriented at maximum tilt, except for rooftop and building mounted solar systems which rely upon Section 5.6.1 of the Ordinance for height permitting standards.

Example of Assembly Solar



https://graham.umich.edu/media/files/Developing-Workable-Renewable-Energy-Ordinances.pdf

Strategy 1:
“Fine-tuning” a CREO item

Solar sound

CREO

NP Outer Wall*:
55 dBA Leq (1-hour)

** ["outer wall" measurement penalty]*

MPSC

NP Outer Wall*:
55 dBA Leq (1-hour)
+
Conditions of Approval:

1. Contract with a third-party acoustics expert for post-construction monitoring
2. Demonstrate compliance and maintain compliance through sound mitigating measures if necessary

Workable

NP Property Line:
Range between Ambient + 5 dBA Leq and 60 dBA LMax

Unworkable

NP Property Line:
Below 45 dBA LMax

Sound tweak-points

- Sound standards all include:
  - **Reading type:** *LMax* only must be exceeded once, *Leq* averages over a period (more wiggle room)
  - **Measurement location:** An ear at property line *or* inhabited structure
  - **Decibel amount:** Measurement location is much more important

Source	CREO	Past Projects (rough avg.)
Nearest property line	-	40-60 dBA Max
Inhabited structure	NP: 55 dBA Leq (1 hour)	-

- Sec. 226(8) solar sound has three permissive elements: average, structure, non-participating only

Solar setbacks

CREO

NP Property Line: 50ft

NP Structure: 300 ft

Public Road: 50 ft

MPSC

NP Property Line: 50ft

NP Structure: 300 ft

Public Road: 50 ft

Workable

NP Property Line: 20-50 ft

NP Structure: 200-300 ft

Public Road: 50 ft

P Property Line: 20-50 ft

P Structure: 200 ft

Unworkable

NP Property Line: 50+ ft

NP Structure: 300+ ft

Public Road: 50+ ft

P Property Line: 50+ ft

P Structure: 200+ ft

Solar height

CREO	MPSC	Workable	Unworkable
25 feet at full tilt	25 feet at full tilt	14 - 18 feet or district height	Below 14 feet

Solar decommissioning

CREO

Financial assurance **after deducting** salvage value:

- 25% on operation
- 50% by 5th year
- 100% by 10th year

MPSC

Same as CREO +

Conditions of Approval:

1. Repair all drainage systems damaged during construction and decommissioning
2. Demonstrate that financial assurance has been acquired and will be maintained

Workable

Decommissioning Plan agreed upon by developer and community, including financial assurance **after deducting** salvage value, reviewed every 3-5 years:

- 100% upon permitting

Unworkable

Financial assurance **including** salvage value, reviewed and updated every 3-5 years

Recycling of all materials:

- 125 % upon permitting

Strategy 2:
“Mirroring” an MPSC item

Solar screening

CREO

MPSC

Condition of Approval:
Agreement to implement screening, approved case-by-case by Commission

Workable

Types of screening:
Landscaping or Privacy Fencing

Examples:
Standards of underlying zoning district, if inadequate then PC may require along NP residential uses;
or MSU-E/UM sample zoning guidebook

Unworkable

Types of screening:
Landscaping and Privacy Fencing, or Berming

Example:
Multiple rows of trees at mature height all around project

Solar ground cover

CREO

MPSC

Evaluation Criteria: Vegetative groundcover in *consideration* of MSU's Michigan Pollinator Habitat Scorecard
+ similar Condition of Approval

Workable

Sites not enrolled in PA 116 must meet one or more of the four types of dual use:

1) MSU Pollinator Habitat Planning Scorecard for Solar Sites: score of 76 or more
2) Conservation cover
3) Forage cover
4) Agrivoltaics

Unworkable

Must meet one of two types of dual use:

1) Forage cover
2) Agrivoltaics

Solar approval process

CREO	MPSC	Workable	Unworkable
By Right + Site Plan Review	Commission contested case process	Special Land Use	

Strategy 3: Pay extra attention to “Dealbreaker” zoning items

Solar location control

CREO

All districts

MPSC

All districts +

Evaluation Criteria:

1) Will not unreasonably diminish prime farmland
2) Shall consider feasible alternative development locations
3) Shall consider impact on local land use, including % of land dedicated to energy generation

Workable

! Districting !
! Lot minimums !

Implemented in a way that still provides ample and suitable land for renewable development + large patch size + access to transmission/substation is considered

Unworkable

! Overlays !
! Districting !
! Lot Maximums !

Implemented in a way that does not provide ample and suitable land for renewable development

Especially problematic when a developer has already identified a project location!

Strategy 4:
Get yourself easy wiggle room

Review timeline

CREO	MPSC	Workable	Unworkable
120 - 240 days	365 days	Streamlined by resolution (less than 365 days)	No time limit

Additional financial benefits

CREO

Not required of developer through zoning.

Reminder: If permitted locally, eligible for RRCA

MPSC

Guaranteed $2,000/MW **Host Community Agreement** for Zoning Authority

Workable

Community Benefits Agreement
Request financial benefits tied to direct impact of project on community.

Reminder:
If permitted locally: Eligible for RRCA
If permitted at state: Guaranteed HCA

Unworkable

Community Benefits Agreement
Require $/MW CBA that's greater than the MPSC's HCA requirement.

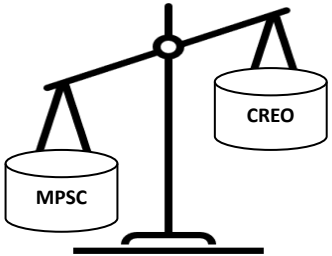
Reminder:
If permitted locally: Eligible for RRCA
If permitted at state: Guaranteed HCA

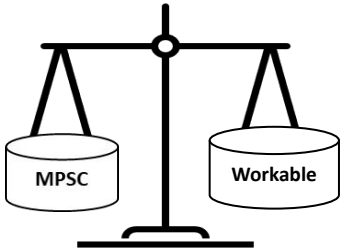
Strategy 4: Get yourself easy wiggle room

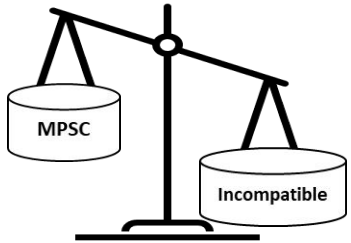
Other examples for easy wiggle room include:

- MPSC's Application Filing Requirements that you can live without
- Alternative locations analysis
- Proof of consultation with other agencies, …

Workability is a balance







Zoning Activity

- Sound
- Setbacks
- Screening
- Ground Cover
- Height
- Decommissioning
- Location Control
- Timeline
- Approval Process
- Additional Financial Benefits

CREO PA 233 Standards

PA 233 Standards + MPSC Conditions of Approval

Workable Incompatible Standards

Unworkable Incompatible Standards

If you'd like a copy of the activity card set or would like us to talk you through it, reach out!

Where does planning fit in all of this?

- The role of planning in PA 233
  - Not in the law, but MPSC instructions require it
  - MPSC to consider impacts on local land use

- Identify top community concerns and priorities to inform a workable ordinance
  - Tools: Mapping local suitability for solar/wind (EGLE); community engagement

- “Rezoning justification memo”/findings
  - For the ordinance decisions you take, link intentions to master plan goals
  - If MPSC route, paper trail for contested case

- Consider energy facilities in the context of existing goals
  - Early conversations about tensions between goals/zoning items helpful either way

What are you trying to preserve?

- Urban boundary
- Rural vista
- Habitat
- Land for growing food
- Farm livelihoods

So, what's next?

We won't know how any of this will truly play out until there's case precedent – we need to see what projects the MPSC says yes and no to, and how developers respond to denials. Until then …

- **Start thinking as a community what your zoning priorities are for renewable energy**
  - Get your municipal planner and attorney involved
  - For multi-jurisdictional projects, less reason to adopt a CREO if your neighbors aren't
  - If you choose a path that requires amending your zoning ordinance (CREO or "Workable"), start moving quickly on those amendments
  - If you're still leaning towards an "Unworkable" ordinance, consider exploring how to harness benefits and minimize priority impacts with a workable ordinance

Resources

- **MPSC**: Renewable Energy and Energy Storage Facility Siting webpage
  - FAQs, MPSC's Application Filing Instructions and Procedures, Recording of stakeholder engagement workshops

- **UM Center for EmPowering Communities**: PA 233 resources
  - https://graham.umich.edu/project/MI-energy-siting
    - FAQs, guidance on "workable" ordinances (data), sample CREO
    - Annotated solar, wind guidebooks (MSU-E), storage guidebook

- **EGLE**:
  - Renewable Energy Academy webpage
  - Renewables Ready Communities Award webpage
  - Michigan Zoning Database

- **Michigan Townships Association**: PA 233 resources
  - Sample workable ordinances, sample CREO, Application Fee Escrow Documents, etc. (members only)

Resources cont.

- **Local resource potential maps:**
  - Reach out to EGLE!

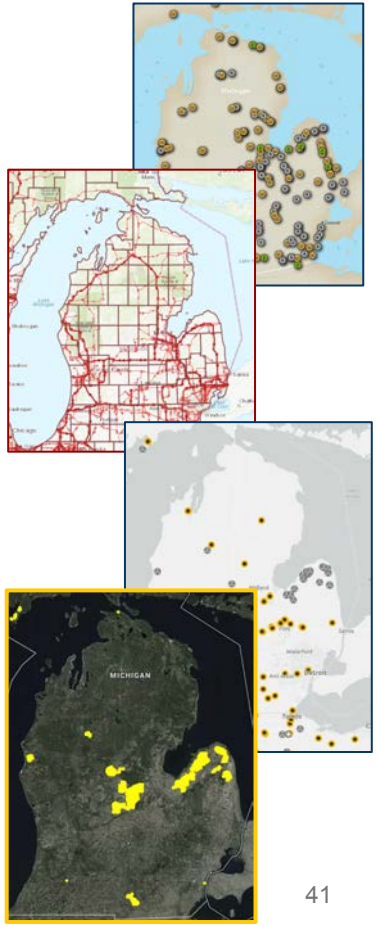
- **MPSC Resource Hub:**
  - Michigan-specific maps of solar and wind projects, utility service areas, and much more

- **MISO Interconnection Queue:**
  - Interactive Queue Map showing proposed projects in Michigan
  - Interactive Queue Data (additional information on proposed projects)

- **Geospatial Energy Mapper Tool:**
  - Launch tool to view map with layer of existing transmission lines and substations, county boundaries, etc.

- **US Energy Information Administration:**
  - Existing Energy Infrastructure and Resources in the US (map)
  - Form EIA-860 data (existing and planned energy generators)

- **US Wind Turbine Database and Solar Photovoltaic Database**



Questions?

- **Reach out to me!**
  - Answer questions
  - Review draft ordinances
    - Talk through pros/cons of alternatives
  - Connect you to other communities, MSU-Extension

- **More training**
  - Renewable Energy Academy Workshops
  - Online webinars on zoning

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