GRAHAM SUSTAINABILITY INSTITUTE
CENTER FOR EMPOWERING COMMUNITIES
UNIVERSITY OF MICHIGAN

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

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My background, perspective

- 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

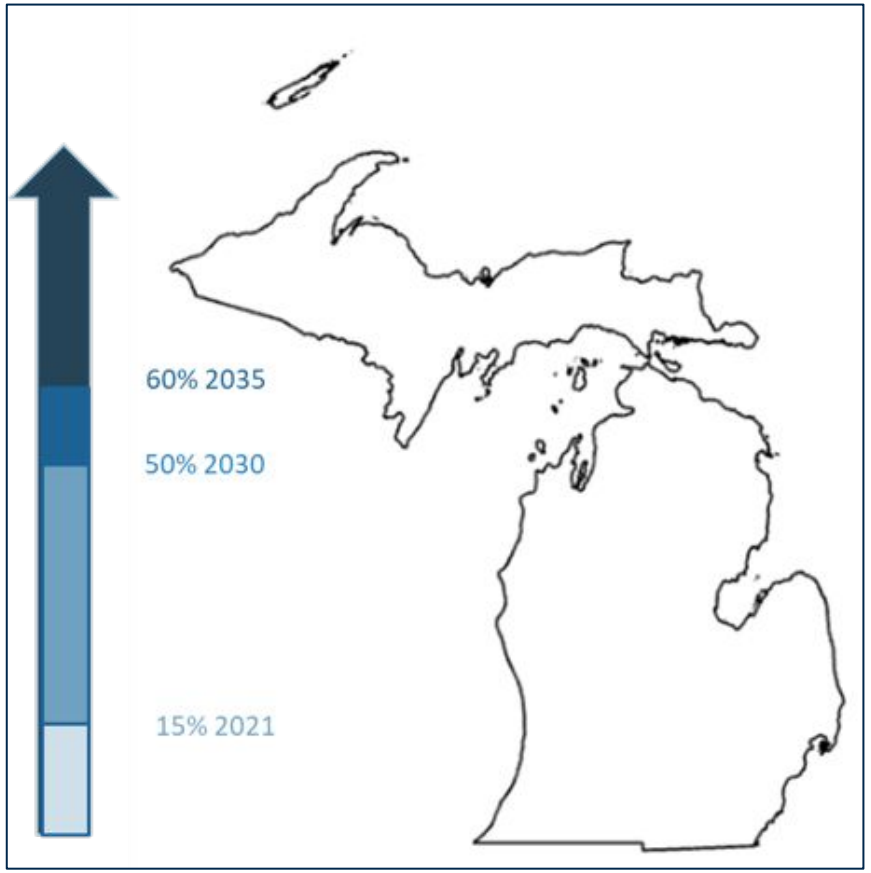
Agenda

- PA 233 basics
- What are the options & the pros/cons
- Workability: Balancing scale & community goals
- Q&A

The scope

- Focus on “what now” rather than “how we got here”

- Our goal: Help communities prepare for the new renewable energy siting landscape considering PA 233 and new renewable goals
  - Renewable Portfolio Standard of 50% by 2030
  - Clean Energy and Jobs Package: PA 233, 234, 235



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 not present until 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; may stay local even if there's an "incompatible" ordinance
2. Once at permitting, project already has a **voluntary landowner host**; no eminent domain

Four permitting pathways

INCOMPATIBLE
Developer *can* call MPSC

Compatible Renewable Energy Ordinance (CREO)

Projects permitted through local ordinance constrained by PA 233 Sec. 226(8) and timeline, which are both quite permissive. Projects will be cheap and easy to build.

State-Level Certification (MPSC)

Projects permitted by the MPSC, subject to:
PA 233 requirements + 21 minimum conditions + evaluation criteria (incl. impact on farmland/land use) applied by the MPSC. 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 per MW Host Community Agreement; $75,000 intervenor funds; up to 365 days
- **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 seek MPSC certification, which is time-intensive & costly
  - In line with recent nationwide study of renewable energy developers: state-processes generally perceived as more expensive and resulting in fewer local benefits
  - But – not true for all developers and projects; MPSC certification is still a highly viable option in some cases
- Additionally, the “Renewables Ready Communities Award”

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Renewables Ready Communities Award (RRCA)

- In PA 233, developers must *pay communities* for State siting. This disincentivized communities from updating their own ordinances, which is suboptimal for developers due to the timeline.

- A grant from the State for *local permitting* balances this, incentivizing local ordinance updates *and* routing developers through a process which saves them time and money.

The RRCA provides up to $5,000/MW to permitters and hosts of eligible utility-scale renewable energy projects which underwent **local** permitting processes (Workable or CREO.)

The total current funding available is $30,000,000, but CPRG funding will significantly expand the amount available. There is **no deadline to apply** — open until funds are depleted.

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
  - Still risk for multi-jurisdiction 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

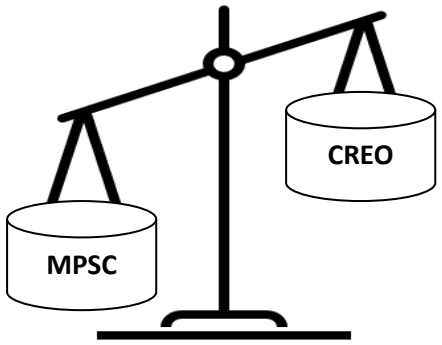
- Pass or maintain the incompatible ordinance
- Say you don't have a CREO and have no intent of amending the ordinance further
- Formally request developer to permit the project locally

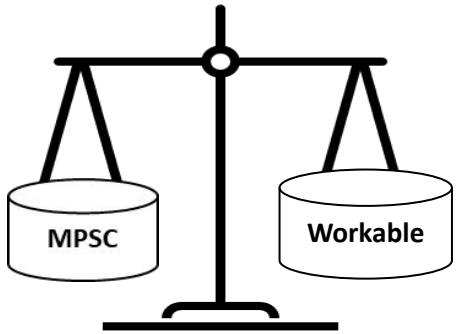
Workability is a balance

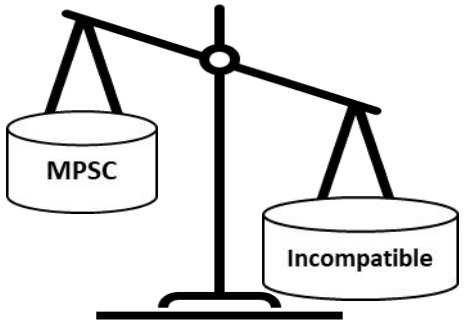
To create a balanced, workable ordinance that works for your community *and* a developer:

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

Past Workable Ordinances

File Edit View Insert Format Data Tools Extensions Help

	A	B	C	D	E	F	G
1			https://www.canr.msu.edu/resources/planning-zoning-for-solar-energy-sys	https://energyzoning.org/sites/default/files/PDF/2602517880_ConvisTow	https://energyzoning.org/sites/default/files/PDF/26155_Shiawassee_Cou	https://drive.google.com/file/d/18k3KEXag1WW3ZF3pruMB1netSIUlyh0c	https://energyzoning.org/sites/default/files/PDF/2606504240_Aurelius%2
2	Category	PA 233	Sample Zoning	Convis Township	Shiawassee County	Adrian Township	Aurelius Township
3	Setbacks	The following minimum **setback** distances, measured from the nearest edge of the perimeter fencing of the facility: Occupied community buildings and dwellings on nonparticipating properties: 300 feet from the nearest point on the outer wall Public road right-of-way: 50 feet measured from the nearest edge of a public road right-of-way Nonparticipating property lines: 50 feet measured from the nearest shared property line	Setback distance shall be measured from the property line or road right-of-way to the closest point of the solar array at minimum tilt or any SES components and as follows: a. In accordance with the setbacks for principal buildings or structures for the zoning district of the project site [or __ [e.g. 50] feet from the property line of a non-participating lot]. b. __ [e.g., 100] feet from any existing dwelling unit on a non-participating lot. c. A Ground-Mounted SES is not subject to property line setbacks for common property lines of two or more participating lots, except road right-of-way setbacks shall apply.		All PV systems and support structures associated with such facilities (exclusing perimeter fencing) shall be setback a minimum of 40 feet from a side or rear property line and minimum of 50 feet from any road right-of-way.	Solar Farm facilities and related structures and components shall be set back a minimum of thirty feet (30) from all lot line. In addition, Solar Farm solar arrays and other structures must be located at least three hundred (300) feet from the road right-of-way along M-52; one hundred fifty (150) feet from the road right-of-way along all other roadways, public and private; and one hundred fifty (150) feet from any lot line adjacent to all existing Residential (R), Urban Residential (R-1), and Multiple-Family Residential (R-2) District land and any lot line adjacent to an existing residence at the time the Solar Farm is granted conditional use approval, unless the zoning lot is comprised of a portion of the lot containing the residence. Additional setbacks may be required to mitigate noise and glare impacts, or to provide for designated road or utility corridors, as identified through the review process.	All photovoltaic solar panels and support structures associated with such commercial SES/solar farm (excluding perimeter security fencing) shall be a minimum of 40 feet from a side or rear property line, and a minimum of 50 feet from any road right-of-way.
4	Sound	The solar energy facility does not generate a maximum sound in excess of 55 average hourly decibels as modeled at the nearest outer wall of the nearest dwelling located on an adjacent nonparticipating property. Decibel modeling shall use the A-weighted scale as designed by the American National Standards Institute.	The sound pressure level of a large principal-use SES and all ancillary solar equipment shall not exceed __ [e.g. 45] dBA (Leq (1-hour)) at the property line of an adjoining non-participating lot. The site plan shall include modeled sound isolines extending from the sound source to the property lines to demonstrate compliance with this standard.		The noise generated from an SES shall not exceed forty (40) dB(A) at the exterior of any habitable structure, also measured at the closest property line to the SES. This sound pressure level may be exceeded during short-term events such as utility shortages or severe wind storm. If the ambient sound pressure level exceeds forty (40) dB(A), the standard shall be the ambient dB(A) plus five (5) dB(A).	No component of any Solar Farm shall produce noise that exceeds any of the following limitations. Adequate setbacks shall be provided to comply with these limitations. (1) Fifty (50) dBA, as measured at the property line of any adjacent Residential (R.), Urban Residential (R-1), and Multiple-Family Residential (R-2) District zoned land in existence at the time the Solar Farm is granted conditional use approval	The sound-noise generated from a Commercial SES shall not exceed 40 dB(A) at the exterior of any habitable structure, also measured at the closest property line to the SES. This sound pressure level may be exceeded during short-term events such as utility shortages or severe wind storm. If the ambient sound pressure level exceeds 40 dB(A), the standard shall be the ambient dB(A) plus five dBA.

Solar Ordinance Text | Wind Ordinance Text | Solar Projects Studied | Wind Projects Studied | Methodology and Disclaimers

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

Solar sound

CREO	MPSC	Workable	Unworkable
NP Structure: 55 dBA Leq (1-hour) + Sound Modeling Study * [“outer wall” measurement penalty]	NP Structure: 55 dBA Leq (1-hour) + Sound Modeling Study and Sound Monitoring for Compliance * [“outer wall” measurement penalty]	NP Property Line: Range between Ambient + 5 dBA Leq and 60 dBA LMax	NP Property Line: Below 45 dBA LMax

Strategy 1: "Fine-tuning" a CREO item

- Sound as an example:
  - **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

- Changing CREO items is a balancing act, e.g. keeping Leq may gain leniency elsewhere

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

Strategy 2: “Mirroring” an MPSC item

- Screening as an example:
  - Is a “minimum condition” of approval by the MPSC, but is **not** required in a Sec. 226(8) CREO

- Imagine you have a base CREO and add *just* screening
  - If developer finds ordinance unworkable due to this item, they go to the MPSC … which subjects them to this same screening standard and more

- Screening *alone* should be “workable”, but it’s still part of the overall balance

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

Strategy 3: Pay extra attention to "Dealbreaker" zoning items

- Location control as an example:
  - Adding an item to your ordinance that is not considered in a CREO or the State's process invites a higher risk of triggering unworkability

- **Districting**: Specify the zoning district that large renewable can/can't go in
- **Overlays**: Your ordinance says that projects are permitted in an Overlay District, which itself can be placed to exclude certain priority areas

- But – our interpretation of a CREO: "By right in all districts"
  - This might break workability outright, unlike fine-tuning of sound/setbacks
  - **<u>Especially problematic when a developer has already identified project location</u>**

Review timeline

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

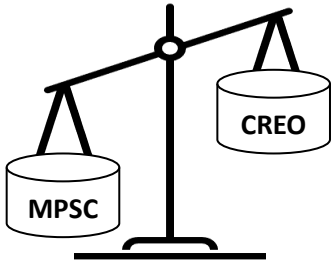
Strategy 4: Get yourself easy wiggle room

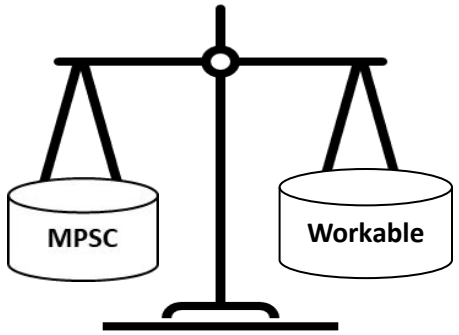
- Timeline as an example:
  - Cutting cost to developer that are imposed through MPSC process

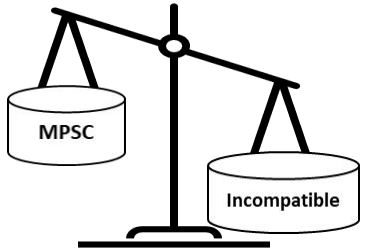
- Time is money
  - Review process timeline:
    - MPSC = 365 days
    - CREO = 120-240 days
  - Can you commit to a timeline that's in between?

- 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







Planning, community engagement, memos?

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

- “Rezoning justification memo”
  - For the ordinance decisions you take, link intentions to master plan goals
  - If MPSC route, participate in 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
  - MPSC's Application Filing Instructions and Procedures (10/10/2024)
  - Comments and reply comments on prior draft versions
  - 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

- **Michigan Townships Association**:
  - Sample CREO & Application Fee Escrow Documents (members only)

- **EGLE**:
  - Renewable Energy Academy **> next workshop: 10/28 in Kalamazoo!**
  - Renewables Ready Communities Award webpage
  - Michigan Zoning Database

Questions?

- **Reach out to us**
  - 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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