

Mikado Township
Ordinance No. ____ of 2022

**An ordinance to amend the Mikado Township Zoning Ordinance Article 2 (Definitions),
Article 5 (District Regulations) and Article 9 (Supplemental Regulations)**

Mikado Township, Alcona County, Michigan ordains :

Section 1: Amendments to the Mikado Township Zoning Ordinance

That the Mikado Township Zoning Ordinance, Section 2.1 (Definitions) is hereby amended to read as follows:

(add the following)

Solar Energy Definitions:

A. ***Solar Energy Facility (Utility Scale/Commercial)***. A facility designed to capture and utilize the energy of the sun to generate electrical power to be used primarily off-site. A solar energy collection facility consists of an array of solar collection devices used to collect solar rays and all associated ancillary and structural devices needed to support and convert/transmit the energy collected.

B. ***Solar Energy Panels (Accessory)***. Solar collection devices designed to capture and utilize the energy of the sun to generate electrical power primarily for use on-site. A solar collection device is the actual material(s) used to collect solar rays and all associated ancillary and structural devices needed to support and convert/transmit the energy collected.

1. ***Building-Integrated Accessory Solar Energy Panels***. Accessory solar energy panels that are an integral part of a primary or accessory building or structure (rather than a separate mechanical device), replacing or substituting for an architectural or structural component of the building or structure. Building-integrated systems include, but are not limited to, photovoltaic or hot water solar energy systems that are contained within roofing materials, windows, skylights, and awnings.

2. ***Ground-Mounted Accessory Solar Energy Panels***. Accessory solar energy panels mounted on support posts, like a rack or pole that are attached to or rest on the ground.

3. ***Roof-Mounted Accessory Solar Energy Panels***: A solar energy system mounted on racking that is attached to or ballasted on the roof of a building or structure.

C. ***Maximum Tilt***. The maximum angle of a solar panel (i.e., most vertical position) for capturing solar radiation as compared to the horizon line.

D. ***Minimum Tilt***. The minimal angle of a solar panel (i.e., most horizontal position) for capturing solar radiation as compared to the horizon line.

E. ***Non-Participating Lot(s)***. One (1) or more lots for which there is not a signed lease or easement for development of a solar energy facility associated with the applicant project.

F. **Participating Lot(s).** One (1) or more lots under a signed lease or easement for development of a solar energy facility associated with the applicant project.

G. **Repowering.** Reconfiguring, renovating, or replacing a solar energy facility to maintain or increase the power rating of the solar energy facility within the existing project footprint.

That the Mikado Township Zoning Ordinance, Section 5.0 (Single-Family Residential District) is hereby amended to read as follows:

(add the following)

B.6 Solar Energy Panels (Accessory)

That the Mikado Township Zoning Ordinance, Section 5.1 (Multiple-Family Residential District) is hereby amended to read as follows:

(add the following)

B.3 Solar Energy Panels (Accessory)

That the Mikado Township Zoning Ordinance, Section 5.2 (Agricultural-Residential District) is hereby amended to read as follows:

(add the following)

B.5 Solar Energy Panels (Accessory)

C.21 Solar Energy Facility (Utility Scale/Commercial)

Some communities also choose to designate an overlay district so as not to open up the entire Ag district up to solar.

That the Mikado Township Zoning Ordinance, Section 5.3 (Commercial District) is hereby amended to read as follows:

(add the following)

B.15 Solar Energy Panels (Accessory)

That the Mikado Township Zoning Ordinance, Section 5.4 (Forest-Recreational District) is hereby amended to read as follows:

(add the following)

B.11 Solar Energy Panels (Accessory)

Some communities add them as special uses here as well.

That the Mikado Township Zoning Ordinance, Section 5.5 (Resource Conservation District) is hereby amended to read as follows:

(add the following)

B.6 Solar Energy Panels (Accessory)

That the Mikado Township Zoning Ordinance, Section 9 (Supplemental Regulations) is hereby amended to read as follows:

(add the following)

T. Solar Energy Facilities (Utility-Scale/Commercial)

1. **Reflection/Glare.** Solar collection devices, or a combination of devices, shall be designed and located to avoid glare or reflection onto adjacent properties and adjacent roadways and shall not interfere with traffic or create a safety hazard. This may be accomplished by both the placement and angle of the collection devices as well as human-made or environmental barriers. Glare intensity is considered an issue if it measures more than twenty (20) percent of the incident sun intensity. Plans to reduce glare may be required in the initial materials submitted.

2. **Impervious Surface/Stormwater.** If more than eight thousand (8,000) square feet of impervious surface will be located on the site, the application shall include a drainage plan prepared by a registered civil engineer showing how stormwater runoff will be managed. If detergents will be used to clean solar panels, details on the type of detergent, frequency, and quantity of use, and stormwater quality protection measures shall be provided. Any necessary permits from outside agencies for off-site discharge shall be provided.

3. **Screening.** Solar devices shall be screened year-round from view from any existing residential use and the public right-of-way by use of a screening wall, evergreen vegetation, or other screening of similar effectiveness and quality, as determined by the Planning Commission. Screening shall be installed which screens the facility fully from view from the time of planting or installation. Screening shall be maintained throughout the life of the facility including replacing dead vegetation within six (6) months or at the earliest feasible time of year dependent on the weather.

4. **Setbacks.** The setbacks of all solar collection devices and ancillary equipment shall be at least fifty (50) feet from all property lines of non-participating lots.

5. **Fencing.** Solar Energy Facilities may be secured with perimeter fencing to restrict unauthorized access. Fencing is not subject to setbacks in subsection 4.

6. **Height.** Solar collection devices shall not exceed twenty (20) feet in height when oriented at maximum tilt (measured from the ground at the base of the equipment).

7. **Lighting.** Solar Energy Facility lighting shall be limited to inverter and/or substation locations only. Light fixtures shall have downlit shielding and be placed to keep light on-site and glare away from adjacent properties, bodies of water, and adjacent roadways. Flashing or intermittent lights are prohibited.

8. **Wiring.** Wiring (including communication lines) may be buried underground. Any above-ground wiring within the footprint of the solar energy facilities shall not exceed the height of the solar array at maximum tilt.
9. **Sound.** The sound pressure level of a solar energy facility and all ancillary solar equipment shall not exceed fifty (50) 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.
10. **Battery Storage.** Areas for battery storage shall be shown on the site plan, if applicable.
11. **Land Clearing.** Land disturbance or clearing shall be limited to what is minimally necessary for the installation and operation of the system and to ensure sufficient all-season access to the solar resource given the topography of the land. Topsoil distributed during site preparation (grading) on the property shall be retained on site.
12. **Access/Service Roads.** New access drives within the Solar Energy Facility shall be designed to minimize the extent of soil disturbance, water runoff, and soil compaction on the premises. The use of geotextile fabrics and gravel placed on the surface of the existing soil for temporary roadways during the construction of the Solar Energy Facility is permitted, provided that the geotextile fabrics and gravel are removed from those temporary roadways once the Solar Energy Facility is in operation.
13. **Agricultural Protection.** For sites where agriculture is a permitted use in a district, solar energy facilities shall be sited to minimize impacts to agricultural production through site design and accommodations including:
- a. The ground mounting of panels by screw, piling, or a similar system that does not require a footing, concrete, or other permanent mounting in order to minimize soil compaction.
 - b. Siting panels to avoid disturbance and compaction of farmland by siting panels along field edges and in nonproduction areas to the maximum extent practicable and financially feasible.
 - c. Maintaining all drainage infrastructure on site, including drain tile and ditches, during the operation of the solar energy facility.
 - d. Siting the solar energy facility to avoid isolating areas of the farm operation such that they are no longer viable or efficient for agricultural production, including, but not limited to, restricting the movement of agricultural vehicles/equipment for planting, cultivation, and harvesting of crops, and creating negative impacts on support infrastructure such as irrigation systems or drains.
 - e. Voluntarily purchasing agricultural conservation easements from an equivalent number of prime farmland acres consistent with a purchase of development rights ordinance adopted in the Township.
14. **Repowering.** In addition to repairing or replacing solar energy components to maintain the system, a solar energy facility may at any time be repowered, without the need to apply for a new Special Land Use permit, by reconfiguring, renovating, or replacing the solar energy components to increase the power rating within the existing project footprint.

a. A proposal to change the project footprint of an existing solar energy facility shall be considered a new application, subject to the ordinance standards at the time of the request. Expenses for legal services and other studies resulting from an application to modify a solar energy facility will be reimbursed to the Township by the solar energy facility owner in compliance with established escrow policy.

15. **Abandonment.** Any freestanding solar collection site or device which is not used for six (6) continuous months shall be deemed to be abandoned. The applicant/permit holder will be so notified in writing by the Township and requested to dismantle the site and return it to its original state. If there are mitigating circumstances as to why the site has not been used, the applicant/permit holder may contact the Township and request a three (3) month extension. If a site has been deemed abandoned and no request for an extension is received, the applicant/permit holder will again be notified to dismantle the site and return it to its original state. If the applicant/permit holder does not do this, the Township will have the removal and restoration done at the owner/applicant's expense. Removal shall include removing posts, equipment, panels, foundations, and other items so that the ground is restored to its preconstruction state and is ready for development as another land use.

16. **Performance Guarantee.** As a condition of approval, prior to construction, the Planning Commission may require an owner to deposit funds in escrow with the Township or provide an insurance bond satisfactory to the Planning Commission to assure the removal of the solar energy facility. If required, such escrow deposit or insurance bond shall be in an amount equal to the cost of removal of the facility. The deposit or bond shall be maintained by successor owners of the facility.

17. **Decommissioning Plan.** A decommissioning plan is required at the time of application.

a. The decommissioning plan shall include:

1. The anticipated manner in which the project will be decommissioned, including a description of which above-grade and below-grade improvements will be removed, retained (e.g. access drive, fencing), or restored for viable reuse of the property consistent with the zoning district.

2. The projected decommissioning costs for removal of the solar energy facility (net of salvage value in current dollars) and soil stabilization, less the amount of the surety bond posted with the State of Michigan for decommissioning of panels installed on PA 116 lands.

3. The method of ensuring that funds will be available for site decommissioning and stabilization (in the form of surety bond, irrevocable letter of credit, or cash deposit).

b. A review of the amount of the performance guarantee based on inflation, salvage value, and current removal costs shall be completed every five (5) years, for the life of the project, and approved by the Township Board. An solar energy facility owner may at any time:

1. Proceed with the decommissioning plan approved by the Planning Commission and remove the system as indicated in the most recent approved plan; or

2. Amend the decommissioning plan with Planning Commission approval and proceed according to the revised plan.

18. **Reports.** Solar energy production summary reports by month shall be provided annually for each solar facility to the Township Planning Commission and the Township Clerk, by January 31st each year, for the preceding year.

U. Solar Energy Panels (Accessory)

Solar energy panels shall be allowed as a permitted accessory use in all zoning districts subject to the requirements below. A zoning permit shall be required for accessory solar panels. A building permit may be required.

1. Height.

- a. Ground-mounted accessory solar energy panels shall not exceed the allowable height of structures in that district when oriented at maximum tilt measured from the ground to the top of the system.
- b. Building-mounted or roof-mounted accessory solar energy systems shall not exceed five (5) feet above the finished roof.

2. Setbacks/Location.

- a. Ground-mounted accessory solar energy panels shall adhere to setbacks and location established for detached accessory buildings pursuant to **Section 3.5**. Setbacks are measured from the lot line to the nearest portion of the structure when oriented at minimum tilt. If no solar access is available in the location required, the Planning Commission may approve ground-mounted solar energy panels in an alternate location on a case-by-case basis. Screening from the road or neighboring property may be required.
- b. Building-mounted or roof-mounted accessory solar energy panels shall adhere to district setbacks for a principal building but may encroach into designated principal building setbacks by twelve (12) inches.

3. **Glare.** Panels shall not result in glare onto adjoining properties or public rights of way.

4. **Lot Coverage for Residential Lots.** Ground-mounted accessory solar energy panels (all panels totaled together on one lot) shall be no greater than half (1/2) of the square footage of the principal dwelling. *Some communities don't limit this.*

5. Nonconformities.

- a. A building-mounted or roof-mounted accessory solar energy panel installed on a nonconforming building or nonconforming use shall not be considered an expansion of the nonconformity.
- b. Ground-mounted accessory solar energy panels installed on a nonconforming lot or nonconforming use shall not be considered an expansion of the nonconformity.

6. Building-Integrated Solar Panels. Building-Integrated solar energy panels are subject only to zoning regulations applicable to the structure or building and not subject to ground-mounted or building-mounted standards in subsections 1 through 4 above.

Section 2: Severability

If any clause, sentence, paragraph or part of this Ordinance shall for any reason be finally adjudged by a ny court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder of this Ordinance but shall be confined in its operation to the clause, sentence, paragraph or part thereof directly involved in the controversy in which such judgment is rendered.

Section 3: Saving Clause

The Mikado Township Zoning Ordinance, except as herein or heretofore amended, shall remain in full force and effect. The amendments provided herein shall not abrogate or affect any offense or act committed or done, or any penalty or forfeiture incurred, or any pending fee, assessments, litigation, or prosecution of any right established, occurring prior to the effective date hereof.

Section 4: Effective Date

The ordinance changes shall take effect on the 8th day after the publication of the notice of adoption.

Mikado Township Supervisor

Mikado Township Clerk

I, _____, Clerk for Mikado Township, hereby certify that the foregoing is a true and correct copy of Ordinance No. _____ of 2022 of Mikado Township, adopted by at a meeting of the Township Board of Trustees held on _____.

A copy of the complete ordinance text may be inspected or purchased at the Mikado Township Hall, at 2291 S. F-41 Mikado Mikado, MI 48745.

Adopted: Published: Effective

_____, subject to PA 110 of 2006, as amended