

Middle Township Renewable Energy Systems Ordinance
Adopted August 1, 2011 as part of Ordinance 1392-11

250-629 Renewable Energy Systems

A. Purpose

1. Promote the safe, effective and efficient use of small scale wind, solar and other renewable energy systems to reduce the on-site consumption of utility-supplied electricity.
2. Recognize the designation of “inherently beneficial use” of wind and solar renewable energy systems by New Jersey municipal land use law by allowing these facilities in all zones as an accessory use, in accordance with the regulations below.

B. Definition - Renewable Energy System – any structure or installation such as a wind turbine, solar collecting array, or geothermal system, which is designed and intended to produce energy from natural forces such as wind, sunlight or geothermal heat.

C. Renewable energy systems are permitted as an accessory use in all zones and shall meet the following requirements:

1. The primary purpose of the renewable energy system will be to provide power for the principal use of the property. The system shall be sized to accommodate no more than the average annual electric use for the property or in the case of new construction, the projected annual electrical use for the property.
2. Structures shall not be located in a front yard or side yard.
3. Minimum separation distance required between any structures associated with the renewable energy system and any other structures or buildings on site are 10’.
4. Roof mounted wind turbines are not permitted.
5. All utility lines associated with the renewable energy system shall be underground.
6. Wherever practical and possible, renewable energy structures shall be located on a property so as to not be visible from the street.

D. Additional regulations for solar energy systems

1. For a roof-mounted photovoltaic solar system, the panels and all accessory equipment shall extend no more than 12 inches above the highest point of the roof surface or structure.
2. For ground mounted solar energy systems, setbacks shall be in conformance with setbacks required for principal use; height for all related structures is limited to 15’ above natural grade.
3. The maximum lot area that can be covered by ground mounted solar energy systems is 10%. The panels shall not be counted towards maximum impervious coverage.

E. Additional regulations for wind energy systems

1. Definitions

“Rotor diameter” means the cross sectional dimension of the circle swept by the rotating blades of a wind-powered energy generator.

“Small wind energy system” means a wind energy system, as defined in this section, that (a) is used to generate electricity; and (b) has a *rated nameplate capacity* of 100 kilowatts or less.

“Total height” means, in relation to a wind energy system, the vertical distance from existing grade to the tip of a wind generator blade when the tip is at its highest point.

“Tower” means a monopole, freestanding, or guyed structure that supports a wind generator.

“Wind energy system” means a wind generator and all associated equipment, including any base, blade, foundation, nacelle, rotor, tower, transformer, vane, wire, inverter, batteries or other component necessary to fully utilize the wind generator.

“Wind generator” means equipment that converts energy from the wind into electricity. This term includes the rotor, blades and associated mechanical and electrical conversion components necessary to generate, store and/or transfer energy.

2. Access - All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access. The tower shall be designed and installed so as not to provide step bolts, a ladder, or other publicly accessible means of climbing the tower, for a minimum height of eight feet above the ground.
3. Lighting - A small wind energy system shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration.
4. Appearance, Color, and Finish - The wind generator and the tower shall remain painted or finished in the color or finish that was originally applied by the manufacturer, unless a different color of finish is approved in the zoning approval.
5. Signs - There shall be no signs that are visible from any public road posted on a small wind generator system or any associated building, except for the manufacturer’s or installer’s identification, appropriate warning signs, or owner identification.
6. The minimum lot size required to install a wind energy system is 1 acre.
7. Utility notification and interconnection - Small wind energy systems that connect to the electric utility shall comply with the New Jersey’s Net Metering and Interconnection Standards for Class I Renewable Energy Systems at N.J.A.C. 14:4-9
8. Met towers - A met tower shall be permitted under the same standards, permit requirements, restoration requirements and permit procedures as a small wind energy system.
9. Setbacks – all wind turbines shall be setback from rear and side property lines a minimum of 50’. All wind turbines shall be setback from any off-site residential structure the distance equal to the total height of the wind turbine. Setbacks shall be measured to the tip of the blade at its furthest extent.
10. Height – towers should be the minimum height needed for proper function of the turbine considering site conditions. The industry standard is a minimum of 30’ above obstacles within a 500’ radius or the prevailing mature tree line (whichever is higher), for the proper function of the turbine, or at least 60’ on open ground or higher if recommended by the manufacturer. In no case shall the system height exceed 170’.

11. Noise – the wind turbine shall not violate the provisions of the noise ordinance of the Township of Middle Code.

F. Permit Requirements

1. Permit. A zoning permit and construction permit shall be required for the installation of a renewable energy system.
2. Documents: Except for roof-mounted solar applications, the zoning permit application shall be accompanied by a plot plan which includes the following:
 - (a) Property lines and physical dimensions of the property;
 - (b) Location, dimensions, and types of existing major structures on the property;
 - (c) In the case of a turbine whose height is greater than any setback, provide the distance of the furthest extent of the turbine to any adjacent residential structures.
 - (d) Location of the all components of the renewable energy system;
 - (e) The right-of-way of any public road that is contiguous with the property;
 - (f) Any overhead utility lines;
 - (g) Energy system specifications, including manufacturer and model, rotor diameter, tower height, tower type (freestanding or guyed);
 - (h) Copy of the application to the local electric utility for interconnection.
3. Expiration. A permit issued pursuant to this ordinance shall expire if: (a) The renewable energy system is not installed and functioning within 24-months from the date the permit is issued; or (b) The renewable energy system is out of service or otherwise unused for a continuous 18-month period.

G. Abandonment

1. A renewable energy system that is out-of-service for a continuous 18 -month period will be deemed to have been abandoned.
2. The Administrator may issue a Notice of Abandonment to the owner of a renewable energy system that is deemed to have been abandoned. The notice shall be sent return receipt requested.
3. The Owner shall have the right to respond to the Notice of Abandonment within 30 days from Notice receipt date.
4. If the owner provides information that demonstrates the renewable energy system has not been abandoned, the Administrator shall withdraw the Notice of Abandonment and notify the owner that the Notice has been withdrawn.
5. If the Administrator determines that the renewable energy system has been abandoned, the Owner of the small wind energy system shall remove the wind generator from the tower at the Owner's sole expense within 6 months after the Owner receives the Notice of Abandonment.