

**TOWNSHIP OF MONTGOMERY
ORDINANCE NO. 12-1418**

**AN ORDINANCE AMENDING AND SUPPLEMENTING
CHAPTER XVI, "LAND DEVELOPMENT",
OF THE CODE OF THE TOWNSHIP OF MONTGOMERY (1984)
COUNTY OF SOMERSET, STATE OF NEW JERSEY,
BY AMENDING
ALL "ACCESSORY USES PERMITTED" SECTIONS IN ALL ZONING DISTRICTS
AND IN ALL OPTIONAL DEVELOPMENT ALTERNATIVES,
BY AMENDING THE "PERMITTED USES ON THE LAND AND IN BUILDINGS" SECTION
IN THE "LM" LIMITED MANUFACTURING ZONING DISTRICT,
AND BY ADDING A NEW SECTION 16-6.10,
"WIND, SOLAR OR PHOTOVOLTAIC ENERGY SYSTEMS",
TO SECTION 16-6,
"EXCEPTIONS, MODIFICATIONS AND DEVELOPMENT ALTERNATIVES",
ALL IN ORDER TO PROVIDE REGULATIONS FOR
WIND, SOLAR & PHOTOVOLTAIC ENERGY SYSTEMS
WITHIN MONTGOMERY TOWNSHIP**

WHEREAS, it is the purpose of this ordinance to promote the safe, effective and efficient use of solar and wind energy systems to reduce the on-site consumption of utility-supplied electricity and to allow wind, solar and other photovoltaic energy systems as permitted accessory or principal uses within the Township; and

WHEREAS, the Township Committee of the Township of Montgomery has determined the following:

1. Solar and wind energy is an abundant, renewable, and nonpolluting energy resource.
2. Converting solar rays and wind to electricity will reduce our dependence on nonrenewable energy resources and decrease air and water pollution that results from the use of most conventional energy sources.
3. Solar and small wind energy systems also enhance the reliability and quality of the power grid, reduce peak power demands, and help diversify the State's energy supply portfolio.
4. Solar and small wind energy systems make the electricity supply market more competitive by promoting customer choice; and

WHEREAS, New Jersey's Renewable Portfolio Standards (RPS) require each

supplier/provider, as defined at N.J.A.C. 14:8-1.2, that sells electricity to retail customers in New Jersey to provide a percentage of their retail electricity sales from renewable energy sources, i.e., 7.4 percent as of June 1, 2010 and increasing to 22.5 percent by June 1, 2021; and

WHEREAS, the Township Committee finds that it is necessary to establish standards for the installation and operation of wind, solar and other photovoltaic systems in accordance with legislative mandates so that this clean, renewable energy resource can be utilized in appropriate locations and in a cost-effective manner in the municipality in accordance with recognized safety standards, and without jeopardizing or being inconsistent with Montgomery Township's accomplishments to preserve farmland, open space lands including contiguous greenway corridors, and historic resources; and

WHEREAS, one of the stated purposes of the Municipal Land Use Law at N.J.S.A. 40:55D-2.n. and one of the stated objectives of the Township's Master Plan is "to promote utilization of renewable energy resources"; therefore, the creation of an ordinance governing and reasonably limiting alternative energy sources is consistent with the Master Plan and promotes the goals and objectives of the plan.

BE IT ORDAINED BY THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF MONTGOMERY in the County of Somerset and the State of New Jersey, that Chapter XVI, "Land Development", of the Code of the Township of Montgomery (1984) is hereby amended and supplemented as follows:

SECTION 1. Amend existing Section 16-4.2 b., "Accessory Uses Permitted" in the "MR", "R-5", R-2, "R-1" and "R" residential zoning districts, by adding a new Subsection 16-4.2 b.11. to read as follows:

"11. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 2. Amend existing Section 16-4.3 b., "Accessory Uses Permitted" in the

"VN" Village Neighborhood zoning district, by adding a new Subsection 16-4.3 b.10. to read as follows:

- "10. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 3. Amend existing Section 16-4.4 b., "Accessory Uses Permitted" in the "APT/TH" Multiple-Family zoning district, by adding a new Subsection 16-4.4 b.6. to read as follows:

- "6. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 4. Amend existing Section 16-4.5 b., "Accessory Uses Permitted" in the "NC" Neighborhood Commercial zoning district, by adding a new Subsection 16-4.5 b.9. to read as follows:

- "9. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 5. Amend existing Section 16-4.6 b., "Accessory Uses Permitted" in the "REO-1", "REO-2" and "REO-3" Research, Engineering and Office zoning districts, by adding a new Subsection 16-4.6 b.7. to read as follows:

- "7. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 6. Amend existing Section 16-4.8 a., "Permitted Uses on the Land and in Buildings" in the "LM" Limited Manufacturing" zoning district, by adding a new Subsection 16-

4.8 a.11. to read as follows:

- "11. Wind, solar or photovoltaic energy systems for the production of electric energy on tracts of land at least twenty (20) contiguous acres or more in size that are owned by the same person or entity as permitted at N.J.S.A. 40:55D-66.11, provided the applicable requirements in Section 16-6.10 are met."

SECTION 7. Amend existing Section 16-4.8 b., "Accessory Uses Permitted" in the "LM" Limited Manufacturing zoning district, by adding a new Subsection 16-4.8 b.12. to read as follows:

- "12. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 8. Amend existing Section 16-4.9 b., "Accessory Uses Permitted" in the "SB" Small Business zoning district, by adding a new Subsection 16-4.9 b.6. to read as follows:

- "6. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 9. Amend existing Section 16-4.10 b., "Permitted Accessory Uses and Conditions for Development" in the "PPE" Public Parks and Education zoning district, by adding a new Subsection 16-4.10 b.10. to read as follows:

- "10. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 10. Amend existing Section 16-4.11 b., "Accessory Uses Permitted" in the "CC-1" and "CC-2" Community Commercial zoning district, by adding a new Subsection 16-4.11 b.9. to read as follows:

- "9. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 11. Amend existing Section 16-4.12 b., "Accessory Uses Permitted" in the "HC" Highway Commercial zoning district, by adding a new Subsection 16-4.12 b.11. to read as follows:

- "11. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 12. Amend existing Section 16-4.13 b., "Accessory Uses Permitted" in the "ARH" Age-Restricted Housing zoning district, by adding a new Subsection 16-4.13 b.9. to read as follows:

- "9. Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 13. Amend existing Subsection 16-4.14 a.4., "Accessory Uses Permitted" in the "SSIZ-1" Site Specific Inclusionary Zone 1, by adding a new Subsection 16-4.14 a.4.(h) to read as follows:

- "(h) Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 14. Amend existing Subsection 16-6.5 b.2., "Accessory Uses Permitted" in the Single-Family Residential Clusters I and II optional development alternatives, by adding a new Subsection 16-6.5 b.2.(j) to read as follows:

- "(j) Small wind, solar or photovoltaic energy systems for the production of electric

energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 15. Amend existing Subsection 16-6.5 c.2., "Accessory Uses Permitted" in the Planned Residential Developments optional development alternative, by adding a new Subsection 16-6.5 c.2.(f) to read as follows:

"(f) Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 16. Amend existing Subsection 16-6.5 g.7., "Accessory Uses Permitted" in the Single-Family Conservation Design Subdivisions optional development alternative, by adding a new Subsection 16-6.5 g.7.(i) to read as follows:

"(i) Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 17. Amend existing Subsection 16-6.5 h.6., "Accessory Uses Permitted" in the Planned Shopping Complex optional development alternative, by adding a new Subsection 16-6.5 h.6.(d) to read as follows:

"(d) Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable requirements in Section 16-6.10 are met."

SECTION 18. Amend existing Subsection 16-6.5 i.5., "Accessory Uses Permitted" in the Planned Office Complex optional development alternative, by adding a new Subsection 16-6.5 i.5.(h) to read as follows:

"(h) Small wind, solar or photovoltaic energy systems for the production of electric energy to serve the principal permitted use on the lot, provided the applicable

requirements in Section 16-6.10 are met."

SECTION 19. Add a new Section 16-6.10., entitled "Wind, Solar Or Photovoltaic Energy Facilities", to Section 16-6, entitled "Exceptions, Modifications And Development Alternatives", in its entirety to read as follows:

"16-6.10 Wind, Solar Or Photovoltaic Energy Systems.

a. *Purpose & Legislative Mandates.*

The primary purpose of these zoning ordinance provisions is to establish standards and limitations for the installation and operation of wind, solar and other photovoltaic systems, either as permitted principal or permitted accessory uses/structures, within the Township of Montgomery.

This ordinance is adopted in compliance with the following legislative mandates:

1. N.J.S.A. 40:55D-66.11 of the Municipal Land Use Law, entitled "Wind And Solar Facilities Permitted In Industrial Zones", which was approved on March 31, 2009 as P.L.2009, Chapter 35, and which requires that both wind and solar renewable energy facilities be permitted on industrially zoned lands comprising 20 or more contiguous acres that are owned by the same person or entity.
2. N.J.S.A. 40:55D-66.12 of the Municipal Land Use Law, entitled "Municipal Ordinances Relative To Small Wind Energy Systems", which was approved on January 16, 2010 as P.L.2009, Chapter 244, and which limits the restrictions municipalities can require for the installation and operation of small wind energy systems so as not to unreasonably hinder the performance of such installations.
3. N.J.S.A. 52:27D-141.1, entitled "Residential Development Solar Energy Systems Act", which was approved on March 31, 2009 as P.L.2009, Chapter 33, and which provides for regulations for the installation of solar energy facilities in new residential developments consisting of 25 or more residential dwelling units.
4. N.J.S.A. 4:1C-32.4, entitled "Certain Generation Facilities, Structures, Equipment Permitted on Preserved Farmland", which was approved January 16, 2010 as P.L.2010, Chapter 213, and which provides that a person who owns preserved farmland may construct, install, and operate biomass, solar, or wind energy generation facilities, structures, and equipment on the farm, and may make improvements to agricultural, horticultural, residential, or other buildings or structures on the land for that purpose, provided that the biomass, solar, or wind

energy generation facilities, structures, and equipment meet specific requirements.

5. N.J.A.C. 2:76-A.12, entitled "Agricultural Management Practice For The Construction, Installation, Operation Or Maintenance Of Solar Energy Generation Facilities, Structures And Equipment On Commercial Farms", which was adopted on July 20, 2011 and which provides for regulations for the installation and operation of solar energy facilities on commercial farms with reference to the "Right To Farm Act".

While Montgomery Township intends to comply with the prevailing law, it also wishes to safeguard the farmland within its bounds, much of which has been preserved via State, County and local funding. Montgomery Township also does not wish to jeopardize the use or tranquility of the preserved open space lands within its bounds by any neighboring inappropriate development.

Montgomery Township notes that a new 2011 State Energy Master Plan has been adopted as a basis to fulfill the State's energy needs for the next ten (10) years. The Township agrees with a policy of the plan to focus the development of large renewable energy resource facilities on large commercial, landfill and/or brownfield sites and discourage the development of such facilities which will adversely impact the preservation of farmland and open space lands.

Montgomery Township also desires to safeguard the special conservation resource lands as identified in the adopted "Recreation Plan And Conservation Plan Elements" of the Township Master Plan, especially those lands and riparian corridors directly affecting water quality and biodiversity.

b. *Applicable Definitions.*

COLLECTOR SURFACE: Any part of a solar collector that absorbs solar energy for use in the collector's energy transformation process but does not include frames, support and mounting hardware.

METEOROLOGICAL TOWER: A structure designed to support the gathering of wind energy resource data and includes the tower, base plate, anchors, guy cables and hardware, anemometers (wind speed indicators), wind direction vanes, booms to hold equipment, data logger, instrument wiring, and any telemetry devices that are used to monitor or transmit wind speed and wind flow and characterize the wind resource at a given location. For the purpose of this ordinance, meteorological towers shall conform to the requirements for small wind energy systems.

RENEWABLE ENERGY FACILITY: A facility that engages in the production of electric energy from solar technologies, photovoltaic technologies, or wind energy.

ROTOR DIAMETER: The cross sectional dimension of the circle swept by the rotating blades of a wind-powered energy generator.

SMALL WIND ENERGY SYSTEM: A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity consistent with applicable provisions of the State Uniform Construction Code promulgated pursuant to the "State Uniform Construction Code Act," P.L.1975, c.217 (C.52:27D-119 et seq.) and technical bulletins issued pursuant to section 2 of P.L.2009, c.244 (C.40:55D-66.13), and which will be used primarily for onsite consumption.

SOLAR COLLECTOR: A device, structure or part of a device or structure in which a substantial purpose is used to transform solar energy into thermal, mechanical, chemical or electrical energy.

SOLAR ENERGY: Direct radiant energy received from the sun.

SOLAR ENERGY SYSTEM: A solar energy system and all associated equipment including any generator, base, foundation, structural support, wire, batteries or other components necessary to convert solar energy into useable electrical energy through the use of solar panels.

SOLAR PANEL: An elevated panel or plate, or a canopy or array thereof, that captures and converts solar radiation to produce power, and includes flat plate, focusing solar collectors, or photovoltaic solar cells and excludes the base or foundation of the panel, plate, canopy, or array.

SYSTEM HEIGHT: For wind energy systems, the height above grade of the tower plus the wind generator.

TOWER HEIGHT: The height above grade of the fixed portion of the tower, excluding the wind generator.

VAWT SYSTEMS: A vertical axis wind turbine which utilizes vertical panels as opposed to horizontal propellers.

WIND GENERATOR: Blades and associated mechanical and electrical conversion components mounted on top of the tower.

WIND, SOLAR OR PHOTOVOLTAIC ENERGY FACILITY OR STRUCTURE: A facility or structure for the purpose of supplying electrical energy produced from wind,

solar, or photovoltaic technologies, whether such facility or structure is a principal use, a part of the principal use or an accessory use or structure.

WIND TOWER: The monopole, freestanding, or guyed structure that supports a wind generator.

c. *Small Wind, Solar & Photovoltaic Energy Systems
As Permitted Accessory Uses/Structures In All Zoning Districts.*

The primary purpose of an accessory small wind, solar or photovoltaic energy system as an accessory use or accessory structure is to provide power for the principal use of the property, whether residential, nonresidential or farming, whereon said system is to be located, and shall not be for the generation of power for commercial sale purposes, although this provision shall not be interpreted to prohibit the sale of excess power generated from time to time from a small wind, solar or photovoltaic energy system designed to meet the energy needs of the principal use. For the purposes of this subsection concerning permitted accessory energy systems, the sale of excess power shall be limited so that in no event an energy system is generating more energy for sale than what is otherwise necessary to power the principal use on the property.

1. Rooftop & Building Mounted Solar Collectors As Accessory Uses/Structures.

Rooftop or building mounted solar collectors are permitted as accessory uses/structures in all zoning districts in the Township on all permitted principal and accessory structures in the Township, subject to the following requirements:

- (a) On residential buildings, solar panels and all accessory equipment for the solar energy system shall not exceed a height of twelve (12) inches beyond the edge of the roofline or above the highest point of the roof structure or surface upon which the panels and equipment are located.
- (b) On all other buildings, solar panels and all accessory equipment for the solar energy system shall not exceed a height of twelve (12) inches above the highest point of the roof surface upon which they are located, but in no event shall the placement of the solar panels or any related accessory equipment result in a total height, inclusive of the subject building, exceeding that height which is otherwise permitted in the applicable zoning district.
- (c) Any ground-mounted accessory equipment associated with the rooftop or

building mounted solar collectors shall be no higher than ten feet (10') in height, shall be located within side or rear yard areas only and within ten feet (10') of the structure upon which the panels are located and shall conform to the accessory building setbacks and the coverage requirements of the applicable zoning district.

- (d) See Subsection 16-6.10 g. of this ordinance herein below for additional general requirements.
- (e) For farms, see Subsection 16-6.10 d. herein below for additional provisions, requirements, limitations and standards.
- (f) For all residential and nonresidential buildings, a zoning permit for a compliant rooftop or building mounted solar energy system on a property is required from the Township Zoning Officer in accordance with Section 16-13.16 of this chapter regarding designated local historic sites and/or properties within designated local historic districts, Subsection 16-10.3 d. of this chapter, and all information required by the Zoning Officer to determine compliance with the provisions of this ordinance shall be provided for the permit.
- (g) In the instance where a proposed rooftop or building mounted solar energy system on a residential or nonresidential property is not compliant with the provisions of this ordinance, a variance is required pursuant to N.J.S.A. 40:55D-70 c. of the Municipal Land Use Law in addition to minor site plan approval in accordance with Section 16-8.3 of this chapter and Section 16-6.10 h.5. of this ordinance.

2. Ground-Mounted & Freestanding Solar Collectors As Accessory Uses/Structures.

Ground-mounted and freestanding solar collectors are permitted as accessory uses/ structures in all zoning districts of the Township subject to the following requirements:

- (a) Ground-mounted arrays and freestanding solar collectors may be located only on properties at least one (1) acre or greater in area where the applicant proves to the satisfaction of the Board or the Zoning Officer, as the case may be, that rooftop or building mounted solar collectors are not feasible on the subject site.
- (b) The total surface area of all ground-mounted or freestanding solar collectors shall be as follows:
 - (1) On a residential lot, the total surface area shall not exceed a

maximum aggregate area of 750 square feet on lots 1 acre to 2 acres in area, 1,200 square feet on lots 2 acres to 5 acres in area, and 1,500 square feet on lots 5 acres or larger.

- (2) On a nonresidential lot, the total surface area shall not exceed the existing building coverage of the building served by the ground-mounted or freestanding solar collectors.
- (c) The solar collectors and accessory equipment shall not be permitted within any front yard areas, except that for reverse frontage lots, the solar collectors and accessory equipment may be located in the front yard area to the rear of the dwelling, provided that the collectors and equipment are set back at least seventy-five (75) feet from the street line behind the dwelling or the minimum required front yard setback if that distance is greater than seventy-five (75) feet.
- (d) The location of any ground-mounted or freestanding solar collectors or other structures or equipment associated with a solar energy system shall be as follows:
 - (1) On a residential lot, the setback shall be 40 feet from all side and rear property lines or the accessory building setback requirement of the applicable zoning district, whichever distance is greater.
 - (2) On a nonresidential lot, the setback shall be 50 feet or the accessory building setback requirement of the applicable zoning district, whichever distance is greater.
- (e) The height of the solar collectors and any mounts shall not exceed twelve (12) feet when oriented at maximum tilt.
- (f) See Subsection 16-6.10 g. of this ordinance herein below for additional general requirements.
- (g) For farms, see Subsection 16-6.10 d. herein below for additional provisions, requirements, limitations and standards.
- (h) For any accessory ground-mounted or freestanding solar energy system on a residential lot that that complies with Subsection 16-6.10 c.2.(b)(1) of this ordinance, and for any accessory ground-mounted or freestanding solar energy system on a nonresidential lot that complies with Subsection

16-6.10 c.2.(b)(2) of this ordinance and has a total aggregate surface area less than 2,500 square feet, a zoning permit is required from the Township Zoning Officer in accordance with Subsection 16-10.3 d. of this chapter, Section 16-13.16 of this chapter regarding designated local historic sites and/or properties within designated local historic districts, and any other information required by the Zoning Officer to determine compliance with the provisions of this ordinance shall be provided for the permit.

- (1) The Zoning Officer shall consult with the Township Landscape Architect regarding the adequacy of the proposed landscape screening.
- (2) An escrow account of seven hundred fifty dollars (\$750) shall be established by the applicant with Montgomery Township to pay for the time expended by the Township Landscape Architect.
 - (i) All accessory ground-mounted or freestanding solar energy systems on a residential lot not in compliance with Subsection 16-6.10 c.2.(b)(1) of this ordinance, and all accessory ground-mounted or freestanding solar energy systems on a nonresidential lot not in compliance with Subsection 16-6.10 c.2.(b)(2) of this ordinance and/or with a total aggregate surface area of 2,500 square feet or greater, shall require minor site plan approval in accordance with Section 16-8.3 of this chapter and Section 16-6.10 h.5. of this ordinance with any required variance relief in accordance with N.J.S.A. 40:55D-70 c. of the Municipal Land Use Law.

3. Small Wind Energy Systems As Accessory Uses/Structures.

Small wind energy systems are permitted as accessory uses/structures on lots in all zoning districts in the Township, subject to the following requirements:

- (a) A minimum lot size of six (6) acres shall be required to install a small wind energy system, and no more than one (1) small wind energy system shall be permitted on a lot.
- (b) Small wind energy systems shall not be located within any front yard areas.

- (c) Towers shall be set back a distance equal to one and one-half (1.5) times the height of the tower from all property lines, public roads, dwellings, and overhead power lines. The distance shall be measured from the center of the tower.
- (d) The maximum total height of any small wind energy system shall not exceed one hundred twenty (120) feet; the total height shall include the vertical distance from the ground to the tip of a wind generator blade when the tip is at its highest point.
- (e) A meteorological tower shall be permitted under the same standards and requirements as a small wind energy system.
- (f) See Subsection 16-6.10 g. of this ordinance herein below for additional general requirements.
- (g) For farms, see Subsection 16-6.10 d. herein below for additional provisions, requirements, limitations and standards.
- (h) All small wind energy systems as an accessory use/structure shall require minor site plan approval in accordance with Section 16-8.3 of this chapter and Section 16-6.10 h.5. of this ordinance.

d. *Additional Provisions, Requirements, Limitations And Standards
For Wind, Solar & Photovoltaic Energy Systems As Accessory Uses/Structures
On Preserved Farmland, Commercial Farms & Other Farms.*

1. Preserved Farmland.

- (a) Notwithstanding any law, rule or regulation to the contrary, a person who owns preserved farmland may construct, install, and operate biomass, solar, or wind energy generation systems, structures, and equipment on the farm as an accessory use/structure, whether on the preserved portion of the farm or on any portion excluded from preservation, for the purpose of generating power or heat, and may make improvements to any agricultural, horticultural, residential, or other building or structure on the land for that purpose, provided that the biomass, solar, or wind energy generation facilities, structures, and equipment:
 - (1) Do not interfere significantly with the use of the land for agricultural or horticultural production as determined by the State Agriculture Development Committee;
 - (2) Are owned by the landowner, or will be owned by the

landowner upon the conclusion of the term of an agreement with the installer of the biomass, solar, or wind energy generation facilities, structures, or equipment by which the landowner uses the income or credits realized from the biomass, solar, or wind energy generation to purchase the facilities, structures, or equipment;

- (3) Are used to provide power or heat to the farm, either directly or indirectly, or to reduce, through net metering or similar programs and systems, energy costs on the farm; and
 - (4) Are limited in annual energy generation capacity to the previous calendar year's energy demand plus ten percent (10%), in addition to energy generated from facilities, structures or equipment existing on the roofs of buildings or other structures on the farm as of January 16, 2011 pursuant to N.J.S.A. 4:1C-32.4 b., or, alternatively and at the option of the landowner, occupy no more than one percent (1%) of the area of the entire farm, including both the preserved portion and any portion excluded from preservation.
- (b) The person who owns the farm and the energy generation facilities, structures, and equipment may only sell energy through net metering or as otherwise permitted under an agreement allowed pursuant to Subsection 16-6.10 d.1.(a)(2) above.
- (c) For the purposes of this ordinance subsection, the following definitions apply:
- (1) "Biomass" means an agricultural crop, crop residue, or agricultural byproduct that is cultivated, harvested, or produced on the farm and which can be used to generate energy in a sustainable manner.
 - (2) "Net metering" means the same as that term is used for purposes of subsection e. of section 38 of P.L.1999, c.23 (C.48:3-87).

- (3) "Preserved farmland" means land on which a development easement was conveyed to, or retained by, the committee, a board, or a qualifying tax exempt nonprofit organization pursuant to the provisions of section 24 of P.L.1983, c.32 (C.4:1 C-31), section 5 of P.L.1988, c.4 (C.4:1C-31.1), section 1 of P.L.1989, c.28 (C.4:1C-38), section 1 of P.L.1999, c.180 (C.4:1C-43.1), sections 37 through 40 of P.L.1999, c.152 (C.13:8C-37 through C.13:8C-40), or any other State law enacted for farmland preservation purposes.
- (d) Required State Approvals.
 - (1) A landowner shall seek and obtain the approval of the State Agriculture Development Committee before constructing, installing, and operating biomass, solar, or wind energy generation facilities, structures, and equipment on the farm as allowed pursuant to Subsection 16-6.10 d.1.(a) above.
 - (2) In the case of biomass energy generation facilities, structures, or equipment, the landowner shall also seek and obtain the approval of the Department of Agriculture as required pursuant to section 5 of P.L.2009, c.213 (C.4:1C-32.5) if the land is valued, assessed and taxed pursuant to the "Farmland Assessment Act of 1964," P.L.1964, c.48 (C.54:4-23.1 et seq.).
- (e) See Subsection 16-6.10 d.3. herein below for additional provisions and requirements.

2. Commercial Farms.

- (a) Notwithstanding the provisions of any municipal or county ordinance, resolution, or regulation to the contrary, the owner or operator of a commercial farm, located in an area in which, as of December 31, 1997 or thereafter, agriculture is a permitted use under the Township Land Development Ordinance and is consistent with the Township Master Plan, or which commercial farm is in operation as of July 2, 1998, and the operation of which conforms to agricultural management practices recommended by the State Agriculture Development Committee and adopted pursuant to the provisions of the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), or whose specific operation or practice has been determined by the Somerset County Agricultural

Development Board to constitute a generally accepted agricultural operation or practice, and all relevant federal or State statutes or rules and regulations adopted pursuant thereto, and which does not pose a direct threat to public health and safety may engage in the generation of power or heat from biomass, solar, or wind energy as accessory uses/structures to the farm use, provided that the energy generation is consistent with P.L.2009, c.213 (C.4:1C-32.4 et al.), as applicable, and the rules and regulations adopted therefore and pursuant to section 3 of P.L.2009, c.213 (C.4:1C-9.2).

- (b) A landowner shall seek and obtain the approval of the State Department of Agriculture before constructing, installing, or operating biomass energy generation facilities, structures, and equipment on any land that is valued, assessed and taxed pursuant to the "Farmland Assessment Act of 1964," P.L.1964, c.48 (C.54:4-23.1 et seq.), in addition to any other approvals that may be required by law.
- (c) The installation of any biomass, solar, or wind energy generation facility on a commercial farm shall abide by the rules, standards and regulations, including N.J.A.C. 2:76-2A.12, that are, or may be, established by the State Agriculture Development Committee (SADC) as well as those set forth in this ordinance, provided that the latter are not in conflict with any rules, standards and regulations established by the SADC or State Department of Agriculture.
- (d) See Subsection 16-6.10 d.3. herein below for additional provisions and requirements.

3. Additional Provisions & Requirements For Any Farm.

Notwithstanding anything to the contrary in this ordinance, the following requirements shall also be applicable to any accessory wind, solar or photovoltaic energy system on any preserved farmland, commercial farmland or on any other farm:

- (a) The minimum distance between any portion of a solar or photovoltaic energy facility and a street line shall be 75 feet and the minimum distance from any other property line shall be 50 feet, unless a greater setback is required by the SADC or any other outside agency.
- (b) Wind towers shall be set back a distance equal to one and one-half (1.5) times the height of the tower from all property lines, public roads,

dwellings, and overhead power lines. The distance shall be measured from the center of the tower.

- (c) The maximum total height of any small wind energy system shall not exceed one hundred twenty (120) feet; the total height shall include the vertical distance from the ground to the tip of a wind generator blade when the tip is at its highest point.
- (d) No portion of any wind, solar or photovoltaic energy system shall be constructed or installed on prime agricultural soils as defined by the USDA Natural Resources Conservation Service and/or identified in an "Agricultural Development Area", unless the applicant can show that there is no other option for the location of such accessory structures on the farm.
- (e) The construction and installation of any energy system shall be designed to minimize any adverse impacts on the productivity of the soil and the farm operation.
- (f) See Subsection 16-6.10 g. of this ordinance herein below for additional general requirements.
- (g) Where site plan approval is required for any energy management system on a farm, a plan that prescribes the conservation and natural resource management measures for the conservation, protection and development of natural resources, the maintenance and enhancement of agricultural or horticultural productivity, and the control and prevention of non-point pollution shall be required as part of the site plan application.

e. *Wind, Solar & Photovoltaic Energy Systems As Permitted Principal Uses/Structures In The "LM" Limited Manufacturing Zoning District.*

1. A minimum lot size of twenty (20) acres shall be required.
2. The minimum distance between any portion of a solar or photovoltaic energy facility and a street line shall be 125 feet and the minimum distance from any other property line shall be 75 feet.
3. Wind towers shall be set back a distance equal to one and one-half (1.5) times the height of the tower from all property lines, public roads, dwellings, and overhead power lines. The distance shall be measured from the center of the tower.
4. The maximum total height of any wind energy system shall not exceed one hundred twenty (120) feet; the total height shall include the vertical distance from

the ground to the tip of a wind generator blade when the tip is at its highest point.

5. More than one (1) tower for a wind energy system shall be permitted on a lot as a principal permitted use.
 6. No rooftop installation is permitted for wind, solar or photovoltaic energy facilities as principal uses.
 7. Wind energy systems shall have a nameplate capacity of 10 kilowatts or less.
 8. See Subsection 16-6.10 g. herein below for additional requirements.
 9. All wind, solar or photovoltaic energy systems as principal permitted uses/structures shall require major site plan approval in accordance with Section 16-8.4 and 16-8.5 of this chapter and Section 16-6.10 h.5. of this ordinance, with any variance relief in accordance with N.J.S.A. 40:55D-70 c. of the Municipal Land Use Law.
- f. *Solar Energy Systems In Residential Developments Of 25 Or More Dwelling Units.*
1. Residential developments of 25 or more dwelling units for owner occupancy shall conform to the provisions of the "Residential Development Solar Energy Systems Act" (N.J.S.A. 52:27D-141.1 et seq.) and standards relative to solar energy systems adopted by the Commissioner of the Department of Community Affairs pursuant to N.J.S.A. 52:27D-141.7.
 2. Where technically feasible, as determined by the Commissioner of the Department of Community Affairs in consultation with the Board of Public Utilities, a developer shall offer to install, or to provide for the installation of, a solar energy system into a dwelling unit when a prospective owner enters into negotiations with the developer to purchase a dwelling unit.
- g. *General Requirements For All Accessory & Principal Wind, Solar & Photovoltaic Energy Systems.*
1. The installation of any wind, solar and photovoltaic energy system and any accessory equipment shall be outside any land area exhibiting "critical areas" as defined in Section 16-6.4 of this chapter, and also shall not be within any conservation easement or conservation deed restricted area.
 2. Any proposal for a wind, solar or photovoltaic energy system shall conform to the provisions of Section 16-5.6 of this chapter, entitled "Natural Features", and of

Section 14.3 of the code, entitled "Clearing and Removal of Trees", with respect to tree removal.

- (a) Any trees and/or shrubs to be removed or topped to accommodate the installation of a wind, solar or photovoltaic energy system shall be accompanied by a site plan identifying the location, size and species of trees to be removed or topped and demonstrating the need to remove or top the trees.
 - (b) An applicant shall locate a wind, solar or photovoltaic energy system so that tree removal is not required to the extent practical; where trees are to be removed, the Zoning Officer, Planning Board or Zoning Board, as the case may be, may require the replacement of trees on the subject property at a one-to-one ratio.
 - (c) The installation of any wind, solar or photovoltaic energy system shall respect the landscaping and trees within any conservation easement or deed restricted area or within any required buffer area so that there is no damage or harm to the plant materials within these areas.
 - (d) In any case, any tree clearing shall not exceed an area more than fifty percent (50%) of the subject property's size or 40,000 square feet, whichever area is less.
3. The design of a wind, solar or photovoltaic energy system shall, to the extent possible, use materials, colors, textures, screening and landscaping that will blend into the natural setting and existing environment.
 4. Wind, solar or photovoltaic energy systems or any associated structure shall not be used for displaying any advertising or signage, except for reasonable identification of the manufacturer, installer, or operator of the system and appropriate warning signs, all not to exceed, in aggregate, four (4) square feet in area.
 5. When a new driveway or road is required for access to the wind, solar or photovoltaic systems, the surface shall be either pervious pavement or gravel and shall be the minimum width to accommodate maintenance as well as emergency vehicles.
 6. All wind, solar or photovoltaic energy system installations must be performed by a qualified installer, and prior to operation the electrical connections must be inspected by the Township or other appropriate electrical inspection agency, as determined by the Township. In addition, any interconnection to the public utility grid must be inspected by the appropriate public utility.

- (a) All power lines from a wind, solar or photovoltaic energy system to onsite interconnection equipment shall be located underground and installed by a certified professional and must meet all applicable national, state, and local electrical codes.
 - (b) The installation of any energy system shall conform to the National Electric Code as adopted by the NJ Department of Community Affairs and the State Uniform Construction Code.
 - (c) Wind, solar or photovoltaic energy systems that connect to the electric utility grid shall comply with the New Jersey Net Metering and Interconnection Standards for Class I Renewable Energy Systems at N.J.A.C. 14:4-9 and as required by the electric utility servicing the property.
7. When batteries are included as part of the wind, solar or photovoltaic energy system, the batteries require a charge controller and must be placed in a secure container or enclosure meeting the requirements of the State Uniform Construction Code when in use and, when no longer used, the batteries shall be disposed of in accordance with the laws and regulations of Somerset County and other applicable laws and regulations. It is preferable to have the energy system connected to the energy grid in lieu of stand-alone systems relying upon batteries to store excess power.
8. Landscaped vegetative screening shall be required, as well as fencing as may be determined appropriate by the Township Landscape Architect, between any ground-mounted solar collectors or any ground-mounted equipment for any energy system and adjacent properties and streets in accordance with the following:
- (a) The overall purpose of the landscaped screening is to obscure or substantially buffer the view of the solar energy system year-round.
 - (b) The landscaped screening shall be comprised of a minimum of one (1) evergreen tree, at least six feet (6') high at time of planting, plus two (2) supplemental shrubs at the discretion of the Township Landscape Architect, all planted within each ten (10) linear feet of the area to be screened. A list of suitable evergreen tree and shrub species is on file in the office of the Township Zoning Officer.
 - (c) Existing vegetation may be used to satisfy all or a portion of the required

landscaped screening.

- (d) Any fencing shall be at least four feet (4') but no greater than six feet (6') in height, provided that any fencing higher than four feet (4') shall be located in the rear yard and shall be set back at least fifteen feet (15') from any property line.
9. If a wind, solar or photovoltaic energy system ceases to perform its originally intended function for more than 12 consecutive months, the property owner shall remove the tower, collector, mount and/or associated equipment and facilities by no later than 90 days after the end of the twelve-month period and shall restore the property to its original condition.
10. Where site plan approval is required, the site plan review shall include review of the adequacy, location, arrangement, size, design, and general site compatibility of the proposed wind, solar or photovoltaic energy systems and its components. Site plan applications and zoning permits for a wind, solar or photovoltaic energy system shall include information demonstrating its efficiency and its compliance with the provisions of this ordinance.
11. Additional requirements specific to solar energy systems:
- (a) The solar collectors shall be located so that any glare is directed away from any adjoining property or street.
 - (b) Solar panels shall not be included in any calculation of impervious surface or impervious cover in accordance with N.J.S.A. 40:55D-38.1.
 - (c) Solar energy systems shall be designed to sustain wind loads up to 110 miles per hour (mph) and snow loads of 50 pounds per square foot (psf).
 - (d) Ground areas beneath solar panels shall not be covered with stone but shall be planted with a seed mixture of native, non-invasive shade tolerant grasses in order to prevent soil erosion and the spread of weeds or other invasive species and to promote biodiversity and a natural habitat; the ground area shall be mowed on a regular basis as may be needed.
 - (e) In order to ensure that there will be minimal disturbance and impact to the land and to promote easy removal and rehabilitation of the site, the preferable method of installation of the solar collectors or panels is by removable earth screws, auger driven piers or a similar system that does not require concrete footings or other relatively permanent foundations. The installation shall respect the natural contours and no grading shall be permitted for the system itself.
12. Additional requirements specific to wind energy systems:

- (a) Wind energy systems shall be placed in such a manner as to minimize visual impacts to adjacent residential zoning districts and/or existing residential uses.
- (b) Access restrictions to the wind energy system shall be designed as follows:
 - (1) All ground-mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
 - (2) The tower shall be designed and installed so as not to provide permanent step bolts, ladders, or other publicly accessible means of climbing the tower for a minimum height of ten (10) feet above the ground.
- (c) A wind energy system shall not be artificially lighted unless such lighting is required by the Federal Aviation Administration or other applicable authority.
- (d) The blades on the wind energy system shall be constructed of a corrosive resistant material, and the tower shall not be constructed of aluminum.
- (e) A wind energy system shall remain painted or finished in a grey or white color that was originally applied by the manufacturer unless the approving authority determines that their visual impact on the surrounding landscape will be minimized by another color or finish.
- (f) The level of noise produced by a small wind energy system shall not exceed 55 dBa beyond the ambient noise levels prior to construction as measured at the property boundaries of the property on which the small wind energy system is to be located.
 - (1) The noise level limit shall not apply during short-term events such as utility outages and/or severe wind storms.
 - (2) The applicant shall provide technical information on noise levels prepared by a qualified professional.
- (g) No wind energy system shall be roof mounted, except that a VAWT system may be installed upon any portion of a roof, provided that the total height of the system shall not extend beyond ten (10) feet above the roof line and provided further that the said VAWT system shall be setback no less than fifty (50) feet from any property line.
- (h) All wind energy systems, except for a VAWT system permitted to be

constructed on a roof, shall be mounted on a monopole, shall not utilize a truss frame construction, and shall not require a wired guyed system.

- (i) All wind energy systems shall be designed with an automatic braking system and an over-speed control to prevent over-speeding and excessive pressure on the tower structure during periods of excessively high winds.
- (j) There shall be a minimum ground clearance of at least fifteen (15) feet between the finished grade and bottom of any rotor, blade or moving part of a small wind energy system.

h. *Zoning Permit & Site Plan Application Requirements.*

1. For Rooftop & Building Mounted Solar Collectors
As Accessory Uses/Structures.

- (a) For all residential and nonresidential buildings, a zoning permit for a compliant rooftop or building mounted solar energy system on a property is required from the Township Zoning Officer in accordance with Section 16-13.16 of this chapter regarding designated local historic sites and/or properties within designated local historic districts, Subsection 16-10.3 d. of this chapter, and all information required by the Zoning Officer to determine compliance with the provisions of this ordinance shall be provided for the permit.
- (b) In the instance where a proposed rooftop or building mounted solar energy system on a residential or nonresidential property is not compliant with the provisions of this ordinance, a variance is required pursuant to N.J.S.A. 40:55D-70 c. of the Municipal Land Use Law in addition to minor site plan approval in accordance with Section 16-8.3 of this chapter and Section 16-6.10 h.4. of this ordinance.

2. For Ground-Mounted & Freestanding Solar Collectors
As Accessory Uses/Structures.

- (a) For any accessory ground-mounted or freestanding solar energy system on a residential lot that that complies with Subsection 16-6.10 c.2.(b)(1) of this ordinance, and for any accessory ground-mounted or freestanding solar energy system on a nonresidential lot that complies with Subsection 16-6.10 c.2.(b)(2) of this ordinance and has a total aggregate surface area less than 2,500 square feet, a zoning permit is required from the Township Zoning Officer in accordance with Subsection 16-10.3 d. of this chapter, Section 16-13.16 of this chapter regarding designated local historic sites and/or properties within designated local historic districts, and any other

information required by the Zoning Officer to determine compliance with the provisions of this ordinance shall be provided for the permit.

- (1) The Zoning Officer shall consult with the Township Landscape Architect regarding the adequacy of the proposed landscape screening.
- (2) An escrow account of seven hundred fifty dollars (\$750) shall be established by the applicant with Montgomery Township to pay for the time expended by the Township Landscape Architect.

- (b) All accessory ground-mounted or freestanding solar energy systems on a residential lot not in compliance with Subsection 16-6.10 c.2.(b)(1) of this ordinance, and all accessory ground-mounted or freestanding solar energy systems on a nonresidential lot not in compliance with Subsection 16-6.10 c.2.(b)(2) of this ordinance and/or with a total aggregate surface area of 2,500 square feet or greater, shall require minor site plan approval in accordance with Section 16-8.3 of this chapter and Section 16-6.10 h.5. of this ordinance with any required variance relief in accordance with N.J.S.A. 40:55D-70 c. of the Municipal Land Use Law.

3. For Small Wind Energy Systems As Accessory Uses/Structures.

All small wind energy systems as an accessory use/structure shall require minor site plan approval in accordance with Section 16-8.3 of this chapter and Section 16-6.10 h.4. of this ordinance.

4. For Wind, Solar & Photovoltaic Energy Systems As Permitted Principal Uses/Structures In The "LM" Limited Manufacturing Zoning District.

All wind, solar or photovoltaic energy systems as principal permitted uses/structures shall require major site plan approval in accordance with Section 16-8.4 and 16-8.5 of this chapter and Section 16-6.10 h.4. of this ordinance, with any variance relief in accordance with N.J.S.A. 40:55D-70 c. of the Municipal Land Use Law.

5. All site plan applications shall be accompanied by a plot plan survey which shall include the following information in addition to any other information required for a minor or major site plan application pursuant to Section 16-8 of this chapter:

- (a) Property lines and physical dimensions of the property, as shown on a

current survey;

- (b) Location, dimension, and types of existing structures and easements on the property;
 - (c) Location, dimensions and type of the proposed wind, solar or photovoltaic energy system, including manufacturer's specifications and operation requirements, the model of all components, panel height and width, ground elevation and height of the system, and setbacks from property lines and buildings;
 - (d) Orientation of the wind, solar or photovoltaic energy system;
 - (e) The right-of-way line of any public or private road contiguous with the property;
 - (f) The location of any above ground or overhead utility lines;
 - (g) Existing and proposed landscaping and fencing for ground-mounted systems, including photographs of the area proposed for the energy system;
 - (h) If applicable, a statement that the proposed energy system is either within an historic site or district or within 200 feet thereof;
 - (i) For wind energy systems, verification from a qualified design professional that the proposed location and proposed tower elevation has sufficient wind speeds for operation of the wind energy system;
 - (j) For wind energy systems, tower and tower foundation drawings prepared and sealed by a licensed engineer in the State of New Jersey; and
 - (k) For wind energy systems, noise levels of the proposed wind energy system at all property lines.
 - (l) For any major site plan, a visual sight distance analysis must be submitted, including photos of the subject property that graphically simulates the appearance of any proposed energy system from at least five (5) locations around and within one (1) mile of the proposed tower(s) or solar arrays.
6. Upon completion of any wind, solar or photovoltaic energy system, a certified letter from a professional engineer will be required to be submitted by the applicant to the Township Construction Office stating that the structure was

constructed in accordance with the approved drawings."

SECTION 20. All ordinances and resolutions or parts thereof inconsistent with this ordinance are repealed.

SECTION 21. If any section, paragraph, subsection, clause or provision of this Ordinance shall be adjudged by the Courts to be invalid, such adjudication shall apply only to the section, paragraph, subsection, clause or provision so adjudged and the remainder of this Ordinance shall be deemed valid and enforceable.

SECTION 22. This Ordinance shall take effect upon final adoption, publication and the filing of a copy of said Ordinance with the Somerset County Planning Board, all in accordance with the law.

I, Donna Kukla, Clerk for the Township of Montgomery, hereby certify that Ordinance #12-1418 was introduced on first reading by the governing body of the Township of Montgomery, County of Somerset, on May 17, 2012.

Public hearing and consideration for adoption was held on June 7, 2012, at which time the Ordinance was finally adopted.

Donna Kukla, Township Clerk