

TOWN OF COPAKE
DRAFT SOLAR ENERGY LAW
Revised: November 7, 2016

Section 1.

A new Chapter 191, entitled “Solar Energy Facilities”, is added to the Code of the Town of Copake, as follows:

A. Purpose and Intent

1. The Town of Copake recognizes that solar energy is a clean, readily available, and renewable energy source. It further recognizes that energy generated from solar energy systems can be used to offset energy demand on the grid where excess solar power is generated.
2. The Town of Copake has determined that comprehensive zoning regulations regarding the development of solar energy systems are necessary to protect the interests of the Town, its residents, its farmland, and its businesses. This section aims to accommodate solar energy systems while balancing the potential impact on neighbors while preserving the rights of property owners to install solar energy systems. This section is intended to promote the effective and efficient use of solar energy resources; set provisions for the placement, design, construction, and operation of such systems to be consistent with the Town of Copake Comprehensive Plan; to uphold the public health, safety, and welfare; and to ensure that such systems will not have a significant adverse impact on the environment or on aesthetic qualities and character of the Town.
3. Intent: greater restrictions to prevail. It is not intended by this chapter to abrogate or impair existing conditions previously made or permits previously issued relating to the use of buildings. Whenever this section imposes a greater restriction upon the use of buildings or premises than is required by existing provisions of law, ordinance, or regulations, the provisions of this section shall control.

B. Definitions

The following terms shall have the meanings indicated. The definitions contained in Article II of Chapter 232 of the Code of the Town of Copake, (“Zoning”), shall also apply.

1. Building Integrated Photovoltaic System (“BIPV”): A combination of photovoltaic building components integrated into any building envelope system such as vertical

facades including glass and other façade material, semitransparent skylight systems, roofing material, and shading over windows. Solar energy systems constructed over a parking lot are considered building integrated systems. Exterior or roof-mounted solar panels or collectors shall not be deemed to be part of, or included within, a Building Integrated Photovoltaic System.

2. Decommissioning Plan: Detailed steps to remove unused or inactive utility-scale solar energy systems, the elimination of all safety hazards, the restoration of the site to pre-existing conditions, and cost estimates to accomplish these requirements.
3. Ground-Mounted Solar Energy System: A Solar Energy System that is anchored to the ground and attached to a pole or other mounting system, detached from any other structure, for the primary purpose of producing electricity for onsite consumption.
4. Small-Scale Solar Energy System: Any solar energy system that cumulatively on a lot meets all of the following provisions:
 - (a) Is an accessory use or structure, designed and intended to generate energy primarily for a principal use, located on that lot.
 - (b) Produces up to ten kilowatts (kW) of energy, or solar-thermal systems which serve the building to which they are attached, and does not provide energy for any other buildings beyond the lot.
 - (c) Notwithstanding the above, a solar energy system located on a farm operation, as defined in §301(11) or the relevant provision of the New York State Agriculture and Markets Law, and located in a New York State Agricultural District, which primarily serves the needs of such farm operation and produces up to 110% of the farm's needs, or other amount that may be established by resolution of the Copake Town Board in accordance with New York State Department of Agriculture and Markets guidance, shall be deemed a Small Scale Solar Energy System.
5. Solar Collector: A solar or photovoltaic cell, plate, panel, film, array, reflector, or other structure affixed to the ground, a building, or other structure that harnesses solar radiation to directly or indirectly generate thermal, chemical, electrical, or other usable energy, or that reflects or concentrates solar radiation to a solar or photovoltaic cell, plate, panel, film, array, reflector, or other structure that directly or indirectly generates thermal, chemical, electrical, or other usable energy.
6. Solar Energy System: A system of components intended for the collection, inversion,

storage, and/or distribution of solar energy and that directly or indirectly generates thermal, chemical, electrical, or other usable energy. A solar energy system consists of, but is not limited to, solar collectors, mounting devices or structures, generators/turbines, water and energy storage and distribution systems, storage, maintenance and/ or other accessory buildings, inverters, fans, combiner boxes, meters, transformers, and all other mechanical structures.

7. Solar Panel: A photovoltaic device for the direct conversion of solar energy into electrical energy.
8. Solar Thermal System: A system that directly heats water or other liquid using sunlight.
9. Utility-Scale Solar Energy System: Energy generation facility or area of land principally used to convert solar energy to electricity, whether by photovoltaics, concentrating solar thermal devices or various experimental solar technologies, designed and intended to supply energy primarily into a utility grid for sale to the general public.

C. Applicability

1. The requirements of this section shall apply to all solar energy systems and equipment installations installed or modified after the effective date of this local law.
2. Solar energy system installations for which a valid building permit has been issued, or, if no building permit is presently required, for which installation has commenced before the effective date of this local law, shall not be required to meet the requirements of this local law. However, to the extent any such solar energy installation is proposed to be enlarged, modified, or changed, such enlargement, modification, or change shall be subject to the requirements of this Chapter. In addition, any system for which plans have previously been submitted in connection with an issued building permit or other approval or permit from the Town, which is proposed to be enlarged, modified, or changed from the previously submitted plans, shall be subject to the requirements of this Chapter to the extent of such enlargement, modification, or change.
3. In order to promote innovative design and encourage the inclusion of alternative energy systems within the overall design of a building, solar energy systems

determined by the Code Enforcement Officer to be building-integrated photovoltaic (BIPV) systems, as defined herein, are exempt from the requirements of this chapter.

D. Requirements for Small Scale Solar Energy Systems

1. No small scale solar energy system shall be installed or operated in the Town of Copake except in compliance with this section.
2. The installation of one or more solar collectors or panels, whether attached to the main structure, an accessory structure, or detached, free standing or ground mounted, or a qualifying solar-thermal system, is permitted as an accessory use. Such installation shall require a building permit.
3. Setbacks for Solar Energy Systems by District: Solar collectors or panels are subject to the minimum setbacks, and other dimensions for whatever zoning district in which they are proposed to be installed. Installation of a ground mounted solar energy system located in a front yard is prohibited. A roof-mounted system that is wholly within the footprint of an existing structure that is subject to a prior setback area variance shall be deemed to be in compliance with setback requirements and shall not be required to obtain an additional setback variance.
4. Height limits for solar collectors mounted on buildings shall be five feet above the level of the permitted building height. The height of ground mounted solar energy systems shall not exceed fifteen (15) feet when oriented at maximum height.
5. All solar collectors and their associated support elements shall be installed in accordance with manufacturers' specifications and in compliance with the New York State Uniform Fire Prevention and Building Code and any other applicable law, regulation, ordinance, or code.
6. In order to ensure firefighter and other emergency responder safety, there shall be a minimum perimeter area, not covered by any solar equipment, of 36 inches around the edge of the roof and adjacent to transitions, which include vertical walls, dormers, valleys, chimneys, vents, and other protrusions, irregularities, or changes in contour, to provide space on the roof for walking around all solar collectors and panels. For ground mounted units, there shall be a minimum horizontal clearance of 48 inches between array rows.
7. In order to mitigate electrical hazard to firefighters and other emergency responders,

the following shall be implemented:

- a. Direct current (DC) and alternating current (AC) isolation switches for the energy system shall be located in close proximity to the electrical service meter.
 - b. A photovoltaic (PV) system shall have an isolation switch on the electrical service to prevent energy from being fed into the service during a power failure.
 - c. The electrical meter of a building served by a photovoltaic (PV) system shall have affixed to it a utility warning sticker stating, in substance, that the building is served by a photovoltaic system.
8. Small Scale Solar Energy Systems, except those consisting of roof-mounted solar panels, shall be subject to a modified site plan review by the Planning Board. No public hearing shall be required for such modified site plan review. Such review shall be limited to consideration of the following factors only, and site plan approval shall be granted by the Planning Board upon the following findings or conditions:
- a. Materials and documents required to be submitted in support of the modified site plan review shall provide necessary information, in a form sufficient for adequate planning board review, but site drawings and other descriptive materials shall not be required to be produced by licensed experts unless the planning board determines such to be necessary for site evaluation.
 - b. All solar collectors and related equipment shall be surfaced, designed, and sited so as not to reflect glare onto adjacent properties and roadways.
 - c. All solar collectors and related equipment shall be designed, located, and constructed so as to minimize the migration of light or sound from the installation and to minimize the development of sight obstructions for adjacent structures or land parcels.
 - d. Screening shall be provided when practicable from adjoining lots through the use of architectural features, earth berms, landscaping, fencing, or other screening which will harmonize with the character of the property and surrounding area. The proposed screening shall not interfere with normal operation of the solar collectors.

E. Requirements for unclassified solar energy systems

1. A proposed solar energy system that is not a Utility-Scale Solar Energy System, but that fails to qualify as a Small Scale Solar Energy System as a result of exceeding the energy output threshold for such systems shall be subject to all of the requirements

applicable to Small Scale Solar Energy Systems as set out in section D, above. In addition, the modified site plan approval process for such system shall also take into consideration the following:

- a. A.
- b. B.
- c. C.

F. Requirements for Utility-Scale Solar Energy Systems

2. A special use permit and site plan review by the Planning Board shall be required for all utility-scale solar energy systems. Such systems are prohibited within the Scenic Corridor Overlay Zone.
3. Applications, Permits and Approvals Required and Applicable Zoning Districts
 - a. All applications for utility-scale solar energy systems shall include an application for special use permit and site plan review, and all applicable fees as may be established by the Town Board. Both site plan and special use permit reviews and approvals are required.
 - b. All applications for utility-scale solar energy systems shall include the following:
 - (1) Plans and drawings of the utility-scale solar energy system installation signed by a professional engineer registered in New York State showing the proposed layout of the entire utility-scale solar energy system along with a description of all components, whether on site or off site, existing vegetation and proposed clearing and grading of all sites involved. Clearing and/or grading activities are subject to review by the Planning Board and shall not commence until the issuance of site plan approval.
 - (2) Plan for clearing and/or grading of the site.
 - (3) An electrical diagram detailing the utility-scale solar energy system installation, associated components, and electrical interconnection methods, with all disconnects and over-current devices identified.
 - (4) Documentation of access to the project site(s), including location of all access roads, gates, parking areas, and other vehicular accommodations.

- (5) A stormwater pollution prevention plan per New York State Department of Environmental Conservation requirements to detail stormwater runoff management and erosion control plans for the site.
- (6) Documentation of utility notification, including an electric service order number.
- (7) Photo simulations shall be included showing the proposed utility-scale solar energy system in relation to the building/site along with elevation views and dimensions, and manufacturer's specs and photos of the proposed utility-scale solar energy system, solar collectors, and all other components.
- (8) Details of the proposed noise that may be generated by inverter fans. The Planning Board shall require a noise analysis to determine potential adverse noise impacts.
- (9) Statement co-signed by the applicant and the landowner 1) that the establishment of the proposed utility-scale solar energy system shall not result in a tax penalty, pursuant to section 305 or 306 of the New York State Agriculture & Markets Law, due to the conversion of land to a non-agricultural use, which shall also state the last year, if any, for which the subject lands received an agricultural real property tax exemption, or 2) that the establishment of the proposed utility-scale solar energy system will result in a tax penalty, pursuant to section 305 or 306 of the New York State Agriculture & Markets Law, along with a statement of the total amount of tax penalty to be imposed, including interest, and a statement of the number of acres to be converted to a non-agricultural use.
- (10) Part I of the Full Environmental Assessment Form (FEAF) filled out.
- (11) Decommissioning plan and description of financial surety that satisfies the Town of Copake that all required removals of inactive systems shall be completed. The decommissioning plan shall identify the anticipated life of the project, method and process for removing all components of the utility-scale solar energy system and returning the site to its preexisting condition, and estimated decommissioning costs, including any salvage value. The decommissioning plan applies to applicant and all subsequent owners.
- (12) Identification and contact information of the responsible party to be notified in the event of emergency or for any other reason, including the address for

notices of the utility-scale solar energy system owner/operator or designated party to receive notice in the event of decommissioning and removal of the energy system. If the party to receive notices, or the address thereof, changes at any time, the applicant is required to notify the Town Clerk, in writing of such change. Such information shall also be provided to the fire district within which the energy facility is located.

- (13) The Town of Copake shall require any applicant to pay all associated costs for any application review, including but not limited to engineering, legal, environmental, planning, and the review required under SEQRA. When the Planning Board or Zoning Board of Appeals determines that a review is anticipated to require engineering, legal, environmental, or planning costs, they shall provide an estimate to the applicant. Subsequently, funds adequate to cover such estimated costs shall be placed into escrow by the applicant prior to commencement of any further Planning Board or Zoning Board of Appeals review, and shall be replenished or increased at the direction of either of such boards.

4. Special Use Permit Required

- a. No utility-scale solar energy system shall be permitted except upon obtaining a special use permit in accordance with the procedure and standards for special use permits set out in Chapter 232 of the Code of the Town of Copake. In addition to such standards, issuance of a special use permit shall be contingent upon satisfaction of the following:
 - (1) A minimum parcel size of 15 acres is required for utility-scale solar energy systems.
 - (2) Development and operation of a utility-scale solar energy system shall not have a significant adverse impact on fish, wildlife, or plant species or their critical habitats, or other significant habitats identified by the Town of Copake or other federal or state regulatory agencies.

5. Site Plan Review Required

- a. Every application for a utility-scale solar energy system shall be subject to site plan review and approval, as set out in Chapter 232 of the Code of the Town of Copake, regardless of whether the proposed utility-scale solar energy system exceeds any threshold for site plan review which is otherwise stated in such chapter. In conducting site plan review for a utility-scale solar energy system, the planning board may waive submission requirements set out in chapter 232 that, in the planning board's judgment, are inapplicable or are not relevant to the review of the proposed solar facility. In addition to the requirements and standards set out in Chapter 232, every site plan review of a utility-scale solar

energy system shall include a public hearing and be subject to the following:

- (1) All utility-scale solar energy systems shall adhere to all applicable Town of Copake building, plumbing, electrical, and fire codes.
- (2) There shall be a minimum 100 foot buffer between any component of the utility-scale solar energy system and the parcel boundary line. The Planning Board is authorized to increase the width of this buffer after analysis of site conditions and adjacent land uses.
- (3) No component of any utility-scale solar energy system may be located within one hundred and fifty (150) feet of any roadway, other than a private service road used solely for access to the site of such energy system.
- (4) Any site containing a utility-scale solar energy system shall be enclosed by perimeter security fencing, to restrict unauthorized access, at a height of 8 feet with HIGH VOLTAGE warning placards affixed every 150 feet.
- (5) There shall be created and maintained within the security fence, and between such fence and the components, structures, or fixtures of the solar energy system, a clear and unobstructed buffer area at least twenty-five (25) feet in width encircling the entire perimeter of the facility, with a surface and grade suitable for the safe passage of fire trucks and other emergency vehicles.
- (6) Lands which have the highest ecological values as evidenced by large, contiguous areas of forest, undisturbed drainage areas, wetlands, or NYS DEC identified critical habitats or rare plant and animal populations shall be avoided.
- (7) Previously cleared or disturbed areas are preferred locations for solar panel arrays. The clearing of additional lands to accommodate a proposed utility-scale solar energy system may be permitted, provided the percentage of newly cleared land on any parcel does not exceed 10% of the existing woodlands on that parcel.
- (8) Solar Energy Systems and Agriculture. In accordance with the Comprehensive Plan, the Town of Copake does not support conversion of productive farmland to support utility-scale solar energy systems. When proposed on an active farm located within the New York State Certified Agricultural District in Copake, a utility-scale solar energy system may occupy up to 20% of any farmed parcel but in no case shall exceed 10 acres. Arrays shall be located on a parcel in such a manner as to avoid, to the maximum extent

feasible, soils classified as prime farmland by the U.S. Department of Agriculture, New York State or the Natural Resources Conservation Service.

- (9) Native grasses and native vegetation shall be maintained below the arrays.
- (10) The utility-scale solar energy system, including any proposed off-site infrastructure, shall be located and screened in such a way as to avoid or minimize visual impacts as viewed from:
 - a. Publicly dedicated roads and highways, including State Route 22 and State Route 23;
 - b. Existing residential dwellings located on contiguous parcels;
 - c. A berm, landscape screen, or other opaque enclosure, or any combination thereof acceptable to the Town of Copake capable of fully screening the site, shall be provided (See example illustration, below).

Figure 1: Example of a landscaped berm designed to fully screen a utility-scale solar energy facility.



- a. The design, construction, operation, and maintenance of any utility-scale solar energy system shall prevent the misdirection and/or reflection of solar rays onto neighboring properties, public roads, and public parks in excess of that which already exists.
- b. All structures and devices used to support solar collectors shall be non-reflective and/or painted a subtle or earth-tone color to aid in blending the facility into the existing environment.

- c. All transmission lines and wiring associated with a utility-scale solar energy system shall be buried and include necessary encasements in accordance with the National Electric Code and Town of Copake requirements. The Planning Board may recommend waiving this requirement if sufficient engineering data is submitted by the applicant to demonstrate that underground transmission lines are not feasible or practical. The applicant is required to show the locations of all proposed overhead and underground electric utility lines, including substations and junction boxes and other electrical components for the project on the site plan. All transmission lines and electrical wiring shall be in compliance with the utility company's requirements for interconnection.
- d. Artificial lighting of utility-scale solar energy systems shall be limited to lighting required for safety and operational purposes only and shall be down-lighted and shielded from all neighboring properties and public roads.
- e. Any signage used to advertise the utility-scale solar energy system shall be in accordance with the Town of Copake's signage regulations. The manufacturers or installer's identification and appropriate warning signage shall be posted at the site and clearly visible.
- f. The height of the solar panel arrays shall not exceed fifteen feet, and no part of any system structure or equipment shall exceed fifteen feet in height, when oriented at maximum height.
- g. Following construction of a utility-scale ground-mounted solar energy system, all disturbed areas where soil has been exposed shall be reseeded with native grass and/or planted with low-level native vegetation capable of preventing soil erosion and airborne dust.

6. Requirements after approvals.

- a. Any post-construction changes or alterations to the utility-scale solar energy system shall be done by amendment to the special use permit and site plan review and approval, with public hearing, and subject to the requirements of this article.

- b. After completion of a utility-scale solar energy system, the applicant shall provide a post-construction certification from a professional engineer registered in New York State that the project complies with applicable codes and industry practices and has been constructed and is operating according to the design plans. The applicant shall further provide certification from the utility that the facility has been inspected and connected.

G. Abandonment or Decommissioning of Utility-Scale Solar Energy Systems

1. To ensure the proper removal of utility-scale solar energy systems, a decommissioning plan shall be submitted as part of the special use application. Compliance with this plan, shall be made a condition of the issuance of a special use permit under this section. The decommissioning plan applies to the applicant or any subsequent owner. A cost estimate detailing the projected cost of executing the decommissioning plan shall be prepared by a professional engineer or contractor. Cost estimates shall take into account inflation. Removal of utility-scale solar energy systems must be completed in accordance with the decommissioning plan.
2. A utility-scale solar energy system which has been inactive for a period of 1 year shall be decommissioned and removed at the owner's or operator's expense. Upon such failure to maintain operation and activity, all approvals and permits issued in relation to such system or facility, including special use permit and site plan approval, shall terminate. Decommissioning shall include removal of all energy facilities, structures and equipment including any subsurface wires and footings from the parcel. Any access roads created for building or maintaining the system shall also be removed and re-planted with vegetation.
3. Prior to the issuance of any permits, the Zoning Board will require the applicant to submit a performance/removal bond or other financial surety, as directed by and satisfactory to the Zoning Board, upon advice of the Town's attorney, engineer, or other professional experts, based upon the decommissioning cost estimate in an amount satisfactory to the Town of Copake, to ensure the removal and restoring the site to pre-existing conditions. In the event that the utility-scale solar energy system is not removed within one year and the site restored as required, the Town of Copake, by resolution of the Town Board after thirty days' written notice and opportunity of the landowner and system operator to be heard, may cause the same to be removed and the site restored using the funds from the performance/removal bond or surety. Notice sent by first class U.S. mail to the property owner, as reflected in the Town real property

records, to the mailing address set forth therein, and to the energy system owner/operator, at the address for notice set forth in the application, as may be amended or superseded by written notice to the Town Clerk, shall be sufficient notice.

4. All safety hazards created by the installation and operation of the utility-scale solar energy system shall be eliminated and the site restored to its preexisting condition within six months of the removal of the utility-scale solar energy system.

H. Indemnification: The applicant shall be solely responsible and answerable in damages for any and all accidents and/or injuries to persons (including death) or property arising out of or related to the installation, operation and decommissioning of the utility-scale solar energy system. The applicant shall indemnify and hold harmless the Town of Copake and its officers and employees from claims, suits, actions, damages and cost of every nature arising out of the Town of Copake providing services related to the utility-scale solar energy system.

Section 2.

Local Law Number X of 2016, entitled “Town of Copake Commercial Solar Energy Installation Moratorium Law” is hereby repealed.