Town of Stuyvesant Solar Law

Revision 2022 2/24/2022

Zoning Revision Committee

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Revised 2/24/2022

Stuyvesant Solar Energy Local Law 2022

1. Authority

This Solar Energy Local Law is adopted pursuant to sections 261-263 of the Town Law and section 20 of the Municipal Home Rule Law of the State of New York, which authorize the Town of Stuyvesant to adopt zoning provisions that advance and protect the health, safety and welfare of the community, and, in accordance with the Town Law of New York State, "to make provision for, so far as conditions may permit, the accommodation of solar energy systems and equipment and access to sunlight necessary therefor."

Statement of Purpose

This Solar Energy Local Law is adopted to advance and protect the public health, safety, and welfare of the town by creating regulations for the installation and use of solar energy generating systems and equipment, with the following objectives:

- 1) To take advantage of a safe, abundant, renewable and non-polluting energy resource;
- 2) To decrease the cost of electricity to the owners of residential and commercial properties, including single-familyhouses;
- 3) To increase employment and business development in the Town of Stuyvesant, to the extent reasonably practical, byfurthering the installation of Solar Energy Systems;
- 4) As agriculture is the prime industry in the town of Stuyvesant and the town considers Prime Farmlands and soils of Statewide Importance to be critical environmental resources and not appropriate for conversion to other uses, and seeks to preserve its productive Farmland. This law seeks to mitigate the impacts of Solar Energy Systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources, and;

2. Definitions

Agricultural Purposes; The cultivation of soil, raising or harvesting any agricultural or horticultural commodity including the raising, shearing, feeding, caring for, grazing, training and management of livestock, poultry, furbearing animals and wildlife for gain, sale of profit.

BATTERY ENERGY STORAGE SYSTEM: One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time, not to include a stand-alone 12-volt car battery or an electric motor vehicle.

BUILDING-INTEGRATED SOLAR ENERGY SYSTEM: A combination of Solar Panels and Solar Energy Equipment integrated into any building envelope system such as vertical facades, semitransparent skylight systems, roofing materials, or shading over windows, which produce electricity for onsite consumption.

FARMLAND OF STATEWIDE IMPORTANCE: Land, designated as "Farmland of Statewide Importance" in the U.S. Departmentof Agriculture Natural Resources Conservation Service (NRCS)'s Soil Survey Geographic (SSURGO) Database on Web Soil Survey, that is of statewide importance for the production of food, feed, fiber, forage, and oilseed crops as determined by

the appropriate state agency or agencies. Farmland of Statewide Importance may include tracts of land that have been designated for agriculture by state law.

Solar projects in excess of 25 Megawatts: Solar projects proposed that exceed 25 Megawatts (Article 10 and ORES projects) of production are not allowed under this law in interest of preserving productive ag lands.

GLARE: The effect by reflections of light with intensity sufficient as determined in a commercially reasonable manner to causeannoyance, discomfort, or loss in visual performance and visibility in any material respects.

GROUND-MOUNTED SOLAR ENERGY SYSTEM: A Solar Energy System that is anchored to the ground via a pole or othermounting system, detached from any other structure, that generates electricity for onsite or offsite consumption.

NATIVE PERENNIAL VEGETATION: native wildflowers, forbs, and grasses that serve as habitat, forage, and migratory waystations for pollinators and shall not include any prohibited or regulated invasive species as determined by the New York State Department of Environmental Conservation.

POLLINATOR: bees, birds, bats, and other insects or wildlife that pollinates flowering plants, and includes both wild and managed insects.

PRIME FARMLAND: Land, designated as "Prime Farmland" in the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS)'s Soil Survey Geographic (SSURGO) Database on Web Soil Survey that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these land uses.

ROOF-MOUNTED SOLAR ENERGY SYSTEM: A Solar Energy System located on the roof of any legally permitted building orstructure that produces electricity for onsite or offsite consumption.

SOLAR ACCESS: Space open to the sun and clear of overhangs or shade so as to permit the use of active and/or passive Solar Energy Systems on individual properties.

SOLAR ENERGY EQUIPMENT: Electrical material, hardware, inverters, conduit, storage devices, or other electrical and photovoltaic equipment associated with the production of electricity.

SOLAR ENERGY SYSTEM: The components and subsystems required to convert solar energy into electric energy suitable for use. The term includes, but is not limited to, Solar Panels and Solar Energy Equipment. The area of a Solar Energy System includes all the land inside the perimeter of the Solar Energy System, which extends to any interconnection equipment. A Solar Energy System is classified as a Tier 1, Tier 2, or Tier 3 Solar Energy System as follows.

- A. Tier 1 Solar Energy Systems include the following:
 - a. Roof-Mounted Solar Energy Systems
 - b. Building-Integrated Solar Energy Systems
- B. Tier 2 Solar Energy Systems include Ground-Mounted Solar Energy Systems with system capacity up to 25 kW AC and that generate no more than 110% of the electricity consumed on the site over the previous 12 months.
- C. Tier 3 Solar Energy Systems are systems that are not included in the list for Tier 1 and Tier 2 Solar Energy Systems.

SOLAR PANEL: A photovoltaic device capable of collecting and converting solar energy into electricity.

STORAGE BATTERY: A device that stores energy and makes it available in an electrical form.

3. Applicability

- A. The requirements of this Local Law shall apply to all Solar Energy Systems permitted, installed, or modified in Stuyvesant after the effective date of this Local Law, excluding general maintenance and repair.
- B. Solar Energy Systems constructed or installed prior to the effective date of this Local Law shall not be required to meet the requirements of this Local Law.
- C. Modifications to an existing Solar Energy System that increase the Solar Energy System area by more than [5] % of the original area of the Solar Energy System (exclusive of moving any fencing) shall be subject to this Local Law.
- D. All Solar Energy Systems shall be designed, erected, and installed in accordance with all applicable codes, regulations, and industry standards as referenced in the NYS Uniform Fire Prevention and Building Code ("Building Code"), the NYS Energy Conservation Code ("Energy Code"), and the Code of the Town of Stuyvesant.

4. General Requirements

- A. A Building permit shall be required for installation of all Solar Energy Systems.
- B. Local land use boards are encouraged to condition their approval of proposed developments on sites adjacent to Solar Energy Systems so as to protect their access to sufficient sunlight to remain economically feasible over time.
- C. Issuance of permits and approvals by the Planning Board shall include review pursuant to the State EnvironmentalQuality Review Ac, ECL Article 8 and its implementing regulations of 6 NYCRR Part 617 "SEQRA".
- D. The requirements of this local law shall not apply to any paid application filed with the Town prior to the adoption of this local law. The requirements found in the Town of Stuyvesant's Zoning Law of 2017 shall apply to such applications.

5. Permitting Requirements for Tier 1 Solar Energy Systems

All Tier 1 Solar Energy Systems shall be permitted in all zoning districts and shall be exempt from site plan review under the towns local zoning code or other land use regulation, subject to the issuance of a building permit and Certificate of compliance by the town CEO and the following conditions for each type of Solar Energy Systems:

A. Roof-Mounted Solar Energy Systems

- 1) Roof-Mounted Solar Energy Systems shall incorporate, when feasible, the following design requirements:
 - a. Solar Panels on pitched roofs shall be mounted with a maximum distance of eight (8) inches between the roof surface the highest edge of the system.
 - b. Solar Panels on pitched roofs shall be installed parallel to the roof surface on which they are mounted or attached.
 - c. Solar Panels on pitched roofs shall not extend higher than the highest point of the roof surface on which they are mounted or attached.
 - d. Solar Panels on flat roofs shall not extend above the top of the surrounding parapet, or more than twentyfour (24) inches above the flat surface of the roof, whichever is higher.

2) Glare: All Solar Panels shall have anti-reflective coating(s).

3) Height: All Roof-Mounted Solar Energy Systems shall comply with the height limitations in

table 3

- 4) Requires a uniform Building Permit.
- B. Building-Integrated Solar Energy Systems shall be shown on the plans submitted for the building permit application for thebuilding containing the system.

6. Permitting Requirements for Tier 2 Solar Energy Systems

All Tier 2 Solar Energy Systems shall be permitted in all zoning districts as accessory structures and shall be exempt from siteplan review under the local zoning code or other land use regulations, subject to the following conditions:

A. Glare: All Solar Panels shall have anti-reflective coating(s).

- B. Setbacks: Tier 2 Solar Energy Systems shall be subject to the setback regulations specified for the accessory structures within the underlying zoning district. All Ground- Mounted Solar Energy Systems shall only be installed in the side or rearyards in residential districts.
- C. Height: Tier 2 Solar Energy Systems shall be subject to the height limitations specified for accessory structures within the underlying zoning district.
 - 1) All Tier 2 Solar Energy Systems shall have views minimized from adjacent properties to the extent reasonablypracticable.
 - 2) Solar Energy Equipment shall be located in a manner to reasonably avoid and/or minimize blockage of views fromsurrounding properties and shading of property to the north, while still providing adequate solar access.
- D. Lot Size: Tier 2 Solar Energy Systems shall comply with the existing lot size requirement specified for accessory structures within the underlying zoning district.

7. Permitting requirements for Tier 3 Solar Energy Systems

All Tier 3 Solar Energy Systems are permitted through the issuance of a Special Use Permit within the Agriculture, Hamlet 1 & 2 and Hamlet Ext., Commercial Light Industrial zoning districts, and subject to site plan application requirements set forth in this Section and section 9 of the Town of Stuyvesant Zoning Law.

A. Applications for the installation of Tier 3 Solar Energy System shall be considered a Type 1 action and shall be;

- 1) reviewed by the Code Enforcement Officer for completeness. Applicants shall be advised within ten (10) business days of the completeness of their application or any deficiencies that must be addressed prior to substantive review.
- 2) subject to a public hearing to hear all comments for and against the application. The Planning Board of the Town of Stuyvesant shall have a notice printed in a newspaper of general circulation in the Town at least five (5) days in advance of such hearing. Applicants shall have delivered the notice by registered mail to adjoining landowners or

Landowners within 200 feet of the property at least ten (10) days prior to such a hearing. Proof of mailing shall be provided to the Planning Board at the public hearing.

- 3) referred to the Columbia County Planning Department pursuant to General Municipal Law § 239-m if required.
- 4) upon closing of the public hearing, the Stuyvesant Planning Board shall take action on the application within 62 days of the public hearing, which can include approval, approval with conditions, or denial. The 62-day period may be extended upon consent by both the Planning Board and applicant.
- 5) Require the submission of a construction/completion performance bond to ensure that all conditions of approval are actually built (fencing, landscaping, access roads, etc.)
- B. Underground Requirements. All on-site utility lines shall be placed underground to the extent feasible and as permitted by the serving utility, with the exception of the main service connection at the utility company right-of-way and any new interconnection equipment, including without limitation any poles, with new easements and right-of-way.
- C. Vehicular Paths. Vehicular paths within the site shall be designed to minimize the extent of impervious materials and soil compaction.
- D. Signage.
 - 1) No signage or graphic content shall be displayed on the Solar Energy Systems except the manufacturer's name, equipment specification information, safety information, and 24-hour emergency contact information. Said information all be depicted within an area no more than eight (8) square feet.
 - 2) As required by National Electric Code (NEC), disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface. A clearly visible warning sign concerning voltage shall be placed at the base of allpad-mounted transformers and substations.
- E. Glare. All Solar Panels shall have anti-reflective coating(s).
- F. Lighting. Lighting of the Solar Energy Systems shall be limited to that minimally required for safety and operationalpurposes and shall be reasonably shielded and downcast from abutting properties.
- G. Tree-cutting. If the proposed project includes the removal of existing trees larger than (6) inches in diameter, approval is subject to a written plan from NRCS that provides permanent perennial cover.
- H. Decommissioning.
 - 1) Solar Energy Systems are considered abandoned after not producing electricity for a period 1 year.. The town of Stuyvesant Code Enforcement Officer shall be notified that electric generation has ceased within 60 days of cessation. Abandoned systems shall be removed at the Owner and/or Operators expense, which at the Owner's option may come from any security made with Town of Stuyvesant as set forth in Security Section herein.
 - 2) A decommissioning plan (see Appendix 4) signed by the owner and/or operator of the Solar Energy System shall be submitted by the applicant, addressing the following:
 - a. The cost of removing the Solar Energy System.
 - b. The time required to decommission and remove the Solar Energy System any ancillary structures.
 - c. The time required to repair any damage caused to the property by the installation and removal of the Solar EnergySystem.

- 3) Security.
 - a. The deposit, executions, or filing with the Stuyvesant Clerk of cash, bond, or other form of security reasonably acceptable to the Stuyvesant attorney and/or engineer, shall be in an amount sufficient to ensure the good faith performance of the terms and conditions of the permit issued pursuant hereto and to provide for

the removal and restorations of the site subsequent to removal. The amount of the bond or security shall be 125% of the cost of removal of the Tier 3 Solar Energy System and restoration of the property with an escalator of 2% annually for the life of the Solar Energy System. The salvage value of the panels or other equipment on the site shall not be utilized in the calculation to determine the amount of the decommissioning security.

- b. In the event of default upon performance of such conditions, after proper notice and expiration of any cure periods, the cash deposit, bond, or security shall be forfeited to the Town of Stuyvesant, which shall be entitled to maintain an action thereon. The cash deposit, bond, or security shall remain in full force and effect until restoration of the property as set forth in the decommissioning plan is completed.
- 1. Site plan application. For any Solar Energy system requiring a Special Use Permit, site plan approval shall be required. Any site plan application shall include the following information:
 - 1) Property lines and physical features, including roads, for the project site
 - 2) Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting, and screening vegetation or structures
 - 3) A one- or three-line electrical diagram detailing the Solar Energy System layout, solar collector installation, associated components, and electrical interconnection methods, with all National Electrical Code compliant disconnects and over current devices.
 - 4) A preliminary equipment specification sheet that documents all proposed solar panels, significant components, mounting systems, and inverters that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of building permit.
 - 5) Name, address, and contact information of proposed or potential system installer and the owner and/or operator of theSolar Energy System. Such information of the final system installer shall be submitted prior to the issuance of building permit.
 - 6) Name, address, phone number, and signature of the project applicant, as well as all the property owners, demonstrating their consent to the application and the use of the property for the Solar Energy System.
 - 7) Zoning district designation for the parcel(s) of land comprising the project site.
 - 8) Property Operation and Maintenance Plan. Such plan shall describe continuing photovoltaic maintenance and propertyupkeep, such as mowing and trimming.
 - 9) Erosion and sediment control and storm water management plans prepared to New York State Department of Environmental Conservation standards, if applicable, and to such standards as may be established by the PlanningBoard.
 - 10) Prior to the issuance of the building permit or final approval by the Planning Board, but not required as

part of theapplication, engineering documents must be signed and sealed by a New York State (NYS) Licensed Professional Engineer or NYS Registered Architect.

J. Special Use Permit Standards.

1) Lot size

The property on which the Tier 3 Solar Energy System is placed shall meet the lot size requirements in Appendix 1.

2) Setbacks

The Tier 3 Solar Energy Systems shall meet the setback requirements in Appendix 2.

3) Height

- a. The Tier 3 Solar Energy Systems shall comply with the building height limitations for principal structures of the underlying zoning district.
- 4) Fencing Requirements. All mechanical equipment, including any structure for storage batteries, shall be enclosed by a7-foot high fence, as required by NEC, with a self-locking gate to prevent unauthorized access.
- 5) Screening and Visibility.
 - a. Solar Energy Systems smaller than ten (10) acres shall have views minimized from adjacent properties to the extent reasonably practicable using architectural features, earth berms, landscaping, or other screening methods that willharmonize with the character of the property and surrounding area.
 - b. Solar Energy Systems larger than ten (10) acres shall be required to:
 - I. Conduct a visual assessment of the visual impacts of the Solar Energy System on public roadways and adjacentproperties. At a minimum, a line-of-sight profile analysis shall be provided. Depending upon the scope and potential significance of the visual impacts, additional impact analyses, including for example a digital view shed report, may be required to submitted by the applicant.
 - II. Submit a screening & landscaping plan to show adequate measures to screen through landscaping, grading, or other means so that views of Solar Panels and Solar Energy Equipment shall be minimized as reasonably practical from public roadways and adjacent properties to the extent feasible.

1.The screening & landscaping plan shall specify the locations, elevations, height, plant species, and/or materials that will comprise the structures, landscaping, and/or grading used to screen and/or mitigate anyadverse aesthetic effects of the system, following the applicable rules and standards established by the Town of Stuyvesant.

6) Agricultural Resources. For projects located on agricultural lands:

Any Tier 3 Solar Energy System located on the areas that consist of Prime Farmland or Farmland of Statewide Importance shall be limited to the following;

Parcels 10 acres or less that Contain less than 75% of Prime Farmland or Farmland of Statewide Importance.

Parcels between 10-20 acres that contain less than 50% of Prime Farmland or Farm Land of Statewide Importance

Parcels over 20 acres that contain more than 35% of Prime Farmland or Farmland of Statewide Importance would be required to preserve as a block for agriculture purposes a block of prime soils being of such size and shape that provides access and allows for effective and efficient farming, that encompasses 75% of the soils of prime Farmland or Farmland of Statewide Importance that are within the parcel. That block will be required to have access for agriculture purposes.

- 1) To the maximum extent practicable, Tier 3 Solar Energy Systems located on Prime Farmland shall be constructed in accordance with the construction requirements of the New York State Department of Agriculture and Markets.
- 2) Tier 3 Solar Energy System owners shall develop, implement, and maintain native vegetation to the extent practicable pursuant to a vegetation management plan developed by NRCS that would provide a permanent perennial living cover

Before Granting a special use permit the Planning board shall determine;

- (1) That the use conforms with specific special use permit standards found in the use regulations of this chapter.
- (2) That the use is consistent with the town's current planning documents including the Comprehensive Plan.
- (3) That the use is consistent with the purposes of the land use district in which it is located and with applicable provisions of this chapter, including any other detailed special use permit criteria provided herein.
- (4) That the use will be suitable for the property's size, location, topography, vegetation, soils, natural habitat and hydrology and if appropriate, its ability if desired to be buffered or screened from neighboring properties and public roads.
- (5) That the use will be compatible with adjoining properties and with the natural and manmade environment.
- (6) That the use will not adversely affect surrounding land uses by creating excessive noise, dust, odors, glare, pollution or other nuisances.
- (7) That the use will not cause undue traffic congestion, unduly impair pedestrian safety or overload existing roads considering their current width, surfacing and condition.
- (8) That the use will have appropriate parking and be accessible to fire police and other emergency vehicles.
- (9) That the use will not degrade any natural resource, ecosystem or historic resource.
- (10) That all relevant site planning criteria can be satisfied and a site plan approval can be granted under this chapter.
- K. Ownership Changes. If the owner or operator of the Solar Energy System changes or the owner of the property

changes, the special use permit shall remain in effect, provided that the successor owner or operator assumes in writing all of the obligations of the special use permit, site plan approval, and decommissioning plan. A new owner or operator of the Solar Energy System shall notify the zoning enforcement officer (in writing-via registered mail) of such change in ownership or operator within thirty (30) days of the ownership change.

8. Safety

- A. Solar Energy Systems and Solar Energy Equipment shall be certified under the applicable electrical and/or building codesas required.
- B. Solar Energy Systems shall be maintained in good working order and in accordance with industry standards. Site access shall be maintained, including snow removal at a level acceptable to the local fire department and, if the Tier 3 Solar Energy System is located in an ambulance district, the local ambulance corps. Training of local Volunteer Fire Companies within the district will be required of developer, prior to making connection with the Grid.
- C. Storage Batteries, including Battery Energy Storage Systems are not allowed.

9. Permit Time Frame and Abandonment

A. The Special Use Permit and site plan approval for a Solar Energy System shall be valid for a period of 18 months, provided that a building permit is issued for construction or construction is commenced. In the event construction is not completed in accordance with the final site plan, as may have been amended and approved, as required by the [Planning board], within 18 months after approval, the applicant or the Town of Stuyvesant may extend the time to complete construction

for 180 days. If the owner and/or operator fails to perform substantial construction after 24 months, the approvals shall expire.

- B. Upon cessation of electricity generation of a Solar Energy System on a continuous basis for 12 months, the Town of Stuyvesant shall notify and instruct the owner and/or operator of the Solar Energy System to implement the decommissioning plan. The decommissioning plan must be completed within 360 days of notification.
- C. If the owner and/or operator fails to comply with decommissioning upon any abandonment, the Town of Stuyvesant may, at its discretion, utilize the bond and/or security for the removal of the Solar Energy System and restoration of the site in accordance with the decommissioning plan.

10. Enforcement

Any violation of this Solar Energy Law shall be subject to the same enforcement requirements, including the civil and criminal penalties, provided for in the zoning or land use regulations of the Town of Stuyvesant.

11. Severability

The invalidity or unenforceability of any section, subsection, paragraph, sentence, clause, provision, or phrase of the aforementioned sections, as declared by the valid judgment of any court of competent jurisdiction to be unconstitutional, shall not affect the validity or enforceability of any other section, subsection, paragraph, sentence, clause, provision, or phrase, which shall remain in full force and effect.

Appendix 1: Lot Size Requirements

The following table displays the size requirements of the lot for Ground-Mounted Solar Energy Systems to be permitted.

Table 1: Lot Size Requirements

Zoning District	Tier 3 Solar Energy Systems
Residential Hamlet 1&2	$\geq 2 \text{ acres}$
Residential Hamlet Ext	$\geq 2 \text{ acres}$
Commercial / Business	\geq 5 acres
Light Industrial	5 acres
Agricultural	\geq 5 acres

Key:

---: Not Allowed N/A: Not Applicable

Appendix 2: Parcel Line Setbacks

The following table provides parcel line setback requirements for Ground-Mounted Solar Energy Systems. Fencing, accessroads and landscaping may occur within the setback.

	Tier 3 Ground-Mounted		
Zoning District	Front	Side	Rear
Hamlet 1 & 2	100'	100'	100'
Hamlet Ext	100'	100'	100'
Commercial	50'	50'	50'
Light Industrial	50'	50'	50'
Agricultural	100'	100'	100'

Key:

-: Not Allowed

Appendix 3: Height Requirements

The following table displays height requirements for each type of Solar Energy Systems. The height of systems will be measured from the highest natural grade below each solar panel.

Table 3: Maximum Height Requirements

Zoning District	Tier 1 Roof- Mounted	Tier 2	Tier 3
Hamlet 1 & 2	2' above roof	10'	15'
Hamlet Ext	2' above roof	10'	15'
Commercial	4' above roof	15'	20'
Light Industrial	4' above roof	15'	20'
Agricultural / Residential	2' above roof	15'	20'

Key:

-: Not Allowed

Appendix 4: Example Decommissioning Plan

Date:

Decommissioning Plan for [Solar Project Name], located at: [Solar Project Address]

Prepared and Submitted by [Solar Developer Name], the owner of [Solar Farm

Name]

As required by the Town of Stuyvesant, [Solar Developer Name] presents this decommissioning plan for [Solar Project Name] (the"Facility").

Decommissioning will occur as a result of any of the following conditions:

- 1. The land lease, if any, ends
- 2. The system does not produce power for [12] months
- 3. The system is damaged and will not be repaired or replaced

The owner of the Facility, as provided for in its lease with the landowner, shall restore the property to its condition as it existed before the Facility was installed, pursuant to which may include the following:

- 1. Removal of all operator-owned equipment, concrete, conduits, structures, fencing, and foundations to a depth of 36 inchesbelow the soil surface.
- 2. Removal of any solid and hazardous waste caused by the Facility in accordance with local, state and federal wastedisposal regulations.
- 3. Removal of all graveled areas and access roads unless the landowner requests in writing for it to remain.

All said removal and decommissioning shall occur within 12 months of the Facility ceasing to produce power

for sale. The owner of the Facility, currently [Solar Developer Name], is responsible for this

decommissioning.

Facility Owner Signature: Date:	Date:
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