

PROPOSED

Town of Rensselaerville Solar Energy Local Law Local Law No. 2 of 2020

Be it enacted by the Town Board of the Town of Rensselaerville as follows:

A. Title

This local law shall be entitled “Solar Energy Local Law.”

B. Effective Date

This local law shall take effect upon filing with the Secretary of State and as provided by law.

C. Authority

This Solar Energy Local Law is adopted pursuant to the Municipal Home Rule Law of the State of New York.

D. 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, in accordance with the Town of Rensselaerville Comprehensive Plan.

E. Amendment of Zoning Law

The Town’s Zoning Law, set forth at Chapter 215 of the Laws of the Town of Rensselaerville, is amended by adding as Article XI (Special Use Permits), Section 27, entitled “Solar Energy”, as follows:

1. Definitions

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. Department of Agriculture Natural Resources Conservation Service (NRCS)’s Soil Survey Geographic (SSURGO) Database on Web Soil Survey, that is of state wide 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.

GLARE: The effect by reflections of light with intensity sufficient as determined in a commercially reasonable manner to cause annoyance, 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 other mounting 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 way stations 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 pollinate 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 or structure 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 Small-Scale and Large-Scale Solar Energy System as follows:

- A. Small-Scale Solar Energy Systems include the following:
 - a. Roof-Mounted Solar Energy Systems;
 - b. Building-Integrated Solar Energy Systems; and

- c. Ground-Mounted Solar Energy Systems with system capacity up to 25 kW AC and that generate no more than 120% of the electricity consumed on the site over the previous twelve (12) months.

B. Large-Scale Solar Energy Systems include the following:

- a. Ground-Mounted Solar Energy Systems with system capacity of 25 kW AC or greater; and
- b. any other Solar Energy Systems that are not included within the definition of Small-Scale 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.

2. Applicability

- A. The requirements of this Local Law shall apply to all Solar Energy Systems permitted, installed, or modified in the Town of Rensselaerville 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 Town of Rensselaerville Code.

3. General Requirements

- A. A building permit shall be required for installation of all Solar Energy Systems.
- B. Issuance of permits and approvals shall include review pursuant to the State Environmental Quality Review Act.
- C. Solar Use Schedules: The attached Solar Use Schedules for Small-Scale Solar (Appendix One) and Large-Scale Solar (Appendix Two), setting forth the permitting requirements by zoning district. All Solar Energy Systems shall be permitted in accordance with the Solar Use Schedules.

D. Special Use Permit Procedures: Where a Special Use Permit and Site Plan is required for a Small-Scale Solar System or Large-Scale Solar System, all procedural and substantive requirements set forth in Articles IX and X of the Zoning Law shall govern in addition to the requirements set forth herein.

E. Appendices: All Appendices hereto are incorporated into this local law.

4. Permitting Requirements for Small-Scale Solar Energy Systems

A. Generally: Except as to any Small-Scale Solar Energy System for which a Special Use Permit is required, as set forth in the Small-Scale Solar Use Schedule, the permitting requirements for Small-Scale Solar Energy Systems shall be as set forth in this Section.

B. Exemption: Small-Scale Solar Energy Systems that consist of no more than twenty-five (25) square feet of solar panels on residential properties are exempt from any permitting and zoning requirements under the Small-Scale Solar Use Schedule and herein.

C. Uniform Solar Permit: For Small-Scale Solar Energy Systems, the Town hereby adopts the New York State Unified Solar Permit, as it may be amended from time-to-time.

D. Lot Size: Small-Scale Solar Energy Systems shall comply with the existing lot size requirement specified for accessory structures within the underlying zoning district.

E. Setbacks: Small-Scale Solar Energy Systems shall comply with the setback requirements in Appendix Three.

F. Height: Small-Scale Solar Energy Systems shall comply with the height limitations in Appendix Four.

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

H. Roof-Mounted Solar Energy Systems:

1) Roof-Mounted Solar Energy Systems are permitted to face any rear, side and front yard area.

2) Roof-Mounted Solar Energy Systems installed on a sloped roof:

a. the highest point of the system shall not exceed the highest point of the roof to which it is attached; and

b. edges of Solar Panels shall be parallel to the roof edges.

3) Roof-Mounted Solar Energy Systems installed on a flat roof:

- a. the highest point of the system shall not exceed 4 ft from the roof surface.
- 4) Solar Panels in Roof-Mounted Solar Energy Systems shall be set back no less than three (3) feet from the edge and three (3) feet from the peak of the roof to allow for fire access and ventilation. On sloped roofs, this requirement does not apply along that portion of the bottom edge located more than three (3) feet from a side edge. In the event New York State shall adopt regulations that govern the placement of roof-mounted Solar Panels for fire prevention purposes, said regulations shall supersede this setback provision.
- 5) 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 twenty-four (24) inches above the flat surface of the roof, whichever is higher.
- 6) Glare: All Solar Panels on Roof-Mounted Solar Energy Systems shall have anti-reflective coatings.
- 7) Height: All Roof-Mounted Solar Energy Systems shall comply with the height limitations in Appendix Two.
- I. Building-Integrated Solar Energy Systems shall be shown on the plans submitted for the building permit application for the building containing the system.
- J. Ground-Mounted Solar Energy Systems with system capacity up to 25 kW AC and that generate no more than 120% of the electricity consumed on the site over the previous twelve (12) months shall be subject to the following conditions:
 - 1) Screening and Visibility: Solar Energy Equipment shall be located in a manner to reasonably avoid and/or minimize blockage of views from surrounding properties and shading of property to the north, while still providing adequate solar access.
 - 2) Ground-Mounted Solar Energy Systems shall only be installed in the side or rear yards in residential districts.

- K. Special Use Permit Standards: Small-Scale Solar Energy Systems requiring a Special Use Permit pursuant to the Small-Scale Solar Use Schedule shall be subject to review for compatibility with the character of the neighborhood and historic nature of the structure.

5. Permitting requirements for Large-Scale Solar Energy Systems

- A. Special Use Permit: A Special Use Permit shall be required for all Large-Scale Solar Energy Systems.
- B. Special Use Permit Standards: A Special Use Permit for Large-Scale Solar Energy Systems shall be subject to the following standards:
 - 1) Lot size: The property on which the Large-Scale Solar Energy System is placed shall meet the lot size requirements of the underlying zoning district.
 - 2) Setbacks: The Large-Scale Solar Energy Systems shall meet the setback requirements in Appendix Three.
 - 3) Height: The Large-Scale Solar Energy Systems shall comply with the height limitations in Appendix Four.
 - 4) Lot coverage
 - a. The following components of a Large-Scale Solar Energy System shall be considered included in the calculations for lot coverage requirements:
 - I. Foundation systems, typically consisting of driven piles or monopoles or helical screws with or without small concrete collars.
 - II. All mechanical equipment of the Solar Energy System, including any pad mounted structure for batteries, switchboard, transformers, or storage cells.
 - III. Paved access roads servicing the Solar Energy System.
 - b. Lot coverage of the Solar Energy System, as defined above, shall not exceed the maximum lot coverage requirement of the underlying zoning district.
 - 5) Fencing Requirements. All mechanical equipment, including any structure for storage batteries, shall be enclosed as required by the NEC, but at a minimum such enclosure shall include a fence of no fewer than seven (7) feet tall.
 - 6) 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 will harmonize with the character of the property and surrounding area.
- b. Solar Energy Systems larger than ten (10) acres or larger shall be required to:
 - I. Conduct a visual assessment of the visual impacts of the Solar Energy System on public roadways and adjacent properties. 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 viewshed report, may be required to be submitted by the applicant.
 - II. Submit a screening and 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. The screening and 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 any adverse aesthetic effects of the system, following the applicable rules and standards established by the Town.
- 7) Glare. Solar Panels shall have anti-reflective coatings and shall be placed and arranged such that reflected solar radiation of glare shall not be directed onto adjacent buildings, properties or roadways. Exterior surfaces of roof mounted collectors and related equipment shall have a reflective finish and shall be color coordinated to harmonize with roof materials and other dominant colors of the structure.
- 8) 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.
- 9) Vehicular Paths. Vehicular paths within the site shall be designed to minimize the extent of impervious materials and soil compaction.
- 10) Signage.
 - a. 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 shall be depicted within an area no more than eight (8) square feet.

- b. 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 all pad-mounted transformers and substations.

11) Lighting. Lighting of the Solar Energy Systems shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded and downcast from abutting properties.

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

- a. to the maximum extent practicable, Large-Scale 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.
- b. Large-Scale Solar Energy System owners shall develop, implement, and maintain native vegetation to the extent practicable pursuant to a vegetation management plan by providing native perennial vegetation and foraging habitat beneficial to game birds, songbirds, and pollinators. To the extent practicable, when establishing perennial vegetation and beneficial foraging habitat, the owners shall use native plant species and seed mixes.

C. Applications. Applications for the installation of all Large-Scale Solar Energy Systems shall be reviewed by the Code Enforcement Officer / Building Inspector for completeness. Applicants shall be advised within thirty (30) days of the completeness of their application or any deficiencies that must be addressed prior to substantive review.

D. Site plan applications. For any Solar Energy system requiring a Special Use Permit, as set forth in the Solar Use Schedules, 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 the Solar 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 property upkeep, such as mowing and trimming, and shall include no chemical pest or weed control.
 - 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 Planning Board.
 - 10) Prior to the issuance of the building permit or final approval by the Planning Board, but not required as part of the application, engineering documents must be signed and sealed by a New York State (NYS) Licensed Professional Engineer or NYS Registered Architect.
 - 11) Approvals shall be subject to referrals to the Albany County Planning Board pursuant to the General Municipal Law § 239-m and adjacent municipalities pursuant to General Municipal Law § 239-nn, to the extent required by those provisions, as well as any other applicable notice provisions.
- E. 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 of such change in ownership or operator within thirty (30) days of the ownership change.

6. Safety

- A. Safety. All Solar Energy Systems and Solar Energy Equipment must be constructed and maintained in accordance to all federal, and state regulations. Solar Energy Systems and Solar Energy Equipment shall be certified under the applicable electrical and/or building codes as required.

- a. All electrical and control equipment, including any battery and storage cells, shall be labeled and secured to prevent any unauthorized access.
 - b. Signs. Warning signage shall be placed on solar equipment to the extent appropriate. Solar equipment shall not be used for displaying any advertising. All signs, flags, streamers or similar items, both temporary and permanent are prohibited on solar equipment except: (a) manufacturers or installers identification; (b) appropriate warning signs and placards; (c) signs that may be required by a federal agency; and (d) signs that provide a 24hr emergency contact phone number and warn of any damage.
 - c. Access and parking. A road and parking will be provided to assure adequate emergency and service access. Maximum use of existing roads, public or private shall be made.
- B. Maintenance and Access: 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.
- C. Storage Batteries: If Storage Batteries are included as part of the Solar Energy System, they shall meet the requirements of any applicable fire prevention and building code when in use and, when no longer used, shall be disposed of in accordance with the laws and regulations of the Town and any applicable federal, state, or county laws or regulations.

7. 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 eighteen (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 eighteen (18) months after approval, the applicant or the Town may extend the time to complete construction for as many as one hundred eighty (180) days. If the owner and/or operator fails to perform substantial construction after twenty-four (24) months, the approvals shall expire.
- B. Upon cessation of electricity generation of a Solar Energy System on a continuous basis for twelve (12) months, the Town may 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 one year of notification.
- C. If the owner and/or operator fails to comply with decommissioning upon any abandonment, the Town 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.

8. Decommissioning

A. Generally.

- 1) Solar Energy Systems that have been abandoned and/or not producing electricity for a period of one (1) year shall be removed at the Owner and/or Operators expense, which at the Owner's option may come from any security made with the Town as set forth in Section 10 (B) herein.
- 2) A Solar Energy System shall be deemed abandoned if the system fails to generate and transmit electricity at a rate of more than 10% of its rated capacity over a continuous period of twenty-four (24) months. If the Code Enforcement Officer receives a complaint of suspected abandonment, or requests access to inspect a Solar Energy System to assess whether it is functioning as designed, the property owner shall allow access to the property and system for testing. The Code Enforcement Officer shall have the authority to require the owner to produce proof of Solar Energy System functionality via reports from local service provider.

B. Decommissioning Plan and Security for Large-Scale Solar Energy Systems

- 1) Decommissioning Plan. A decommissioning plan signed by the owner and/or operator of a Large-Scale Solar Energy System shall be submitted as part of the site plan or special use permit application addressing the following:
 - a. A schedule and methods for the removal of the Solar Energy System from the lot.
 - b. A plan for restoring the property to its preinstalled condition, including grading and vegetation stabilization to eliminate any negative impacts to surrounding properties.
 - c. The cost of removing the Solar Energy System.
- 2) Security. The following shall apply to any Large-Scale Solar Energy System:
 - a. The deposit, execution, or filing with the Town Clerk of cash, bond, or other form of security reasonably acceptable to the Town attorney, 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 Large-Scale Solar Energy System and restoration of the property

with an escalator of 2 % annually for the life of the Solar Energy System. The decommissioning amount shall be reduced by the amount of the estimated salvage value of the Solar Energy System.

- 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, 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.
 - c. In the event of default or abandonment of the Solar Energy System, the system shall be subject to decommissioning by the Town at its sole discretion.
 - d. The Town's exercise of any remedy set forth in this Section 8(B)(2) shall be without waiver of its right to seek any other remedies available at law or equity, including, but not limited to, the right to seek excess costs and injunctive relief.
- 3) Requirements for Decommissioning/ Decommissioning and removal of a Solar Energy System shall consist of:
- a. Complete removal of all above-ground and below-ground equipment, including all solar PV modules, mounts, and other associated equipment;
 - b. Disposal of all solid and hazardous waste in accordance with local state and federal waste disposal regulations;
 - c. Restoration of the ground surface and soil; and
 - d. Stabilization and re-vegetation of the site.
- 4) Petition to Planning Board. In connection with any decommissioning of a Solar Energy System, upon petition to the Planning Board, the Board may permit the system owner and/or landowner to leave certain underground or aboveground improvements in place, provided the owner can show that such improvements are part of a plan to redevelop the site, are not detrimental to such redevelopment and do not adversely affect community character or the environment.

9. 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 Rensselaerville.

10. 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 ONE: SOLAR USE CHART – SMALL SCALE

Zoning District	H	A/RR	RC-1	RC-2	RC-3	CL
Building Integrated	P	P	P	P	P	p
Roof Mounted	+	P	P	P	P	+
Ground Mounted	S +	P	P	P	P	S +

P- Designates a use permitted with standard permit.

+- Designates a use subject to a site plan approval by the planning board

S- Designates a conditional use contingent upon securing a special use permit by the Planning Board.

H-Hamlet

A/RR- Agricultural/Rural Residential

RC-1,2,3 Resource Conservation districts 1,2 and 3

CL- Crystal Lake

APPENDIX TWO: SOLAR USE CHART – LARGE SCALE

Zoning District	H	A/RR	RC-1	RC-2	RC-3	CL
Building Integrated	NP	S+	S+	S+	S+	NP
Roof Mounted	NP	S+	S+	S+	S+	NP
Ground Mounted	NP	S+	S+	S+	S+	NP

P- Designates a use permitted with standard permit.

+- Designates a use subject to a site plan approval by the planning board

S- Designates a conditional use contingent upon securing a special use permit by the Planning Board.

NP- Designates a district where large scale solar is not permitted

H-Hamlet

A/RR- Agricultural/Rural Residential

RC-1,2,3 Resource Conservation districts 1,2 and 3

CL- Crystal Lake

APPENDIX THREE: PARCEL LINE SETBACKS

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

Table 2: Parcel Line Setback Requirements

Zoning District	Large-Scale Ground-Mounted		
	Front	Side	Rear
A/RR	100'	100'	100'
RC-1	100'	100'	100'
RC-2	100'	100'	100'
RC-3	100'	100'	100'
H	--	--	--
CL	--	--	--

Key:

--: Not Allowed

APPENDIX FOUR: 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: Height Requirements

	Tier 1 Roof-Mounted	Small-Scale	Large-Scale
Zoning District			
A/RR	2' above roof	15'	20'
RC-1	2' above roof	15'	20'
RC-2	2' above roof	15'	20'
RC-3	2' above roof	15'	20'
H	--	--	--
CL	--	--	--

Key:

--: Not Allowed