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Local Land Use Controls & Solar Regulation

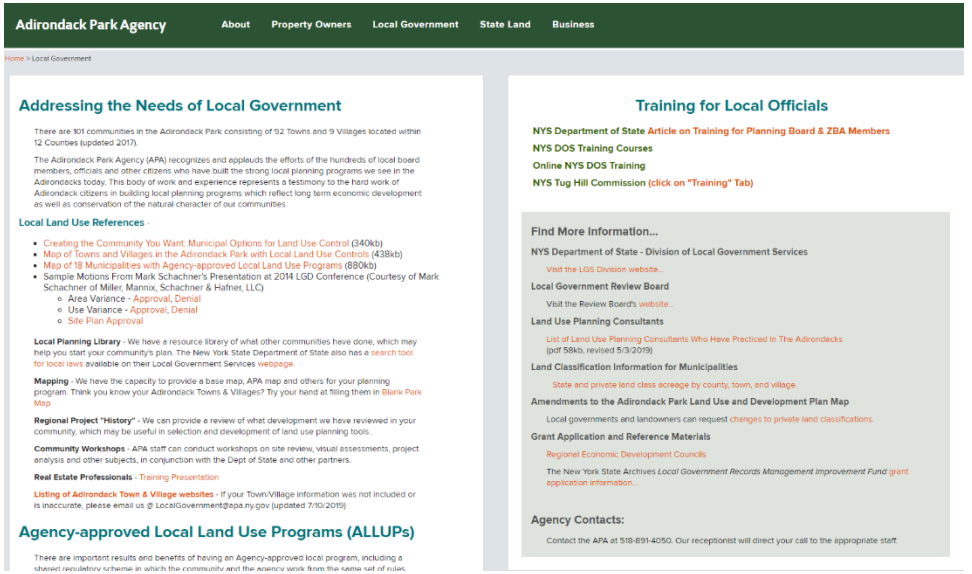
May 13, 2021

Local Government Services Staff

(518) 891-4050

LocalGovernment@apa.ny.gov

- **Robyn Burgess**
  Adirondack Park Local Planning Assistance Specialist
- **Kate-Lyn Knight**
  Environmental Program Specialist



www.apa.ny.gov/Local_Government

You don't need an APA-approved Local Land Use Program to contact us for help.

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Local Government Services

2020 Stats:

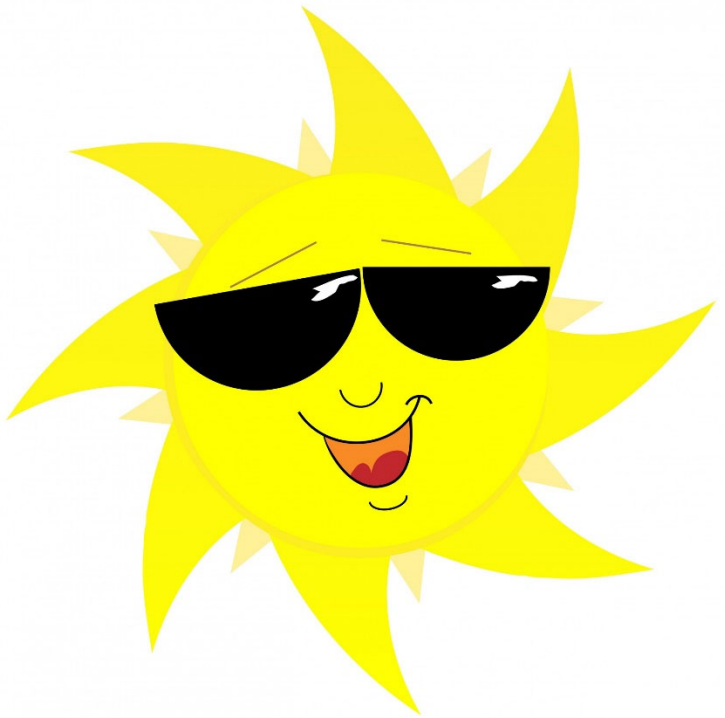
- 152 Consultations with Local Officials
- 32 Consultations with Agency Staff
- 10 Local Controls Reviewed

- APA-Approved Local Land Use Programs (ALLUPs)
  - 8 Local Land Use Control Amendments Approved
  - 69 Variances Reviewed (2 Reversed)
  - 152 Jurisdictional Determinations*

* LGS Staff have been assisting the Jurisdictional Inquiry Office with JIFs following 2020 staff retirements

Outline

- APA Solar Jurisdiction
- Local Land Use Controls
- Solar Generation Facilities
- Local Regulation of Solar
  - Resources Available
  - Local Examples
- Agricultural Districts
- PILOTs & HCAs
- Community Solar
- Developer Considerations
- Benefits



Abbreviations

- ALLUP: APA-Approved Local Land Use Programs
- GHG: Greenhouse Gas
- HCA: Host Community Agreement
- MW: Megawatt
- NJ: Non-Jurisdictional Project (not subject to Agency review)
- NYSERDA: New York State Energy Research & Development
- ORES: Office of Renewable Energy Siting
- PILOT: Payment in Lieu of Taxes
- PSC: Public Service Commission

Solar Projects in the Adirondacks

APA Jurisdiction - Use

- On-site Usage (roof & ground mounted)
  - Accessory - NJ
- Off-site Usage - Solar Generation Facilities
  - Major Public Utility - Class A (NJ in Hamlet*)
  - >25 MW - ORES
- Critical Environmental Areas (CEAs)
  - Accessory to a Single Family Dwelling - NJ
  - Not accessory to SFD - Class A

* In Johnsburg Major Public utility is Class A By Agreement in Hamlet

Solar Projects in the Adirondacks

APA Jurisdiction - Structure

- Height >40ft
- Wetlands
- Shorelines

Local Land Use Controls & Solar Regulation

Authority for Local Land Use Controls

NYS Town Law § 261

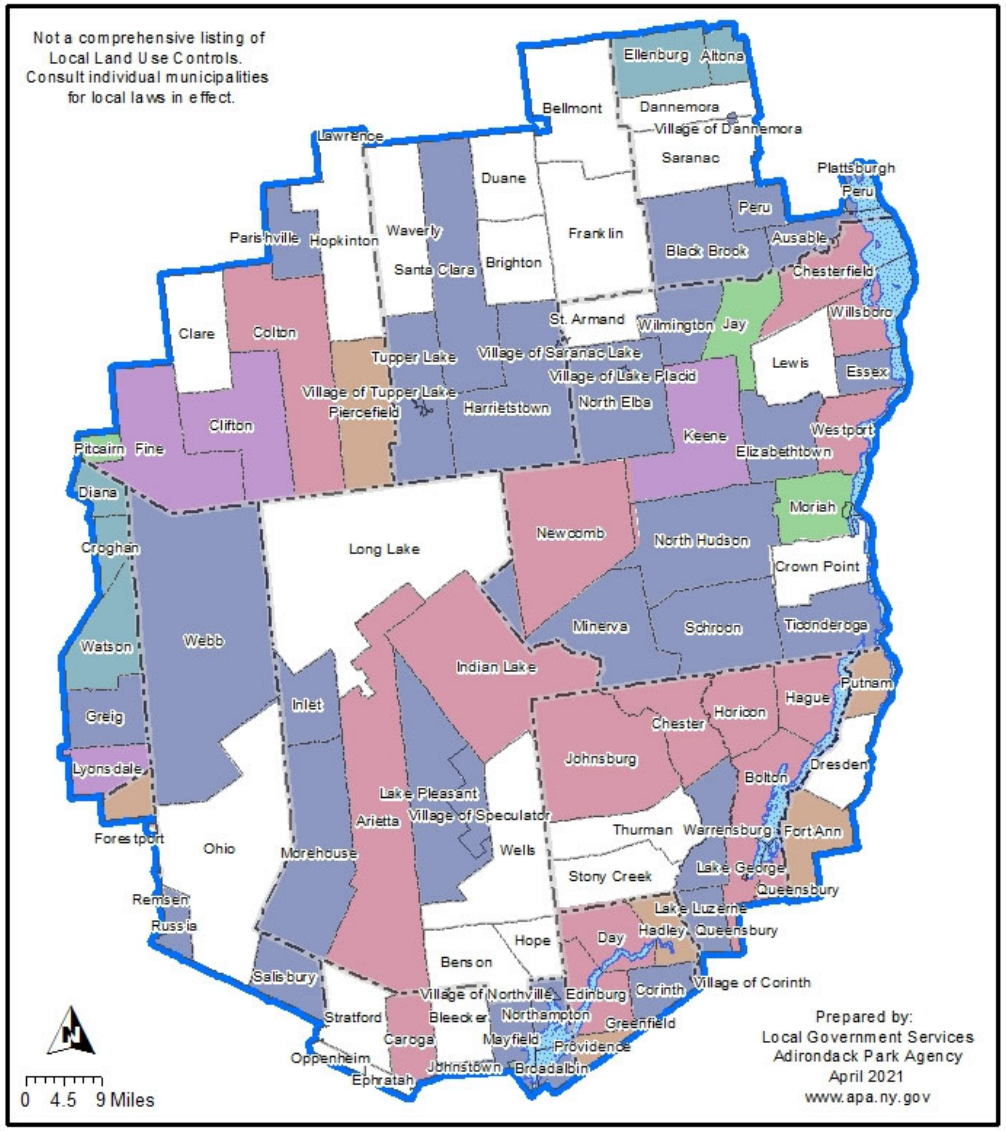
For the purpose of promoting the health, safety, morals, or the general welfare of the community, the town board is hereby empowered by local law or ordinance to regulate and restrict the height, number of stories and size of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts, and other open spaces, the density of population, and the location and use of buildings, structures and land for trade, industry, residence or other purposes; provided that such regulations shall apply to and affect only such part of a town as is outside the limits of any incorporated village or city; provided further, that …

See also NY Municipal Home Rule Law §10 & NY Village Law

Types of Local Land Use Controls

- **Site Plan Review** – Controls setbacks
- **Subdivision** – Controls lot size, shape, road design…
- **Zoning** – Controls uses and generally includes Site Plan Review and Subdivision requirements
  - Authority set forth in NYS Town Law
- **Other Land Use Controls**

- Junk Laws	- Design Standards
- Historic Districts	- Noise Ordinances



Local Land Use Controls in the Adirondack Park

- Park Blueline
- State Boundary
- County Boundary
- Town Boundary
- Village Boundary

Local Land Use Controls

- NO ALLUP, SD, SPR or Zoning
- Site Plan Review
- Subdivision Regulations
- Subdivision & Site Plan Review
- Zoning
- Zoning & Subdivision
- APA-Approved Local Land Use Program

Villages*

Corinth: Z & SD
Dannemora: Z & SD
Lake George: ALLUP
Lake Placid: Z & SD
Mayfield: Z
Northville: Z & SD
Saranac Lake: Z & SD
Speculator: Z & SD
Tupper Lake: Z & SD

Summary

101 Towns/Villages in the Park
62 have Zoning (Z, Z & SD or ALLUP)
18 with ALLUP
25 without Zoning, Subdivision, Site Plan Review or an ALLUP

*ALLUP= APA-Approved Local Land Use Program;
SD= Subdivision Regulations;
SPR= Site Plan Review Only; Z= Zoning

Local Land Use Controls

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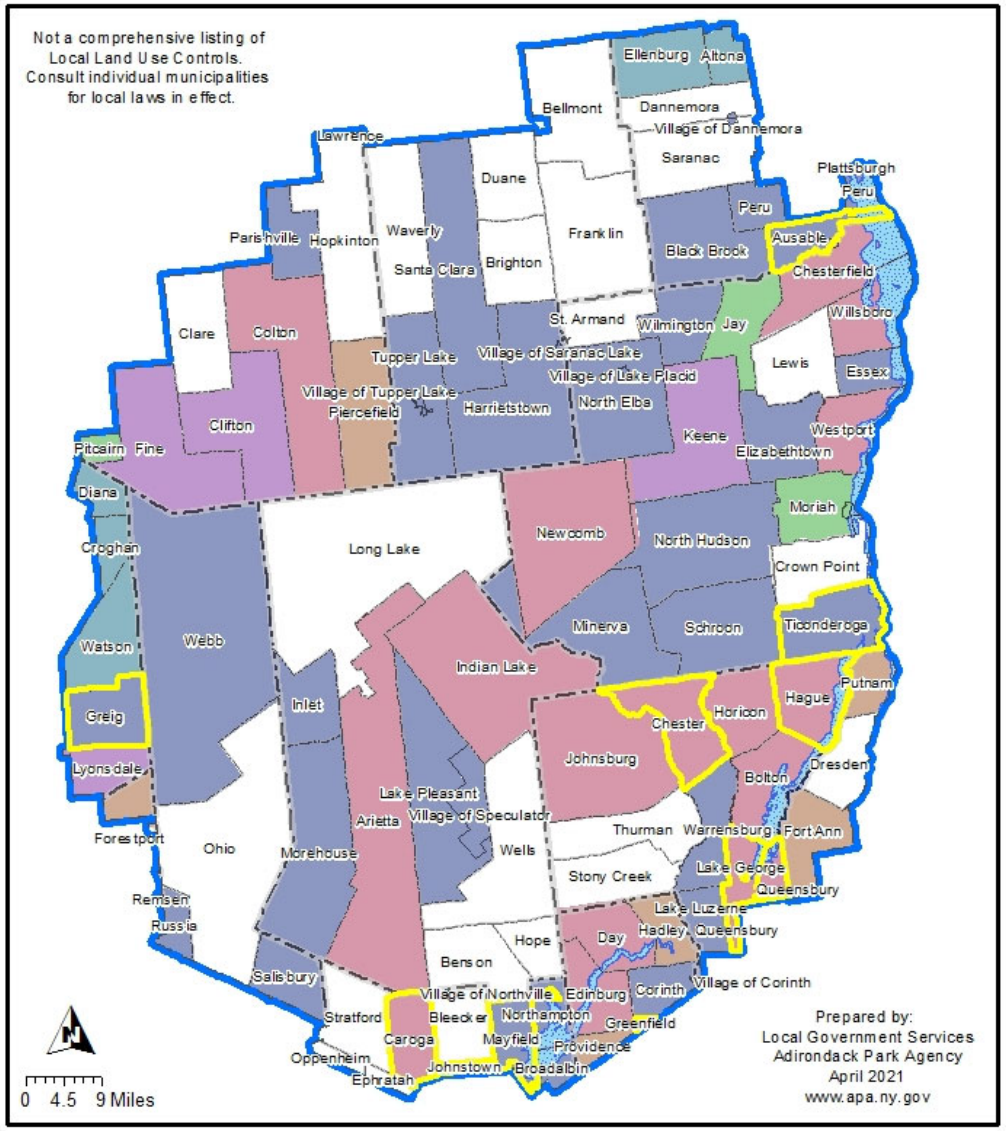

Local Land Use Controls in the Adirondack Park

- Park Blueline
- State Boundary
- County Boundary
- Town Boundary
- Village Boundary

Large-Scale Solar

- SOLAR

Local Land Use Controls

- NO ALLUP, SD, SPR or Zoning
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Solar Generation Facility Controls

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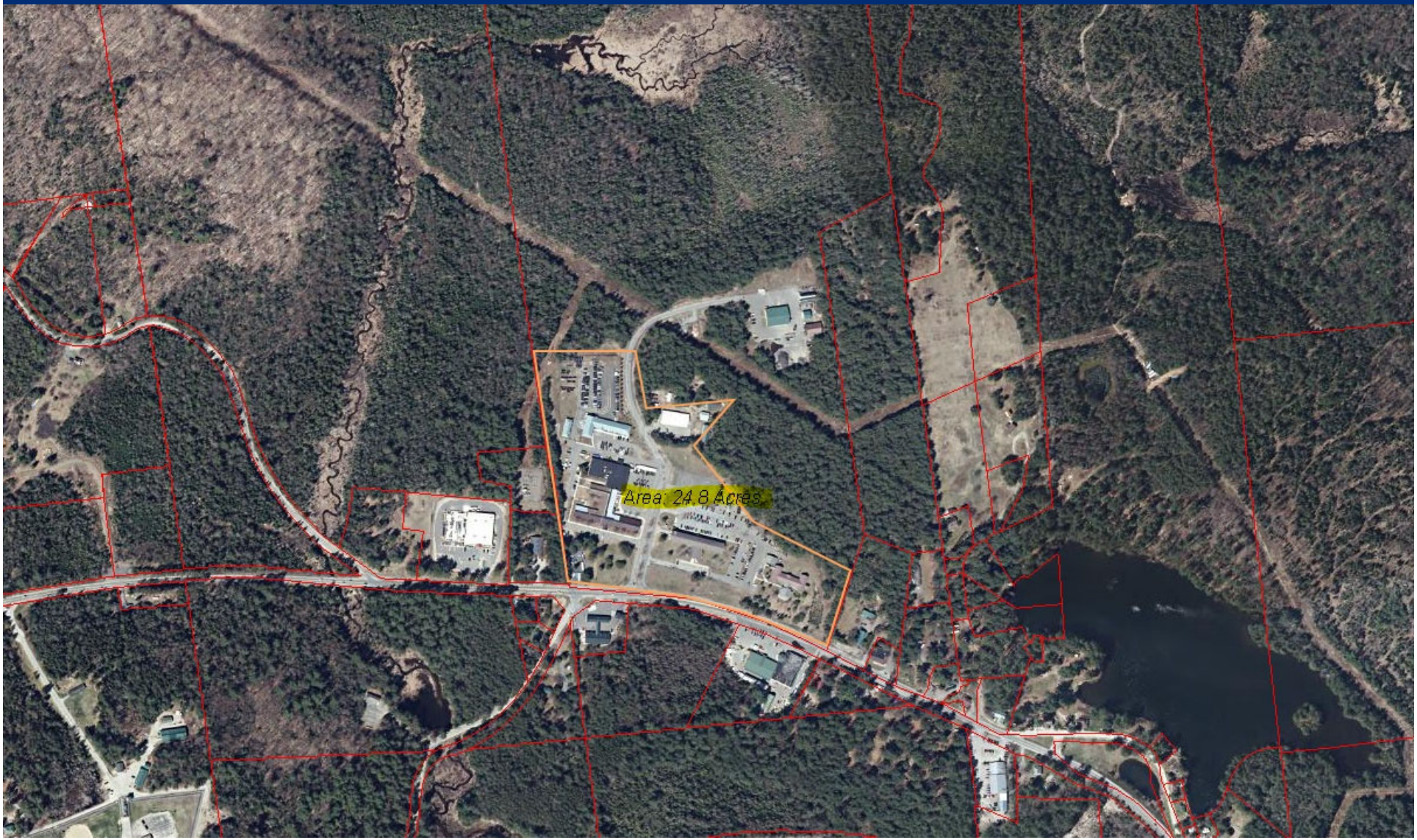
Solar Generation Facilities

For scale:
A 5 MW project is approximately 25 acres



Scale ≈ 25 acres

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Local Land Use Controls & Solar Regulation

Tools for Local Governments

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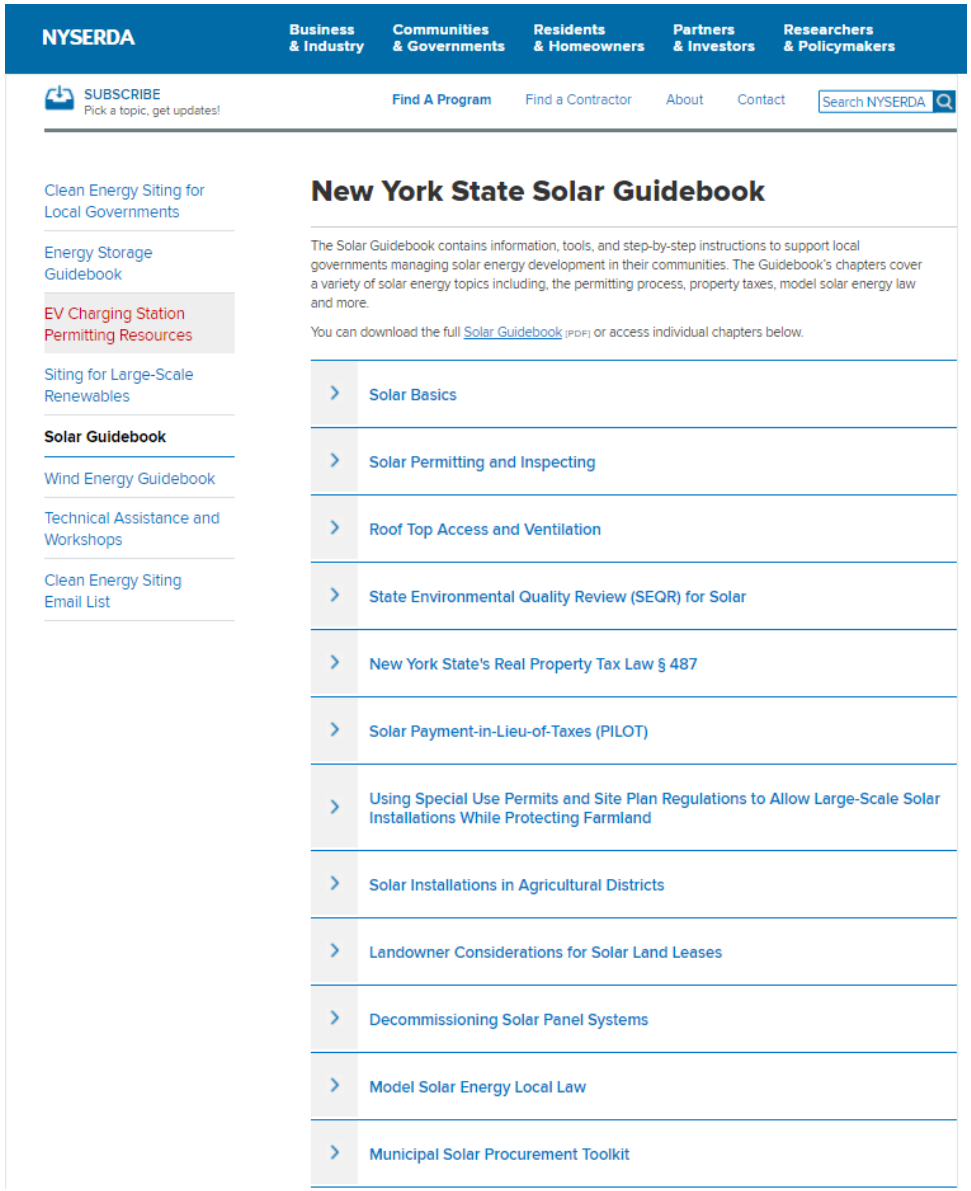
NYSERDA [New York State Solar Guidebook - NYSERDA]



nyserda.ny.gov/solarguidebook

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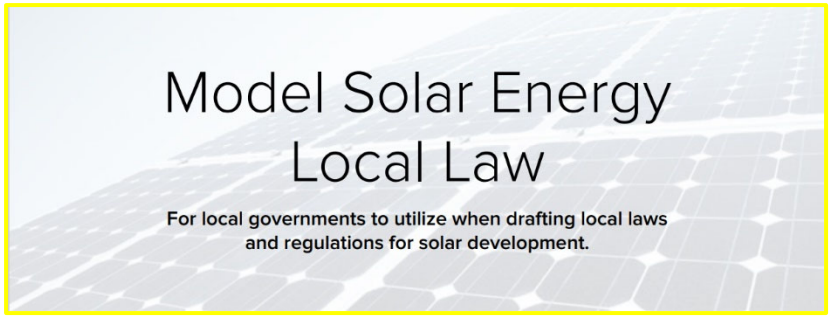
NYSERDA



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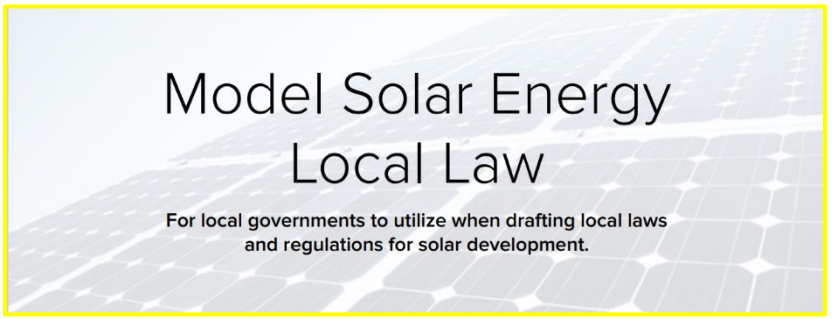

Overview

The Model Solar Energy Local Law serves as a resource to inform local officials on the processes of installing, operating, maintaining and decommissioning solar energy systems in their respective jurisdictions. Providing this as a resource for local governments, officials can then use this Model Law to assist them in examining their own local laws, regulations, and policies to adopt their own rules and regulations that make sense for their respective community with regards to solar development.

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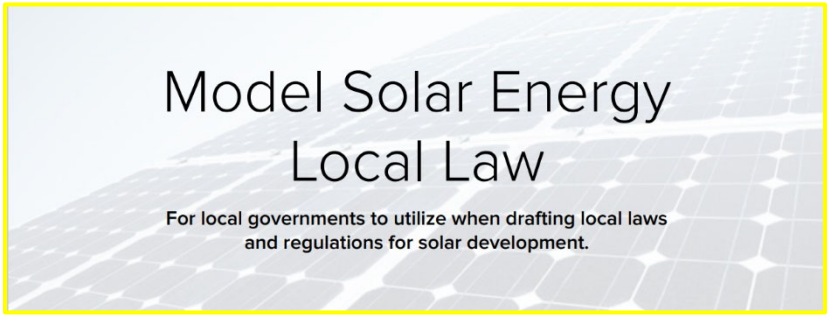

Commentary: As the benefits of Solar Energy Systems may vary from community to community, the Purpose Section should be reviewed and adjusted accordingly. Any benefits of solar energy referred to specifically in the local comprehensive plan should be added to this list. An expansive list of the benefits of solar energy may help secure support from local stakeholder groups for the adoption of the Model Law. A municipality should include benefits in this list that resonate with the stakeholders involved in its community. The following list includes additional benefits of solar energy that communities may choose to incorporate into the Purpose Section, as appropriate:

- To decrease the use of fossil fuels, thereby reducing the carbon footprint of [Village/Town/City];
- To invest in a locally generated source of energy and to increase local economic value, rather than importing non-local fossil fuels;
- To align the laws and regulations of the community with several policies of the State of New York, particularly those that encourage distributed energy systems;
- To become more competitive for state and federal grants and tax benefits;
- To make the community more resilient during storm events;
- To aid in the energy independence of the community as well as the country;
- To diversify energy resources to decrease dependence on the grid;
- To improve public health;
- To encourage a sense of pride in the community;
- To encourage investment in public infrastructure supportive of solar, such as generation facilities, grid-scale transmission infrastructure, and energy storage sites.

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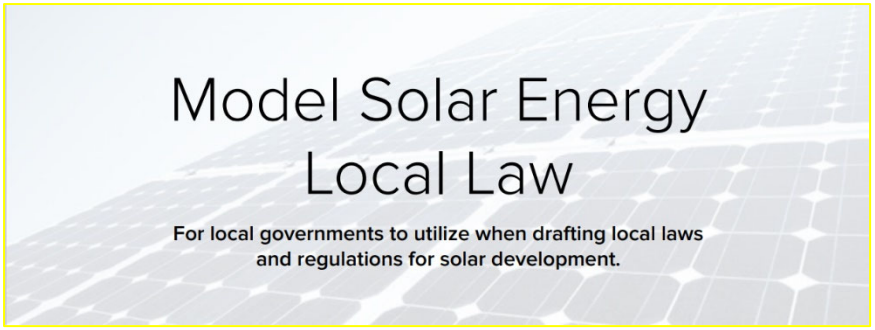
2019 Ticonderoga Zoning Law

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

a. To take advantage of a safe, abundant, renewable and non-polluting energy resource;
b. To decrease the cost of electricity to the owners of residential and commercial properties, including single-family houses;
c. To increase employment and business development in the Town, to the extent reasonably practical, by furthering the installation of Solar Energy Systems;
d. To mitigate the impacts of Solar Energy Systems on environmental resources such as important agricultural lands, forests, wildlife and other protected resources, and;
e. To create synergy between solar and other natural resources of the Town in accordance with the Town's Comprehensive Plan.

NYSERDA



Commentary: These definitions are critical to the workability of the remaining sections of the Model Law. There are three types of Solar Energy Systems defined here.

Tier 1 Solar Energy Systems are defined as all Roof-Mounted and Building-Integrated Solar Energy Systems and are permitted in all zoning districts.

Tier 2 Solar Energy Systems are Ground-Mounted systems that use the electricity generated from solar panels primarily onsite. A municipality may define Tier 2 Solar Energy Systems according to their physical size using measurements similar to those found in the zoning ordinance's bulk and area requirements (measured in acres, square feet etc.), or based on energy capacity due to the fact that the physical size of a Solar Energy System tends to increase as kilowatts produced increases.

Tier 3 Solar Energy Systems are systems that are not included in either Tier 1 or Tier 2 Solar Energy Systems. Note that Solar Energy Systems producing 25 MW or more are required to seek a permit through a State-level siting process administered by the Office of Renewable Energy Siting (ORES). ORES will ensure that siting decisions are predictable, responsible, and timely, while providing opportunities for local engagement throughout the process. Additionally, new solar projects between 20-25 MW and existing projects in the initial phases of the Article 10 review process may opt-in to the ORES review process.

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Different Levels of Solar - *Example*

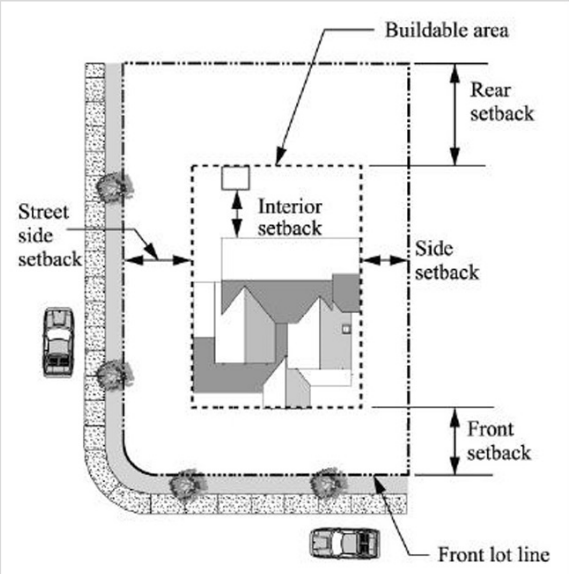
Town of Ticonderoga:

A Solar Energy System is classified as a Tier 1, Tier 2, or Tier 3 Solar Energy System as follows:

1. Tier 1 Solar Energy Systems include the following:
   i. Roof-Mounted Solar Energy Systems
   ii. Building-Integrated Solar Energy Systems
2. Tier 2 Solar Energy Systems include Ground-Mounted Solar Energy Systems with a total surface area of all solar panels on the lot of up to 4,000 square feet and that generate up to 110% of the electricity consumed on the site over the previous 12 months.
3. Tier 3 Solar Energy Systems are systems that are not included in the list for Tier 1 and Tier 2 Solar Energy Systems.

Common Zoning Considerations

- Districts
- Minimum Lot Size
- Setbacks



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 Low Density	≥ 2 acres
Residential High Density	—
Commercial / Business	≥ 5 acres
Light Industrial	N/A
Heavy Industrial	N/A
Agricultural / Residential	≥ 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, access roads and landscaping may occur within the setback.

Table 2: Parcel Line Setback Requirements

	Tier 3 Ground-Mounted		
Zoning District	Front	Side	Rear
Residential Low Density	100'	100'	100'
Residential High Density	—	—	—
Commercial / Business	30'	15'	25'
Light Industrial	30'	15'	25'
Heavy Industrial	30'	15'	25'
Agricultural / Residential	30'	15'	25'

Key:

—: Not Allowed

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Zoning Considerations - *Examples*

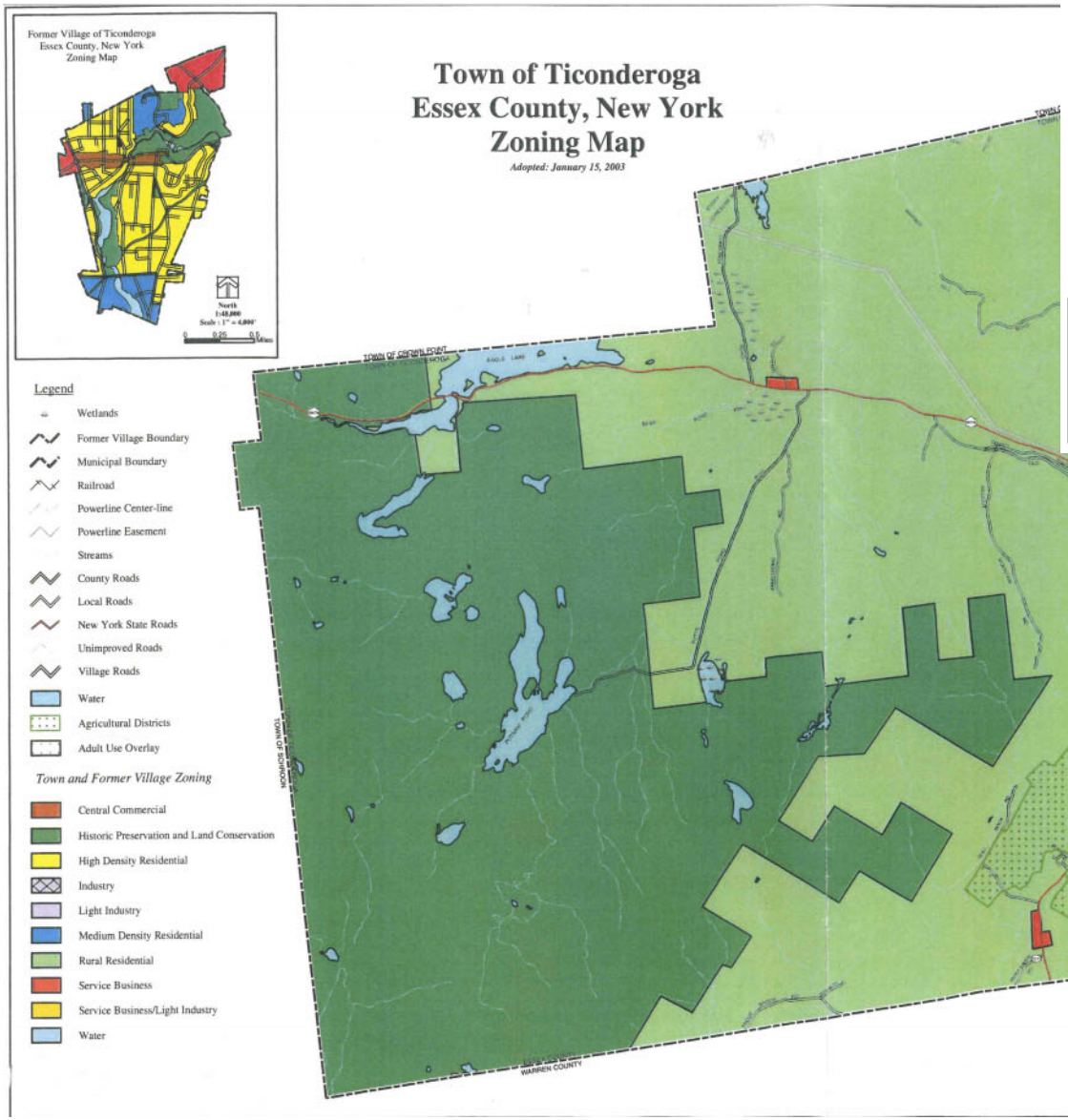

Table 1: Lot Size Requirements

Zoning District	Tier 3 Solar Energy Systems
Rural Residential	≥ 2 acres
High Density Residential/Medium Density Residential	Not allowed
Central Commercial	Not allowed
Service Business/ Light Industry/ Industry	≥ 5 acres
Historic Preservation and Land Conservation	≥ 5 acres

Common Zoning Considerations

- Panel Height
- Lot Coverage
- Signage
- Other…

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: Height Requirements

Zoning District	Tier 1 Roof-Mounted	Tier 2	Tier 3
Residential Low Density	2' above roof	10'	15'
Residential High Density	2' above roof	10'	—
Commercial / Business	4' above roof	15'	20'
Light Industrial	4' above roof	15'	20'
Heavy Industrial	4' above roof	15'	20'
Agricultural / Residential	2' above roof	15'	20'

Key:

—: Not Allowed

Zoning Considerations - *Examples*

- "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." Town of Ticonderoga

- "All solar collectors and related equipment shall be surfaced, designed and sited so as not to reflect glare onto adjacent properties." Town of Chester

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NYSERDA

1. Abandonment and Decommissioning

Abandonment occurs when a solar array is inactive for a certain period of time.

- Abandonment requires that solar panel systems be removed after a specified period of time if they are no longer in use. Local governments establish timeframes for the removal of abandoned systems based on aesthetics, system size and complexity, and location. For example, the Town of Geneva, NY, defines a solar panel system as abandoned if construction has not started within 18 months of site plan approval, or if the completed system has been nonoperational for more than one year.[22]
- Once a local government determines a solar panel system is abandoned and has provided thirty (30) days prior written notice to the owner it can take enforcement actions, including imposing civil penalties/fines, and removing the system and imposing a lien on the property to recover associated costs.

Decommissioning is the process for removing an abandoned solar panel system and remediating the land.

- When describing requirements for decommissioning sites, it is possible to specifically require the removal of infrastructure, disposal of any components, and the stabilization and re-vegetation of the site.

1.1 Decommissioning Plans

Local governments may require having a plan in place to remove solar panel systems at the end of their lifecycle, which is typically 20-40 years. A decommissioning plan outlines required steps to remove the system, dispose of or recycle its components, and restore the land to its original state. Plans may also include an estimated cost schedule and a form of decommissioning security (see Table 1).

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Abandonment - *Examples*

- "Solar energy systems are considered abandoned after 90 days without electrical energy generation and must be removed from the property. Applications for extensions are reviewed by the Planning Board and can only be extended for a period of four months." Town of Hague

- "Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the large-scale ground-mounted solar energy system shall be considered abandoned when it fails to operate for more than one year without the written consent of the Planning Board." Village of Northville

Surety - *Examples*

- "In addition to the Decommissioning Plan, the applicant shall also provide an estimate, prepared by a qualified engineer, setting forth the costs associated with decommissioning the solar farm at issue. In the event the Planning Board grants a Special Use Permit pursuant to this Chapter, it must also establish the amount of such surety to be established by the applicant prior to building permit issuance. The surety may be in the form of escrowed funds, bonds or otherwise, but it is the intention of this provision to ensure that the Town has sufficient funds available to remove the installations and restore landscaping consistent with Section F above, in the event the applicant fails to comply with its decommissioning obligations." Town of Mayfield

- "If the solar commercial farm is not decommissioned after being considered abandoned, the municipality may remove the system and restore the property and impose a lien on the property to cover these costs to the municipality." Town of AuSable

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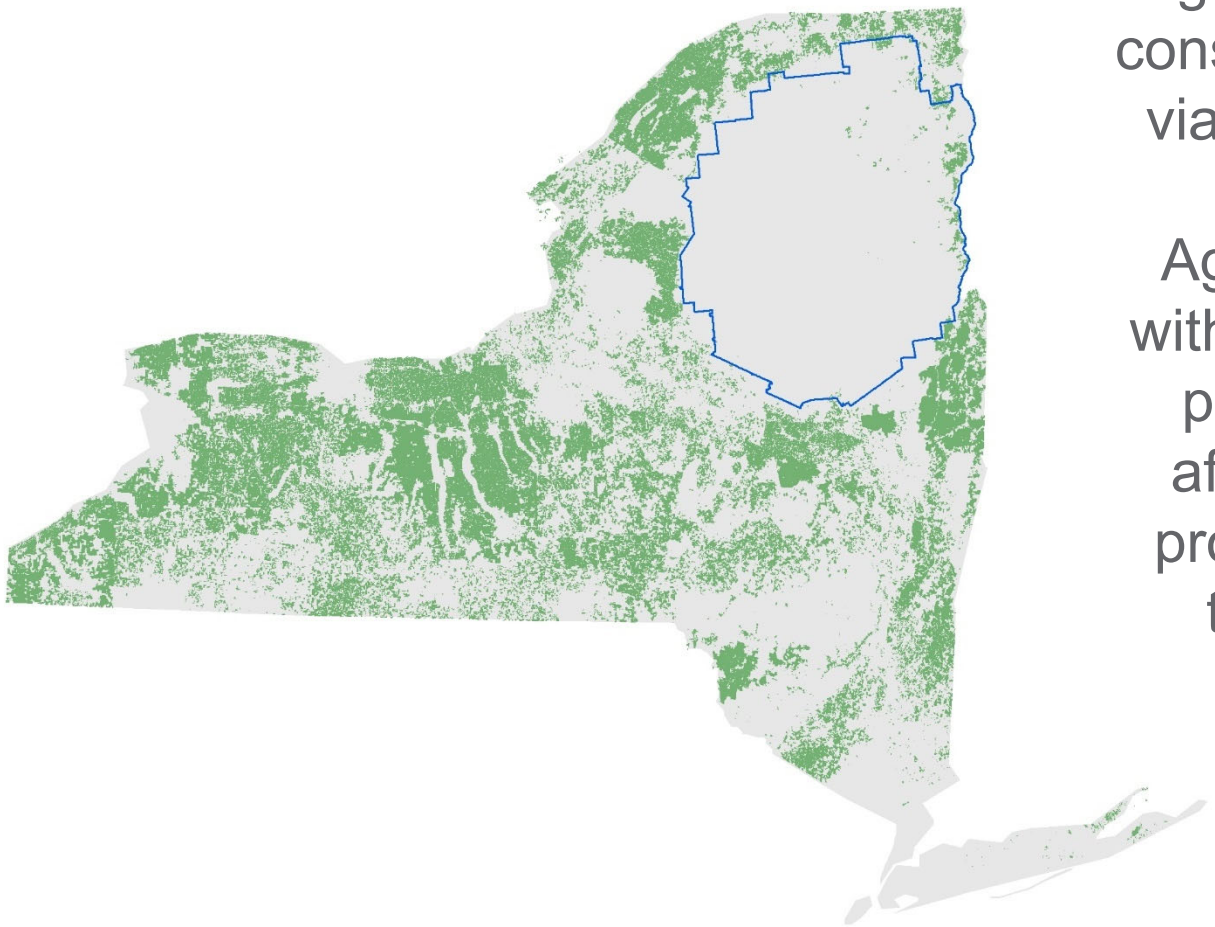
NYS Agricultural Districts



A geographic area which consists predominantly of viable agricultural land.

Agricultural operations within the district are the priority land use and afforded benefits and protections to promote the continuation of farming and the preservation of agricultural land.

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NYS Ag Districts – Agricultural Assessment

- The agricultural assessment program allows eligible farmland located both within and outside agricultural districts to be taxed at its agricultural assessment, rather than at its fair market value.
- The agricultural assessment value establishes an “upper limit” for taxable assessments on eligible farmland.
- Any assessed value which exceeds the equalized agricultural assessment on the land is exempt from real property taxation.
- Any owner of at least 7 acres of land which produces a minimum of $10,000 annually, or any owner of less than 7 acres of land which produces a minimum of $50,000 annually, on average, in the preceding 2 years from the sale of crops, livestock, or livestock products, is eligible to receive an agricultural assessment.

NYSERDA

1.2 Protections for farm-related solar

The Department of Agriculture and Markets considers solar panel systems to be "on-farm" equipment when they are designed, installed, and operated so that the anticipated annual total amounts of electrical energy generated do not exceed the anticipated annual total electrical needs of the farm by more than 110 percent. If a local government classifies solar equipment as structures or buildings, they are deemed on-farm buildings. As on-farm equipment or buildings, the installation of solar panel systems are protected under the Agricultural Districts Law.

To ensure that the electrical output of solar equipment does not exceed the 110-percent threshold, an initial energy assessment may be required to separate farm-related energy consumption from other uses.

Further, if the solar equipment is connected by remote net metering, multiple meters must be combined to determine the electrical needs of on-farm equipment.

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NYSERDA

Solar Installations in Agricultural Districts

Navigating the development of solar projects in accordance with local and New York State agricultural policies.

1.4 Penalties for converting farmland to solar

A conversion penalty is imposed if farmland that is subject to an agricultural assessment is located in an agricultural district and is converted to a nonagricultural use within five years of the last agricultural assessment (or eight years if the farmland is located outside an agricultural district). No conversion penalty is imposed if agricultural land is converted for oil, gas, or wind energy development that does not support agricultural production. Because solar energy is not included in this exemption, the conversion penalty could apply if electrical output of solar equipment substantially exceeds (e.g., is more than 110 percent of) a farm's anticipated electrical needs.

The assessor determines whether a conversion has occurred on the basis of the facts of each case:

- Conversion is defined as "an outward or affirmative act changing the use of agricultural land" to a nonagricultural use, in New York State's Agriculture and Markets Law.
- A conversion penalty involves a payment to capture the tax savings a property owner received while the land was under an agricultural assessment. This is limited to a five-year roll-back as specified in New York State's Agriculture and Markets Law.
- Conversion payments are equal to five times the taxes saved in the most recent year that the land received an agricultural assessment, plus interest.

When only a portion of a parcel is converted, the assessor apportions the real property tax assessment and the agricultural assessment, determines the tax savings attributable to the converted portion, and computes the conversion payment based on that portion. If the remaining land within a parcel is used for agricultural purposes and the eligibility criteria are met, that land may still receive an agricultural assessment.

Payments for the conversion of agricultural land to nonagricultural use are added to the taxes of the converted land. Properties may be subject to a tax sale if conversion penalty payments are not made. These payments generally become the landowner's responsibility at the time of conversion. Failure to notify may result in a penalty of two times the payments owed, to a maximum of $1,000.

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Payment in Lieu of Taxes (PILOT) Agreements

- Real Property Tax Law § 487 provides a 15-year real property tax exemption for properties located in New York State with renewable energy systems, including solar electric systems. Communities may opt-out by passing a local law.

- Communities that opt-out may still negotiate PILOTs with developers.

- Communities that do not opt-out can require a solar developer to pay an annual fee or “payment-in-lieu of taxes” as a replacement for the taxes it would have otherwise collected.

Payment in Lieu of Taxes (PILOT) Agreements

- Only applies to the value that a solar electric system adds to the overall value of the property; it does not mean that landowners with an installed renewable energy system are exempt from all property tax.

- PILOTs are often developed on a $/MW figure with standard escalators (typically about 2% to accommodate inflation).

Host Community Agreements

- Host Community Agreements (HCA) may also be negotiated by the towns.

- An HCA is a separate agreement between a developer and the town, which complements the PILOT agreement. This agreement documents additional benefits for the town that is hosting the project beyond what they receive through the broader PILOT agreement.

- No PILOTs or HCAs have yet been approved in the Park.

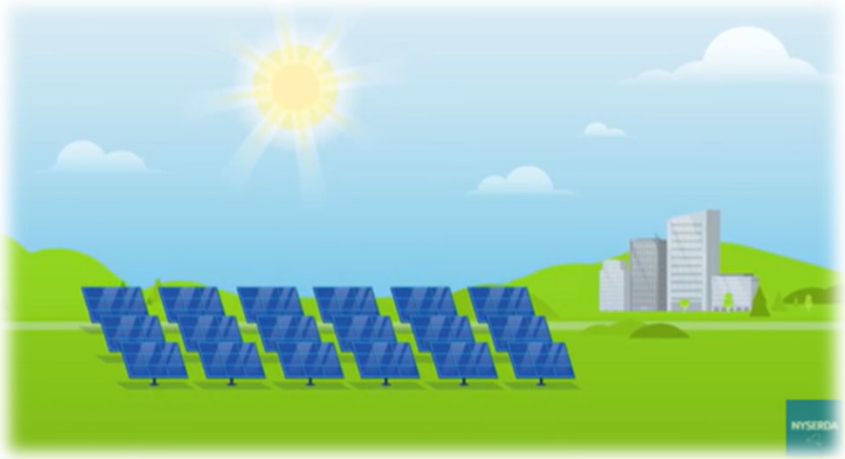
Community Solar

Community Solar

- Community Solar is a group of solar panels with access to the local electricity grid (the project).
- Energy from the project feeds into the local power grid.
- Businesses, homeowners, governments and institutions can subscribe to buy energy from the project.
- Subscribers earn credits on their electric bill every month from their portion of the generated energy.
- Subscribers continue to receive bills from their existing providers.

Community Solar

According to NYSERDA: “A New York State approved community solar project should save you money on your electricity costs - whether you purchase a share of the solar panels, or you subscribe to the electricity produced from the solar farm.”



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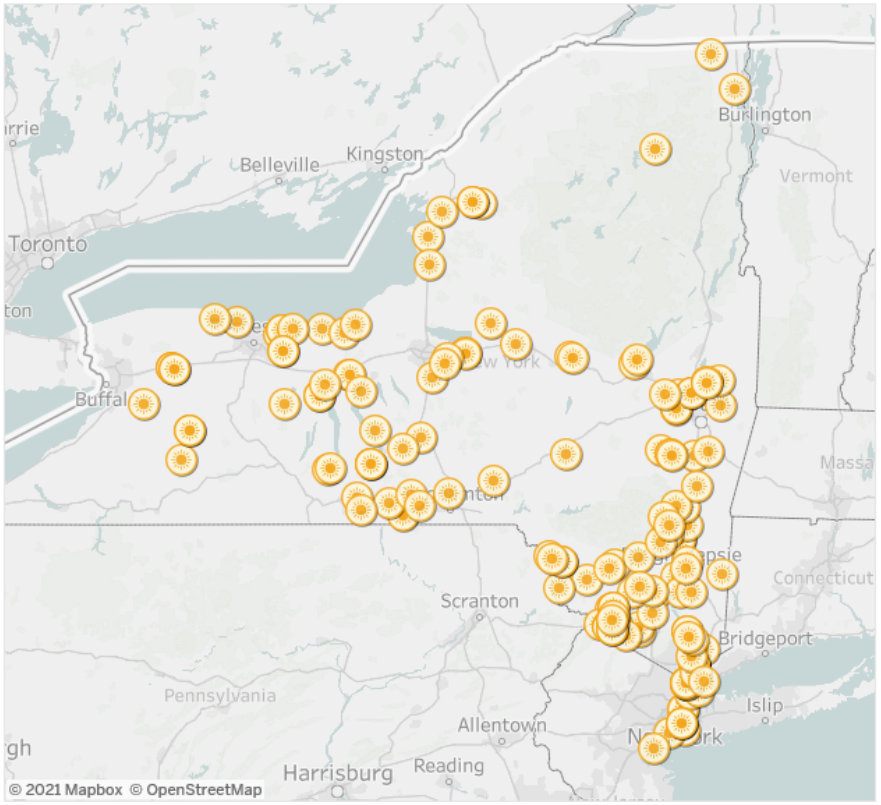
Find a Community Solar Project

Community solar is available to New Yorkers across the State. Use our tool below to find community solar providers offering subscriptions.

1. **Select your utility provider**. The results will show the providers offering community solar in your utility's service territory. You can peruse the community solar map to see which projects are closest to you. If you are PSEG-Long Island customer, you can find a list of approved solar providers on PSEG-Long Islands' website.
2. **Explore the list**. Providers are listed alphabetically with a link to their website where you can learn about availability, subscription plans and terms, and expected savings.
3. **Do your research**. To find the right subscription and know the right questions to ask, see what you need to know Before You Get Started.
4. **Talk to community solar providers**. You can contact as many providers as you want to determine which subscription is right for you.

Questions or issues accessing this data should be directed to communitysolar@nyserda.ny.gov.

Select your utility company (All)



https://www.nyserda.ny.gov/All-Programs/Programs/NY-Sun/Solar-for-Your-Home/Community-Solar/Community-Solar-Map

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Solar - Other Considerations & Benefits

Solar Developer Considerations

- Commercial Solar Site Considerations:
  - Proximity to three-phase power and appropriate interconnection points
  - Clear southern exposures
  - Expensive energy markets to sell to
  - Anchor purchasers for the power

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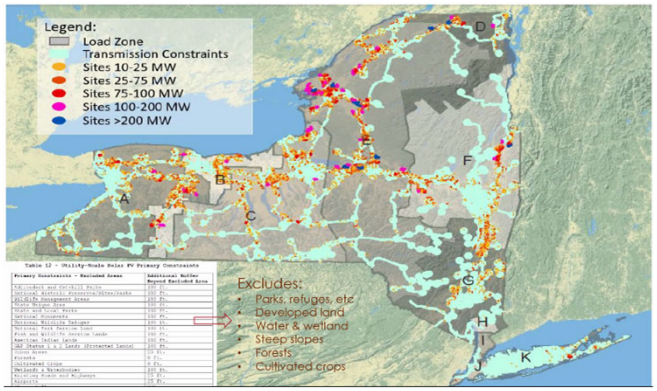
Solar Developer Considerations

- Interest Alignment with Regulatory Agencies:
  - Seeking quick permitting with minimal costs
    - ✓ Avoid wetlands
    - ✓ Avoid critical habitat
    - ✓ Avoid significant grading
    - ✓ Minimize stormwater infrastructure through limited impermeable surfaces



Source: NYSERDA White Paper - Clean Energy Standard Procurements to Implement New York's Climate Leadership and Community Protection Act

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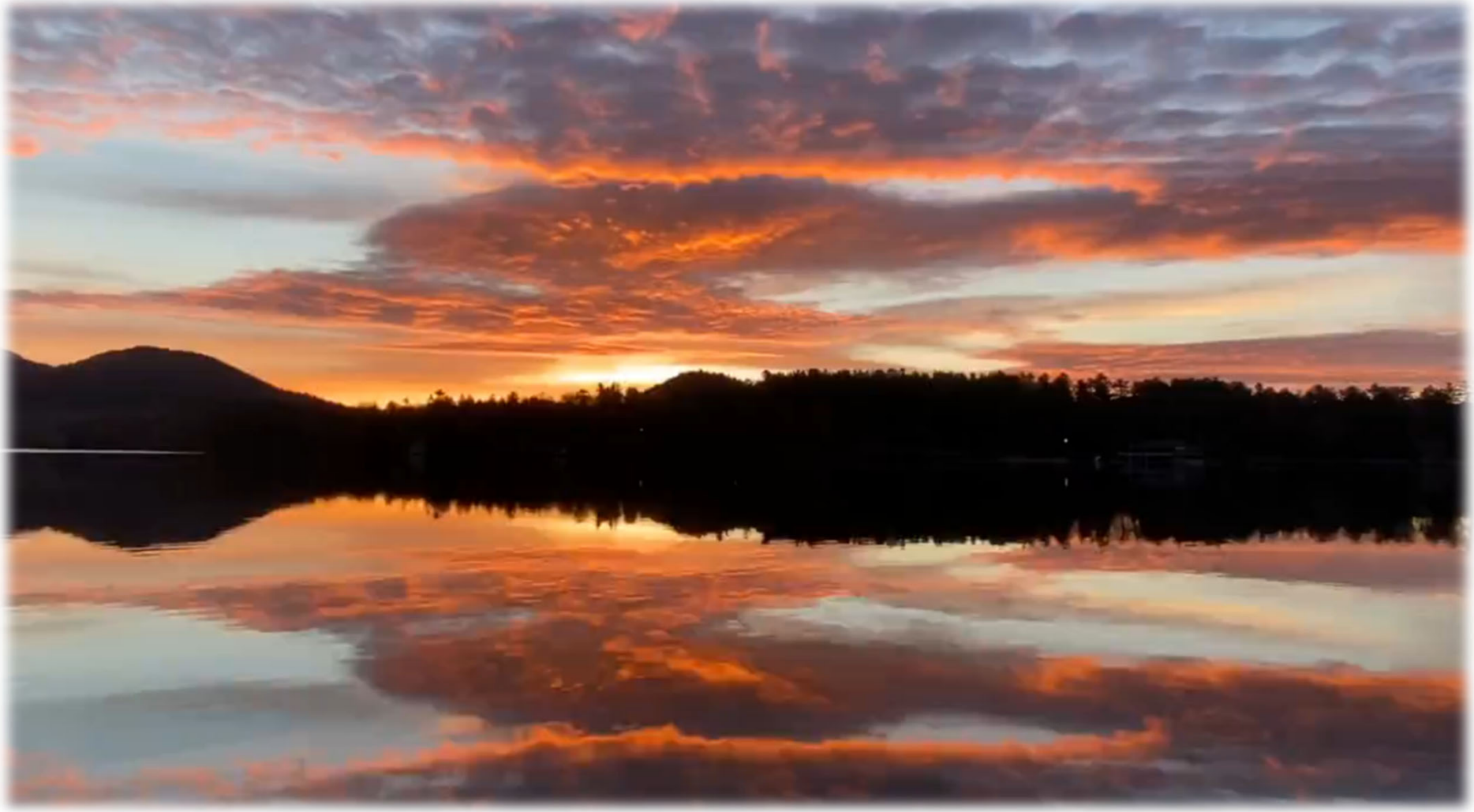
Solar Benefits



Solar - Climate Act

- In 2019, the Governor signed the Climate Leadership and Community Protection Act, commonly referred to simply as the “Climate Act.”

- The Climate Act set nation-leading targets in greenhouse gas emissions (GHG) aiming toward 70% renewable energy production by 2030, 100% carbon-free electricity generation by 2040, and an overall 85% reduction in GHG emissions below 1990 levels by 2050.

- The Act specifically calls for over 6,000 MW of solar electricity generation in New York by 2025.

Solar Benefits

- According to the Solar Energy Industries Association, each MW of solar generation capacity is enough to power between 150 to 210 homes.
- A 5 MW solar project has the capacity to provide energy to between 750 and 1,050 homes.
  - In 49 (72%) of the municipalities wholly located in the Adirondack Park, a 5 MW solar project would have the capacity to power 100% or more of that town's residential energy needs*.
- All the residents of Hamilton County could receive power from one 11 MW solar project*.

* Estimates based on an average household size of 2.8 people

Solar Benefits

- 44% of the State's existing renewable energy generation capacity is in the North Country (Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis and St. Lawrence Counties).
- Nearly 2,000 jobs in the North Country are supported by renewable energy.
- In New York State, 770 solar companies employ more than 9,000 people alone.
- Average wage of a solar industry job is $21/hour (about $42,000 annually) while 42% of North Country workers are in an occupation with a median salary below $30,000 annually.

Solar Benefits

- Community Solar programs typically save subscribers about 10% on their electricity bills, helping reduce the cost of living for residents and operating costs for businesses and institutions.

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