

Clean Energy Siting in New York

Jennifer Manierre

Program Manager, NYSERDA
2023 Hudson River Symposium
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NYSERDA

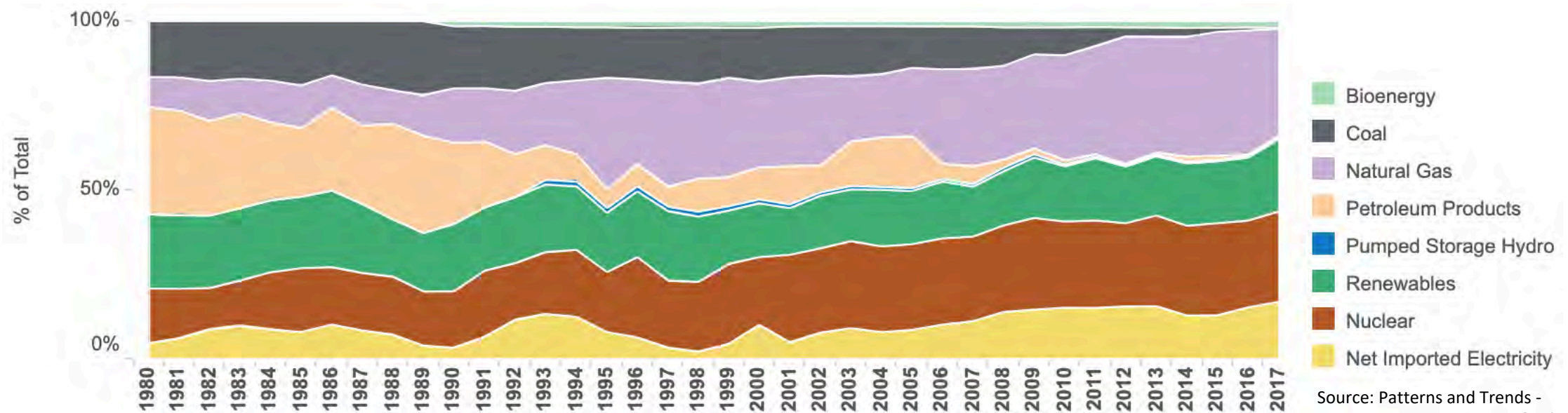
The Climate Leadership and Community Protection Act (Climate Act)

Electricity Sector Goals:

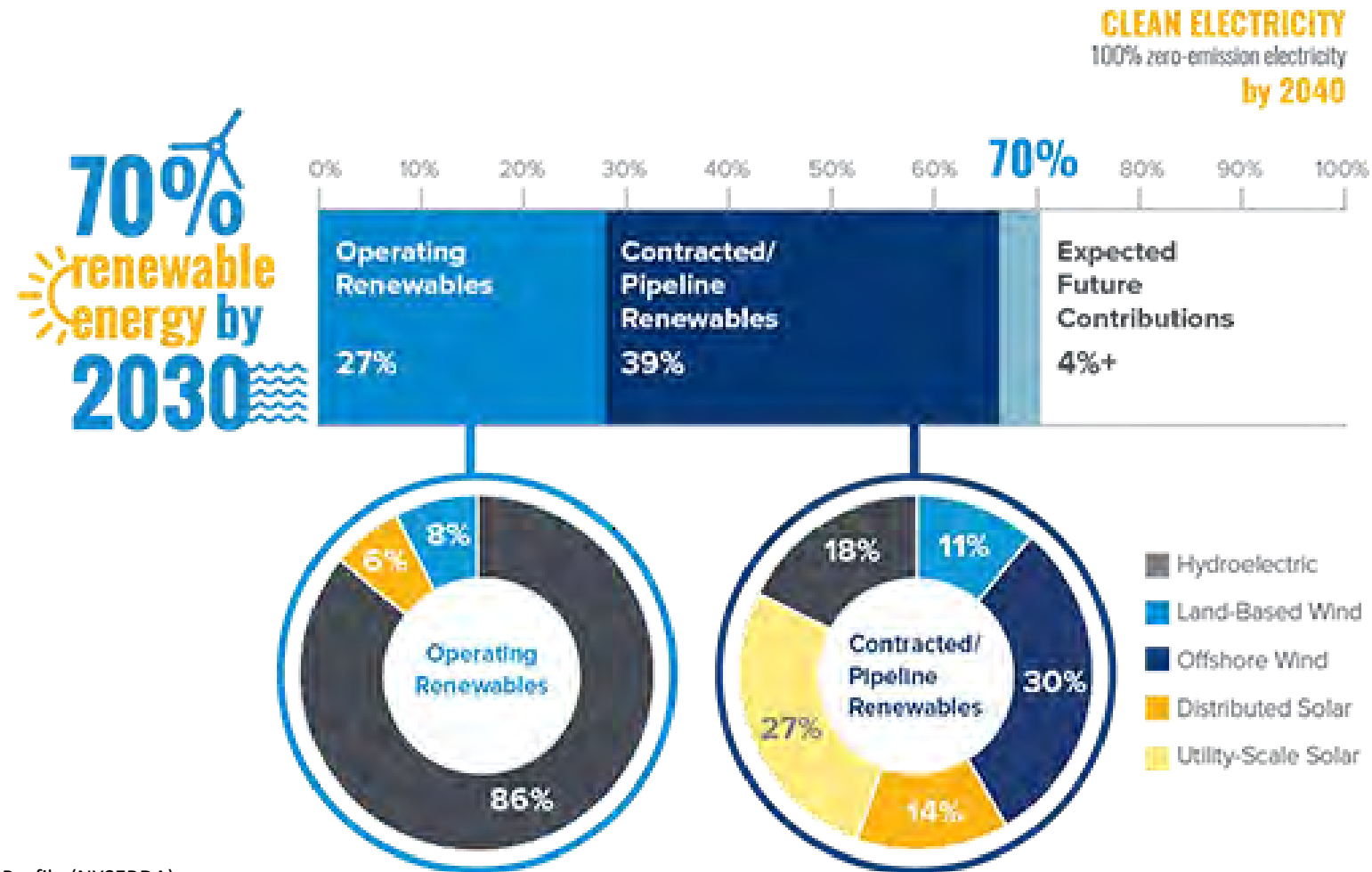
- 70% Renewable Electricity by 2030
- 100% Emissions-Free Grid by 2040

Technology-Specific Goals:

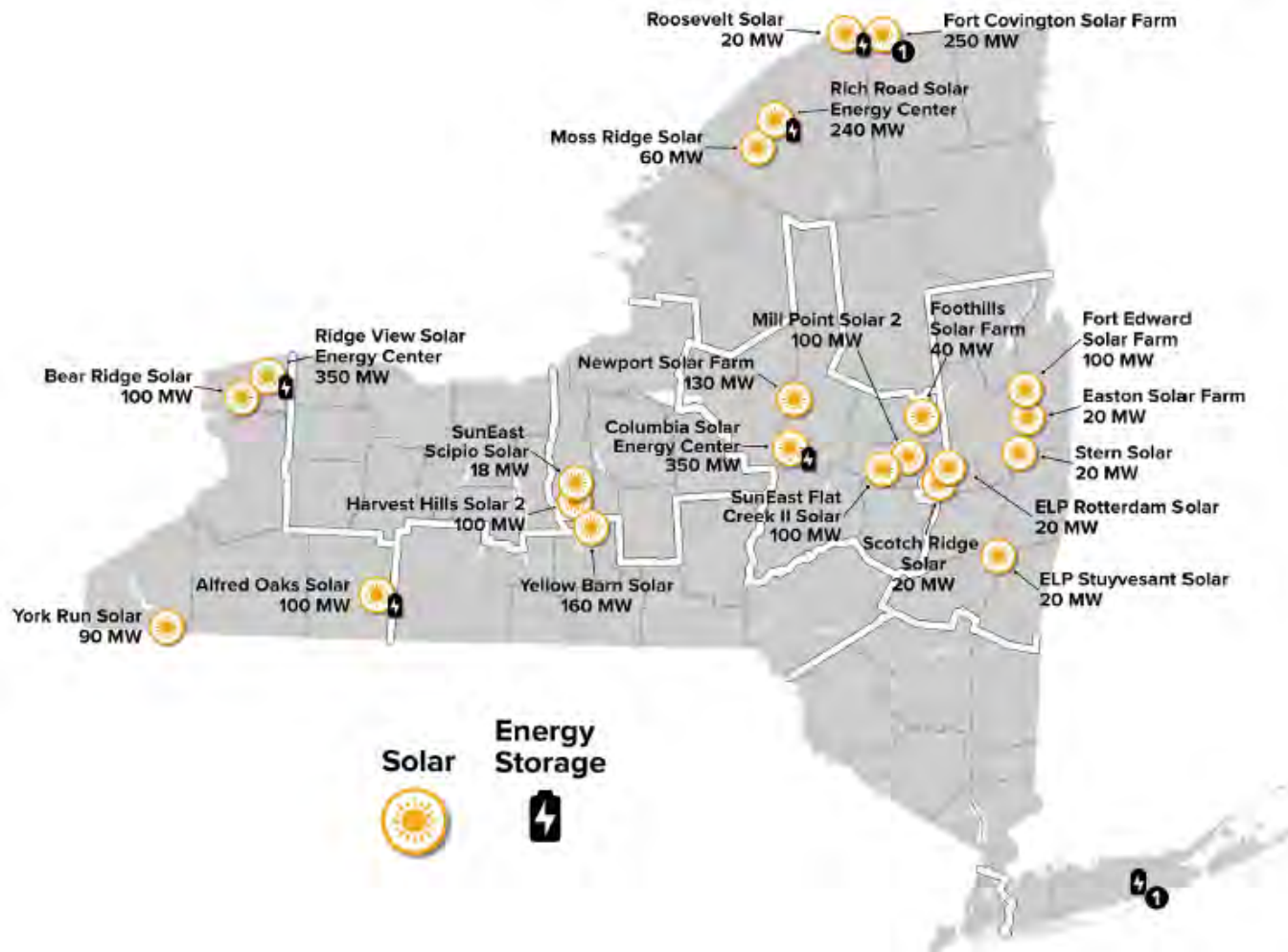
- 10,000 MW Distributed Solar by 2030
- 9,000 MW Offshore Wind by 2035
- 1,500 MW Energy Storage by 2025;
3,000 MW by 2030



The Climate Leadership and Community Protection Act (Climate Act)



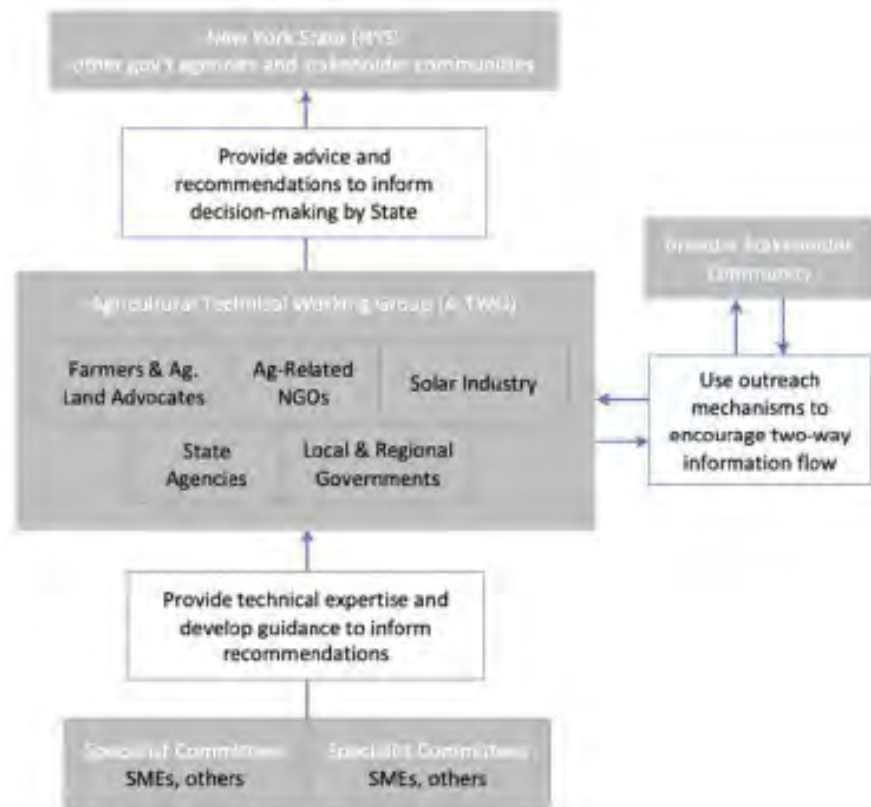
Large-Scale Renewables: 2021 Awards



- Solicitations issued annually since 2017
- Large Scale Renewables 2021 solicitation announced the latest awards for a total of **22** projects:
 - Nearly \$3 billion direct investment projected
 - 3,000+ jobs created
 - 492,000 “cars off the road”

Agricultural Mitigation Policy

Agricultural Technical Working Group (A-TWG)



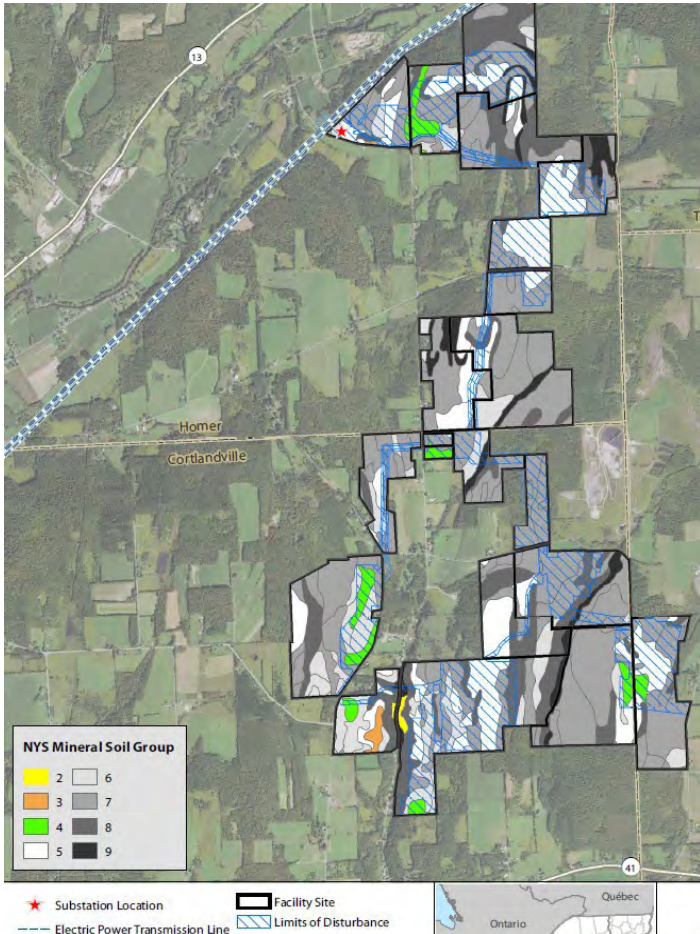
Farmland Protection Working Group (FPWG)



Smart Solar Siting Scorecard

Scorecard Section	Number of Points Available		Total
	Avoidance	Minimization	
Agricultural Protection	50	45	95
Environmental Protection - <i>Forested Lands</i>	30/0/10	5/10/10	35
Community Benefits & Collaboration	25		25
Extra Credit: Innovation	5		5
TOTAL POINTS AVAILABLE			160

Ag Mitigation Payments



- Solar developers are accounting for where high-quality soils are located on their proposed sites and using this information to inform site design when feasible.
- The Agricultural Mitigation Fund mechanism creates a financial incentive to avoid building on MSG 1-4
- Other factors such as other land cover types and active agricultural land may still warrant development on MSG 1-4 when alternatives are not feasible.

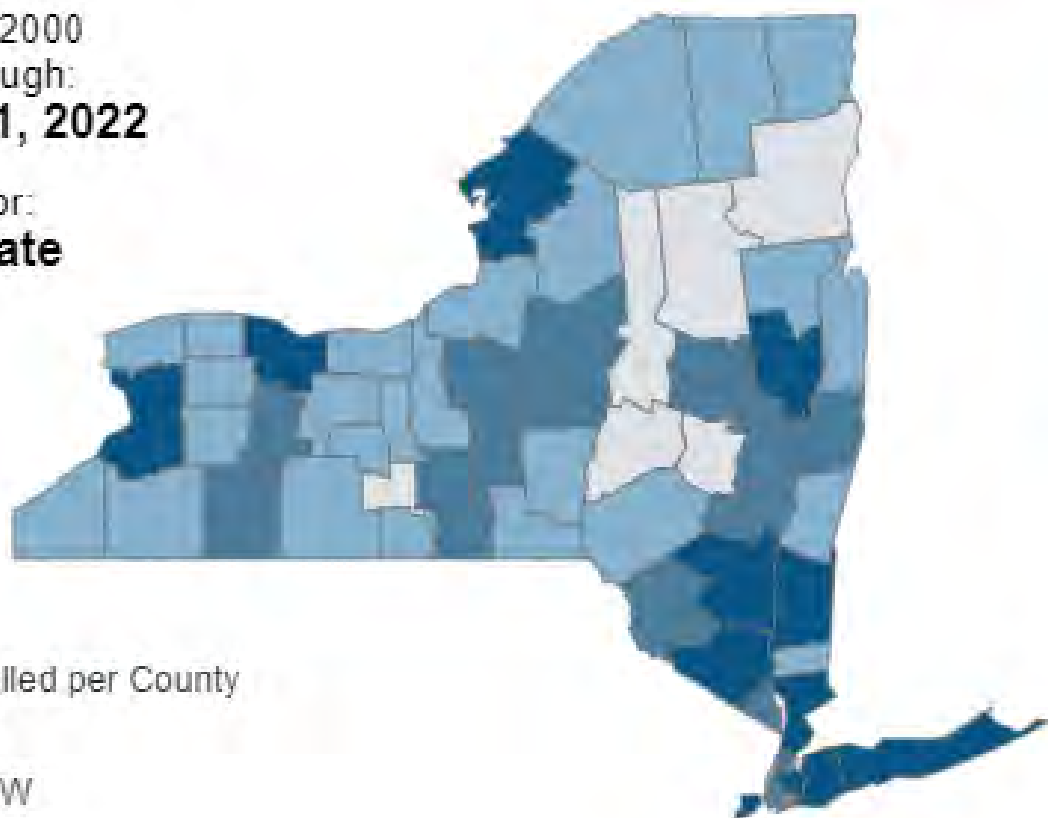
RESRFP22-1 Attachment G - Agricultural Mitigation Estimate Calculator

Project	MWac	Total Parcel(s) Area (Acres)	Facility Area (# of Acres) on Mineral Soil Group:					Total Facility Area (Acres)
			MSG 1	MSG 2	MSG 3	MSG 4	MSG 5:10/ Other	
Example Project 1	180	2,400	10	215	450	100	425	1,200
Example Project 2	20	400	-	40	50	5	35	130

NY-Sun/Distributed Solar

Data beginning 2000
and current through:
December 31, 2022

Showing Data for:
New York State



Megawatts installed per County

- 0 to 10 MW
- >10 to 50 MW
- >50 to 100 MW
- >100 MW

Total Capacity (MW DC)
4,460 MW

Number of Projects
188,739

NY-Sun Incentives for Smart Siting

- Ag Mitigation Payments (30+ acres MSG 1-4)
- Beneficial Siting Adders
 - Existing: Landfills and Brownfields (\$0 .15/W)
 - Proposed: Floating Photovoltaic “FPV” (\$0.15/W)
 - Soon? Agrivoltaics (\$/W??)
- Funding and Research:
 - 2023 RGGI Operating Plan Amendment: \$5 Million



Primary Land Use/Local Considerations

All technologies:

- Appropriate location/zoning
- Environmental impacts
- Bulk/area standards
- Decommissioning
- Taxation

Solar:

- Visual/aesthetic impacts
- Agricultural land impacts

Wind:

- Visual/aesthetic impacts
- Noise
- Shadow flicker

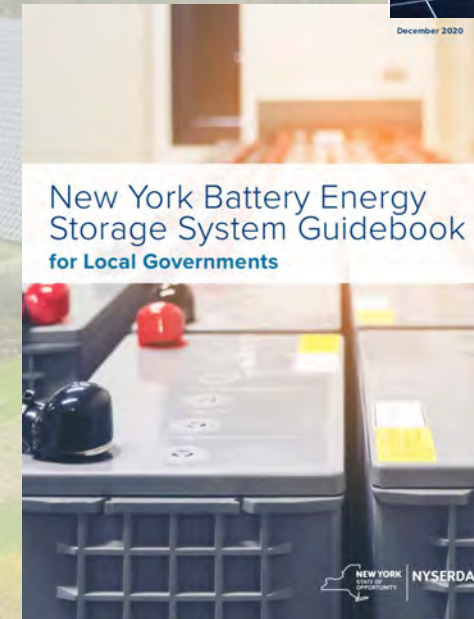
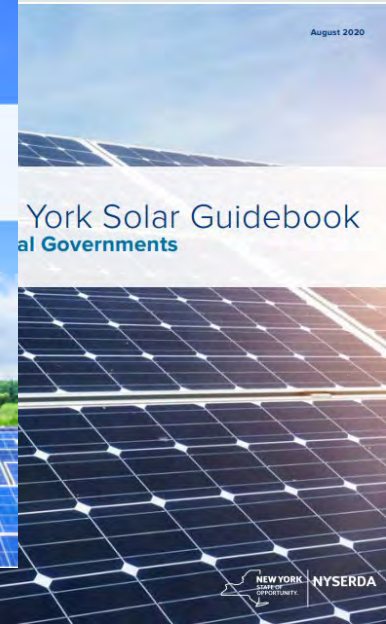
Energy Storage:

- Fire safety
- Incident management training

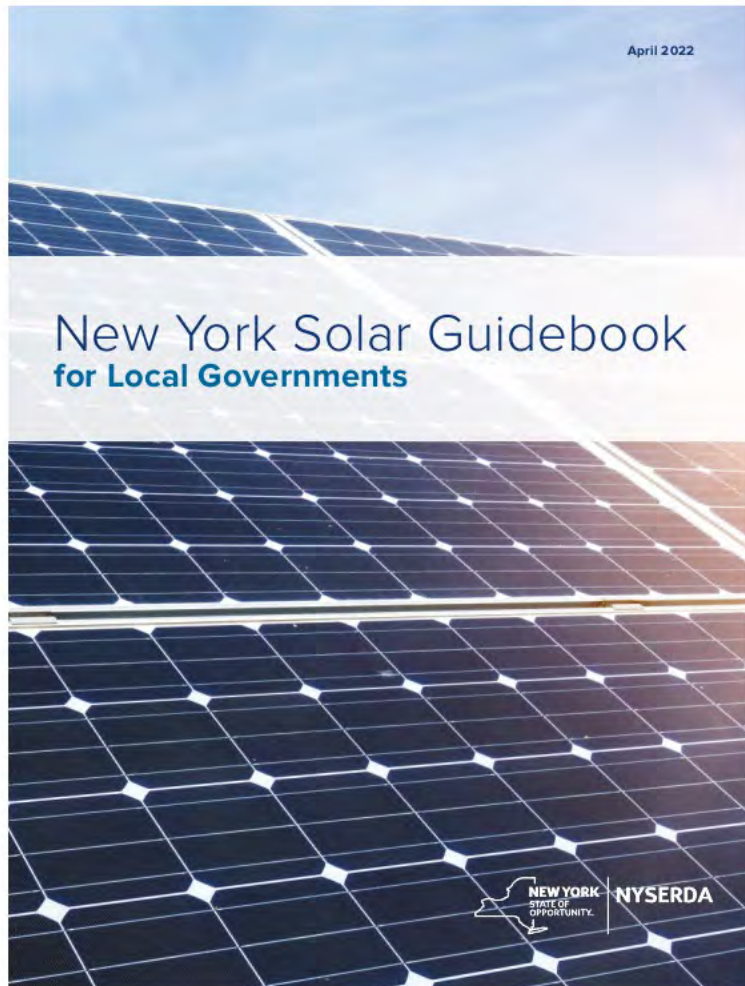


Local Government Resources

Clean Energy Siting Team:
www.nyserda.ny.gov/Siting



Solar Guidebook for Local Governments



Chapter 1 - Solar PV Permitting and Inspecting in NYS

Chapter 2 - Roof Top Access and Ventilation Requirements

Chapter 3 - State Environmental Quality Review (SEQR)

Chapter 4 - NYS's Real Property Tax Law § 487

Chapter 5 - Solar Payment-In-Lieu-of-Taxes Toolkit

Chapter 6 - Using Special Use Permits and Site Plan Regulations

Chapter 7 - Solar Installations in Agricultural Districts

Chapter 8 - Landowner Considerations for Solar Land Leases

Chapter 9 - Decommissioning Solar Panel Systems

Chapter 10 - Model Solar Energy Local Law

Chapter 11 - Municipal Solar Procurement Toolkit

Update!

April 2022

New York
for Local Governments

Model Solar Energy Local Law

For local governments to utilize when drafting local laws
and regulations for solar development.



NEW
YORK
STATE

NYSERDA

Solar Guidebook for Local Governments
NYSERDA 17 Columbia Circle Albany, NY 12203

Summary of Changes

- Adding content to the Model Law chapter to instruct municipalities on how to approach zoning for solar, and to introduce alternative zoning approaches (overlays/floating zones, incentive zoning, etc.).
- Adding a Tier 4 (distinguish between distributed solar & large-scale solar).
- Reformatting/reorganizing to distinguish between special use permit standards vs. site plan approval requirements.
- Alignment with standards/language in place by other State Agencies.
- More robust decommissioning plan template.
- Additional standards for solar impacting agriculture.

Section 8.C: Tier 3 Special Use Permit Standards

13. Environmental Resources –

- Minimize tree removal for existing trees larger than 6 inches in diameter
- Native vegetation for game birds, songbirds, and pollinators
 - farm-related activities may be excluded by reviewing board
- Limit or refrain from pesticide and herbicide use for long term operation and maintenance

14. Agricultural Resources –

- System components shall occupy no more than [50%] of the Mineral Soil Groups (MSG) 1-4 area
 - May exceed the [50%] threshold if it incorporates onsite Farm Operation
 - Review Board may exempt portions if MSG 1-4 land is not viable for agricultural production
- Decommissioned according to NYS Department of Agriculture and Markets guidelines

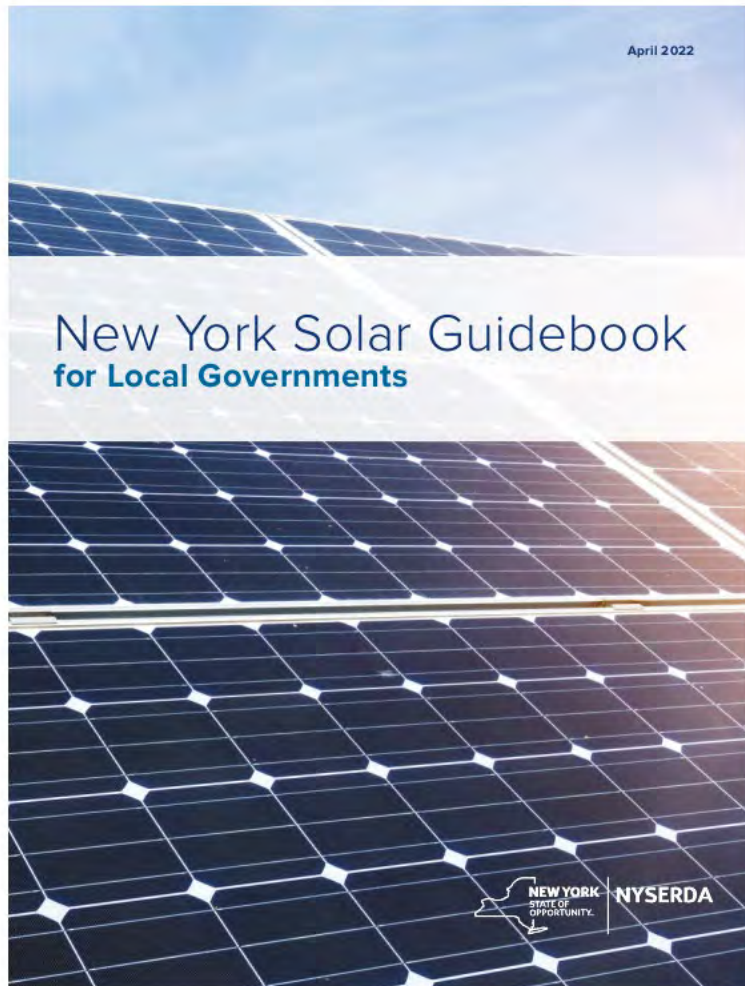
Section 9: Tier 4 Special Use Permit Standards

Special Use Permit Requirement Adjustment:

Agricultural Resources: for Facility Areas including Active Agricultural Lands

- Tier 4 System components, equipment, and associated impervious surfaces shall not occupy more than [50%] of the Active Agricultural Lands within the Facility Area
- Exceedance of [50%] threshold may be allowed based on the Reviewing Board's determination that the land is being used for a Farm Operation
- Require adherence to NYSAGM Guidelines
- No allowance for "not viable" MSG 1-4 land, unlike in Tier 3

Solar Guidebook for Local Governments



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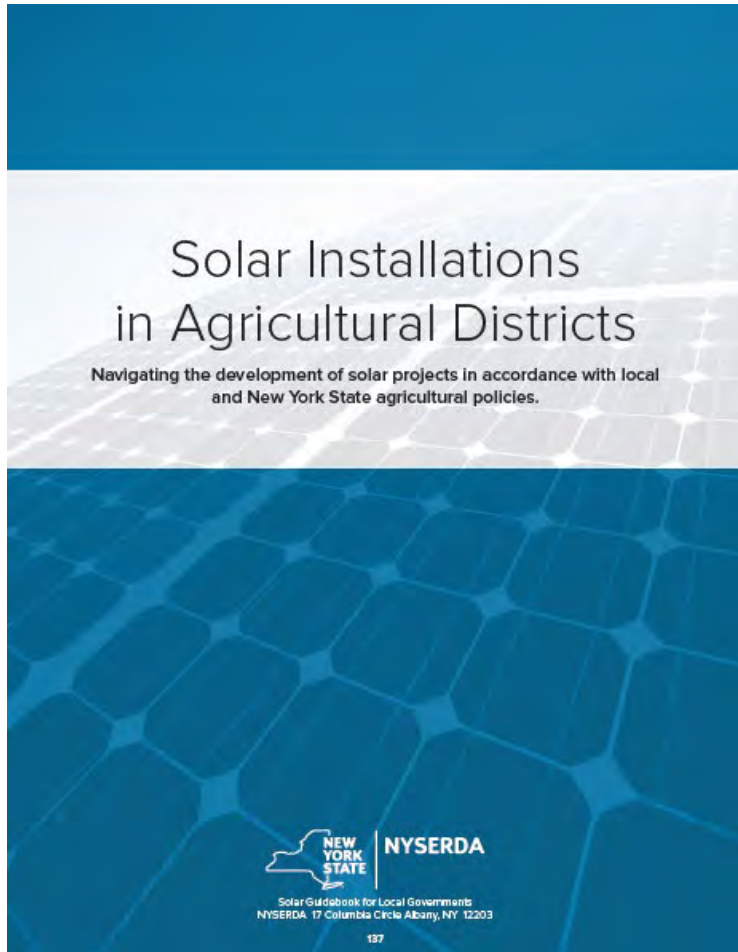
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Solar Installations on Agricultural Lands



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Clean Energy Siting Team

Access the Clean Energy Guidebooks and other resources!

Clean Energy Siting Resources

[Comprehensive Plan Guide](#)

[Energy Storage Guidebook](#)

[Energy Storage Trainings for Local Governments](#)

[EV Charging Station Permitting Resources](#)

[Siting for Large-Scale Renewables](#)

[Solar Guidebook](#)

[Technical Assistance and Workshops](#)

[Wind Energy Guidebook](#)

[Clean Energy Siting Email List](#)

Clean Energy Siting Resources


NYSERDA offers several resources to empower local governments with knowledge, training, and best practices to manage responsible clean energy development in their communities. These resources include step-by-step instructions and tools to guide the implementation of clean energy, including permitting processes, property taxes, siting, zoning, and more. Through NYSERDA's [Build-Ready Program](#), local governments can partner with NYSERDA to turn underutilized land into a renewable energy project.

- [Comprehensive Plan Guide](#): Step-by-step instructions for local governments looking to incorporate clean energy goals and objectives into their communities' comprehensive plans.
- [Energy Storage Guidebook](#): Information, tools, and step-by-step instructions to support local governments managing battery energy storage system development in their communities.
- [Energy Storage Trainings](#): Prerecorded webinars and upcoming sessions related to responsible energy storage system development for local government officials, town and village members, first responders, and code enforcement officers.
- [EV Charging Station Permitting Resources](#): Materials to help municipal and planning board members learn the basics of charging stations and to navigate the process for permitting and promoting EV charging station installations.
- [Siting for Large-Scale Renewables](#): Information on State-level review processes for renewable generating facilities totaling 25 megawatts (MW) or greater.
- [Solar Guidebook](#): Information, tools, and step-by-step instructions for local governments managing solar energy development in their communities.
- [Technical Assistance and Workshops](#): List of free technical assistance on clean energy zoning and permitting available to local governments, including workshops for Continuing Education Credits.
- [Wind Energy Guidebook](#): Information to support local governments managing wind energy development and project siting in their communities.

If you have a question on clean energy siting in your community, or need help with one of our resources, email cleanenergyhelp@nyserda.ny.gov.

Stay up-to-date with the latest about Clean Energy Siting by [joining our email list](#) for local government officials.

Ask the team a question by emailing cleanenergyhelp@nyserda.ny.gov

A row of white electrical enclosures, likely for solar inverters, is shown on a gravel pad. The enclosures are arranged in a line, and the background is a clear blue sky. The text is overlaid on the middle of the image.

To access resources, ask questions, or
request technical assistance, please reach out to
cleanenergyhelp@nyserderda.ny.gov



NYSERDA