

NY Solar Industry Briefing – Central Hudson Solar Summit

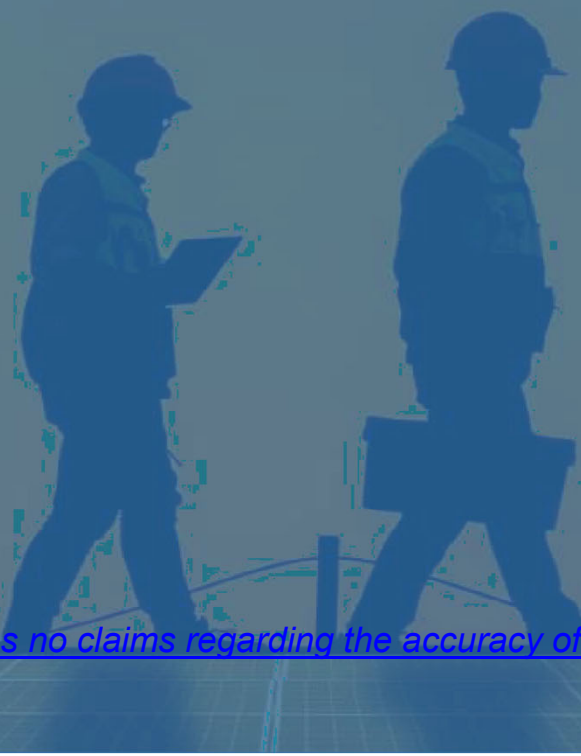
Noah Ginsburg | Executive Director | New York Solar Energy Industries Association

March 6, 2025

NYSEIA
New York Solar Energy Industries Association

Agenda

New York's Distributed Solar + Storage Industry Market Statistics and Trends
NYSEIA 2025 Policy Priorities
Q&A



New York Solar Energy Industries Association
www.nyseia.org
info@nyseia.org

Disclaimer: this presentation is for educational purposes only. NYSEIA makes no claims regarding the accuracy of data or information provided herein.

About NYSEIA


New York's Distributed
Solar + Storage Industry

About New York's Solar + Storage Industry

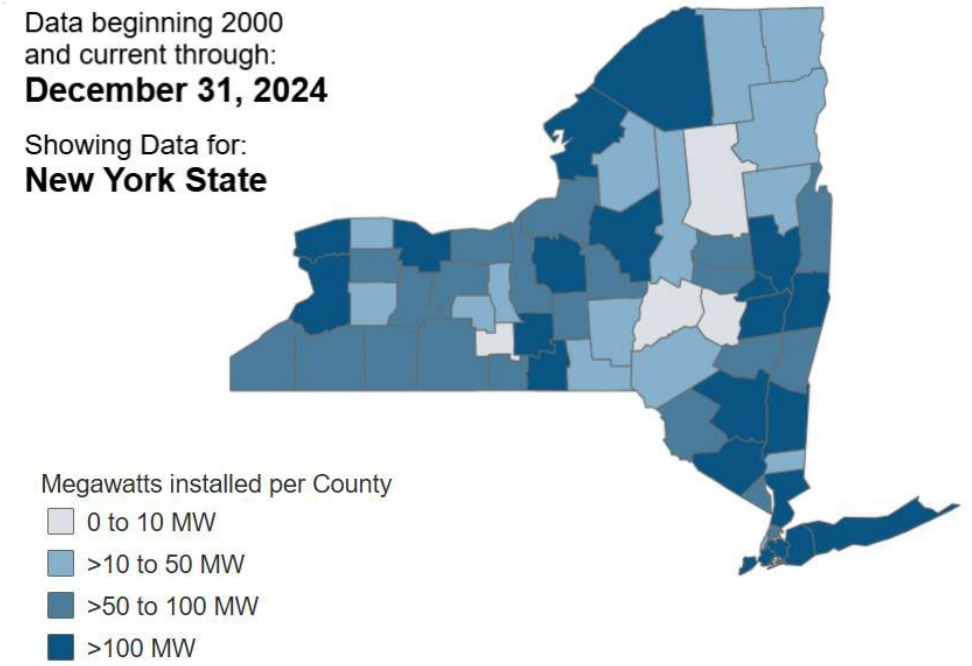
New York's rooftop and community ("distributed") solar industry is the State's **most successful clean energy sector**

The solar industry currently employs **15,490 workers** across hundreds of companies in the state (NYSERDA)

New York's distributed solar program has attracted **$10 billion** in private-sector investment (NYSERDA)

New York has **242,056** distributed solar projects with a total capacity over **6.5 GW**

Solar companies are increasingly incorporating **energy storage** to provide enhanced grid services, reliability, flexibility and resiliency



Graphic: NYSERDA

NY Distributed Solar + Storage Policy Framework

New York's distributed solar market has three main segments:

1. Rooftop solar for homes and businesses
2. Community solar
3. Community-scale energy storage ("retail" storage)

New York has a robust policy framework to support distributed solar + storage deployment.

- Net metering for onsite solar*;
- Value of Distributed Energy Resources (VDER) tariff for exporting solar + storage projects;
- Standardized interconnection process and a cost-sharing framework;
- Community solar and remote crediting framework;
- NYSERDA's NY-Sun program, which provides capacity-based incentives for diverse project types;
- Residential and Retail Energy Storage Incentives (launching this spring!)

**With a Customer Benefit Contribution (CBC) charge*

NYSEIA

2024 Was a Record-Breaking Year for Distributed Solar in NY

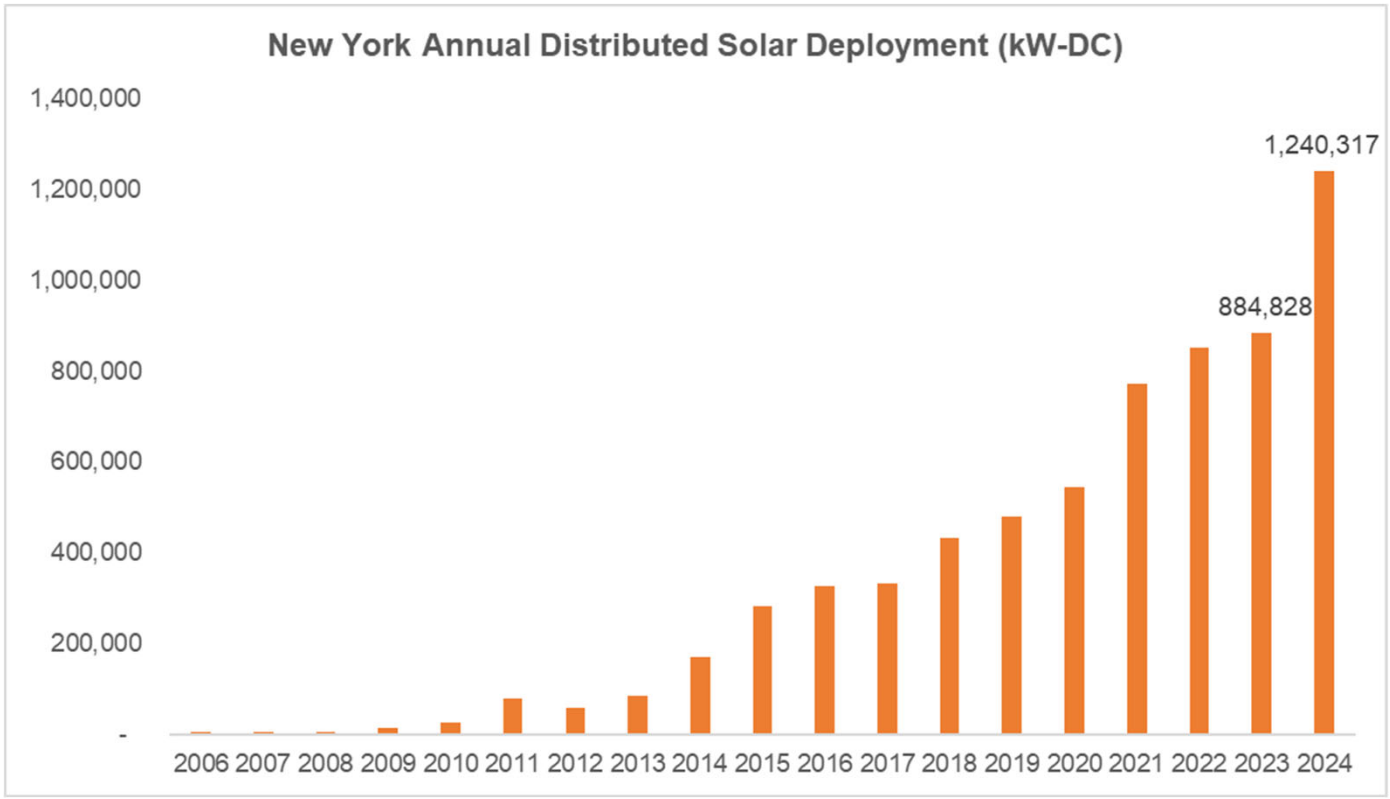
Photo: Samantha Simmons

In October 2024, New York surpassed its 6 Gigawatt distributed solar goal more than a year ahead of schedule.

New York installed 1.24 gigawatts of distributed solar in 2024 – 40% more than any year prior!

NY Distributed Solar Deployment is Up

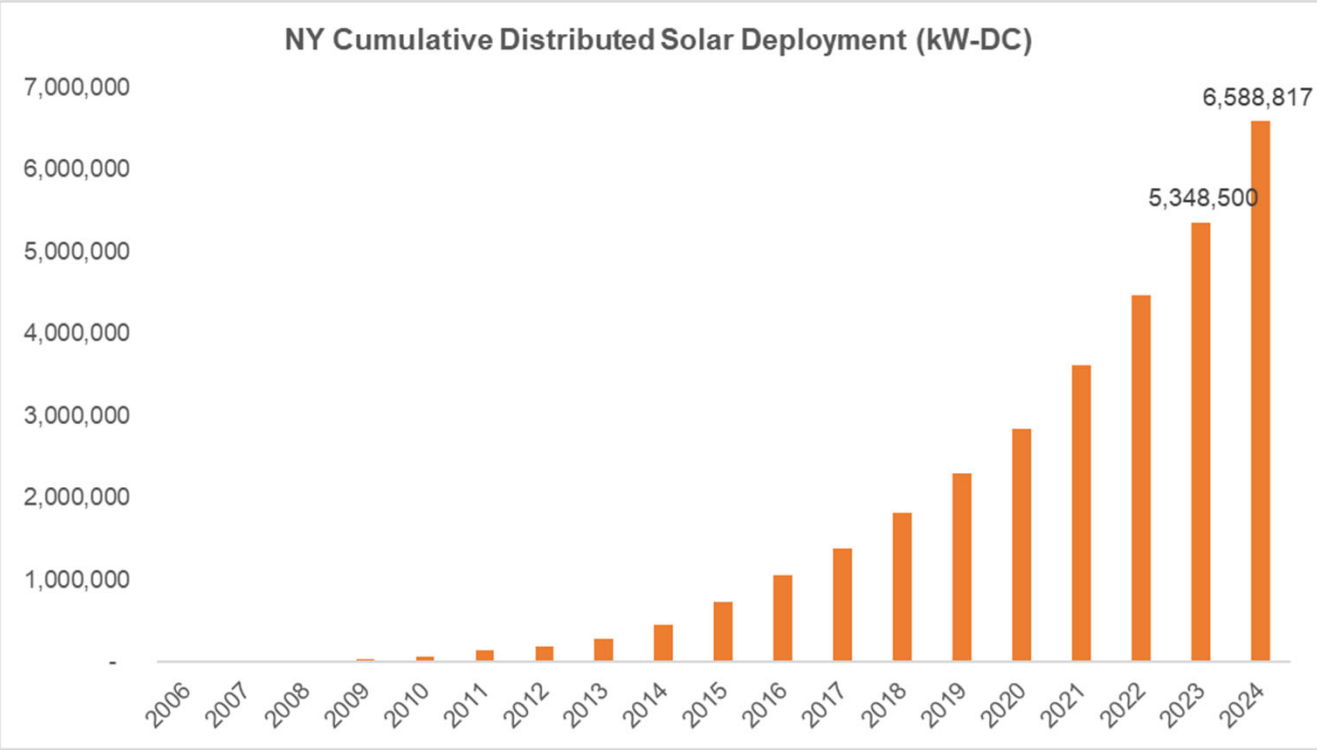
New York deployed more rooftop and community solar in 2024 than any prior year:



Data source: New York State Energy Research and Development Authority (NYSERDA). February 2025.

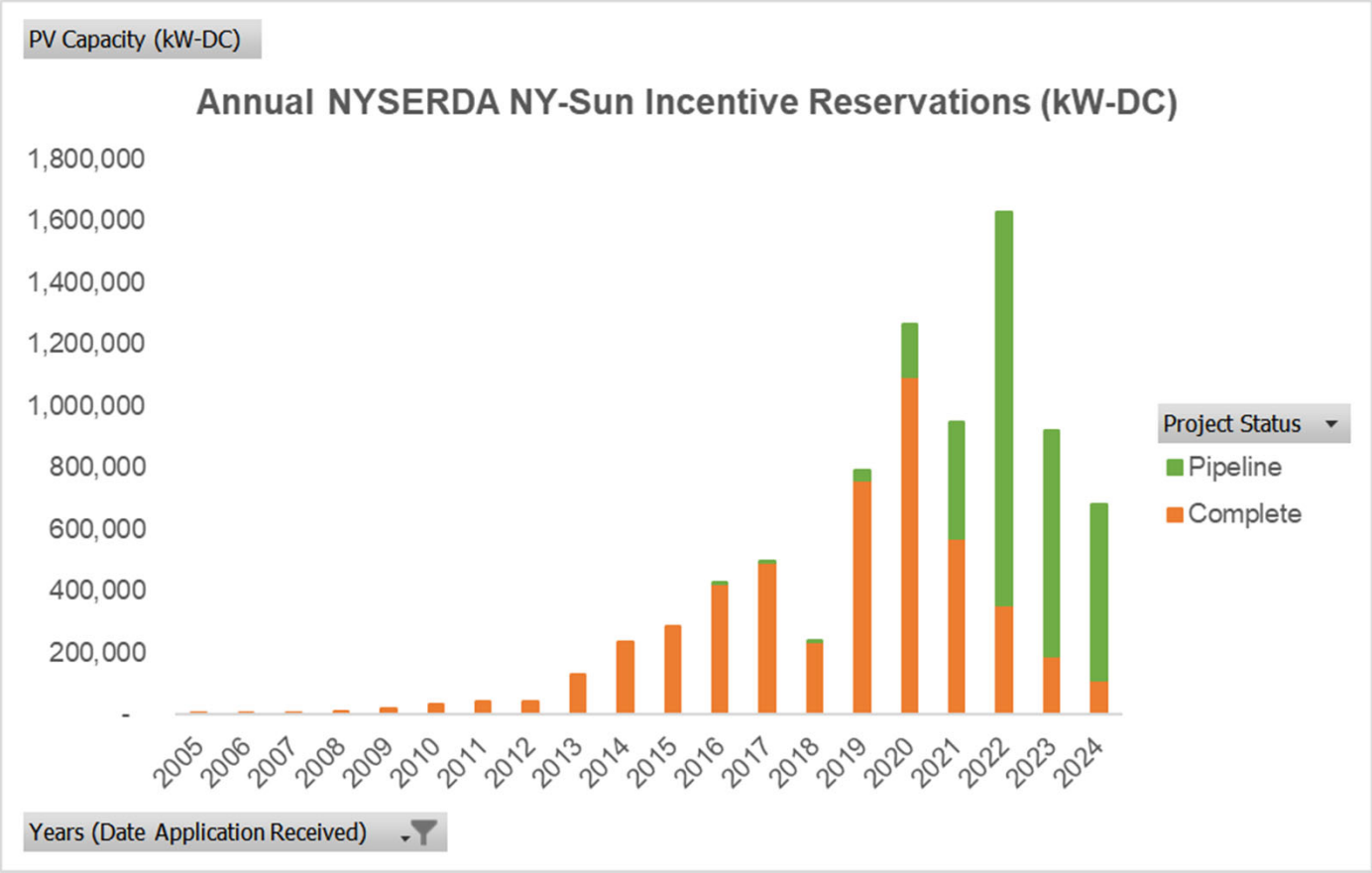
New York Achieved its Distributed Goal Ahead of Schedule

New York's cumulative installed distributed solar capacity surpassed six gigawatts ahead of schedule, and we have a mature pipeline of projects that positions us to reach the 10 gigawatt by 2030 goal ahead of schedule and under budget:



Data source: NYSERDA. February 2025.

New Distributed Solar Development is Declining



Data source: NYSERDA. February 2025.

In 2024, new NYSERDA solar incentive reservations dropped 25% year-over-year, to the lowest level since 2018.

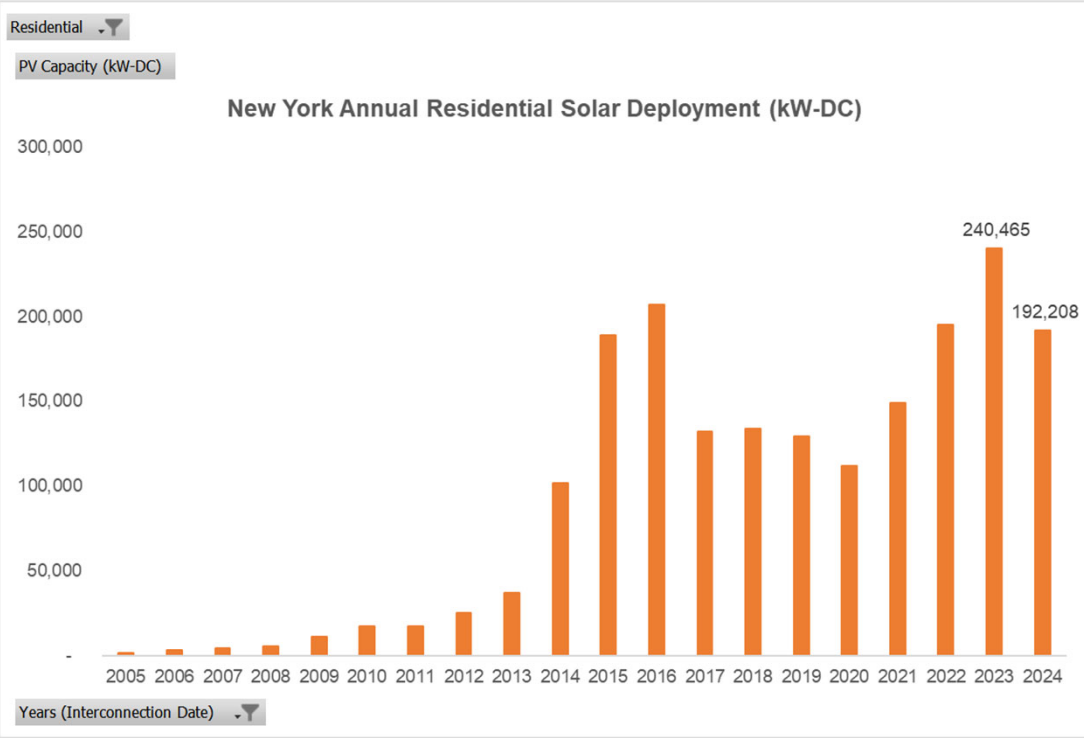
Community solar projects can only reserve NYSERDA NY-Sun incentives after making interconnection deposits and securing zoning approval. Projects with reservations are mature, and reservation statistics are a strong indicator of future year deployment.

New York has 9.75 GW of completed and reserved capacity.

Residential Market Trends

NY Net Metered/Residential Solar Market Trends

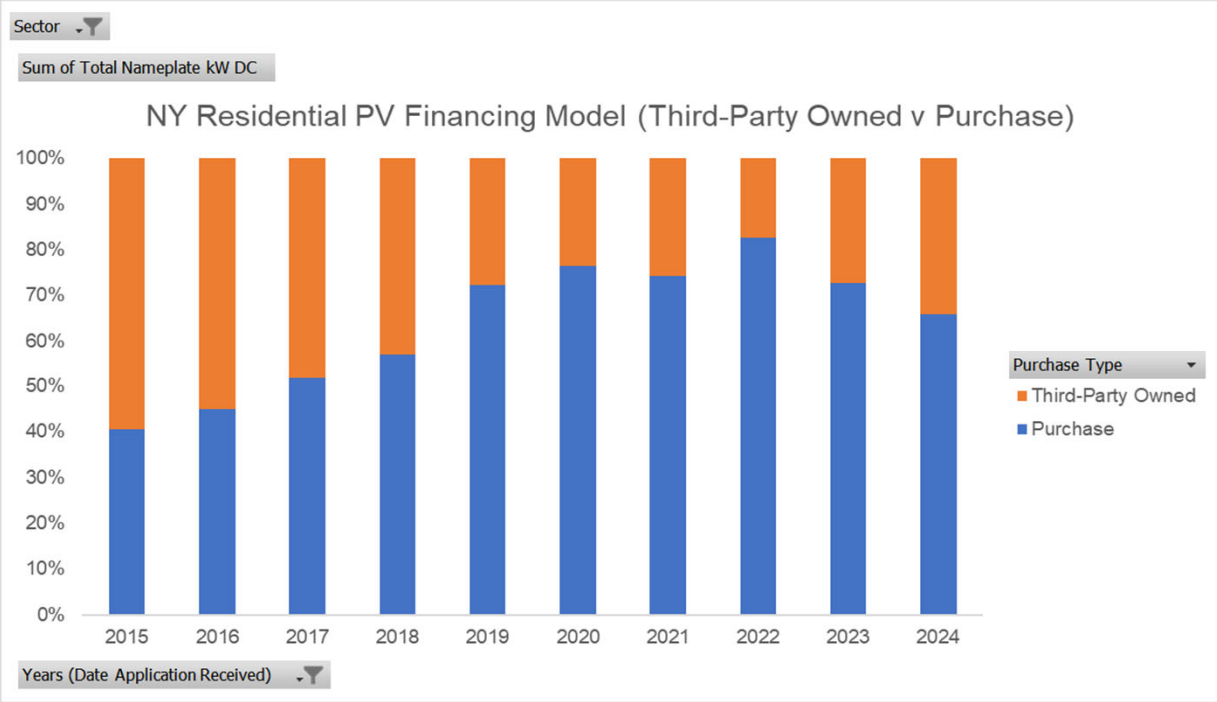
Residential solar deployment in New York State decreased by 20% year-over-year. Most parts of New York experienced a drop in deployment, although it was most pronounced on Long Island. NYSEIA attributes the decline to high interest rates, inflation, declining incentives and increasing fixed charges on solar customers' utility bills, which erode household savings.



Data source: NYSERDA. February 2025.

NY Net Metered/Residential Solar Market Trends

Approximately two thirds (66%) of New York's 2024 residential solar installations were cash purchase (cash or loan) and one third (34%) were financed with a lease or power purchase agreement*. Third-party ownership rates have increased over the last two years in response to high interest rates, although cash purchases are still dominant in New York State.



Data source: NYSERDA. February 2025.

*Statistics only include residential solar projects that received NYSERDA incentives.

Residential Energy Storage Adoption

Residential energy storage attachment rates remain low in New York, hovering just below 5% statewide. The largest residential energy storage market is Long Island, driven by time-of-day rates and available capacity-based incentives. Orange & Rockland achieved high BESS attachment rates due to a Virtual Power Plant pilot program they are implementing jointly with Sunrun. High interest rates, limited incentives, lack of price signals and permitting challenges are key barriers to residential energy storage adoption. Attachment rates will rise when NYSERDA launches incentive programs this year, and if/when NYC lifts its de facto ban against residential energy storage.

Resi BESS Attachment Rate by Utility								
Year	Central Hudson	Con Ed	National Grid	NYSEG	O&R	PSEGLI	RGE	Grand Total
2020	4.8%	0.5%	3.4%	6.7%	0.2%	3.5%	4.4%	2.4%
2021	12.5%	1.7%	6.7%	13.6%	4.5%	8.4%	3.7%	5.8%
2022	7.8%	1.6%	6.7%	12.9%	14.1%	7.6%	7.1%	5.6%
2023	6.0%	0.9%	6.5%	11.9%	11.3%	3.4%	4.1%	3.5%
2024	6.8%	1.0%	3.9%	11.6%	26.5%	4.6%	6.3%	4.5%
Grand Total	7.4%	1.2%	5.5%	11.7%	12.0%	5.4%	5.3%	4.4%

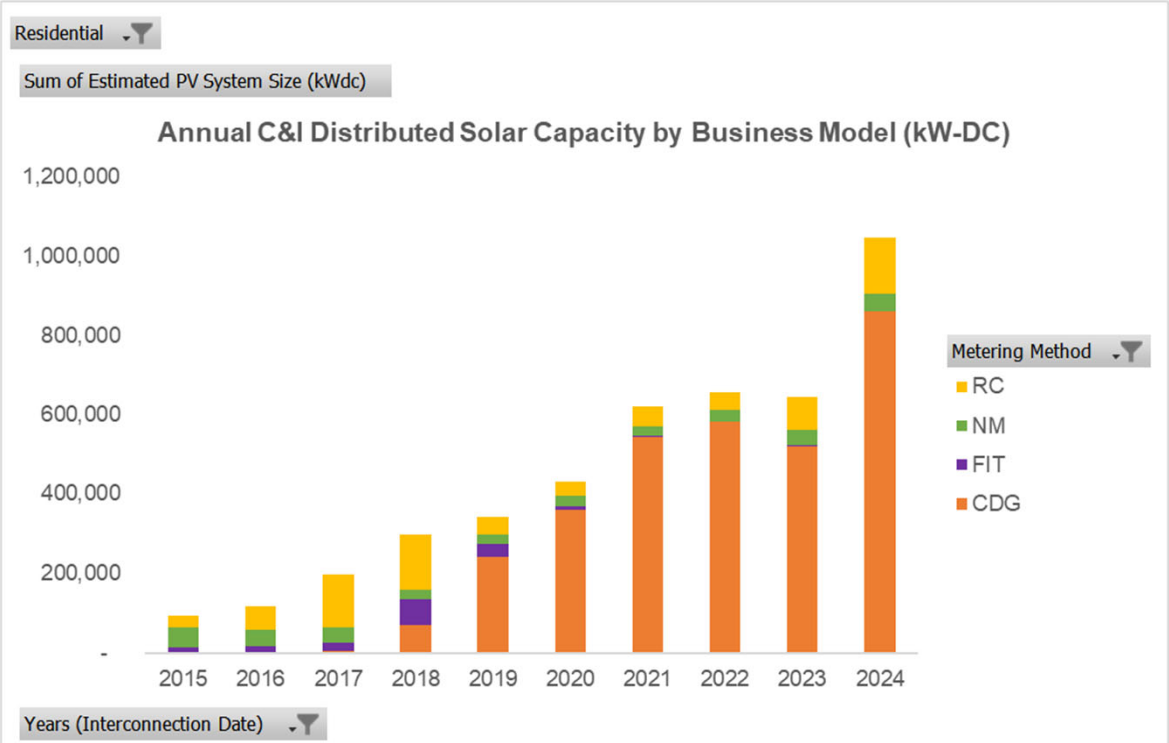
Resi BESS Project Count by Utility								
Year	Central Hudson	Con Ed	National Grid	NYSEG	O&R	PSEGLI	RGE	Grand Total
2020	37	30	33	39	2	197	8	346
2021	131	123	89	91	45	568	9	1,056
2022	138	152	96	121	165	614	25	1,311
2023	132	116	110	138	148	354	12	1,010
2024	128	109	67	113	280	347	16	1,060
Grand Total	566	530	395	502	640	2,080	70	4,783

Data source: NYSERDA. February 2025.


Commercial & Industrial
Market Trends

C&I Annual Deployment Trends

Upstate community solar is the dominant form of commercial & industrial (C&I) solar being deployed in New York, followed by Upstate remote crediting projects. Rooftop commercial solar (net metering) deployment is relatively limited Upstate due to NYSERDA's NY-Sun program rules, utility policies that prevent cost-effective interconnection, and electric tariffs that preference export-only projects.



Data source: NYSERDA. February 2025.

2024 PV Deployment by Utility

Utility	PV Capacity (kW-DC)
National Grid	714,685
NYSEG	227,922
Con Ed	122,057
PSEGLI	86,152
O&R	45,644
Central Hudson	34,091
RGE	9,765
Grand Total	**1,240,317**

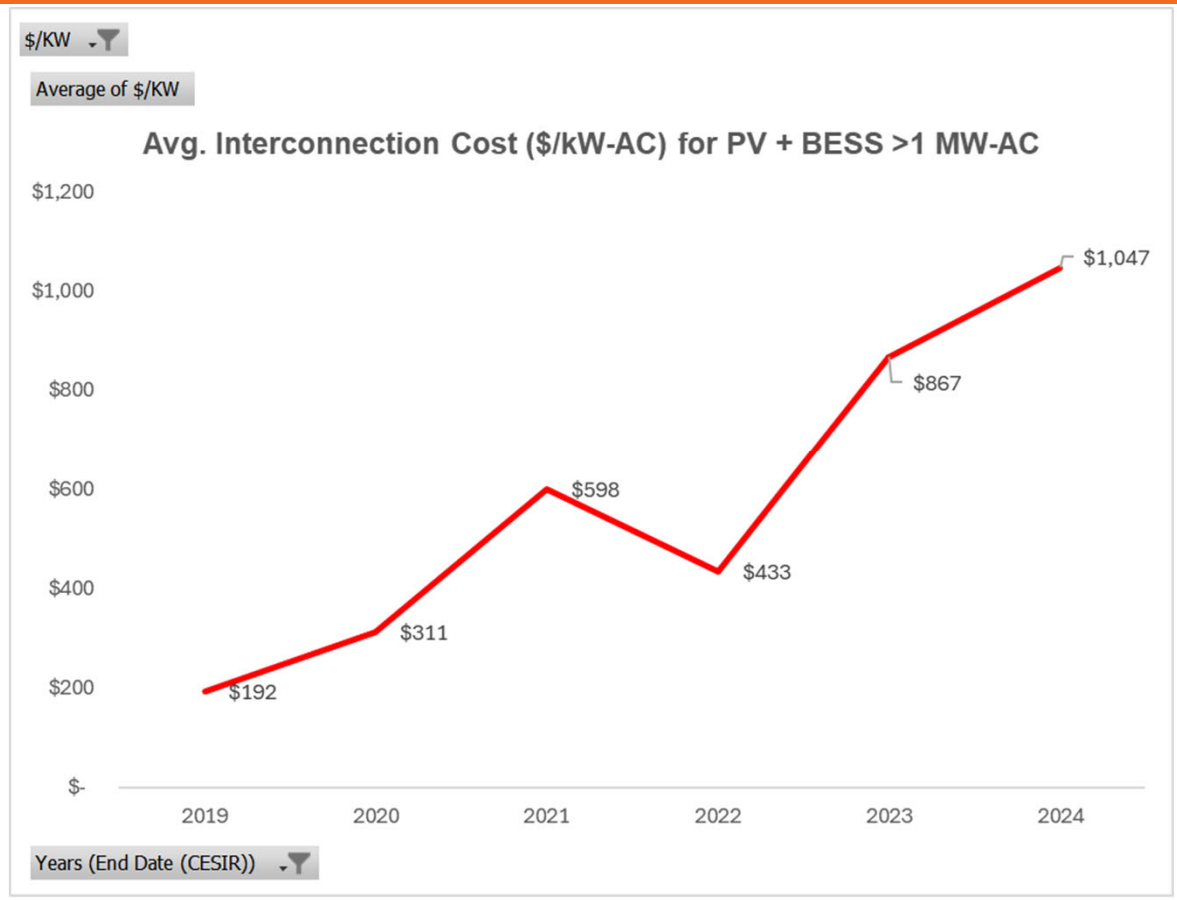
Data source: NYSERDA. February 2025.

Runaway Utility Interconnection Costs

The cost to interconnect new C&I solar + storage projects has increased dramatically in the last few years.

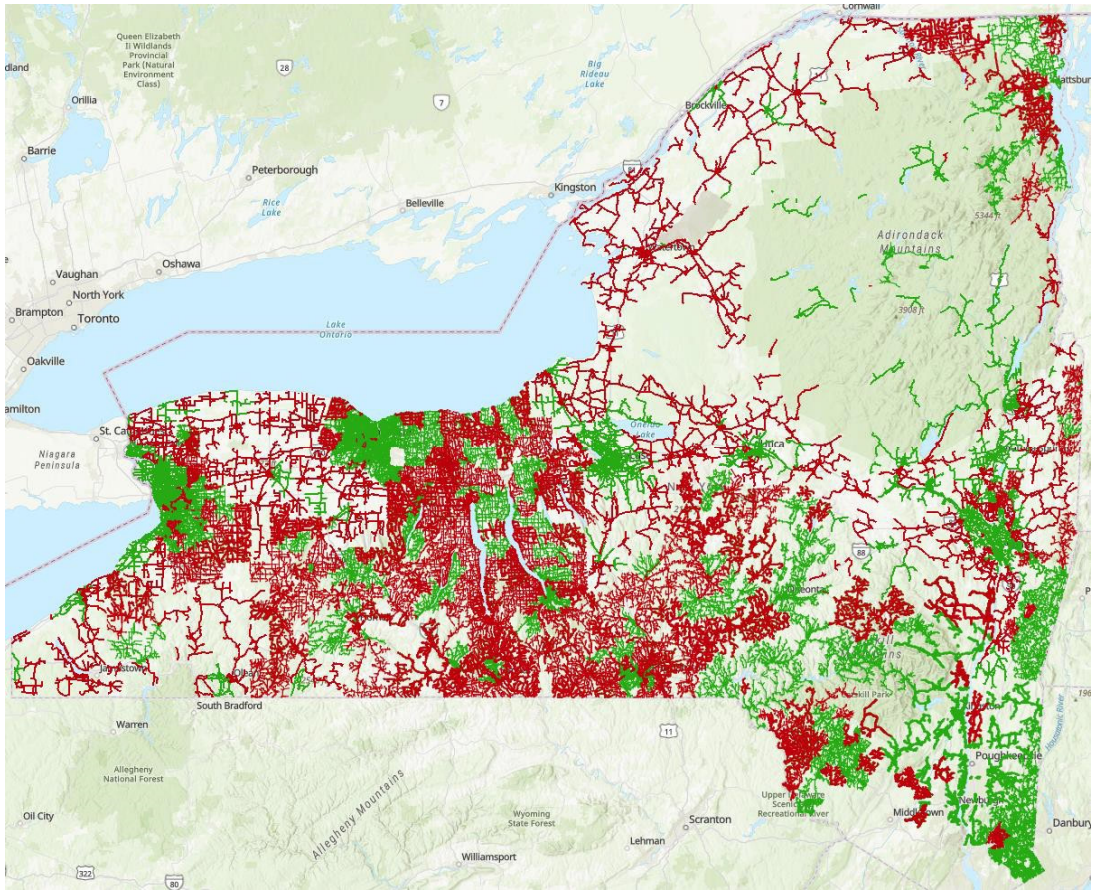
As interconnection costs have risen, a growing number of projects are withdrawing from the interconnection queue because the costs are prohibitively expensive.

Dwindling affordable hosting capacity and rising interconnection costs are a critical barrier to sustained deployment.



Data source: New York Department of Public Service. SIR Inventory. January 2025.

Dwindling Hosting Capacity



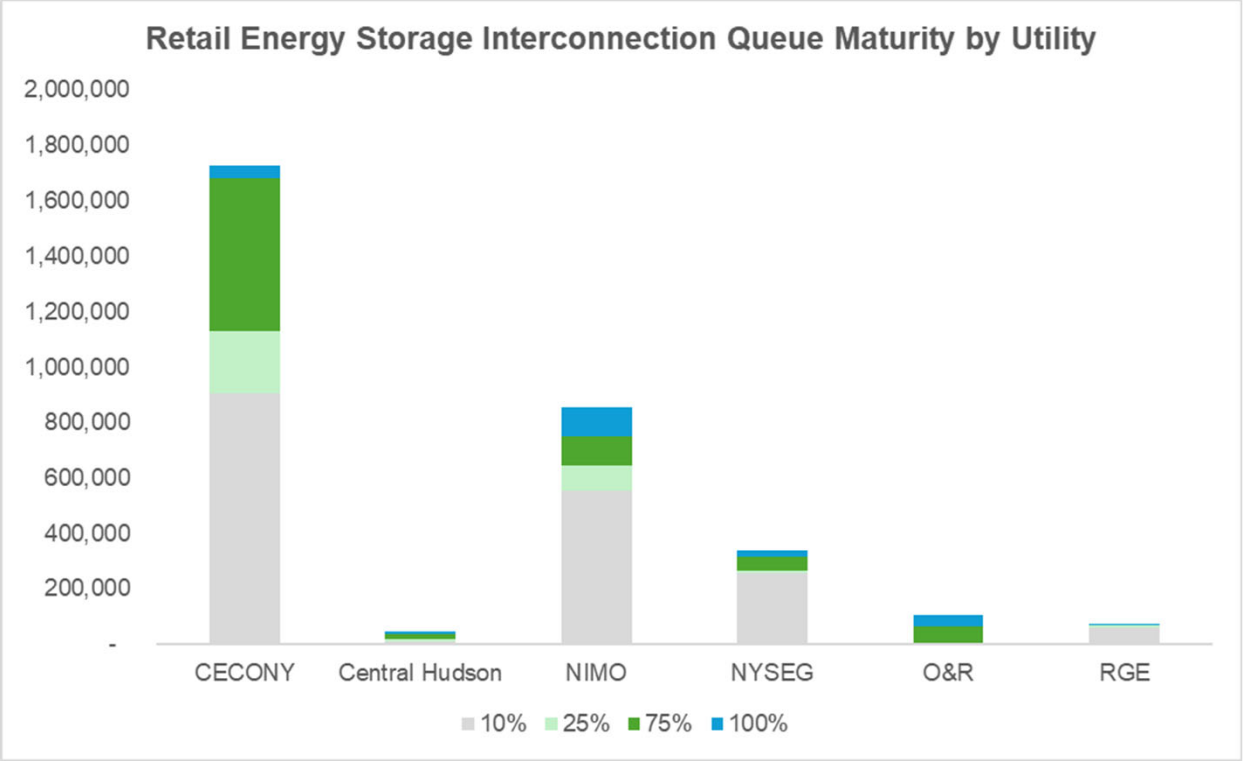
Data source: Montante Solar. NY Joint Utilities Hosting Capacity Maps. 2024.

New York has a Robust Pipeline of Retail Energy Storage

New York has a growing pipeline of standalone retail energy storage projects.

Retail energy storage project development is concentrated in the NYC region; a region where there is not adequate land available for traditional community solar projects but where distributed energy resources can help meet peak demand for electricity.

Approximately 225 MW-AC of retail energy storage capacity is operational in New York, but there is 1.1 gigawatts of additional capacity for which the developer has made an interconnection deposit.

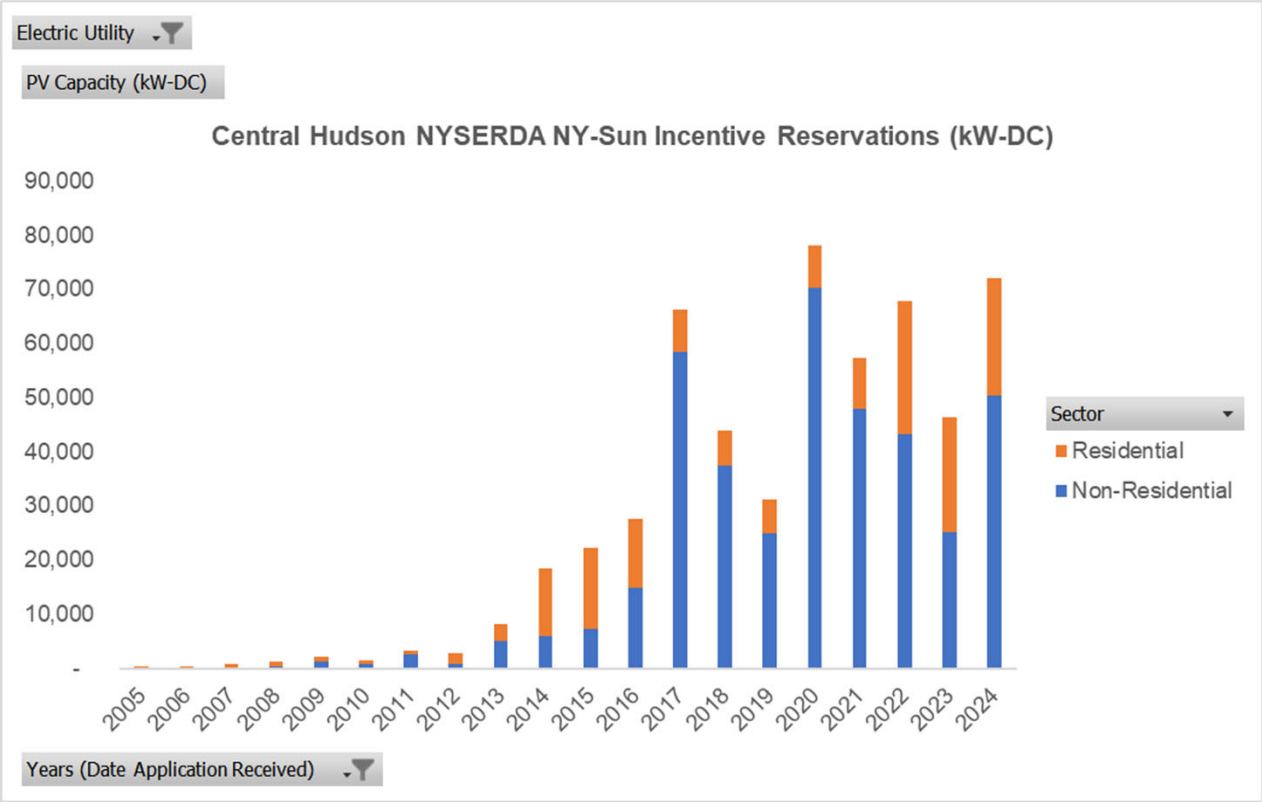


Data source: New York Department of Public Service. SIR Inventory. January 2025.

Central Hudson Solar Market Trends

Central Hudson is bucking the statewide trends, with a 56% year-over-year increase in incentive reservations in 2024.

Residential solar development was flat year-over-year, and most of the growth was driven by eight large community solar projects.



Data source: New York State Energy Research and Development Authority. January 2025.

State of the NY Distributed Solar + Storage Industry

Residential Solar

- 20% year-over-year decline in annual deployment in 2024, mirroring national trends
- High interest rates and inflation are dampening customer demand
- Declining incentives and rising fixed charges on utility bills are weakening the customer value proposition
- Energy storage adoption remains modest (<5%) due to high interest rates and limited incentives/monetization opportunities

Commercial & Industrial ("Community") Solar

- Significant increase in annual deployment in 2024 (lagging indicator of market health due to New York's 3–4-year project development timeline)
- Major decline in new development due to interconnection and siting challenges:
    - Rising interconnection costs, inflation and declining incentives make project-economics challenging
    - Restrictive local laws, moratoria and expanded DEC regulations are eliminating viable sites

Retail Energy Storage

- Robust pipeline (> 1 gigawatt) of retail energy storage projects, concentrated in Con Edison territory
- Moratoria and safety concerns are a key barrier to deployment outside of NYC
- Awaiting a Public Service Commission Order authorizing NYSERDA's incentive Implementation Plans

NYSEIA

Deployment Trends are Impressive, but a Lagging Indicator

New York is a maturing distributed solar market. 2024 was a challenging year for residential solar. 2024 was New York's best year yet in terms of community solar deployment; however, new development is down significantly.

Key threats to the sustained growth of New York's distributed solar market include:

- **Rising installation costs** due to macro trends of inflation and higher interest rates;
- **Declining incentives** as NYSERDA's NY-Sun funding is exhausted**;**
- **Rising interconnection costs**, as "low-hanging fruit is picked" and multi-year/multimillion dollar substation upgrades are increasingly being required by New York's utilities; and
- **Permitting barriers**, as municipalities adopt restrictive local laws to prevent solar as a land-use and the NY Department of Environmental Conservation (DEC) expands jurisdiction over wetlands.
- **Federal uncertainty** as Congress considers the future of the 30% federal solar tax credits.

New York can overcome many of these challenges with the right policy interventions. Urgent action and state-level leadership is needed.

Governor Hochul's State-of-the-State and Budget Proposal

In January, Governor Kathy Hochul delivered her annual State of the State address, outlining her policy priorities for the upcoming year. Shortly thereafter, she presented her Executive Budget proposal.

The Governor's State-of-the-State and Budget proposal failed to include any policies supporting solar or energy storage.

NYSEIA issued a public statement in response, and we are redoubling our advocacy efforts with the State Legislature.

January 22, 2025

New York Solar Energy Industries Association Statement on Governor Hochul's Budget Proposal and State-of-the-State

FOR IMMEDIATE RELEASE

Media Contact: 518-288-5250, info@nyseia.org

Yesterday, Governor Hochul released a budget proposal that fails to support solar power in New York State. In her State-of-the-State address, the Governor spoke about affordability and the need for action on climate. Regrettably, she did not connect the dots between the two issues, nor did she back her rhetoric with proposals to advance cost-effective solar deployment and energy affordability. This missed opportunity won't just drive up energy costs for homes and businesses, it also threatens hundreds of solar companies and 15,490 good jobs for skilled workers in the solar industry. New York Solar Energy Industries Association (NYSEIA) is deeply disappointed in the weak positions Governor Hochul put forward on solar and energy storage in her 2025 policy agenda. State-level leadership has never been more important. We urge the New York State Senate and Assembly to fill the leadership vacuum and advance policies that support the solar industry while lowering electricity bills for all New Yorkers.

NYSEIA 2025 Policy Priorities

Industry Wide Policy Priorities

Raise New York's distributed solar goal to
20 Gigawatts by 2035

In June 2024, NYSEIA released a policy roadmap outlining cost-effective proposals to go beyond 10 gigawatts of distributed solar. Enacting the high-impact policy initiatives in the roadmap will result in tremendous benefits for New Yorkers. www.nysolarroadmap.org

- **$50 billion in direct electric bill savings** for residents, plus an additional **$28 billion in indirect savings** through wholesale market impacts.
- **$3-4 billion in revenue** for rural landowners, municipalities, and school districts.
- **Reduction of 145 metric tons of greenhouse gas emissions and co-pollutants,** leading to improved public health outcomes.
- **Creation of 15,000 jobs** across New York State, effectively doubling the industry's employment footprint.
- **Improved land use** through community-scale projects and beneficial siting practices.

NYSEIA

Industry Wide Policy Priorities

Protect the 30% Federal tax credit for solar on homes and businesses

- Efforts are underway in Congress to repeal elements of the Inflation Reduction Act.
- Preservation of the clean energy tax credits is critical to the success of the solar industry.

NYSEIA is partnering with National SEIA to bolster support for solar tax incentives among Republican members of Congress, aiming to safeguard these incentives from repeal efforts. Given the Republicans' slim majority, securing opposition from just a few members will be crucial for our success.

NYSEIA

NYSEIA 2025 C&I Policy Priorities

Community Solar Siting Reform

Challenge

- Restrictive local laws and moratoria are obstructing 4.6 gigawatts of otherwise viable community solar development.
- Changes to the Freshwater Wetlands Act dramatically expand the DEC's jurisdiction over wetlands, further constraining solar development.

Solution

- Enact legislation establishing reasonable statewide standards for local solar zoning and permitting laws.
- Work with Department of Environmental Conservation (DEC) to develop a viable General Permit for solar energy on and adjacent to certain classes of freshwater wetlands.

NYSEIA

NYSEIA 2025 C&I Policy Priorities

Interconnection Reform

Challenge

- Rising interconnection costs, coupled with a lack of transparency and cost certainty, are heightening risks.
- Long lead-time distribution upgrades make it challenging for projects to secure financing and prolongs the development timeline.

Solution

- Interconnection reforms to improve transparency, cost-certainty and affordability
- Enable flexible interconnection
- Create cost-effective hosting capacity by unlock N-1 transformer capacity (National Grid) and sub-transmission lines (NYSEG)
- Enable self-construction
- Create additional hosting capacity through proactive distribution system investments

NYSEIA

NYSEIA 2025 Residential Policy Priorities

Modernize the NY Residential Solar Equipment Tax Credit

Challenge

- The solar tax credit is inaccessible to low-income families and seniors.
- The incentive has not been updated or adjusted for inflation in ~20 years.
- Energy storage expenses are excluded.
- The current statute places an arbitrary cap on the incentive for housing cooperatives and condominiums.

Solution

- Make the tax credit refundable for low-income families and residents of disadvantaged communities.
- Raise the per household cap to $10,000.
- Clarify that energy storage expenses are part of the eligible basis.
- Remove the cap on housing cooperatives and condominiums.

NYSEIA

NYSEIA 2025 Residential Policy Priorities

Enable Residential Energy Storage in New York City

Challenge

- The current fire code requirements are infeasible and effectively impose a ban on residential batteries in New York City.
- Despite years of advocacy, the FDNY has remained resistant to amending its requirements, preventing NYC residents from accessing resilient power.

Solution

- Enact legislation in the New York City Council that will: 1) waive NYC's bespoke and infeasible requirements for small, UL9540 listed batteries; and 2) direct the FDNY and the Department of Buildings to develop guidelines to facilitate streamlined permitting for medium-sized energy storage systems.

NYSEIA

NYSEIA 2025 Residential Policy Priorities

Lower Soft Costs via Automated Permitting

Challenge

- Permitting timelines and costs vary significantly across New York State, with some jurisdictions taking several weeks or even months to process permits. These permitting challenges are a major factor contributing to customer dissatisfaction and cancellations in the solar industry.

Solution

- Enact legislation to promote the adoption of automated residential solar permitting platforms.

Join NYSEIA today to access member benefits and to strengthen New York's solar industry

https://www.nyseia.org
info@nyseia.org

Thank you!