



New York State Briefing

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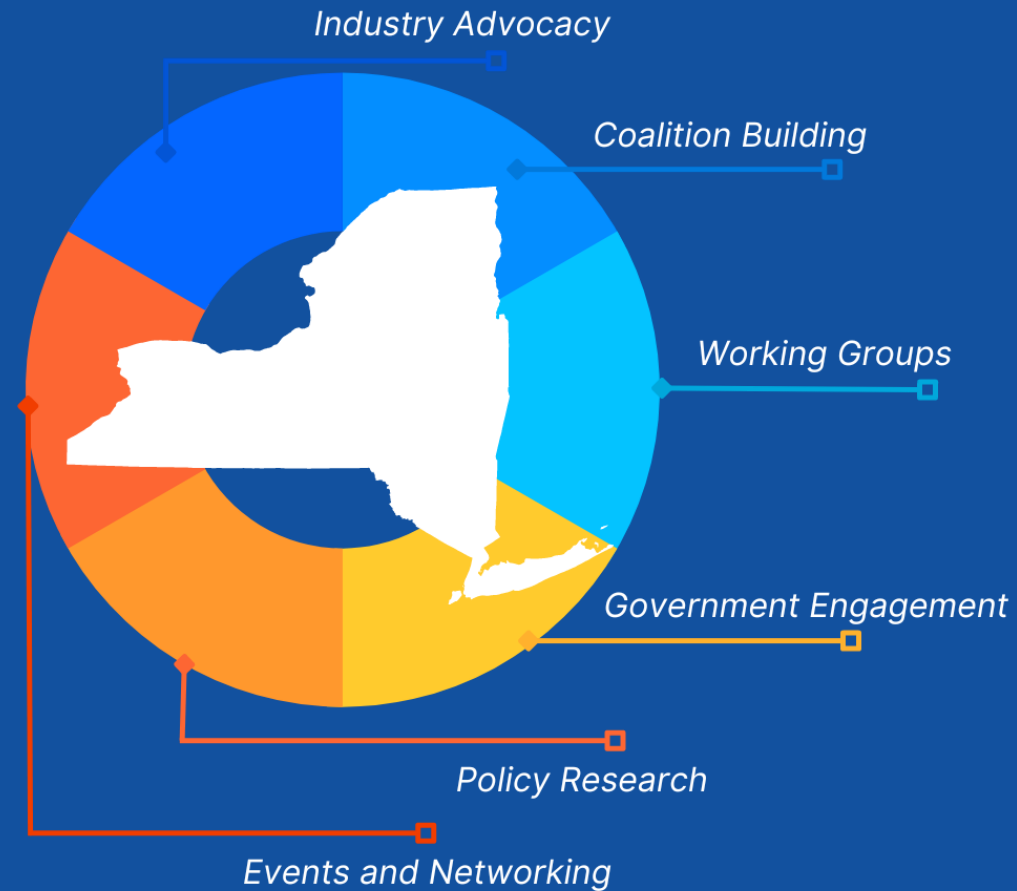
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About NYSEIA

ADVANCING SOLAR ENERGY FOR NEW YORK



New York Solar Energy Industries Association advocates for sustainable growth of solar energy across New York State. Join our trade association to accelerate the solar revolution.



<https://www.nyseia.org>

NY Distributed Solar + Storage Policy Framework

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

New York has strong foundational policies, including: net metering for onsite solar; a Value of Distributed Energy Resources (VDER) tariff for exporting solar + storage projects; a standardized interconnection process; community solar and remote crediting framework; and NYSERDA's NY-Sun program which provides capacity-based incentives for diverse project types.

In 2019, New York's legislature enacted the Climate Leadership and Community Protection Act (CLCPA), climate legislation that requires New York to achieve the following outcomes:

- 70% renewable electricity supply by 2030
- 100% emissions free electricity supply by 2040
- 100% emissions free economy by 2050
- 35-40% of New York's clean energy benefits must accrue to disadvantaged communities

The CLCPA also codified a distributed solar goal of 6 gigawatts by 2025 and 3 gigawatts of energy storage by 2030.

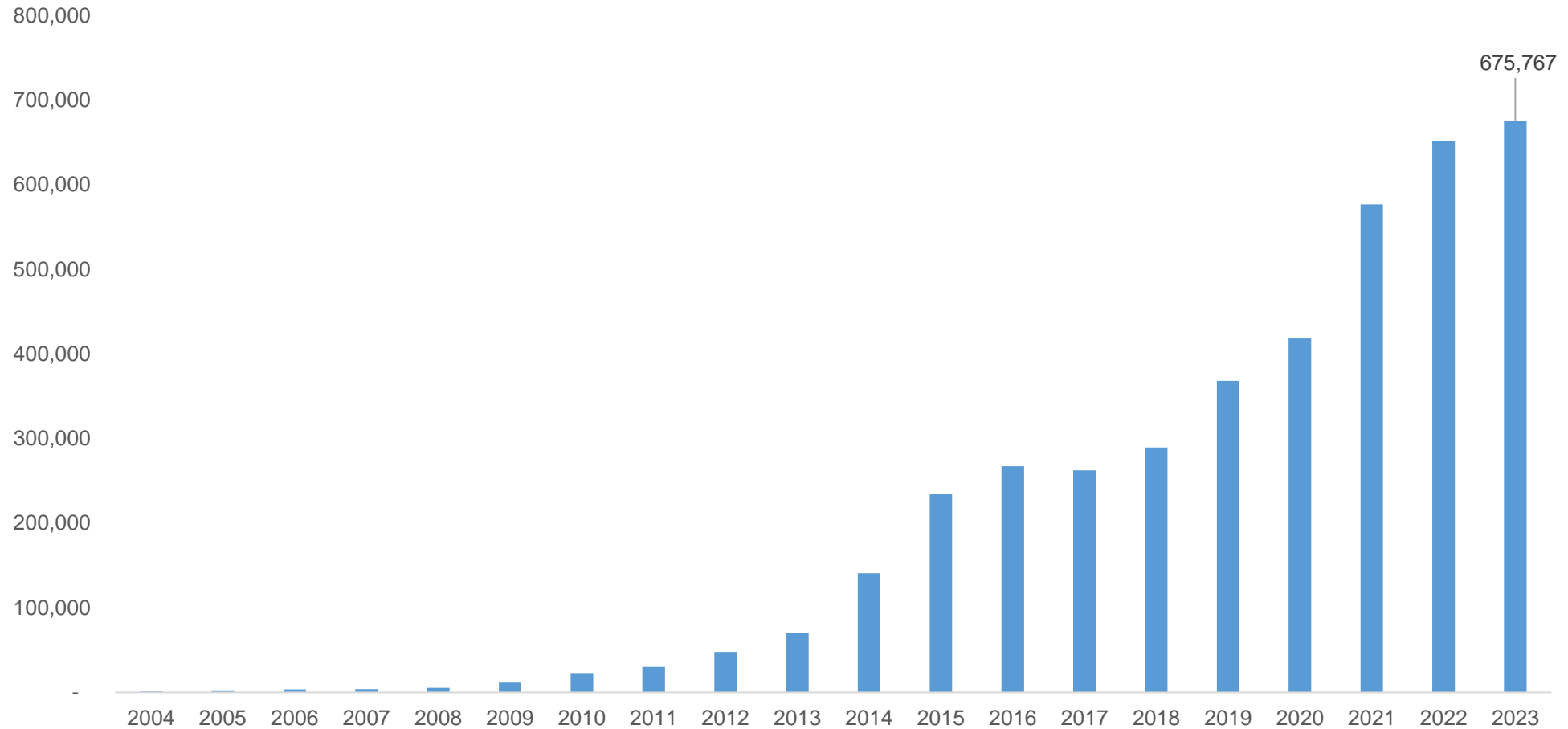
In 2021, Governor Hochul raised New York's distributed solar goal to 10 gigawatts by 2030.

In 2022, Governor Hochul announced a proposal to raise New York's storage goal to 6 gigawatts by 2030.

NY Distributed Solar Market: Statewide Statistics

New York deployed more distributed solar in 2023 than any prior year, nearly one gigawatt DC:

New York Annual Distributed Solar Deployment (kW-AC)

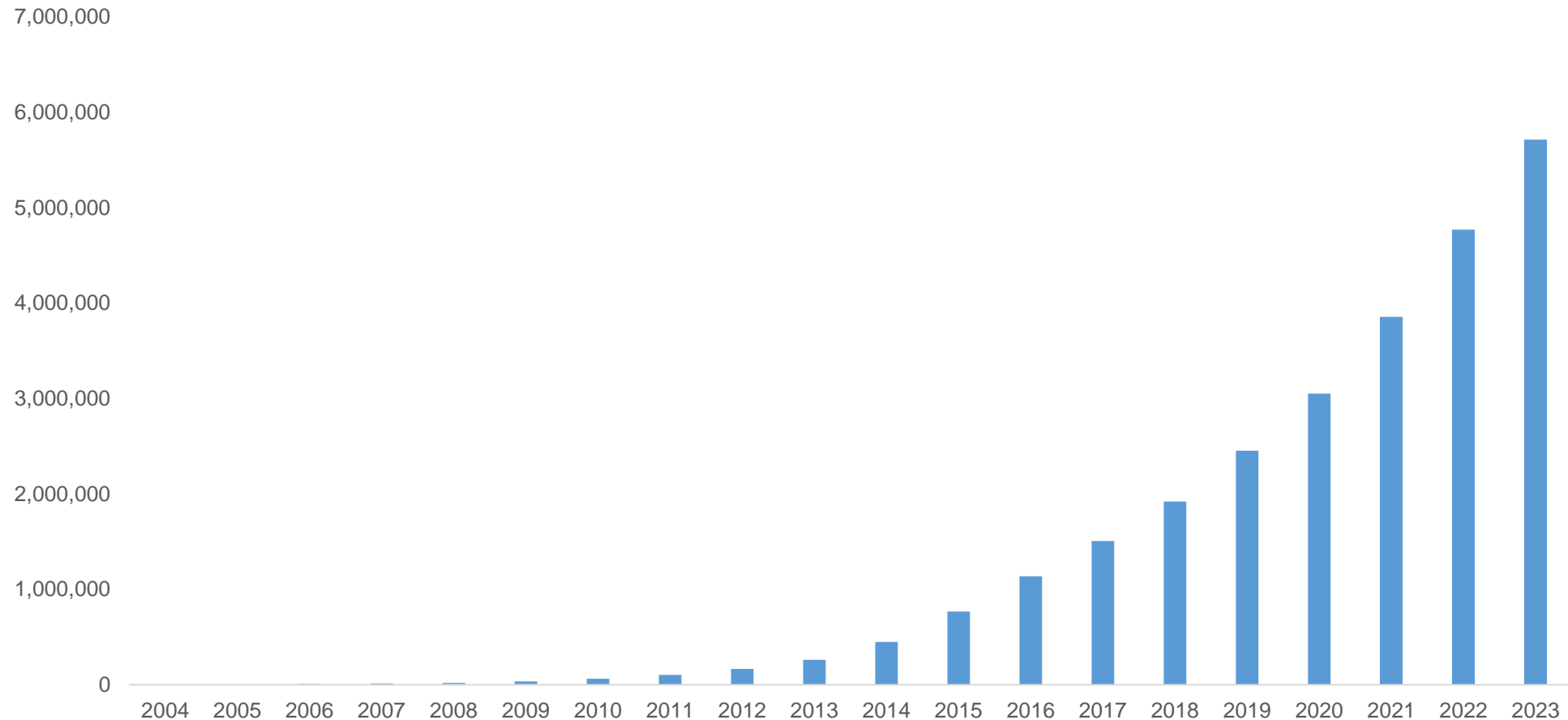


Data source: New York Department of Public Service. Distributed Generation SIR Inventory. February 2024.

NY Distributed Solar Market: Statewide Statistics

New York's cumulative installed distributed solar capacity is rapidly approaching six gigawatts ahead of schedule:

NY Cumulative Distributed Solar Deployment (kW-DC)*



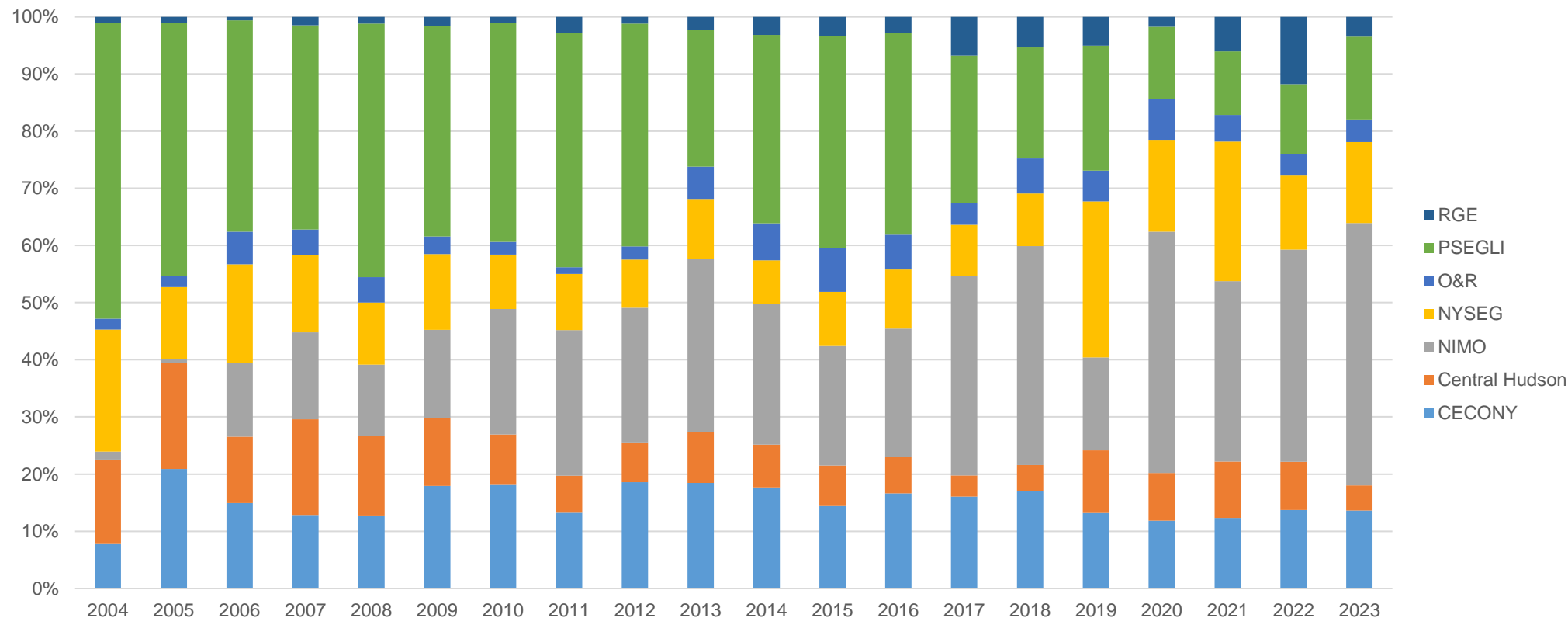
Data source: New York Department of Public Service. Distributed Generation SIR Inventory. February 2024.
*Source data is in kW-AC. NYSEIA estimated DC/AC ratio by year, ranging from 1.20 in 2004 to 1.40 in 2023



NY Distributed Solar Market: Regional Trends

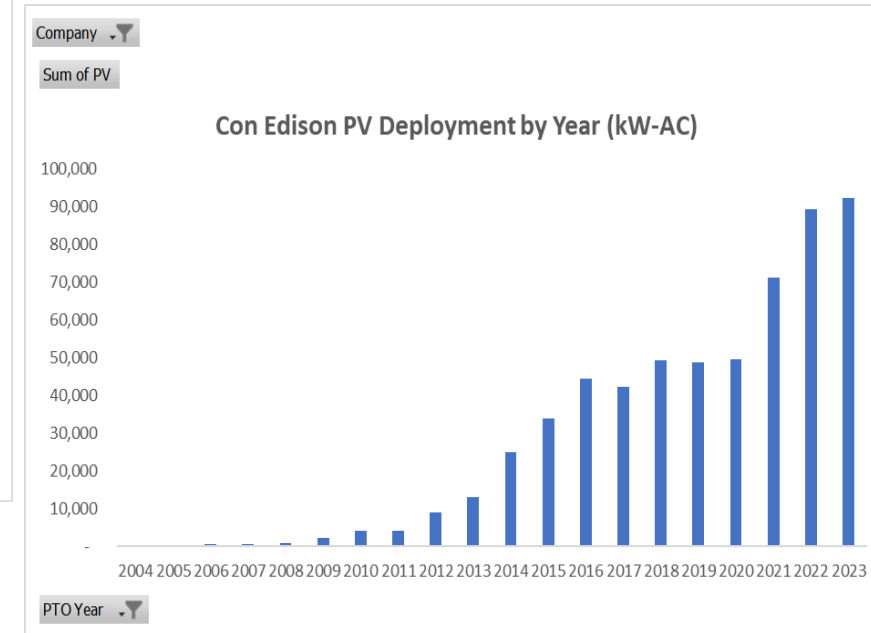
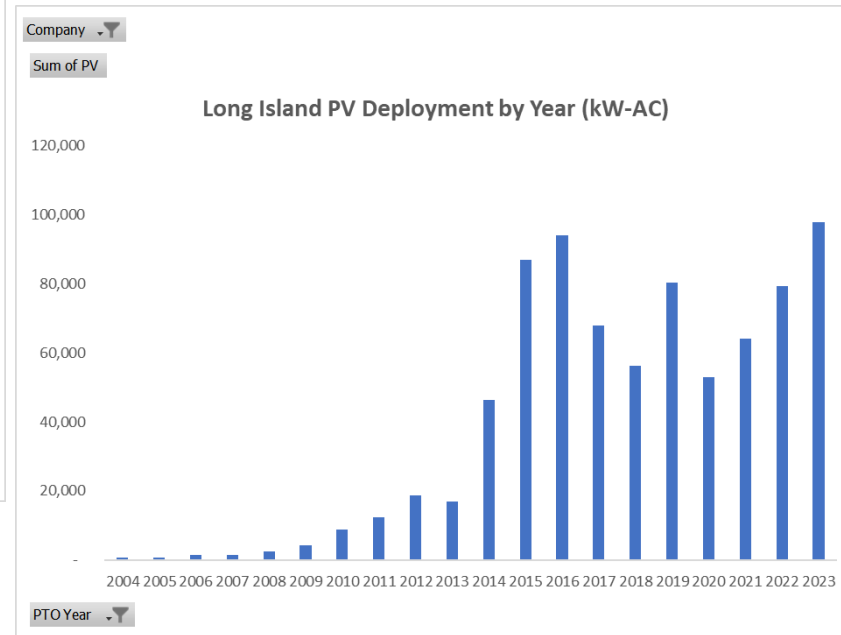
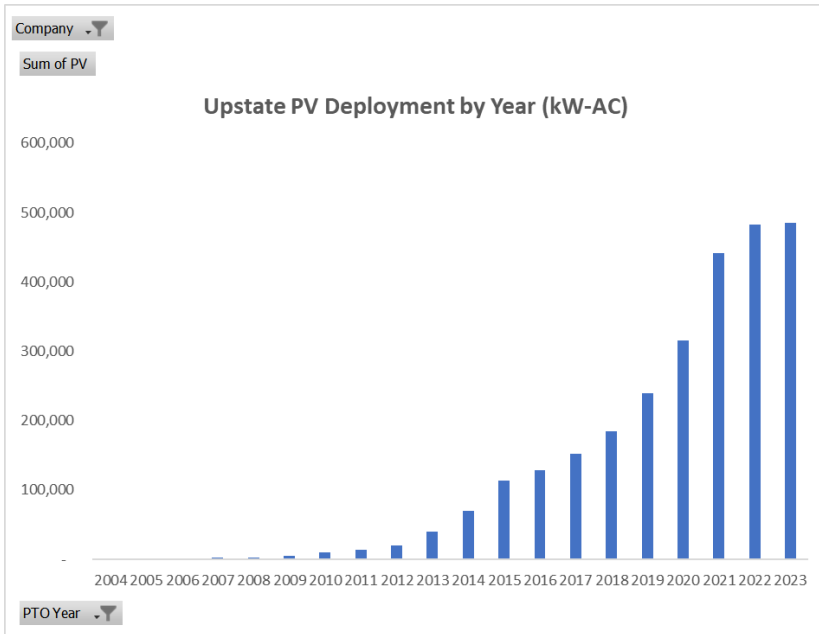
Over the last decade, community solar deployment has accelerated significantly, supplanting rooftop solar as the primary contributor of solar capacity. This trend has resulted in a greater share of New York's solar capacity being installed Upstate:

Annual Distributed Solar Deployment by Utility Territory (%)



Data source: New York Department of Public Service. Distributed Generation SIR Inventory. February 2024.

NY Distributed Solar Market: Regional Trends

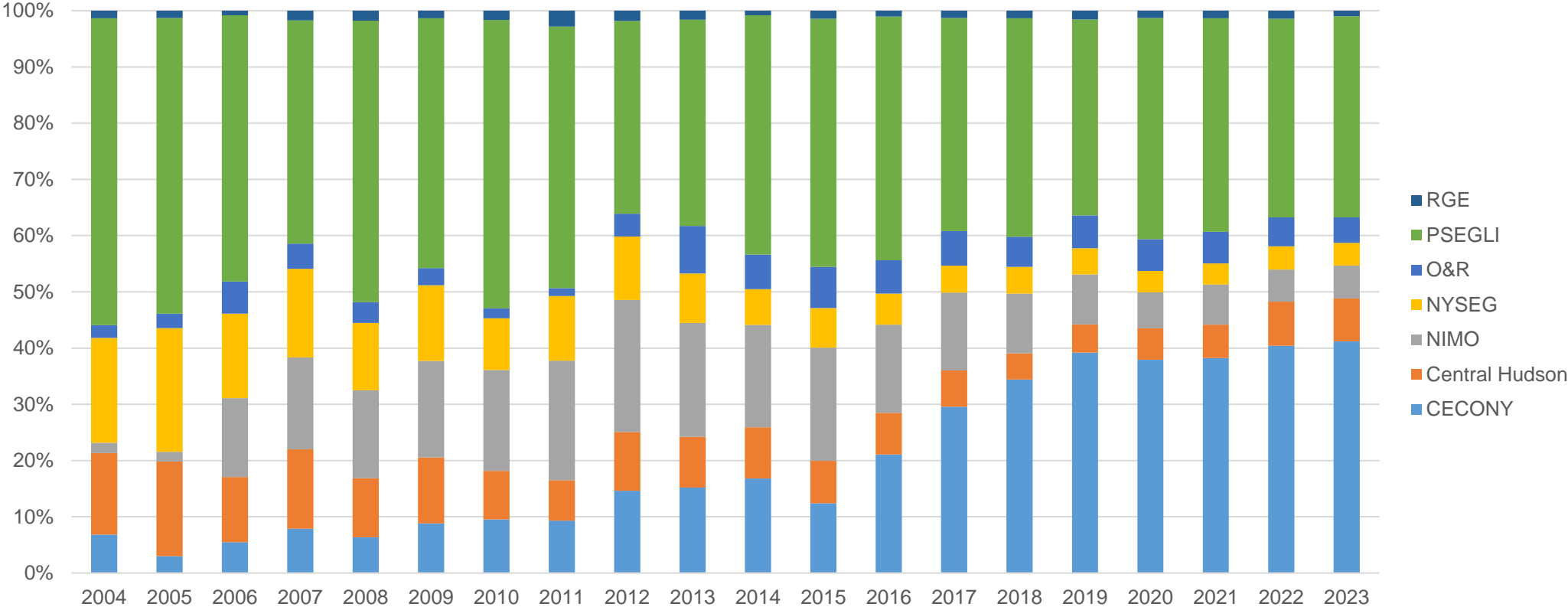


Data source: New York Department of Public Service. Distributed Generation SIR Inventory. February 2024.

NY Net Metered/Residential Solar Market Trends

In the early years, Long Island dominated the rooftop solar industry, followed by Upstate. NYC had limited solar adoption. Over the last decade, the Upstate market for onsite solar has contracted while NYC's market has expanded. In 2021, NYC/Westchester surpassed Long Island's rooftop solar market for the first time. The market share for rooftop solar in Con Edison territory continues to grow.

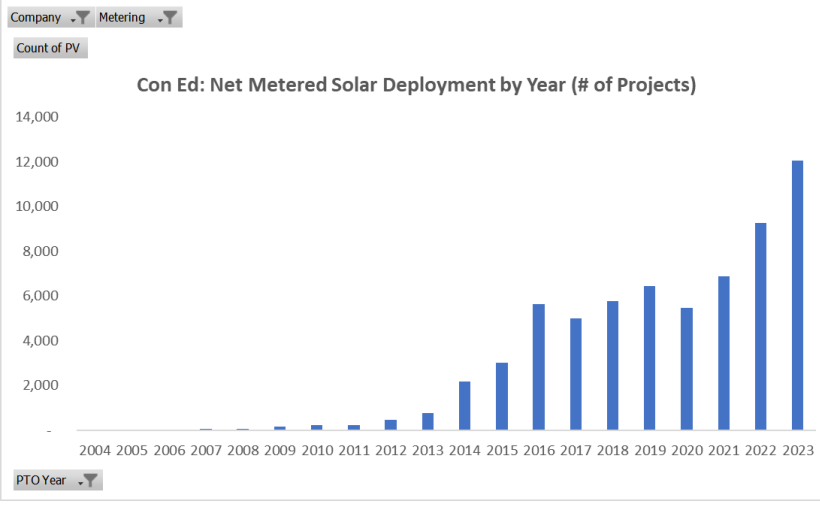
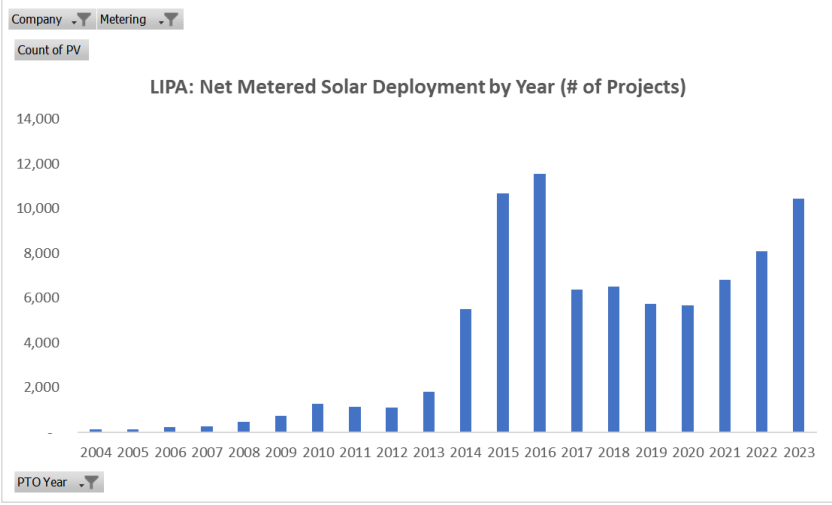
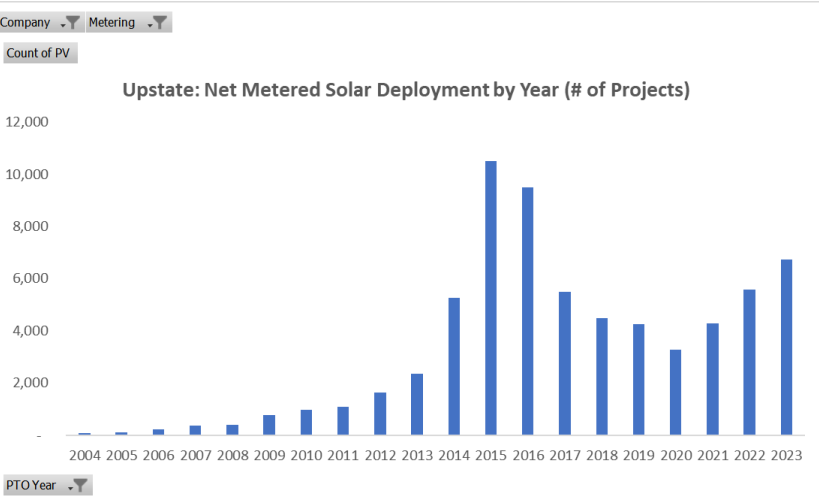
Net Metered Solar Projects by Utility



Data source: New York Department of Public Service. Distributed Generation SIR Inventory. February 2024.



Net Metered Solar: Regional Trends



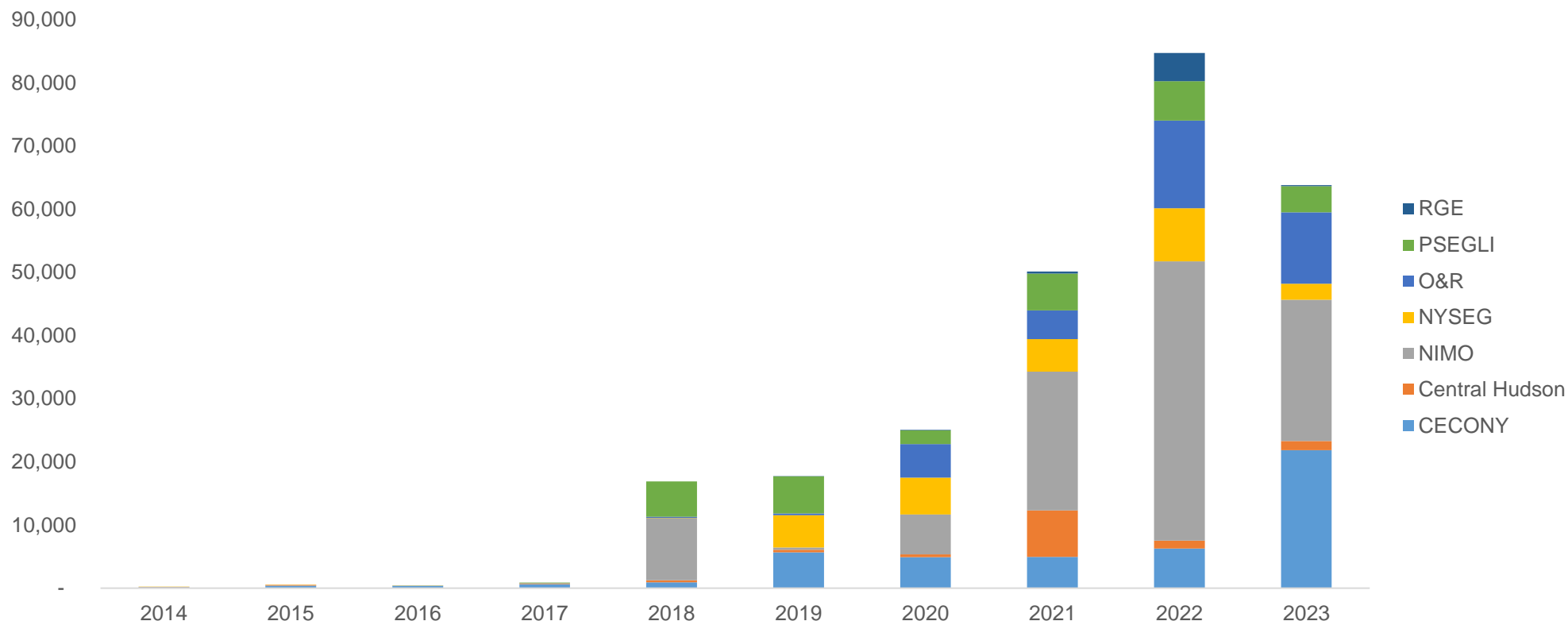
Data source: New York Department of Public Service. Distributed Generation SIR Inventory. February 2024.



NY Distributed Storage Market Trends

Distributed storage deployment is still in its early days in New York, but there is a growing pipeline of standalone energy storage projects in the interconnection queue, especially in Con Edison territory. New York's Energy Storage Safety Working Group is proactively developing standards to ensure the safe deployment of energy storage in NY. New York's solar + storage industry is eagerly awaiting the pending Energy Storage Roadmap Order, which will create incentives for bulk, retail and residential energy storage.

Annual Energy Storage Deployment (kW-AC)



Data source: New York Department of Public Service. Distributed Generation SIR Inventory. February 2024.

Deployment Trends are Impressive, but a Lagging Indicator

New York is a strong, maturing distributed solar industry. 2023 was New York's best year yet in terms of distributed solar deployment; however, deployment is a lagging indicator.

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.

New York can overcome these challenges with the right policy interventions.



NYSEIA 2024 Policy Priorities

Community Solar Siting/Permitting: advance A3579A, a NYSEIA-supported bill that would make renewable energy PILOTs exempt from the property tax cap and create a state-level appeal process through the Office of Renewable Energy Siting for distributed generation projects being unreasonably held up in local zoning.

Residential Solar Tax Credit Expansion: advance S3596C, a NYSEIA-supported bill that would increase the per household cap for the residential solar energy equipment tax credit from \$5,000 to \$10,000, allow for energy storage to be included in the basis, and enable refundability for low-income households.

Interconnection Reform: advance impactful interconnection reforms, including: cost-sharing enhancements, SIR timeline modifications, flexible interconnection, and SIR enforcement mechanisms to drive improved utility performance.

CDG Billing & Crediting: advance industry priority proposals, including: performance metrics and penalties to ensure proper utility administration of New York's community solar program; multiple saving rates; net crediting for volumetric CDG projects

Rate Design: advocate for VDER improvements and thoughtful implementation of LIPA's opt-out time-of-day rate for residential customers.

NY-Sun ICESA Expansion and Statewide Solar for All: advocate for additional incentives and thoughtful programs to encourage sustained CDG deployment beyond 10 GW.

NYC Residential BESS Permitting: engage FDNY to advocate for a reasonable permitting process for residential energy storage in NYC.

National Grid Petition for Declaratory Ruling

On December 22, 2023, National Grid filed a petition for a declaratory ruling regarding interconnection because of the utility's erroneous grid impact studies, and their subsequent delays and re-studies for 60 CDG projects in Western NY. In November, National Grid completed their re-studies and shared the results, which included incremental costs and additional upgrades (relay replacements) for 45 affected projects.

National Grid's petition seeks:

- a Commission ruling to allow NY utilities to impose uncapped retroactive scope and budget modifications to interconnection upgrades, even after the completion of a CESIR study and the execution of interconnection agreements.
- a waiver of certain SIR requirements for 45 of the 60 impacted projects in Western NY.

If the requested declaratory ruling is granted, it could have significant statewide implications. NYSEIA is coordinating a response to National Grid's petition before the March 25th comment deadline.



NYSERDA Post 10 GW Filing

On January 5, 2024, NYSERDA filed their proposal to the New York Public Service Commission for how to leverage funding allocated to the NY-Sun program in the 10 GW Order in April 2022 to support additional community solar capacity for low-income customers in New York State.

- NYSERDA's proposal outlines several scenarios, indicating that NYSERDA can support 557 MW to 1,254 MW of additional solar capacity using previously allocated funding, with the incremental capacity estimate varying (Table Below).

Scenario Number	Project Configuration	Customer Bill Discount	Upstate MW Funded	ConEd MW Funded	Statewide MW Funded
#1	100% ICSA	10%	670	94	784
#2	100% Statewide Solar For All	10%	1,102	132	1,254
#3	50%-50% ICSA/SSFA Split	10%	833	110	963
#4	100% ICSA	20%	456	81	557
#5	100% Statewide Solar For All	20%	621	108	750
#6	50%-50% ICSA/SSFA Split	20%	526	93	639

State of the State and Budget DG Policies

On Tuesday, January 9th, Governor Kathy Hochul delivered her annual State of the State address to a joint session of the New York State Legislature, and issued her executive budget on 1/16.

- **Overarching theme of the Governor's agenda:** making New York more affordable.
- The Governor announced two distributed solar + storage initiatives:
- **Launching Statewide Solar for All (SSFA), a utility administered opt-out low-income solar program**
- **Initiating a PSC proceeding to improve the interconnection process for distributed energy resources.** *The proceeding will consider "incentives, penalties, and other mechanisms for New York State utilities to facilitate faster and more efficient interconnection."*



New York Distributed Solar + Storage Market Outlook

Distributed solar is being deployed at a record pace. New York is ahead of schedule and under budget for Governor Hochul's 10 GW by 2030 goal.

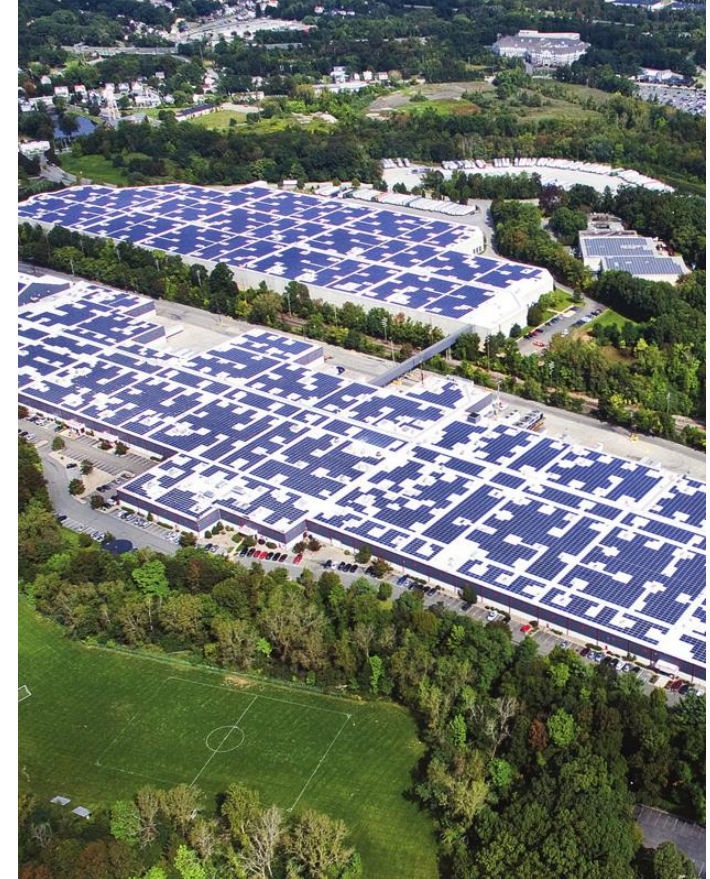
The rooftop solar market is going strong in the NYC region, and that will continue due to the recent extension/expansion of NYC solar + storage property tax abatement.

The Upstate community solar market is going strong, although project economics are tight since the Community Adder was exhausted in 2023.

Permitting barriers, rising interconnection costs, and declining incentives threaten near-term progress.

With smart policies to address these challenges, New York's distributed solar market will continue to outperform and help New York close the gap on its broader clean energy and equity goals.

New York's energy storage market is poised for an exciting chapter of growth. Industry appreciates the important work of the Energy Storage Safety Working Group and eagerly awaiting the Energy Storage Roadmap Order which will enable NYSERDA to launch incentive programs to drive that growth.



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Policy Updates: Incentives and Compensation

Item	Description	Status
Energy Storage Roadmap	In December 2022, NYSERDA and DPS filed a proposal for residential, retail and bulk energy storage incentives to support the Governor’s expanded goal of 6 GW of ESS by 2030. Capacity-based incentives for projects below 5 MW-AC, performance-based incentive (“indexed REC”) for utility-scale.	Industry input in summer 2023, environmental impact statement in fall 2023, pending Public Service Commission (PSC) Order
Marginal Cost of Service (MCOS) Proceeding	In 2023, DPS published a proposal for a revised method for the utilities to calculate their MCOS. MCOS is the basis for deriving two elements of the Value of Distributed Energy Resources (VDER) tariff. DPS’ proposal incorporated industry recommendations and could bolster VDER compensation in the future. Industry is advocating for an MCOS Order followed by a brief stakeholder process re: VDER price signal derivation.	Industry input throughout 2023, pending PSC Order.
NY-Sun Post 10 GW Filing	On January 5, 2024, NYSERDA filed their proposal to go beyond 10 GW with the funding that was allocated toward the NY-Sun program prior to the passage of the IRA. Per the PSC, NYSERDA’s proposal prioritizes low-income community solar.	Awaiting public comment period
NYC Solar + Storage Property Tax Abatement Extension/Expansion	NYC had a 20% local property tax abatement (PTA) for solar for many years. In 2023, the incentive was set to expire. Rather than a straight renewal, NYSEIA worked with the City and the legislature to expand the incentive, raising it to 30% and allowing for the inclusion of energy storage and canopies.	Win! As of January 1, 2024, NYC has a 30% PTA for solar and/or storage projects. The incentive is available for the next decade.
Residential Solar Tax Credit Modernization	New York offers a 25% residential solar tax credit, capped at \$5,000 per household. NYSEIA is advocating for the per household cap to be increased to \$10,000, to allow for the inclusion of energy storage, and for the credit to be refundable for low-income New Yorkers.	Advocating for S3596C / A6739A to be included in NY’s FY 2025 budget

Policy Updates: Community Solar Programs

Item	Description	Status
Net Crediting Enhancements	In October 2023, New York’s utilities filed proposals to improve net crediting (aka consolidated billing) for community solar. Proposals would: 1) allow a single community solar projects to offer multiple saving rates; and 2) expand net crediting to the subset of early volumetric community solar projects that were built before VDER.	Utility proposal in October 2023, industry input in January 2024, pending Public Service Commission (PSC) Order
Billing & Crediting Performance Metrics and Penalties	Over the last few years, New York’s utilities have failed to issue timely and accurate credits to many community solar customers and providers across the state. In response to customer and provider complaints, the PSC directed DPS to develop a proposal for CDG billing & crediting performance metrics and negative revenue adjustments (aka penalties) to encourage the utilities to allocate the software and personnel resources necessary to issue timely and accurate credits to community solar customers.	Industry provided initial input in spring 2023, DPS proposal filed in January 2024, awaiting public comment period
Statewide Solar for All	In May 2023, NYSERDA and DPS filed a proposal for SSFA, a utility-administered low-income solar program whereby solar companies could sell their solar energy credits to the utilities at a discounted rate, with net savings allocated to Energy Affordability Program customers. SSFA is a proposal to expand National Grid’s existing pilot program statewide. The proposal would also allow standalone energy storage projects to participate in Con Edison territory, where it’s challenging to site large solar projects.	NYSERDA/DPS proposal in May 2023, industry input in late summer 2023, State-of-the-State announcement in January 2024, pending PSC Order
New York Power Authority REACH	Last year, NYPA was granted the authority to build and own renewable energy projects by the NYS legislature and directed to develop “REACH” a program to provide clean energy and bill savings to low-income New Yorkers. In early 2024, NYPA submitted their proposal to the PSC for consideration. NYPA’s proposal is fairly similar to SSFA, although it includes some important departures, including inter-utility crediting.	Awaiting public comment period
Inclusive Community Solar Adder Re-Launch	In 2023, NYSERDA re-launched their ICSA program, which provides enhanced capacity-based incentives for community solar projects that serve low- to moderate-income customers. NYSERDA’s revised program included modified eligibility criteria and additional modifications to align the ICSA with federal Low Income Bonus Credit.	Launched in September 2023

Policy Updates: Siting and Interconnection

Item	Description	Status
Community Solar Permitting Reform	<p>New York’s solar industry is advocating for A3579A, legislation that would limit the impact of restrictive local laws on community solar project development. The legislation would: allocate funding to NYSERDA for municipal education/assistance; make renewable energy PILOTs exempt from NY’s property tax cap so host communities can grow their revenue; and create a state-level appeal process for projects unreasonable burdened by local permitting so well-sited projects have a viable permitting pathway.</p>	<p>Legislation introduced in the Senate and Assembly; advocating for inclusion in the FY 2025 budget</p>
Letter of Credit in Lieu of Cash Deposits for Upgrades > \$1M	<p>In 2023, industry worked with New York’s utilities in the Interconnection Policy Working Group (IPWG) to write proposed modifications to the Standardized Interconnection Requirements (SIR) to allow developers to post a letter of credit instead of cash for expensive grid upgrades. The proposal seeks to improve cashflow and lower costs for developers while providing utilities with assurance of payment for grid upgrades that can take years to plan and complete.</p>	<p>Industry drafted proposal under review by utilities, anticipate submitting a PSC petition in Q1 2024</p>
Interconnection Study Windows	<p>In 2023, industry worked with New York’s utilities in the Interconnection Technical Working Group (ITWG) to develop a proposal for solar + storage developers to define a charging/discharging schedule to inform the utilities’ grid impact studies. This proposal is anticipated to reduce interconnection costs</p>	<p>Anticipate filing a PSC petition in Q1 2024</p>
National Grid Sub-Transmission Interconnection Issue and Petition	<p>In 2023, National Grid informed a subset of 60 DG projects that the utility had conducted erroneous grid impact studies, and that additional studies would be required. Throughout 2023, National Grid conducted re-studies and then provided “Additional Upgrade Disclosures” to 45 projects with previously completed CESIR studies and fully executed interconnection agreements. In December, National Grid filed a petition to the Public Service Commission requesting that New York’s utilities be granted unlimited ability to impose retroactive scope and budget modifications to interconnection upgrades.</p>	<p>Public comments due by March 25, 2024</p>
Interconnection Reform Proceeding	<p>Rising interconnection costs and administrative challenges with the interconnection process are a major barrier to scaling up distributed solar + storage in NY. In response to industry advocacy, the Governor announced a pending proceeding to improve the interconnection process in NY. Industry is currently developing a list of high impact interconnection reforms to advance in 2024.</p>	<p>State-of-the-State announcement in 2024</p>