

NY-Sun Initiative Quarterly Performance Report to the Public Service Commission

Quarter Ending March 31, 2019

Final Report | May 2019

NYSERDA's Promise to New Yorkers:

NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.

Mission Statement:

Advance innovative energy solutions in ways that improve New York's economy and environment.

Vision Statement:

Serve as a catalyst – advancing energy innovation, technology, and investment; transforming New York's economy; and empowering people to choose clean and efficient energy as part of their everyday lives.

**NY-Sun Initiative
Quarterly Performance Report to the
Public Service Commission**

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1 Overview of NY-Sun

1.1 Introduction

NY-Sun is a \$1 billion initiative to expand solar capacity throughout New York State by utilizing public funds in a strategic manner to build a self-sustaining solar market. NY-Sun provides financial support to qualified solar installation contractors and presents a comprehensive approach to reducing solar market costs and barriers. Building on the goals and accomplishments of the NY-Sun program, Governor Andrew M. Cuomo announced New York's Green New Deal on January 15, 2019. This nation-leading clean energy and jobs agenda will put the State on a path to carbon neutrality. The Green New Deal includes the proposal to install 6,000 megawatts (MW) of distributed solar electric capacity by 2025, which is an increase from the current goal of 3,000 MW by 2023.

Through March 31, 2019, 844 MW of solar have been installed statewide with the New York State Energy Research and Development Authority's (NYSERDA) NY-Sun funding and there are an additional 992 MW in the pipeline (Table 1). The NYSERDA NY-Sun funded solar capacity installed statewide as of March 31, 2019 generates approximately 990,983 megawatt-hours (MWh) of electricity each year (Table 2), reducing annual carbon dioxide equivalent (CO₂e) emissions by 500,335 metric tons (MT).¹ The budget and financial status associated with NY-Sun programs is presented in Table 3.

Expanding the view to include all NYSERDA's funding support for distributed solar, 1,357 MW have been installed statewide and an additional 1,042 MW are in the pipeline as of March 31, 2019.² These distributed solar installations, which span multiple NYSERDA funding sources and programs, generate

¹ Per the Clean Energy Advisory Council (CEAC) Metrics, Tracking and Performance Assessment (MTPA) Working Group, NYSERDA has adopted a marginal electricity grid emission factor of 1,103 pounds CO₂e/MWh for projects completed after 2016 (<http://documents.dps.ny.gov/public/MatterManagement/MatterFilingItem.aspx?FilingSeq=190731&MatterSeq=50399>). Projects completed prior to 2016 will maintain the 1,160 pounds CO₂e/MWh previously used, based on analysis of grid emissions at that time.

² <https://www.nysERDA.ny.gov/About/Tracking-Progress/Statewide-Completed-Solar-Projects>

This number is exclusive of projects funded through NYSERDA's Large Scale Renewables program, which are not distributed energy resources.

approximately 1,575,007 MWh of electricity each year, reducing annual CO₂e emissions by 803,627 MT.¹ Evidence of a self-sustaining solar market is building, with distributed solar capacity being installed even in the absence of direct NYSERDA funding support. In total, 1,628 MW of distributed solar capacity have been installed statewide,³ including more than 300 MW installed to date without direct NYSERDA funding.

1.2 High-Level Accomplishments This Quarter

- Following a strong 2018, 103 MW of NY-Sun supported projects were brought online in Q1 2019, which was a 42% increase over Q1 in 2018.
- In response to market conditions, NY-Sun added a new Block to the Upstate Commercial MW Block in February 2019. The new Block has 200 MW of capacity at an incentive level of \$0.20/W.
- In the Long Island service territory, the final block of the Nonresidential Block reached full capacity, and NY-Sun incentives are no longer offered in this territory. In less than five years, 29.5 MW of solar serving schools, businesses, multifamily buildings, and other nonresidential properties on Long Island receiving NY-Sun incentives have been completed, and an additional 42.5 MW are currently in the NY-Sun pipeline.
- Uptake for the Affordable Solar Residential Onsite program during Q1 2019, which provides additional incentives for on-site residential projects for low- to moderate-income homeowners, was comparable to Q4 2018. Through Q1 2019, 431 installations were completed with 34 more in the pipeline. A total of 81 NY-Sun contractors have submitted Affordable Solar projects to date.
- The Affordable Solar Predevelopment and Technical Assistance program, which provides funding to support the development of community solar projects serving low- to moderate-income households as well as solar serving multifamily affordable housing properties, approved 19 project applications through Q1 2019, with 16 predevelopment projects under contract.
- In Q1 2019, the final results from Round 4 of Solarize were reported. These campaigns were located in Long Island, the Capital District, Western NY, Mid-Hudson Valley, and the Southern Tier region. Out of the 12 awarded campaigns, six were focused on community solar, and six on rooftop residential. Overall, this round resulted in 200 residential rooftop installations totaling approximately 1.9 MW and 120 community solar subscriptions across the State.
- Although all Residential Block NY-Sun incentives for Long Island have been exhausted, Green Jobs - Green New York financing is still available. As of Q1 2019, 1,289 financing-only Long Island projects have been completed and 98 additional Long Island financing-only project applications have been received or approved in the pipeline.

³ Wood Mackenzie: U.S. Solar Market Insight Full Report, data through December 31, 2018.

- Through the Clean Energy Siting and Soft Cost Reduction initiative, which seeks to reduce soft cost barriers inhibiting the deployment of clean energy technologies, NYSERDA has been working with local government officials to help implement sections of the Clean Energy Guidebook. Additionally, as a compliment to the updated version of the New York Solar Guidebook for Local Governments, technical assistance was provided to more than 200 counties, towns, and villages throughout New York State. More than 35 topic-specific workshops were held, reaching an audience of more than 1,800 local officials through Q1 2019.
- Following the announcement of the first nine Solar for All projects in Q4 2018, three of the projects commenced commercial operation and have initiated the process to allocate credits to the electricity bills of Solar for All participants while two additional projects are scheduled to begin commercial operation in Q2 2019. The remaining projects are expected to start later in 2019.
- Following the launch of the PV + Storage incentive program in Q4 2018, three projects have been submitted for review. Approval of the first project occurred Q1 2019. The bridge incentives to accelerate the retail energy storage market are anticipated to launch in Q2 2019.
- The new Quality Solar Installer designation for NY-Sun, which recognizes builders who consistently meet high standards of quality in the NY-Sun Residential and Nonresidential program, went into effect in Q1 2019. A total of 37 NYSERDA-approved contractors serving residential and nonresidential customers received the Quality Solar Installer designation for projects completed in 2018.

2 Progress and Results

Table 1. Capacity toward 3GW Goal

Through March 31, 2019 (MW)^{4,5}

Program	Projects Completed (Installed Units) with Adjustments through 12/31/18	Projects Completed (Installed Units) 1/01/19 - 3/31/19	Projects Completed (Installed Units) through 3/31/19	Applications Approved but Not Yet Contracted (Current Pipeline)	Projects Contracted but Not Yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 3/31/19
Residential / Small Commercial	474.14	28.72	502.86	3.32	52.16	558.34
Commercial / Industrial	170.24	70.99	241.23	21.12	899.55	1,161.90
Competitive PV	100.14	0.00	100.14	0.00	16.24	116.37
Grand Total	744.51	99.71	844.22	24.44	967.95	1,836.61

⁴ 1,000 MW equals one GW.

⁵ Changes in numbers for previously reported completed projects are due to lagged data and/or QA/QC.

Table 2. Production Associated with 3GW Goal

Through March 31, 2019 (MWh)^{6, 7, 8}

Program	Projects Completed (Installed Units) with Adjustments through 12/31/18	Projects Completed (Installed Units) 1/01/19 - 3/31/19	Projects Completed (Installed Units) through 3/31/19	Applications Approved but Not Yet Contracted (Current Pipeline)	Projects Contracted but Not Yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 3/31/19
Residential / Small Commercial	556,564	33,711	590,275	3,894	61,229	655,398
Commercial / Industrial	199,834	83,330	283,164	24,792	1,055,932	1,363,889
Competitive PV	117,543	0	117,543	0	19,058	136,601
Grand Total	873,941	117,041	990,983	28,686	1,136,218	2,155,887

⁶ Changes in numbers for previously reported completed projects are due to lagged data and/or QA/QC.

⁷ Note that the megawatt-hours included in Table 2 are estimated amounts based on a statewide capacity factor. NYSERDA does not, by filing this report, make any claim to the environmental attributes associated with those megawatt-hours.

⁸ The NY-Sun program does not determine the delivery or use of solar energy (MWh) from projects that receive funding. Generation from NY-Sun-funded projects may be used by customers for their own voluntary use or used toward meeting State requirements to deliver renewable energy to electricity customers in New York State, depending on ownership of the environmental attributes and/or renewable energy certificates (RECs) from those projects. Where NYSERDA has not acquired the RECs from a NY-Sun-funded project, NYSERDA makes no claim to the environmental attributes of that energy.

Table 3. Budget and Financial Status for NY-Sun ProgramAs of March 31, 2019 (in dollars)⁹

Program	Pre-encumbrances	Open Encumbrances	Expended Funds	Grand Total	Budgeted Funds 2014-2023
Residential/Small Commercial	\$484,935	\$15,126,535	\$258,095,730	\$273,707,200	\$533,522,000
Commercial/Industrial	\$17,213,646	\$307,199,329	\$42,223,283	\$366,636,258	\$480,778,018
Competitive PV	\$0	\$26,068,640	\$26,675,343	\$52,743,982	\$52,743,982
Program Implementation	\$336,993	\$2,868,132	\$6,201,255	\$9,406,380	\$32,600,000
Low- to Moderate-Income	\$27,590	\$1,657,943	\$1,531,312	\$3,216,845	\$13,000,000
Consumer Education	\$0	\$2,907,394	\$592,606	\$3,500,000	\$3,500,000
Administration	\$0	\$829,143	\$10,131,074	\$10,960,216	\$38,706,000
Evaluation	\$0	\$131,500	\$147,142	\$278,641	\$2,500,000
NYS Cost Recovery Fee	\$0	\$0	\$2,402,233	\$2,402,233	\$19,250,000
Total	\$18,063,164	\$356,788,614	\$347,999,978	\$722,851,756	\$1,176,600,000

⁹ Administration, Evaluation, and NYS Cost Recovery Fee are for NY-Sun funds only.

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

To learn more about NYSERDA's programs and funding opportunities, visit nyserda.ny.gov or follow us on Twitter, Facebook, YouTube, or Instagram.

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