

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

Quarter Ending March 31, 2020

Final Report | May 2020

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 solar photovoltaic (PV) installations 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's Green New Deal advanced the next phase of NY-Sun, with the announcement of an expansion to the NY-Sun goal from 3,000 megawatts (MW) of distributed solar by 2023 to 6,000 MW by 2025. This expansion goal was identified as an integral component of the Climate Leadership and Community Protection Act (CLCPA), which was enacted on July 18, 2019. On November 25, 2019, the New York State Energy Research and Development Authority (NYSERDA) filed a new petition with the New York State Public Service Commission seeking authorization to support the expanded 6,000 MW policy goal and an extension of the NY-Sun program through 2025.

Through March 31, 2020, NYSERDA, through its NY-Sun program, funded the installation of 1,238 MW of solar statewide with an additional 1,274 MW more in the pipeline (Table 1). These installed systems have resulted in the following:

- Generation of 1,406,530 megawatt-hours (MWh) of electricity annually
- The reduction of 707,795 metric tons (MT)¹ of CO₂ annually
- Annual participant bill savings² of \$207 million
- Non-NYSERDA funding investments of \$3,016 million

The budget and financial status associated with NY-Sun programs is presented in Table 3.

Expanding the view to include all funding support for distributed solar from NYSERDA-administered initiatives, 1,764 MW have been installed statewide and an additional 1,319 MW are in the pipeline as of March 31, 2020.³ These distributed solar installations have resulted in the following:

- Generation of 1,991,425 MWh of electricity annually
- The reduction of 1,012,025 metric tons (MT)¹ of CO₂ annually

Evidence of a self-sustaining solar market continues to build, with evidence of distributed solar capacity installed even in the absence of direct NYSERDA funding support. Through March 31, 2020, a total of 2,410 MW of distributed solar capacity have been installed statewide,⁴ including more than 646 MW installed to date without direct NYSERDA funding.

1.2 High-Level Accomplishments This Quarter

A note regarding accomplishments: In March 2020, Governor Andrew M. Cuomo issued Executive Order 202, and subsequent updates, which among other directives initiated a temporary shutdown of all non-essential onsite construction activities, including solar projects, due to the COVID-19 pandemic. While new solar installed capacity in Q1 2020 remained consistent with Q1 2019, the PAUSE order will likely impact growth of installed capacity throughout the remainder of 2020.

- A total of 107 MW of NY-Sun supported projects were brought online in Q1 2020. This was a slight increase over the 100 MW of NY-Sun supported projects brought online during Q1 2019.
- In January 2020, the 2020 NYSERDA Quality Solar installer class was announced. This special designation recognizes builders who consistently meet high standards of quality in the Residential and Nonresidential program. Alongside the webinar in new Standards and Quality Assurance (SQA) functionality in the NYSERDA Portal that also occurred in January 2020, NY-Sun continues to drive improvements to installation quality and integrity of the solar program.
- In response to market uptake and to provide certainty, 175 MW of additional capacity was added to the Upstate Commercial Block 14 in March 2020. The block maintains the current incentive level of \$0.17/Watt.
- The Multifamily Affordable Housing Added Incentive, which provides additional incentives for projects sited on regulated affordable housing, has continued to grow. Following the large number of new project submissions during Q4 2019, 51 installations have been completed with 106 more in the pipeline through Q1 2020.
- Uptake for the Affordable Solar Residential Onsite program, which provides additional incentives for on-site residential projects for low- to moderate-income homeowners, was comparable to the previous quarter. Through Q1 2020, 557 installations were completed with 34 more in the pipeline. A total of 85 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 and contracted 21 project applications through Q1 2020. The program will re-open for new applications in Q2 2020.
- As of Q1 2020, eight Solar for All projects have come online and are allocating credits to low-income subscribers. The final Solar for All project from the first round of projects will begin commercial operation in April 2020. Through Q1 2020, 1,491 Solar for All subscribers have been assigned to projects and are receiving credits on their electricity bills.
- Although all Residential Block NY-Sun incentives for Long Island have been exhausted, Green Jobs - Green New York financing is still available. As of Q4 2019, 1,877 financing-only Long Island projects have been completed and 174 additional Long Island financing-only project applications have been received or approved in the pipeline.

- Through the Clean Energy Siting and Soft Cost Reduction initiative, NYSERDA works with local government officials to realize the benefits that can be realized through implementation of recommendations in the New York Solar Guidebook for Local Governments and the New York Battery Energy Storage Guidebook for Local Governments. Such technical assistance has been provided to more than 350 counties, towns, and villages throughout New York State and more than 40 topic-specific workshops and more than 50 in-person meetings have been held through Q1 2020.

2 Progress and Results

Table 1. Capacity toward 3GW Goal

Through March 31, 2020 (MW)^{5, 6}

Program	Projects Completed (Installed Units) through 12/31/19	Projects Completed (Installed Units) 1/1/20 - 3/31/20	Project Completed (Installed Units) through 3/31/20	Applications Approved but not yet Contracted (Current Pipeline)	Projects Contracted but not yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 3/31/20
Residential / Small Commercial	576.22	27.62	603.83	9.75	105.98	719.57
Commercial / Industrial	440.00	79.07	519.06	43.86	1,111.77	1,674.69
Competitive PV	115.42	0.00	115.42	2.50	0.00	117.92
Grand Total	1,131.63	106.68	1,238.31	56.12	1,217.75	2,512.18

Table 2. Production Associated with 3GW Goal

Through March 31, 2020 (MWh)^{7, 8}

Program	Projects Completed (Installed Units) through 12/31/19	Projects Completed (Installed Units) 1/1/20 - 3/31/20	Project Completed (Installed Units) through 3/31/20	Applications Approved but not yet Contracted (Current Pipeline)	Projects Contracted but not yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 3/31/20
Residential / Small Commercial	629,325	30,136	659,462	5,470	121,982	786,914
Commercial / Industrial	518,776	92,811	611,588	53,423	1,357,547	2,022,558
Competitive PV	135,481	0	135,481	2,936	0	138,417
Grand Total	1,283,582	122,948	1,406,530	61,830	1,479,529	2,947,889

Table 3. Budget and Financial Status for NY-Sun ProgramAs of March 31, 2020 (in dollars)⁹

Program	Pre-encumbrances	Open Encumbrances	Expended Funds	Grand Total	Budgeted Funds 2014-2023
Residential/Small Commercial	\$471,298	\$12,156,136	\$288,339,035	\$300,966,469	\$533,522,000
Commercial/Industrial	\$12,091,725	\$355,591,241	\$107,921,473	\$475,604,439	\$482,950,167
Competitive PV	-	\$14,336,479	\$36,235,354	\$50,571,833	\$50,571,833
Program Implementation	-	\$3,279,710	\$8,184,727	\$11,464,437	\$32,600,000
Low- to Moderate-Income	\$208,500	\$2,300,253	\$2,759,171	\$5,267,924	\$13,000,000
Consumer Education	-	\$2,508,376	\$991,624	\$3,500,000	\$3,500,000
Community Adder	\$3,257,232	\$12,046,745	\$418,926	\$15,722,903	\$43,393,813
Admin (NY-SUN Only)	-	\$60,123	\$12,564,066	\$12,624,189	\$38,706,000
Evaluation (NY-SUN Only)	-	\$47,275	\$255,976	\$303,251	\$2,500,000
NYS Cost Recovery Fee (NY-SUN Only)	-	-	\$3,327,106	\$3,327,106	\$19,250,000
Total	\$16,028,756	\$402,326,337	\$460,997,459	\$879,352,552	\$1,219,993,813

Endnotes

- 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 Based on a retail rate of the electricity generated by funded solar PV systems.
- ³ <https://www.nyserra.ny.gov/All-Programs/Programs/NY-Sun/Solar-Data-Maps/NYSERDA-Supported-Solar-Projects>This number is exclusive of projects funded through NYSERDA's Large Scale Renewables program, which are not distributed energy resources.
- ⁴ NYSERDA: Statewide Completed Solar Projects, data through March 31, 2020: <https://www.nyserra.ny.gov/All-Programs/Programs/NY-Sun/Solar-Data-Maps/Statewide-Projects>.
- ⁵ 1,000 MW equals one GW.
- 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.
- 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 nyserdera.ny.gov or follow us on Twitter, Facebook, YouTube, or Instagram.

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