

NY-Sun Initiative Quarterly Performance Report to the Public Service Commission Quarter Ending June 30, 2019

Final Report | August 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

Quarter Ending June 30, 2019

Final Report

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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 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 of the NY-Sun goal of 3,000 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.

Through June 30, 2019, the New York State Energy Research and Development Authority (NYSERDA) realized 884 MW of solar installed statewide with NY-Sun funding with an additional 970 MW in the pipeline (Table 1). The NY-Sun funded solar capacity installed statewide as of June 30, 2019 generates approximately 1,038,125 megawatt-hours (MWh) of electricity each year (Table 2), reducing annual carbon dioxide equivalent (CO_{2e}) emissions by 523,927 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 funding support for distributed solar from NYSERDA-administered initiatives, 1,400 MW have been installed statewide and an additional 1,018 MW are in the pipeline as of June 30, 2019.² These distributed solar installations generate approximately 1,625,555 MWh of electricity each year, reducing annual CO_{2e} emissions by 828,924 MT.¹

Evidence of a self-sustaining solar market continues to build, with distributed solar capacity being installed even in the absence of direct NYSERDA funding support. In total, 1,879 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

- A total of 43 MW of NY-Sun supported projects were brought online in Q2 2019. Overall NY-Sun supported projects in the first half of 2019 are up 17% (140 MW) over the first half of 2018 (116 MW).
- Block 1 of the Retail Energy Storage Incentive Program is now fully subscribed and closed, and NY-Sun opened Block 2 in May 2019. Eligible projects in Long Island and the Upstate region, which includes Westchester County, will receive \$250/kWh. Eligible projects in New York City will receive \$300/kWh. Although the retail storage program is distinct from NY-Sun, all retail storage project applications to date have been paired with PV, underscoring the interconnectedness of the two programs and technologies.
- Following the creation of the new Upstate Commercial Block 13 in February 2019, the new block was expanded in May 2019 from 200 MW to 350 MW. The incentive level remains the same at \$0.20/W.
- In April 2019, New York's Department of Public Service released an updated Value Stack Order,⁴ which includes a new option for projects under 750 kW AC to choose compensation either based on the Value Stack or Phase One Net Metering, a change to how DRV is calculated, the introduction of the Community Credit for Community Distributed Generation Projects, and changes to the MTC. A summary of these changes was posted to the NY-Sun website.⁵
- 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 in Q2 2019 to Q1 2019. Through Q2 2019, 459 installations were completed with 33 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 21 project applications through Q2 2019, with 19 predevelopment projects under contract.
- Although all Residential Block NY-Sun incentives for Long Island have been exhausted, Green Jobs - Green New York financing is still available. As of Q2 2019, 1,443 financing-only Long Island projects have been completed and 166 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, 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 guidebooks. Additionally, as a compliment to the updated version of the New York Solar Guidebook for Local Governments, technical assistance was provided to more than 275 counties, towns, and villages throughout New York State. More than 35 topic-specific workshops were held, reaching an audience of more than 2,000 local officials through Q2 2019.
- Two additional Solar for All projects began allocating credits to low-income subscribers in Q2 2019. The remaining four Solar for All projects are anticipated to come online later in 2019.

2 Progress and Results

Table 1. Capacity toward 3GW Goal

Through June 30, 2019 (MW)^{6,7}

Program	Projects Completed (Installed Units) with Adjustments through 3/31/19	Projects Completed (Installed Units) 4/01/19 - 6/30/19	Projects Completed (Installed Units) through 6/30/19	Applications Approved but Not Yet Contracted (Current Pipeline)	Projects Contracted but Not Yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 6/30/19
Residential / Small Commercial	502.86	22.68	525.54	2.99	62.01	590.55
Commercial / Industrial	241.23	17.48	258.71	12.11	876.61	1,147.43
Competitive PV	100.14	0.00	100.14	0.00	16.24	116.37
Grand Total	844.22	40.16	884.38	15.10	954.86	1,854.34

Table 2. Production Associated with 3GW Goal

Through June 30, 2019 (MWh)^{7, 8, 9}

Program	Projects Completed (Installed Units) with Adjustments through 3/31/19	Projects Completed (Installed Units) 4/01/19 - 6/30/19	Projects Completed (Installed Units) through 6/30/19	Applications Approved but Not Yet Contracted (Current Pipeline)	Projects Contracted but Not Yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 6/30/19
Residential / Small Commercial	590,275	26,627	616,902	3,512	72,794	693,208
Commercial / Industrial	283,164	20,516	303,680	14,218	1,028,995	1,346,894
Competitive PV	117,543	0	117,543	0	19,058	136,601
Grand Total	990,983	47,142	1,038,125	17,730	1,120,847	2,176,703

Table 3. Budget and Financial Status for NY-Sun ProgramAs of June 30, 2019 (in dollars)¹⁰

Program	Pre-encumbrances	Open Encumbrances	Expended Funds	Grand Total	Budgeted Funds 2014-2023
Residential/Small Commercial	\$294,421	\$13,928,875	\$265,169,964	\$279,393,260	\$533,522,000
Commercial/Industrial	\$15,398,054	\$320,958,480	\$47,303,942	\$383,660,476	\$481,234,030
Competitive PV	\$700,777	\$22,645,450	\$28,941,743	\$52,287,970	\$52,287,970
Program Implementation	\$336,993	\$3,491,814	\$6,963,239	\$10,792,046	\$32,600,000
Low- to Moderate-Income	\$123,586	\$1,888,888	\$1,751,820	\$3,764,294	\$13,000,000
Consumer Education	\$-	\$2,728,137	\$771,863	\$3,500,000	\$3,500,000
Community Adder	\$-	\$-	\$-	\$-	\$43,393,813
Admin (NYSUN Only)	\$10,000	\$208,178	\$10,692,290	\$10,910,468	\$38,706,000
Evaluation (NYSUN Only)	\$-	\$125,562	\$156,480	\$282,042	\$2,500,000
NYS Cost Recovery Fee (NY-SUN Only)	\$-	\$-	\$2,728,212	\$2,728,212	\$19,250,000
Total	\$16,863,831	\$365,975,384	\$364,479,553	\$747,318,768	\$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 <https://www.nyserdanewyork.gov/All-Programs/Programs/NY-Sun/Data-and-Trends>
This number is exclusive of projects funded through NYSERDA's Large Scale Renewables program, which are not distributed energy resources.
- ³ NYSERDA: Statewide Completed Solar Projects, data through June 30, 2019:
<https://www.nyserdanewyork.gov/About/Tracking-Progress/Statewide-Completed-Solar-Projects>.
- ⁴ <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={06B07A5A-893A-48CB-BB0E-E8B3ABF4A7C6}>
- ⁵ <https://www.nyserdanewyork.gov/All-Programs/Programs/NY-Sun/Contractors/Value-of-Distributed-Energy-Resources>
- ⁶ 1,000 MW equals one GW.
- ⁷ Changes in numbers for previously reported completed projects are due to lagged data and/or QA/QC.
- ⁸ 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.
- ⁹ 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.
- ¹⁰ 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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