NY-Sun Initiative Quarterly Performance Report to the Public Service Commission Quarter Ending June 30, 2018

Final Report | August 2018



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.

NYSERDA Record of Revision

NY-Sun Initiative Quarterly Performance Report to the Public Service Commission Quarter Ending June 30, 2018

Revision Date	Description of Changes	Revision on Page(s)
8/14/2018	Original Issue	Original Issue

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Quarter Ending June 30, 2018

Final Report

Prepared by:

New York State Energy Research and Development Authority

Albany, NY

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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. NY-Sun's goal, referred to as the 3 Gigawatts Goal, is to install three gigawatts (GW) of solar electric capacity by 2023 while building a self-sustaining solar industry.

Through June 30, 2018, 619 megawatts (MW) of solar have been installed statewide with NYSERDA NY-Sun funding (Table 2-1), with an additional 975 MW in the pipeline (Table 2-2). The NYSERDA NY-Sun funded solar capacity installed statewide as of June 30, 2018 generates approximately 726,396 megawatt-hours (MWh) of electricity each year, reducing annual carbon dioxide equivalent (CO₂e) emissions by 382,314 metric tons (MT). The budget and financial status associated with NY-Sun programs is presented in Table 2-3.

Inclusive of all NYSERDA funding through June 30, 2018, 1,117 megawatts (MW) of solar have been installed statewide, with an additional 1,024 MW in the pipeline. These collective installations, which span multiple NYSERDA funding sources and programs, generate approximately 1,293,752 MWh of electricity each year, reducing annual CO₂e emissions by 680,922 MT.¹

1.2 High-Level Accomplishments During This Quarter

Uptake for the Affordable Solar Residential Onsite program during Q2 2018, which provides
additional incentives for on-site residential projects for low- to moderate-income homeowners,
was comparable to Q1 2018. Through Q2 2018, 348 installations were completed with 55 more
in the pipeline. More than 70 NY-Sun contractors have submitted Affordable Solar projects
to date.

The Clean Energy Fund Investment Plan Budget Accounting and Benefits Chapter was submitted on February 22, 2016, in which NYSERDA adopted the NYS Public Service Commission's recommendation in its January 21, 2016 Order Establishing the Benefit Cost Analysis Framework. NYSERDA fulfilled the recommendation that New York State's greenhouse gas (GHG) emissions factor methodology shift from an average grid emission profile to a marginal grid emission profile. Due to this shift, New York State's factor to calculate GHG emissions reductions has changed from 625 pounds CO₂e/MWh to 1,160 pounds CO₂e/MWh. The emissions reductions calculated for this quarterly report reflect the new factor of 1,160 pounds CO₂e/MWh.

- The Affordable Solar Predevelopment and Technical Assistance program, which provides
 funding to support the development of community solar projects serving low- to moderateincome households as well as solar serving multifamily affordable housing properties,
 approved 11project applications through Q2 2018, with eight predevelopment projects
 under contract.
- In Q2, the fourth round of Solarize campaigns launched. Campaigns are located in Long Island, the Capital District, Western NY, Mid-Hudson Valley, and the Southern Tier region. Out of the 12 awarded campaigns, six are focused on community solar, with the remaining on rooftop residential. These campaigns will run throughout the calendar year and close at the end of Q4.
- During Q2 2018, seven additional projects were completed from the Competitive Bid program, totaling 7.2 MW.
- Although the NY-Sun incentives have sunset on Long Island, Green Jobs Green New York financing is still available for Long Island residents. As of the second quarter of 2018, 925 financing-only Long Island projects have been completed and 129 additional Long Island financing-only project applications have been received or approved.
- The MW Block redesign was launched on June 18, 2018. New program manuals were released detailing the changes to the incentive structure as well as the eligibility criteria for the new adders that apply to brownfields/landfills, solar canopies, and multifamily affordable housing.
- 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.
- Program development for Solar for All, which will expand access to community solar for approximately 10,000 low-income households, continued in Q2 2018. The first round of the Solar for All Request for Proposals (RFP) was released on May 24, 2018, which will be followed by the launch of the Solar for All website and the community solar participant sign-up portal in Q3 2018.
- Following the launch of the NY Energy Storage Roadmap in June, NY-Sun began work in designing an incentive for PV+Storage projects.
- Working with independent consultant, DNV GL, NYSERDA completed a Solar Photovoltaic Program Impact Evaluation for 2011–2016.² This report evaluated energy production, capacity factor, realization rates and performance persistence of solar PV systems installed with NYSERDA incentives, including NY-Sun. Production estimates taken from installer applications were found to be very accurate, with a realization rate of 99% overall. In addition, the capacity factor across all systems was estimated to be 12.38%. In the coming months, NYSERDA will adjust its NY-Sun reported energy production values to account for the results of this evaluation.

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² Solar Photovoltaic Program Impact Evaluation for 2011–2016 - Final Report

2 Progress and Results

Table 2-1. Capacity toward 3GW Goal

Through June 30, 2018 (MW)^{3,4}

Program	Projects Completed (Installed Units) with Adjustments through 3/31/18	Projects Completed (Installed Units) 4/01/18 - 6/30/18	Projects Completed (Installed Units) through 6/30/18	Applications Approved but Not Yet Contracted (Current Pipeline)	Projects Contracted but Not Yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 6/30/18
Residential / Small Commercial	399.31	25.00	424.31	3.03	57.07	484.40
Commercial / Industrial	82.51	19.76	102.27	39.51	848.52	990.31
Competitive PV	89.77	2.47	92.24	0.00	26.76	119.00
Grand Total	571.59	47.23	618.82	42.55	932.35	1,593.72

³ 1,000 MW equals one GW.

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

Table 2-2. Production Associated with 3GW Goal

Through June 30, 2018 (MWh)^{5, 6, 7}

Program	Projects Completed (Installed Units) with Adjustments through 3/31/18	Projects Completed (Installed Units) 4/01/18 - 6/30/18	Projects Completed (Installed Units) through 6/30/18	Applications Approved but Not Yet Contracted (Current Pipeline)	Projects Contracted but Not Yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 6/30/18
Residential / Small Commercial	468,724	29,344	498,068	3,559	66,987	568,614
Commercial / Industrial	96,855	23,199	120,054	46,384	996,031	1,162,468
Competitive PV	105,377	2,898	108,275	0	31,411	139,686
Grand Total	670,956	55,440	726,396	49,943	1,094,429	1,870,768

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

Note that the megawatt-hours included in Table 2-2 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.

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, 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 2-3. Budget and Financial Status for NY-Sun Programs

As of June 30, 2018 (in dollars)8

Program	Pre-encumbrances	Open Encumbrances	Expended Funds	Grand Total	Budgeted Funds 2014-2023
Residential/Small Commercial	\$876,003	\$19,746,748	\$235,001,851	\$255,624,602	\$533,522,000
Commercial/Industrial	\$11,290,692	\$273,680,209	\$11,066,516	\$296,037,417	\$479,651,024
Competitive PV	\$0	\$38,635,096	\$15,235,880	\$53,870,976	\$53,870,976
Program Implementation	\$1,024,499	\$2,112,006	\$4,565,565	\$7,702,070	\$32,600,000
Low-Moderate Income	\$163,537	\$905,755	\$975,279	\$2,044,571	\$13,000,000
Consumer Education	\$0	\$2,988,416	\$511,584	\$3,500,000	\$3,500,000
Administration	\$0	\$901,028	\$7,774,294	\$8,675,322	\$38,706,000
Evaluation	\$0	\$20,814	\$129,186	\$150,000	\$2,500,000
NYS Cost Recovery Fee	\$0	\$0	\$1,682,934	\$1,682,934	\$19,250,000
Total	\$13,354,731	\$338,990,072	\$276,943,089	\$629,287,892	\$1,176,600,000

⁸ 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.

New York State Energy Research and Development Authority

17 Columbia Circle Albany, NY 12203-6399 toll free: 866-NYSERDA local: 518-862-1090 fax: 518-862-1091

info@nyserda.ny.gov nyserda.ny.gov



State of New York

Andrew M. Cuomo, Governor

New York State Energy Research and Development Authority

Richard L. Kauffman, Chair | Alicia Barton, President and CEO