

NY-Sun Initiative Quarterly Performance Report to the Public Service Commission Quarter Ending December 31, 2018

Final Report | February 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 December 31, 2018

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 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 December 31, 2018, 744 megawatts (MW) of solar have been installed statewide with New York State Energy Research and Development Authority (NYSERDA) NY-Sun funding (Table 1), with an additional 883 MW in the pipeline (Table 2). The NYSERDA NY-Sun funded solar capacity installed statewide as of December 31, 2018 generates approximately 873,957 megawatt-hours (MWh) of electricity each year, reducing annual carbon dioxide equivalent (CO₂e) emissions by 459,977 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 of NYSERDA's funding support for distributed solar, 1,254 MW have been installed statewide, and an additional 923 MW are in the pipeline as of December 31, 2018.² These distributed solar installations, which span multiple NYSERDA funding sources and programs, generate approximately 1,454,007 MWh of electricity each year, reducing annual CO₂e emissions by 765,267 MT.¹

Evidence of a self-sustaining solar market is building, as installations of distributed solar capacity are being installed even in the absence of direct NYSERDA funding support. In total, 1,570 MW of distributed solar capacity have been installed statewide,³ with more than 300 MW installed to date without direct NYSERDA funding.

Building on the goals and accomplishments noted above, Governor Cuomo announced New York State'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 proposes the following:

- Six thousand MW of solar by 2025, an increase from the current 3,000 MW (or 3 GW) goal noted earlier
- Seventy percent renewable electricity by 2030
- Nine thousand MW of offshore wind by 2035
- Carbon-free electricity by 2040

To achieve these goals, New York State is undertaking one of the most aggressive clean energy agendas in the nation. The NY-Sun program serves as a strong foundation upon which to build toward these new goals.

1.2 High-Level Accomplishments This Quarter

- Following a strong Q3 2018, 54 MW were brought online in Q4 2018, which means that 2018 was the most successful year ever for the NY-Sun program with a total 281 MW.
- Uptake for the Affordable Solar Residential Onsite program during Q4 2018, which provides additional incentives for on-site residential projects for low- to moderate-income homeowners, was comparable to Q3 2018. Through Q4 2018, 416 installations were completed with 35 more in the pipeline. More than 79 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 eighteen project applications through Q4 2018, with thirteen predevelopment projects under contract.
- In Q4 2018, the fourth round of solarize campaigns concluded outreach. Campaigns were instructed to submit all reporting by January 2019, and final results for the 2018 Solarize round will be reported in Q1 2019. These campaigns were located in Long Island, the Capital District, Western New York, Mid-Hudson Valley, and the Southern Tier region. Out of the 12 awarded campaigns, six were focused on community solar, with the remaining on rooftop residential.
- Although all NY-Sun incentives for Long Island residents have been exhausted, Green Jobs - Green New York financing is still available. As of Q4 2018, a total of 1,140 financing-only Long Island projects have been completed and 151 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 Guidebook. Additionally, as a compliment to the updated version of the New York Solar Guidebook for Local Governments, technical assistance was provided to over 150 counties, towns, and villages throughout New York State. Over 30 topic specific workshops were held, reaching an audience of over 1,500 local officials in 2018.
- The first nine Solar for All projects were announced on December 3, 2018 with a total capacity of 9 MW dedicated to the program and will serve utility customers of NYSEG, National Grid, Central Hudson, and Orange & Rockland. In addition to savings on participant electric bills, some of the selected projects have also committed to additional community benefits, including donations to local organizations serving families in need and educational programs for local schools as well as committing additional project capacity to subscriptions for low- to moderate-income households.
- Following the launch of the PV + Storage incentive program in Q4 2018, one project has been submitted for review. Approval of this first project is anticipated for Q1 2019.
- NYSERDA announced a new Quality Solar Installer designation for NY-Sun, which will recognize builders who consistently meet high standards of quality in the NY-Sun Residential & Nonresidential program. Recognized builders will be able to use the designation in marketing materials as proof of the quality projects in our program. This new designation will go into effect in early 2019.

2 Progress and Results

Table 1. Capacity toward 3GW Goal

Through December 31, 2018 (MW)^{4,5}

Program	Projects Completed (Installed Units) with Adjustments through 9/30/18	Projects Completed (Installed Units) 10/01/18 - 12/31/18	Projects Completed (Installed Units) through 12/31/18	Applications Approved but Not Yet Contracted (Current Pipeline)	Projects Contracted but Not Yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 12/31/18
Residential / Small Commercial	448.27	25.89	474.15	5.15	55.75	535.06
Commercial / Industrial	144.26	25.98	170.24	44.41	761.87	976.52
Competitive PV	100.14	0.00	100.14	0.00	16.24	116.37
Grand Total	692.66	51.86	744.53	49.56	833.86	1,627.95

Table 2. Production Associated with 3GW Goal

Through December 31, 2018 (MWh)^{6, 7, 8}

Program	Projects Completed (Installed Units) with Adjustments through 9/30/18	Projects Completed (Installed Units) 10/01/18 - 12/31/18	Projects Completed (Installed Units) through 12/31/18	Applications Approved but Not Yet Contracted (Current Pipeline)	Projects Contracted but Not Yet Completed (Current Pipeline)	Total (Current Pipeline + Installed Units) through 12/31/18
Residential / Small Commercial	526,191	30,388	556,580	6,051	65,447	628,077
Commercial / Industrial	169,342	30,492	199,834	52,130	894,312	1,146,276
Competitive PV	117,543	0	117,543	0	19,058	136,601
Grand Total	813,077	60,880	873,957	58,181	978,816	1,910,954

Table 3. Budget and Financial Status for NY-Sun ProgramAs of December 31, 2018 (in dollars)⁹

Program	Pre-encumbrances	Open Encumbrances	Expended Funds	Grand Total	Budgeted Funds 2014-2023
Residential/Small Commercial	\$596,412	\$18,376,595	\$249,709,297	\$268,682,304	\$533,522,000
Commercial/Industrial	\$14,651,332	\$264,523,527	\$26,888,186	\$306,063,045	\$479,804,133
Competitive PV	\$0	\$33,820,968	\$19,896,899	\$53,717,867	\$53,717,867
Program Implementation	\$445,242	\$2,519,623	\$5,706,242	\$8,671,107	\$32,600,000
Low-Moderate Income	\$237,910	\$1,299,515	\$1,262,981	\$2,800,406	\$13,000,000
Consumer Education	\$0	\$2,960,819	\$539,181	\$3,500,000	\$3,500,000
Administration	\$0	\$871,911	\$9,371,076	\$10,242,987	\$38,706,000
Evaluation	\$0	\$2,858	\$147,142	\$150,000	\$2,500,000
NYS Cost Recovery Fee	\$0	\$0	\$2,163,600	\$2,163,600	\$19,250,000
Total	\$15,930,896	\$324,375,816	\$315,684,604	\$655,991,316	\$1,176,600,000

Endnotes

- ¹ 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.
- ² This number is exclusive of projects funded through NYSERDA's Large Scale Renewables program, which are not distributed energy resources.
- ³ Wood Mackenzie, U.S. Solar Market Insight, Q4 2018. Data through September 30, 2018.
- 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.
- 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 nyserda.ny.gov or follow us on Twitter, Facebook, YouTube, or Instagram.

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