

# New York State is making solar more affordable while building a sustainable solar industry

"The long-term commitment to solar energy represented by NY-Sun will make New York State a national leader in solar development."

- NY Governor Andrew M. Cuomo on NY-Sun

NY-Sun, a dynamic public-private partnership, will drive growth of the solar industry and make solar technology more affordable for all New Yorkers.

In the first two years of NY-Sun, a total of 316 MW of solar electric was installed or under contract, more than was installed in the entire prior decade. Approximately 116,000 tons of greenhouse gas emissions will be avoided annually with the installation of the NY-Sun projects, which is the equivalent of removing 23,000 cars from the road.

# Investment to Stimulate Solar Projects and a Sustainable Solar Industry

In his 2012 State of the State address, Governor Cuomo launched NY-Sun to greatly increase clean, renewable solar energy capacity throughout the State. In 2014, he made a historic announcement to further expand solar through a \$1 billion investment in NY-Sun that would spur development of a market-driven, sustainable, subsidy-free solar industry and launched the statewide NY-Sun Incentive Program to help reach these goals.

The New York State Energy Research and Development Authority (NYSERDA), Long Island Power Authority (LIPA), PSEG Long Island, and New York Power Authority (NYPA) are collaborating to make the transition from previous successful solar programs to add more than 3 gigawatts of installed solar capacity in the State by 2023.

The NY-Sun Incentive Program, along with other NY-Sun efforts, is expected to make New York State a national leader in developing a robust, sustainable solar industry that makes clean solar energy affordable for all New Yorkers. NY-Sun is part of Governor Cuomo's commitment to protect the environment and lower energy costs for New Yorkers by improving the efficiency and reliability of the electric grid.

# **Providing Certainty and Transparency** for the Solar Industry

The future of renewable energy depends on continuing

to reduce system costs and growing demand through informed customers. And more and more New Yorkers are signing up for the solar energy revolution thanks to NY-Sun. As part of NY-Sun, the NY-Sun Incentive Program is an expanded statewide program to provide financial support for solar projects at homes, businesses, not-for-profit facilities, schools, and municipal buildings.



The NY-Sun Incentive Program provides solar electric system megawatt (MW) targets that vary by region and incentives that decline at a predictable rate over time. The program will be managed by NYSERDA with local administration provided on Long Island by PSEG Long Island.

The NY-Sun Incentive Program provides the industry with certainty and transparency regarding incentive levels, accounts for regional market differences, provides a clear signal to industry that New York intends to eliminate cash incentives in a reasonable time frame, and allows for the elimination of those incentives sooner in regions where the market conditions can support it, based on market penetration, demand, and payback. The ultimate goal of the NY-Sun Incentive Program is to, in combination with other components of NY-Sun, facilitate a self-sustaining solar electric industry in New York State.

# **Reducing the Cost of Solar Projects**

Harnessing New York State's solar potential requires bold innovation and continued cost reduction. NY-Sun includes efforts to reduce solar electric balance-of-system (BOS) costs, such as streamlining permitting and inspection processes, decreasing costs of installation and components other than the solar modules, training for local officials and first responders, and tools to support community solar projects. BOS costs can account for half of the total system costs.<sup>1</sup>

Included in BOS efforts is Community Solar NY, administered by NYSERDA. It works with local governments, schools, and other community partners to make solar more accessible and affordable through group purchasing campaigns and other strategies. At the heart of Community Solar NY is K-Solar, a partnership between NYPA and NYSERDA, working with the State Education Department to provide school districts with the tools and expertise necessary to bring solar energy to their facilities and reduce their energy costs, and to become hubs for community solar projects.

NYSERDA and NYPA are collaborating on a targeted, BOS component, providing at least \$50 million to promote activities that will reduce the overall installed cost of solar electric.

# The BOS component of NY-Sun has developed and/or implemented:

- A NYS Unified Solar Permit and is working with local officials to standardize and streamline permitting and inspection procedures.<sup>2</sup>
- The PV Trainers Network to educate local government planners, code officials, fire department personnel, and other first responders.
- A Low- to Moderate-Income PV Working Group to identify ways to make solar more accessible for low- and moderate-income New Yorkers.
- A program to support solar electric balance-of-system research and development projects to reduce costs of solar electric components other than the solar module.
- A Solar Market Acceleration Program developed by NYPA to continue expanding its solar research and demonstration programs aimed at reducing solar costs and improving solar integration with the utility grid.

## The BOS component of NY-Sun is developing:

- Consumer education so potential solar customers understand solar electric options.
- An online solar comparison shopping marketplace to help homeowners, businesses and nonprofits research and comparison-shop for solar electric systems.
- Financing mechanisms that will eliminate all upfront customer expenses and most ongoing customer expenses for solar installations for low-income households.
- A demonstration of the commercial viability of lightweight, rackless roof integration methods and hardware for membrane roofs on commercial/ industrial buildings.



# **Listening to Stakeholders**

NYSERDA, NYPA, LIPA, and PSEG Long Island have partnered with other public and private entities including utilities, equipment vendors, solar installers, and localities across New York State to better understand market barriers, develop program priorities, and communicate program results and best practices across residential, commercial, and industrial end-use applications. To inform this effort and engage stakeholders, a series of meetings and discussions have enlisted the participation of stakeholders involved in solar electric installation, manufacturing, permitting, and financing to provide input on important BOS issues, barriers, and opportunities to lower costs. All of these efforts contribute to the development of a sustainable solar industry in New York State.

### **The Revolution**

NY-Sun is part of New York State's new way of thinking about technology, renewable energy, and the economy. It represents a public-private partnership to expand the State's renewable energy market while working to steadily bring down the costs of the technology and build capacity in the State. All of this effort is focused on building a cleaner and more affordable, resilient, reliable energy system.

# VISIT NY-SUN.NY.GOV FOR MORE INFORMATION ON THE NY-SUN INITIATIVE

NYSERDA. 2012. New York Solar Study: An Analysis of the Benefits and Costs of Increasing Generation from Photovoltaic Devices in New York

Permitting procedures vary from municipality to municipality; while most zoning or land-use rules proceed under standardized rules, applications, procedures, scheduling considerations and therefore "best practices" may vary by service territory.