

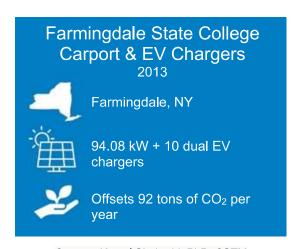
# FARMINGDALE STATE COLLEGE

The carport, powered by 384 245-Watt panels, can charge 20 plug-in vehicles at a time.

Per the Farmingdale State College website- "The solar carport installation is part of the Long Island Smart Energy Corridor project, a partnership with PSEG Long Island, and Stony Brook University. This project, installed at Farmingdale State College, was funded through a U.S. Department of Energy grant to promote renewable and sustainable forms of energy.

The carport canopy is adorned with both the Farmingdale State College and newly created Renewable Energy & Sustainability Center (RESC) logos. The solar carport will create renewable energy in the form of electricity through solar panels located on the roof of the solar carport canopy. (The carport has the ability to create approximately 95kW of power on a sunny day.)

The carport is also equipped with 10 GE Durastation double pedestal charging stations each with a vinyl wrap, to represent the Renewable Energy & Sustainability Center and Farmingdale State College. The charging stations can charge up to 20 electric or plug-in hybrid electric vehicles (PHEV's)... It was installed by Solar Liberty, a New York State based company that was awarded the project through a federal grant bidding process."



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# SUNY NEW PALTZ

Solar Liberty is the proud developer and installer of the State University of New York at New Paltz's cutting-edge rooftop solar-battery backup system. Solar Liberty designed the microgrid system, which includes a rooftop solar array, lithiumion battery bank, a propane gas generator, and all balance of system components allowing for interconnection to the gym's existing electrical service.

This project is the first of its kind in New York State. Solar Liberty was selected by NYPA and SUNY New Paltz through a competitive bidding process. The system includes a 200kWh lithium-ion battery bank, a 100 kW DC capacity rooftop solar array, and a 30kW propane gas generator.

# SUNY New Paltz Microgrid 2018



New Paltz, NY



100.65 kW solar + 200 kWh Li-ion battery



Offsets 95 tons of CO<sub>2</sub> per year

Contact: Brian Pine, Energy Manager SUNY New Paltz Ph.: 845-283-8055 Email: pineb@newpaltz.edu

The system will operate in both a grid interactive/grid supportive and an islanded microgrid state. The smart inverter-based Energy Storage System (ESS) will show the benefits the system on a Central Hudson distribution feeder in need of capacity upgrades. In a grid-connected state, the ESS is designed to actively support grid voltage and frequency by delivering stored real and reactive power in response to real-time monitored conditions. The system employs several additional operating modes, one of which allows the customer to shave campus peak load. In islanded mode, the ESS supplies power to a select set of gym critical loads which light and heat a designated emergency shelter area.

From the Times Herald-Record – "Central Hudson is pleased to support this this innovative project that not only benefits a key customer, but also advances technologies that promote reliability, resilience and sustainability," said Michael L. Mosher, President and Chief Executive Officer of Central Hudson. "This project also provides an opportunity to test the ability of smart inverters and battery storage to support grid functions, for the benefit of all customers."

In addition to this project, NYPA, NYSERDA and the Electric Power Research Institute are funding research to identify additional technical and economic benefits of the project. The research is being done through EPRI's Integrated Grid initiative and directly supports the REV strategy."





# CITY OF ROCHESTER LANDFILL

The City of Rochester is repurposing this closed landfill as a solar array utilizing ballasted racking. Financing for the system was provided through a PPA for the 7,866 Silvantis 335-Watt panel installation.

According to the City of Rochester website (Released 10/25/17) – "The 7-acre site has been vacant since 1972 and was recently removed from New York State's list of inactive Hazardous Waste Disposal Sites, making the project an excellent example of the successful reuse of a brownfield site for the production of renewable energy... In the first year alone, the Solar Field is expected to displace the emissions of approximately 2,300 tons of carbon dioxide equivalent to greenhouse gas emissions from close to 500 passenger vehicles driven for one year or the burning of 12 rail cars of coal. The Solar Field will move the City closer to the goals laid out in its Climate Action Plan and Energy Plan, which include reducing greenhouse gas emissions 20 percent by 2020 and 30 percent by 2040."



Contact: Michelle Virts
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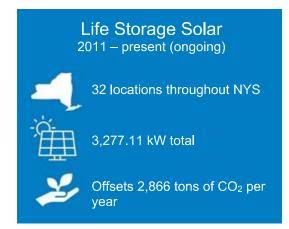


### LIFE STORAGE

Solar Liberty has completed the construction of **32 solar arrays** for Life Storage throughout New York State. We continue to perform the O&M of all of these systems. As a trusted installer, Solar Liberty has an ongoing pipeline of projects with Life Storage.

"We've been very happy with what we've seen as far as reducing our electric bills, in some cases reducing them to zero. The experience working with Solar Liberty has been great. I like working with the people there. They make the regulatory process run smoothly. I also like the short lead times and procurement of materials and also mobilization on site.

We continue to enjoy the relationship with Solar Liberty. We like that they are in our backyard and we can set up meetings on short notice... we look forward to the future," Dan Schwanz, Project Manager, Life Storage.



Contact: Dan Schwanz Life Storage Ph.: 716-650-6056 Email: dschwanz@lifestorage.com





# BOROUGH OF MANHATTAN COMMUNITY COLLEGE

The BMCC solar installation features a combination of roof and wall mounted 327-watt solar panels.

According to the Borough of Manhattan Community College, "Workers have installed 947 solar energy panels on the main roof of Borough of Manhattan Community College's (BMCC/CUNY) four-blocklong 199 Chambers Street building. The five-by three-foot panels of 327 watts—many of which are visible from the streets of Tribeca—are hung vertically on the cooling tower enclosure walls and flat on the western lower roof facing the Hudson River for maximum exposure to the sun.

The BMCC solar array is now the largest public photovoltaic facility on Manhattan island, and has the added distinction of being the first vertical solar facility in all of New York City."



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# MONROE COUNTY

The Solar Liberty team installed this 36,500 335-Watt panel installation to offset the electric bills of Monroe County through a PPA. According to the Rochester Business Journal (Released in 2018) –

"Standing before a field of tens of thousands of solar panels in Hilton, Monroe County Executive Cheryl Dinolfo announced on Wednesday that she has created a sustainability team to carry on work like the solar array energy-saving projects recently launched in the county.

...the projects are saving the county about \$1 million a year through reduced energy cost projects required no investment from the county."

# Monroe County Solar 2018



Penfield and Hilton, NY



13,398 kW total (5 systems)



Offsets 12,470 tons of CO<sub>2</sub> per year

Contact: Michelle Virts Monroe County Ph.: 585-753-7523





# TOWN OF WAWARSING

The Town of Wawarsing is receiving financing through a PPA for this ballasted landfill system. The solar array features 3,456 325-Watt ballasted panels.

According to Spectrum News Hudson Valley (Released 11/1/17) – "The town is having 3,500 panels installed at its transfer station. The \$2 million installation is being done at no cost to the town by Solar Liberty of Buffalo. The panels will be used to help power town-run buildings. Town Supervisor Leonard Distel said once the project is complete, the town will save about \$31,000 in the first year. 'This is a huge savings, especially when our electrical bills are over a quarter-million dollars a year,' he said."



Contact: Holly Behnke Town Clerk, Supervisor's Office Town of Wawarsing Ph.: 845-647-6570 ext. 6 E-mail: wawsupervisor@hvc.rr.com





# BROADALBIN-PERTH CENTRAL SCHOOL DISTRICT

The Broadalbin-Perth Central School District is utilizing a solar array to help educate students while covering capital project payments. Financing for the system was provided through a PPA for the 5,850 330-Watt panel installation.

According to <a href="https://dailygazette.com">https://dailygazette.com</a>, (Released 1/5/18) – "The solar array will pipe energy directly into National Grid power lines, crediting the district for each kilowatt-hour of energy produced and automatically deducting the value of that energy from the district's utility bills... The savings will be used to pay part of the local share of a \$39.7 million capital project approved by voters in 2016, districts officials have promised. The savings are projected to be as high as \$5.3 million over the array's 25-year lifespan, about \$3.6 million of which will help cover capital project payments."





Amsterdam, NY



1,930.50 kW



Offsets 1,763 tons of CO<sub>2</sub> per year

Contact: Stephen Tomlinson, Superintendent Broadalbin-Perth Central School District Ph.: 518-954-2500 Email: tomlinsons@bpcsd.org





# VALLEY SAND & GRAVEL

Valley, Sand & Gravel chose Solar Liberty after a highly vetted process to partner and construct a 1.7MW ground mounted solar array consisting of 4,824 (360 Watt) panels in the Town of Caledonia, NY.

The array will utilize Remote Net Metering to offset various electric bills. The annual savings, based on NYSERDA's VDER Calculator, will come to over \$175,000 annually.

Contact: Tom 'Murph' Murphy Vice President Power & Construction Group Ph.: 585-704-1988 E-mail: murph@pandcg.com

# Valley Sand & Gravel Solar 2020 Caledonia, NY 1,736.64 kW Offsets 1,644 tons of CO<sub>2</sub> per year





# NEW YORK STATE PARKS

The NYS Parks system is receiving PPA financing for the construction and operation of 3 solar arrays throughout Hudson Valley. The projects are in progress and will feature approximately 3.5 megawatts of panels to help the state meet its goal of 70% renewables by 2030.

According to <a href="https://parks.ny.gov">https://parks.ny.gov</a> (Released 3/25/20) – "The four solar arrays at Parks locations are expected to produce about 4.6 gigawatt hours of energy a year, to be added to the 2.2 gigawatt hours currently produced at 29 current solar projects developed at State Parks since 2012. Acting as renewable energy advisor and leading the project, NYPA has been working with State Parks as part of an ongoing effort to combat climate change.

Once the new arrays are completed this year, State Parks will be covering 15 percent of its total statewide energy consumption through solar power, up from the current 4 percent figure. This will offset all the power demand in the Park's Taconic Region on the eastern side of the Hudson River, which includes 14 parks and eight historic sites in Columbia, Dutchess, Putnam and Westchester counties."



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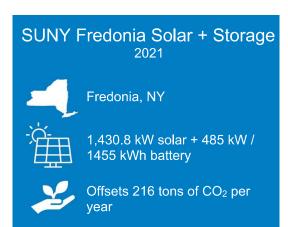


### SUNY FREDONIA

The State University of New York at Fredonia is receiving PPA financing for this cutting-edge solar plus battery storage system. The solar array features 3,562 400-Watt ground mounted panels. The system also features 485 kW/ 1,455 kWh of battery capacity which will be utilized for VDER rate optimization.

According to <a href="https://www.fredonia.edu">https://www.fredonia.edu</a> (Released 7/7/20)— "Oriden and Solar Liberty will provide a customized 1.4 megawatt ground-mounted solar photovoltaic array integrated with a 500 kilowatt energy storage system... The solar-plus-storage solution will provide about 1.7 gigawatt hours of energy and offset an average 432,000 pounds of carbon dioxide each year.

"This project underscores Fredonia's commitment to environmental stewardship. The solar array will provide significant long-term financial savings, while also supporting the institutional goal of environmental sustainability as outlined in Fredonia's strategic plan," said SUNY Fredonia Interim President Dennis L. Hefner."



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