

Contract Details

Contract Type:

Design / Build; Energy Information;
MyEnergyPro™; Own, Operate and
Maintain; Power Purchase Agreement

Technology Type:

Photovoltaic System;
Renewable Energy

Facility:

6 buildings
Total roof area covered: 417,000 sq. ft.

Energy Project Size:

Phase I: 212.6 kW
Phase II: 521.9 kW
Phase III: 348.1 kW
Total: 1.08 MW
\$6.05 million

Summary

The Town of Natick and Ameresco entered a partnership to install photovoltaic systems in the Town and create an opportunity to purchase electricity at a lower rate than electricity from the grid. Ameresco financed and owns and maintains the systems and will remove the system at the end of the 20-year contract at no cost to the Town; and the Town is the sole benefactor of the energy production as outlined in the power purchase agreement (PPA). The Massachusetts Department of Energy Resources (DOER) awarded the Town a grant and the Town expects to reduce its energy costs while educating its students and residents about renewable energy.



For real-time energy information, visit:
<http://solar.myenergypro.com/townofnatick>



Installation on the rooftop of the Wilson Middle School. When all three phases are complete, the Town of Natick will have six solar PV arrays on rooftops.

Customer Benefits

The Town of Natick entered into a solar photovoltaic (PV) power purchase agreement (PPA) with Ameresco where the Town will purchase electricity at a rate lower than the rate currently paid to its electric utility. Working with Ameresco, four rooftop-mounted PV electricity production facilities were installed in Phases I and II with a total capacity of 734.6 kW, with a third phase in development. When all three phases are complete, the combined total of the PV systems will be 1.08 MW. The 20-year PPA guarantees a price per kWh for the Town and offers energy cost savings by reducing exposure to energy price volatility.

As an educational benefit for the schools, Ameresco has offered an extensive amount of teaching materials for teachers to utilize in the classroom; these materials have been prepared to meet the lesson guidelines as outlined by Massachusetts Learning Frameworks. A fully-customizable large-screen LCD television will be located in each lobby to visually display the real-time performance and environmental benefits of the PV system at each of the five schools and the community/senior center. Furthermore, Ameresco will establish a dedicated web page to display data from the rooftop weather station and the PV electricity output for use by students and teachers, as part of the data acquisition system (DAS). Teachers and students will be able to access this web page and the reports generated by the system may be linked to class assignments.

Ameresco worked closely with Town officials, as well as various building committees, the School Committee and the Board of Selectmen, to develop

and implement this multi-phase project. An aggressive schedule was outlined to meet regulatory incentives and local installers and electricians were contracted. In order to keep noise and interruptions to the educational experience at a minimum, crews worked nights and weekends when necessary, as when a crane was on-site to hoist the panels onto the roofs.

Ameresco is proud to work with the Town of Natick on endeavors that will result in significant utility cost savings and provide a reliable source of clean, renewable energy, while also creating a great opportunity for the community to learn about energy and its impact on the environment. The PV systems and the PPA agreement demonstrate the Town's commitment to sustainability goals and the PPA decreases the Town's dependence on fossil fuels. Additionally, funds in the amount of \$74,000 from the Massachusetts Department of Energy Resources (DOER) were used to help defray the cost of the installation on the Kennedy Middle School roof and lowered the electricity price that Ameresco extended to the Town in the PPA.

Accolades

"Our work with Ameresco has been a great public/private partnership. Through the installation of these solar panels, and at no cost to the Town, Natick will realize significant savings in our energy budget while improving the environment through greenhouse gas emission reductions. This project has the added benefit of educating our community on the importance of renewable energy in our future."

- Martha White, Town Administrator, Town of Natick

About the Town of Natick, MA

The Town of Natick is a community of about 33,000 residents located on the upper basin of the Charles and Concord Rivers with an extensive complex of ponds. Natick has become an industrial Boston-oriented suburban community with commercial/retail development on Route 9. Natick is designated a Green Community by the state Department of Energy Resources (DOER) with a commitment to reduce its use of energy produced by fossil fuels by 20% in five years.

Learn more at www.natickma.gov.

About Ameresco

Ameresco, Inc. (NYSE:AMRC) is one of the leading energy efficiency and renewable energy services providers. Our energy experts deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy, supply management, and innovative facility renewal all with practical financial solutions. Ameresco and its predecessors have constructed billions in projects throughout North America.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please visit ameresco.com.



Bennett-Hemenway Elementary School

Environmental Benefits

Through the Town of Natick's partnership with Ameresco, the Town is expected to save the equivalent of 474 metric tons of CO₂ per year. The green benefit from this carbon reduction is roughly equal to:

- ▶ 93 cars taken off the road for one year
- ▶ 41 households powered for one year
- ▶ 101 acres of pine forest absorbing carbon

Services Provided

The start of Phase I consisted of the design and installation of a 212.6 kW PV system on the Kennedy Middle School roof. Ameresco will finance, own, maintain and operate the system for a term of 20-years, as outlined in the energy management services agreement (EMSA). The system consists of 884 photovoltaic modules installed into a single array. The system is expected to generate approximately 241,090 kWh of electric power a year. The power output is provided to the Kennedy School building to satisfy initially 52% of its power needs.



Wilson Middle School



Ameresco assessed the feasibility of installing roof- and ground- mounted systems at additional Natick public schools and municipal facilities. Based on this analysis, three schools were chosen for construction during Phase II: Bennett-Hemenway Elementary School, Memorial Elementary School, and Wilson Middle School. The total system size for Phase II is 521.9 kW.

Each lobby is equipped with an LCD television kiosk, which utilizes Ameresco's proprietary software, MyEnergyPro™, to display key solar performance data through pictures, graphs and text in a user friendly way. The data includes weather conditions, system performance, project photos and information. Historical production values and CO₂ offset and equivalencies are available. The data updates every 15-minutes throughout the day. A public website is available to the community to access the information at any time.

Ameresco and the Town plan to install solar PV on the new Natick High School and new Natick Community Senior Center in Phase III. These buildings are currently in construction, and solar installation is expected during the summer of 2012. The total system size for Phase III is 348.1 kW.



The upper image from the MyEnergyPro™ software features CO₂ offset and equivalencies; the lower image features historical energy data.

