

Contract Details

Contract Type:

Solar License Agreement; Power Purchase Agreement; Photovoltaic System; Renewable Energy

Facility Size:

3 buildings

Capacity:

502 kW

About City of Newburyport

The City of Newburyport is located on the southern bank of the Merrimack River at the mouth of the Atlantic Ocean. Newburyport was first settled in 1635 as a prosperous town of fisherman, merchants and shipbuilders. Today the population tops over 17,000 residents.

Learn more at

<http://www.cityofnewburyport.com>

About Ameresco

Ameresco, Inc. is one of the leading global energy services providers. We deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy solutions, supply management, and innovative facility renewal strategies. The company has over 650 employees in regional offices throughout North America. Ameresco, Inc. has constructed billions in energy projects throughout the world.

Learn more at

www.ameresco.com



The rooftop of the Rupert Nock Middle School and Edward G. Molin Upper Elementary School features a solar array that transmits data via the Internet to the science classrooms for the students to monitor weather and solar conditions.

Customer Benefits

Ameresco has designed, financed, and installed the largest municipal solar PV system in Massachusetts at the time, providing the City of Newburyport 502 kW of clean, renewable electricity. For the next 20 years Ameresco will own, maintain, and operate the system using a Power Purchase Agreement (PPA). The system is built on three buildings, the Rupert Nock Middle School/Edward G. Molin Upper Elementary School and the Department of Public Works (DPW) building. All three buildings are reliant on electric heating and cooling.

To provide Newburyport's children with a learning experience, Ameresco has installed a lobby LCD panel in the Middle School and a special educational software package that sends rooftop weather and solar PV production data to the Internet for the science classrooms.

To assist with the funding of this renewable energy project, the City received \$1.6M dollars in rebate funding from the Massachusetts Technology Collaborative Renewable Energy Trust, from which Newburyport was allowed to retain \$400,000.

Environmental Benefits

Through their partnership with Ameresco, the City will have the following annual carbon reduction equivalents:

- ▶ the offset of 402 tons of CO₂
- ▶ the planting of 8,000 acres of trees

- ▶ the powering of 70 average sized homes

The project helps reduce the need for energy from traditional power plants fueled by fossil fuels.

Services Provided

Ameresco was selected during a competitive bid process to work with the City for implementation of their 500-kW solar photovoltaic system using a power purchase agreement. Under the power purchase agreement, Ameresco installed a 391.7-kW solar photovoltaic array at Rupert Nock Middle School.

Ameresco, the City, and the schools worked closely to put the construction schedule on a fast track so that the Nock School installation would be completed during the school's summer vacation months. The project called for over 2,000 panels installed on the roof top of the Rupert A. Nock Middle School/Edward G. Molin Upper Elementary School and the Department of Public Works (DPW) building.

A 110.6-kW photovoltaic array was also installed at the Department of Public Works building. Ameresco also reinforced the roof at the Department of Public Works building and redesigned the project to meet new structural regulations.

The system uses Canadian Solar Inc. modules, Solectria Inverters, Power Tube racks, and a Heliotronic data acquisition system tied to a lobby LCD panel and a special educational software package connecting to the Internet for the science classrooms.