



Fall 2022

Solar arrays at Beverly Middle School

Basic information

Beverly Public Schools are going green! The City of Beverly partnered with Kearsarge Energy to develop 4.3 kW DC solar arrays across six properties, including Beverly Middle School and Beverly High School, to generate renewable energy credits, save money, and reduce carbon emissions.

Construction is wrapping up at Beverly Middle School -- here's what to expect as you begin the school year:

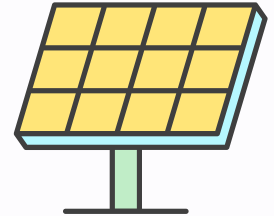
The main parking lot will re-open before the start of the school year. There will be no change to the traffic flow.

A few spaces at a time under the canopies may be coned off in the first weeks of the year to complete electrical work. Rooftop construction will also continue. This remaining work will not be disruptive to student learning.

After that, these panels will add clean energy to our local electrical grid for the next 20+ years!

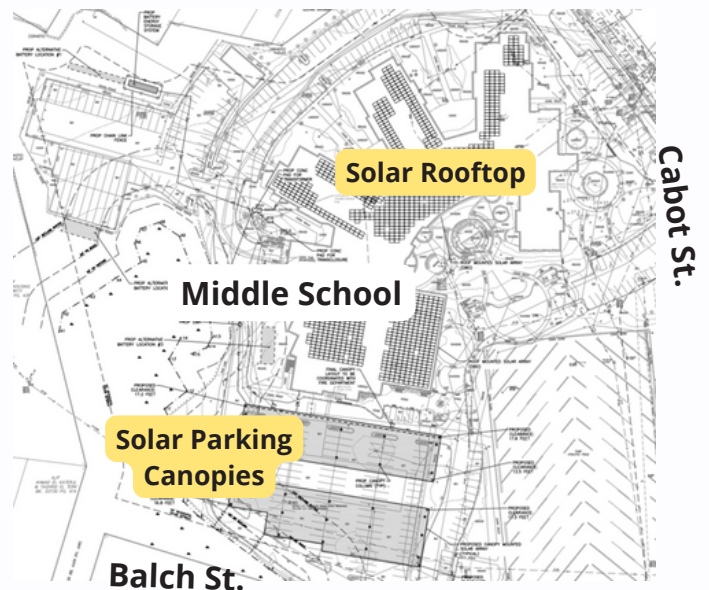
Middle School:

- Rooftop
- Parking Canopies



High School:

- Ground-mounted array, replacing the existing historic array from 1981
- Parking Canopies by the cafeteria entrance
- Battery storage



*Solar canopies under construction at Beverly Middle School
Aug. 16, 2022*

FAQs

What is the status of the construction work?

During summer vacation, crews built the parking canopy structures, installed the solar panels and electrical wiring, and started constructing the rooftop array.

Parking, drop-off, and pick-up will return to normal by the start of the '22-'23 school year. A few parking spaces at a time may be blocked in the first month to complete testing. Installation of rooftop solar will continue into the school year.

How does this project help our climate goals?

Our community's climate action plan, Resilient Together, strives to reduce carbon emissions by 50% by 2030. Combined with our existing solar portfolio, this City-wide solar project will help us offset nearly all municipal electricity consumption.

Each year, this project will avoid carbon emissions equivalent to 390,000 gallons of gasoline and equivalent to sequestering carbon from 4,000 acres of forest!

How will the solar canopies be maintained?

Kearsarge Energy will monitor and maintain the solar canopies. During the winter, the City will continue to salt and plow snow in these parking lots.

Will it be dark under the canopies? Will there be glare above?

Lights will be moved under the canopies to illuminate parking spaces. The materials are primarily steel, glass, and silicon, and the panels are designed to absorb light rather than reflect it.

What are the benefits to students?

Students will experience a daily reminder that their community is committed to fighting climate change. One row of the 1981 solar array at the High School, the oldest continuously operating solar field in the U.S., will be kept for educational purposes to demonstrate the evolution of solar technology. The project includes clean energy educational resources.

Practically, there may be less snow to remove from cars, more shelter from rain, and more shade in the warmer months.

What are the financial benefits?

The City of Beverly will receive over \$1.1 M in revenue over the 20-year term, as well as electricity cost savings of ~\$937 K. The School Department currently benefits from discounted electricity through the purchase of renewable energy credits generated from our existing solar portfolio (solar farms by the airport and over the capped landfill on Otis Rd.).

Interested in learning more?

Visit beverlyma.gov/473/Sustainability for project plans, slides, and presentation recordings.

Questions? Email sustainability@beverlyma.gov or call Erina (Sustainability Office) at 978-605-2332.