

The local company Beaumont Solar installed solar panels on a historic building near the New Bedford waterfront that houses the Buzzards Bay Coalition. John Robson



Whale oil made New Bedford, Mass., America's energy capital in the early 19th century. Now the gritty fishing port is once again linking its future to energy—this time renewable.

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and help run the schools and streetlights.

Not only is the city of 95,000 expanding its docks to supply wind farms off the Massachusetts coast, it's also becoming a major generator of solar power. New Bedford is installing solar panels at 10 sites—including the city's drinking-water plant, three schools and two reclaimed toxic-waste dumps—to supply power to city services. The setup already cranks out enough electricity to offset the entire power usage of the city's water supply

On the Rise

Many cities across the country have plunged into solar power. But New Bedford's experiment is one of the most extensive. Among cities on the East Coast, only New York generates more electricity from solar power, according to data from the Environment Massachusetts Research and Policy Center in Boston. And among U.S. cities only Honolulu generates more solar-powered electricity per inhabitant.

New Bedford has also gone further than many other cities in tapping credits and incentives to make its project economically feasible, specialists in renewable power say. For instance, by using tax credits and other arrangements, the city was able to finance the entire \$53 million capital cost of the 16.2 megawatt project without putting up any cash or adding to the city's debt, which already consumes nearly 4% of the budget.

"For the city, it's a direct savings—there's no capital outlay," says John DeVillars, managing principal of BlueWave Capital, which developed the project for New Bedford.

The city doesn't own or operate the solar sites itself, that falls to ConEdison Solutions, a unit of Consolidated Edison Inc., and SunEdison, a manufacturer of solar panels based in St. Peters, Mo. New Bedford buys the power from those companies at prices fixed well below current market rates of 12 cents to 16 cents per kilowatt-hour. (Power from each of the 10 sites is sold at a different price.)

The project also earns renewable-energy credits from the state that the city sells to the local utility, which needs to meet an annual green-production target.

All told, New Bedford ends up saving about \$1 million a year on its electric bill, which currently runs about \$6 million to \$7 million, or about 2.5% of the city's \$285 million budget.

"Strictly from a financial perspective, the deal was too good to pass up," says Mayor Jon Mitchell, a former federal prosecutor who spent seven years chasing Boston mobster Whitey Bulger.

If electricity prices rise, New Bedford will pay ConEdison Solutions and Sun Edison the same amount for power from the panels. Mayoral aide Neil Mello says the deal will shave a total of about \$21.8 million off the city's electric bill over the next 20 years.

Getting Even Greener

The mayor sees the solar panels as the first step in a broader plan. His goal is to eventually obtain all of the city's electricity from renewable sources. He would also like to replace New Bedford's municipal lighting with more-efficient LED bulbs, convert oil-fired boilers to run on natural gas, and refit city buildings with insulation and new windows. Then there's education: Many of the solar panels were installed by a local firm, Beaumont Solar Co., which is also training students at the city's vocational high school to become electricians and install and maintain solar systems.

"New Bedford has suffered a long time with chronic unemployment and a shrinking tax base," says Mr. Mitchell, "so being seen as progressive on energy can help, and it dovetails very well with our plans to be a base for the wind farms."

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