The City of Newburyport advances its Green Communities initiative with a cost-saving Cree® LED lighting solution.
Opportunity

The citizens of Newburyport, Massachusetts take great pride in their home. “We’re a beautiful seaport community, rich in history,” says Mayor Donna Holaday.

A bird flyway passes over the city. It has excellent walking trails and bike paths, lovely beaches and a state park that’s great for cross-country skiing and snowshoeing. It’s a wonderful ecotourism destination.

No surprise then that Newburyport is designated by the state of Massachusetts as a Green Community. In keeping with that, the city committed to, and has now achieved, a 20 percent reduction in energy consumption.

But the Newburyport Energy Advisory Committee is ever vigilant for savings beyond that 20 percent, and when state legislation was enacted allowing municipalities to purchase their own street lights, it saw a great opportunity.

The city was spending about a quarter of a million dollars a year on its street lights. A search was launched for a more cost- and energy-efficient solution that kept the lights on in Newburyport.

Solution

Enter George Woodbury, President of LightSmart Energy Consulting. Woodbury had helped write that legislation allowing municipalities to explore cost-saving alternatives to what the utility provided, and the city enlisted his expertise. He made the case for LED.

With an LED streetlight conversion, Woodbury explains, not only are you facilitating energy and cost savings, “you’re rebranding a community.” An upgrade to LED street lighting, he believes, sends a clear message that the city is striving to improve its quality of life.

The city conducted a trial of LED lighting from five manufacturers along Mosely Avenue. The trial ran for several months and was widely publicized. Input was solicited from the police and fire departments, the department of public safety, the city council and local residents.

The Cree® RSW Series featuring WaveMax® Technology emerged the winner.

“Overall,” says Molly Ettenborough, the city’s Recycling and Energy Manager, “people were happiest with the Cree® lighting because of the temperature of the light and the fact that it was truer to natural light.”

The consensus was that the RSW Series best reflected Newburyport’s quaint character.

“There was a lot of excitement when our team got together and looked at this product. There was a lot of enthusiasm for it.”

Donna Holaday | Mayor, Newburyport, Massachusetts
Moreover, the RSW™ luminaire offers “the flexibility that we needed to use the same fixture for multiple applications. It gave us the simplicity we were looking for.”

And it’s also a very energy-efficient fixture. Over 1,300 HPS street lights were replaced — ranging from 50- to 250-watt — with 30- to 50-watt LED RSW luminaires.

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Brian Woodbury, LightSmart’s Vice President of Operations, says: “We’re consultants, so we’re brand agnostic. We obviously have our preferences, but most communities are going to want to see information on multiple manufacturers.

“Historically, Cree has won pretty much every single project based on long-term numbers.”

The Green Community program offers grants to its participant municipalities, with a top priority being street light conversion to LED. “We were poised and ready to move ahead with this project,” Holaday says.

The city applied for and received a grant, then gathered some additional funding from the state’s Metropolitan Area Planning Council, for a total of nearly $180,000 in incentives.

**Benefits**

The installation went very smoothly, Ettenborough says. “We simply laid out the map, the installer had everything on an iPad, and there were really no issues.”

In addition to the energy savings, the City of Newburyport anticipates a significant reduction in maintenance. The return on investment for this upgrade is under two years, with the city expecting to save more than $90,000 a year.

“That’s money that can be relocated to other needs – public safety, our schools, our police, roads, infrastructure,” says Holaday.

Ettenborough adds that the city plans to invest a portion of those savings in renewable energy and in other energy-efficiency technologies.

The Cree® LED solution comes with a 10-year warranty, and behind that warranty, asserts Sean Harris, Cree’s Street Lighting Product Manager, are “years of testing, validation and making sure that the products we’re putting together are going to last as long as we say they’re going to last.”

George Woodbury is a believer: “When you make an investment in these lights, you hope they’re going to be up for many years to come. You want to make sure they’re going to perform, and so you need to work with a company that has both the experience and the financial strength to stand behind their product.

“Cree fits that mold.”

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“The RSW™ street light is the only fixture of its particular design. Others are going to try to copy it, but they haven’t done it yet.”

George Woodbury | President, LightSmart Energy Consulting
Cree® LED Lighting Used

- RSW Series LED Street Luminaire

Participants

End User: The City of Newburyport
Consultant: LightSmart Energy Consulting