Vermont's largest "solar parking lot" deploys innovative panels on the Burlington waterfront

ECHO, Leahy Center for Lake Champlain, the City of Burlington, and Encore Renewable Energy partnered to build a solar canopy for Science Museum

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BURLINGTON, VT, UNITED STATES, January 16, 2019 /EINPresswire.com/ -- Burlington, VT — Encore Renewable Energy announced today that Vermont's largest solar canopy to date, built by a public-private partnership for the Science Museum on the Burlington waterfront, has commenced generation of electricity.

The 156kWp solar carport at the ECHO, Leahy Center for Lake Champlain employs innovative two-sided panels that capture reflected light as well as the direct rays of the sun, increasing its output. It was constructed at the same time as a new parking lot and a state-of-the-art stormwater pollution control system built by ECHO and the City of Burlington to help improve the water quality in Burlington's inner harbor.

"We are so pleased to have been able to work with ECHO and the City of Burlington in delivering this important project," said Chad Farrell, Chief Executive Officer of Burlington-based Encore Renewable Energy, which built and will operate the array. "This project is a strong example of the forward-looking thinking and action that we need from municipalities, non-profits and other organizations below the national level, to advance the clean energy economy and address the negative impacts of climate change."

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> *Phelan Fretz, Executive Director of ECHO*

The solar canopy project required complex engineering. Encore had to design for varying lakefront water levels, high winds, specific truck and bus traffic patterns at the Science Museum, and existing underground infrastructure.

Due to ECHO's location in Burlington's previously industrialized waterfront, soil and water quality were continuously monitored throughout construction, in strict adherence to the State of Vermont's regulatory process for environmentally contaminated property.

“The opportunity is finding ways to take urban settings in which we already have high land use, like a parking lot, and turning it into renewable power production,” said Phelan Fretz, Executive Director of ECHO.

The project design called for innovative bifacial, or two-sided, solar panels to increase the electricity generated by capturing albedo light, the short-wave solar radiation reflected from the parking lot, parked vehicles and nearby lake surface. This higher output will increase the overall savings for the Science Museum.

“We are thrilled to support ECHO’s mission, and their commitment to continued education to improve energy production, land use development and water quality management,” said Farrell.

Encore was responsible for coordinating and managing all aspects of the project including navigating the complex lakefront environmental and geotechnical issues, project design, permitting, financing, construction, and commissioning. In addition, Encore and one of its financing partners will own, operate and maintain the project.

“This is a great project that advances many of the City’s key goals, from the protection of Lake Champlain through better stormwater facilities, to new solar capacity that helps move us toward our goal of becoming a Net Zero Energy City, to additional attractions in the heart of our vibrant waterfront,” said Mayor Miro Weinberger. “The City is proud to have played a role in this project, and I am very thankful for the hard work of ECHO and Encore in getting it done.”

ECHO was Vermont’s first LEED certified building when it was built in 2003. The building already features solar panels on the roof, natural lighting, passive heating and cooling, smart lighting, and specially controlled HVAC systems, built from renewable materials and locally sourced supplies.

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About Encore Renewable Energy
Encore Renewable Energy is a Burlington, Vermont-based leading clean energy development company focusing on commercial-scale solar photovoltaic systems and 21st-century solutions for underutilized property, including landfills, brownfields and rooftops. Founded in 2007 as Encore Redevelopment, Encore specializes in the design, development, financing, permitting, and construction of renewable energy projects. For more information about Encore, please visit EncoreRenewableEnergy.com

About ECHO, Leahy Center for Lake Champlain
ECHO, Leahy Center for Lake Champlain is an innovative science and nature museum located on Burlington, Vermont’s waterfront. ECHO leverages its unique setting to inspire and engage families in the joy of scientific discovery, wonder of nature, and care of Lake Champlain. ECHO is the public face of the Leahy Center for Lake Champlain, a 2.7-acre campus that also includes the University of Vermont Rubenstein Ecosystem Laboratory and research vessel, Lake Champlain Sea Grant, the Lake Champlain Basin Program, and the Lake Champlain Navy Memorial in Hoehl Park. Visit www.echovermont.org

About the City of Burlington
Burlington is a celebrated, vibrant, small city located on the eastern shoreline of Lake Champlain. Burlingtonians are diverse, forward-thinking citizens, surrounded by scenic beauty and recreational opportunities. The City is steeped in arts and culture, and is engaged in the growth of the local economy. Visit us at burlingtonvt.gov

Lauren Glickman

RenewComm LLC
+1 504-258-7955
email us here