

SUMMERSIDE AND SAMSUNG CREATE GLOBAL FIRST IN SMART ENERGY STORAGE



When Samsung Renewable Energy Inc. wanted to model a large-scale solar energy battery for the North American market, it chose Summerside as the site.

Renewable energy users face a challenge in storing excess energy for later use. Samsung had developed a ground-breaking solar battery for that purpose. However, the global technology leader needed to demonstrate its product and prove the technology.

Creating a demonstration project required Samsung to find an ecosystem with sophisticated technology, a larger scale power user, and an electrical utility with an openness to try innovative products. The City of Summerside could offer a large-scale energy user in its new recreation centre that included two NHL ice arenas, 3,700-seat facility, aquatics centre, fitness centre, bowling lanes, and conference and meeting rooms. The city also boasted the required technical experience at its electrical utility and its willingness to work with entrepreneurial partners in its Living Lab environment.

Samsung Renewable Energy and Summerside officially began their partnership in 2017. Their demonstration

project at the city's recreation facility, Credit Union Place, illustrated how a smart storage system could green a facility and save money. With the help of funding partners, the project included the installation of 1,548 solar panels and a 250 KW lithium-ion battery with 890 KWH (a little over 3.5 hours) of storage capacity. The battery serves as a peak shaver for Credit Union Place and provides 3.5 hours of backup generation. The system saves the facility about \$105,000/year in energy costs, reduces greenhouse gas emissions, and provides a green venue to city residents and the many national/ international events that the facility hosts every year.

The demonstration project has also added to the city's expertise in renewable storage—paving the way for even larger projects in the future.

In the process, Samsung Renewable Energy has showcased the success of its product as the company works to market and install similar systems throughout the continent. A strong commercialization relationship has developed between the city and Samsung Renewable Energy due to this demonstration project, the first of three initiatives by the partners to bring green energy to the community and beyond.

