

SUMMERSIDE SMART GRID SERVES AS TESTING SITE FOR AI TECHNOLOGY



When BluWave-ai needed to validate its AI technology for renewable energy optimization, it found the ideal partner in the City of Summerside.

The Ontario-based company offers software to make use of “big data”—using algorithms to help utilities predict generation from renewable sources like solar and wind to forecast overall energy requirements.

BluWave-ai, however, needed access to real-world utility data to test and refine its artificial intelligence technology.

The company found a partner in the City of Summerside in 2018. Summerside provided the large dataset required for testing and an openness to work with entrepreneurs in its Living Lab environment. For testing, the Summerside grid offered a valuable mix of wind power, solar power, battery storage, smart metering, and utility loads.

The partners conducted a six-month pilot, with BluWave-ai software used side by side with the in-house system at Summerside’s electrical utility.

Using the BluWave-ai algorithms, Summerside Electric saved more than \$200,000 per year and reduced CO2 emissions by thousands of tonnes. By 2021, BluWave-ai and Summerside had announced the first end-to-end AI-optimized power grid in North America.

As a result of the pilot, BluWave-ai verified and improved its algorithms and documented results it could showcase when marketing to potential clients. The company has since signed multi-year contracts in India, the United States, and Scotland.

BluWave-ai continues to help optimize Summerside’s utility manager software and further the city’s leadership in green energy and net zero emissions. The company has also established a permanent presence.

In 2022, BluWave-ai and Summerside launched the Canadian Smart Grid AI Center of Excellence in Summerside. This real-world AI testing centre for BluWave-ai will develop artificial intelligence software and optimization programs for renewable energy utilities over the globe.

