Press Release - Wiikwemkoong Moves Forward on EV Infrastructure Project

Wiikwemkoong Leadership approved a two phase process to have installed Electric Vehicle (EV) chargers and the Battery Energy Storage Solution (BESS) at the Recreational Complex. OGimaah Ominika welcomed the launch of the project with CEO, Brian Walters of Vortex at location on November 27th, 2024. "When private sector companies partner and invest with aboriginal communities, there are benefits for the technology, for the people, for the environment and for the community" noted OGimaah Ominika.

This project will realize charging capacity in Wikwemikong with the Phase 1 Level 2 Chargers and later Phase 2 Level 3 Chargers in the community. What is unique to the project is that with BESS, energy is stored and even with a power outage, individuals can still get their vehicle charged.

The BESS technology is a first of its kind in that it does not use traditional Lithium-Ion electrochemical batteries but rather it incorporates a next generation graphene based, solid state cell that has some significant advantages. Vortex batteries do not heat up so no special cooling (unlike Lithium-Ion batteries) which means there is no chance of a thermal runaway event resulting in fire. Due to the inherent properties in the Vortex BESS technology, the # of charge and discharge cycles is significantly higher which means that the batteries should last 20+ years. Another feature is that the Vortex batteries charge very quickly and can use both the grid and the existing Solar array atop the roof at the recreational centre to charge them. So even during a power outage, the solar array would be used to charge the BESS system, therefore capturing the energy that would otherwise be lost. Also beneficial to the community is that during power outages, the energy stored in the BESS system can also be used in the kitchen of the upper hall of the facility, thereby providing a space for community members.

The location of the EV Chargers was important as it is necessary to have the area accessible, 24/7 by the public and central to the community. With this type of infrastructure, people coming into the community can top up their EV vehicle while taking in Wikwemikong's other attractions. Commissioning of the chargers should occur sometime in the May/June 2025 timeframe.

The project would not have happened without the in-kind contribution by Vortex Technology Group, and through the IESO Indigenous Energy Project program, NRCAN ZEVIP program and Wiikwemkoong.

"This installation is a first of it's kind in Canada and demonstrates Wikwemikong's leadership role in adopting a much needed green energy solution for charging EV vehicles while at the same time reducing their carbon footprint by using a renewable energy source during power outages to provide power to EV Vehicles as well as emergency cooking and heating" said Brian Walters, CEO of Vortex Technology Group. He also stated, "We are very proud to be awarded this innovative project and Vortex has invested in this installation as a showcase of how our BESS technology solution can be utilized for the EV charging application as well as supporting emergency power during outages".

