Challenge: LCBA - VEC FortisBC - Residential EV Charging Optimisation

Challenge Statement/Synopsis:

Additional EV charging infrastructure is critical to advance the adoption of electric vehicles (EVs) in British Columbia to help reduce GHG emissions. FortisBC is seeking innovative ideas that ensure FBC has visibility of residential EV loads, help reduce barriers for customers to install EV home charging and improve charging accessibility in rural and remote communities. Specifically, FortisBC is interested in technologies that allow detection of Level 2 (208V and 240V) EV chargers using hourly data from FortisBC's advanced metering infrastructure (AMI), off-grid Level 2 chargers, off-grid or single-phase DC fast chargers and DC fast chargers incorporating demand management including integrated battery storage and supply solutions.

Context:

FortisBC has an important role to play in helping British Columbia move to a low-carbon, renewable energy future. FortisBC has charted a path, through its Clean Growth Pathway to 2050 strategy, to achieving the provincial climate action goal of an 80% GHG emissions reduction by 2050.

FortisBC currently operates public fast chargers along highway corridors and supports home charging in regions where they provide electricity. Without adequate charging infrastructure deployed throughout the province to allow zero emission vehicles to travel throughout BC safely and conveniently, it is unlikely that the EV market share will progress quickly. Further collaboration between the province, local governments and FortisBC and BC Hydro can address this gap.

Response Criteria:

- FortisBC is seeking low-cost, high impact solutions that make EV home charging more accessible and improve charging accessibility in rural and remote communities. Solutions can include, but are not limited to, analytic detection of Level 2 EV chargers using hourly AMI data, off-grid Level 2 chargers, off-grid or single-phase DC fast chargers and DC fast chargers incorporating demand management including integrated battery storage and supply solutions..
- Proponents should explain the technology's ongoing service and site-support model, including costs.

- Proponents should explain coverage (i.e. how may connection points will the system need?), effectiveness (how well will the solution mitigate risks, or improve performance?), and reliability (how well will the solution perform in real-world environments?).
- Submissions must explain how the proposed solution meets the basic certification and/or minimum standards required to deploy any product and/or service (i.e. ULC, CSA, Technical Safety BC, Health Canada, National Sanitation Foundation, WorkSafe BC, etc…).
- Proponents must demonstrate Personal Information Protection Act (PIPA) compliance for any innovation that handles personal information/ FortisBC's strong preference is that any data be hosted and encrypted within Canada. In certain cases, it may be possible to explore solutions that rely on infrastructure hosted outside of Canada. FortisBC will likely require further discussion and explanation during the evaluation process.
- Proponents should explain any specific IP requirements or constraints.

Eligible European companies can apply to the targeted challenge using the LCBA Canada Application Portal

The Opportunity:

- If chosen, conduct a demonstration project of the solution with FortisBC, British Columbia's largest energy provider.
- Pitch your solution during GLOBE Forum 2022, North America's longest running sustainable business conference.
- Meet new customers and access new markets.

About FortisBC:
FortisBC is a Canadian-owned company, delivering natural gas, electricity, and propone to 1.2 million customers in 135 communities throughout British Columbia. It owns approximately 49,000 km of natural gas transmission and distribution pipelines, 7,260 km of electric transmission and distribution power lines, LNG storage and production facilities, and hydroelectric generating plants.

***Only non-confidential information should be included in your response ***