Submission for Ontario’s Fall 2020 Budget Consultations to the Honourable Rod Phillips, Minister of Finance, c/o Budget Secretariat

By: U-Battery Canada
Introduction to U-Battery

U-Battery Canada is reimagining the way we power Ontarians’ lives through sustainable energy development by pairing technological innovation with nuclear energy development. With an experienced network of industry-leading consortium members—including global nuclear supply chain company Urenco Group and Canadian engineering firm Kinectrics—U-Battery Canada is dedicated to advance Ontario’s first commercial small modular reactor (SMR).

Our advanced SMR can enable a broad range of energy-intensive industries, including mining operations in the Ring of Fire, as well as northern and remote communities to be self-sufficient by accessing a clean, local, low-carbon, cost-effective and safe alternative to fossil fuel generation. More specifically, our SMR is designed as a cogeneration unit to produce heat and power, emissions-free, with the capabilities to facilitate hydrogen production and desalination.

We are poised to enable regional economic development and environmental and social benefits across the province and advance Ontario’s position as a global leader in nuclear innovation by leveraging its experience and leadership in the sector.

Our recent milestones include:

- Progress through pre-qualification stage of the Canadian Nuclear Laboratories’ invitation to site an SMR demonstration projects at their Chalk River facility;
- Participation in Natural Resource Canada’s SMR Action Plan;
- Memorandum of Understanding (MoU) with Bruce Power;
- Service agreement with the Canadian Nuclear Safety Commission for pre-licensing vendor design review.

An opportunity for Ontario

Ontario presents an ideal market for SMRs, through its abundance of northern and remote communities, energy-intensive industries and natural resources projects in need of reliable and clean energy. Ontario is also home to leading nuclear power generation and research facilities such as Darlington, Pickering Nuclear, and Chalk River. And while nuclear energy primarily supplies larger power grids, including over 60 per cent of Ontario’s electric power, conservative estimates place the potential value for SMRs in Canada at $5.3 billion between 2025 and 2040. Having been encouraged by Ontario’s leadership in establishing the interprovincial MoU to advance SMRs, U-Battery believes that there is a momentous opportunity for Ontario to help lead the charge in Canada.

Through the development and deployment of our advanced SMR, U-Battery will ensure energy security, energy equity and environmental sustainability for the province. We are confident SMRs will be integral in starting Ontario down the road to recovery from COVID 19.

Our recommendation
Government of Ontario establishes a dedicated funding program to support SMR developers as part of its Fall 2020 Budget. This will enable Ontario to leverage nuclear innovation to help start Ontario down the road to recovery from COVID-19.

It would also allow Ontario to:

- Secure the position of province’s nuclear supply chain in global markets;
- Fortify manufacturing, expert nuclear services, and made-in-Ontario jobs;
- Foster enhanced interprovincial cohesion and potential for greater (low carbon) energy security and resilience;
- Create a pipeline of attractive, inclusive, diverse, global talent through Ontario universities and organizations;
- Create bilateral opportunities, through strategic partnerships with allies (i.e. UK; U.S.).