

ESSEX ENERGY STORAGE PROJECT

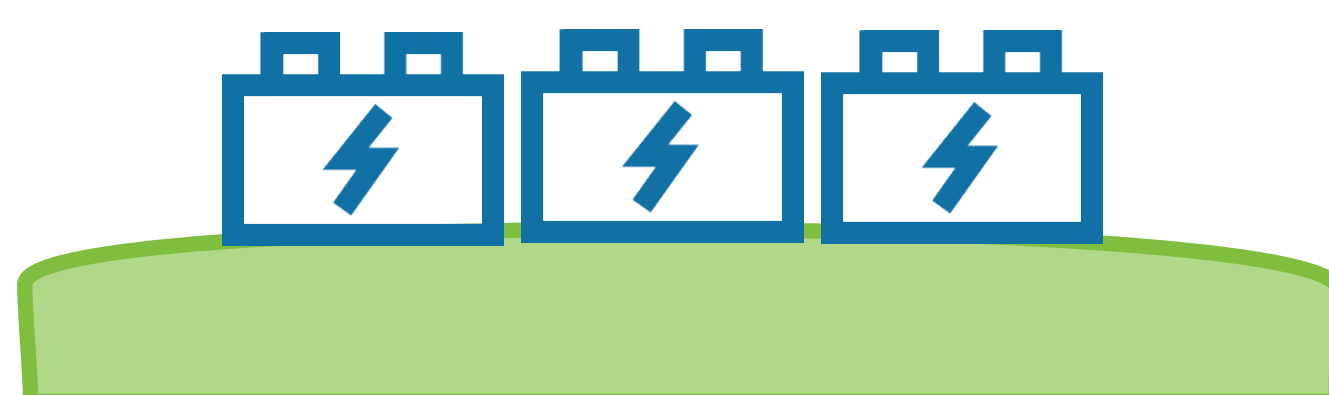
WELCOME!

PR Development LP, Essex Storage LP (both affiliates of Potentia Renewables Inc.) and Essex BESS Limited Partnership (previously BW Storage 1 Limited Partnership) is developing the Essex Battery Energy Storage System (Essex BESS).

Please sign in at the front desk and provide your contact information if you would like to receive project updates.

We are here to provide information and answer your questions about Essex BESS, the developers of Essex BESS, and our team members. We invite you to walk around and look at the displays.

If you have questions or comments, please reach out to one of our team members.



ABOUT THE PROJECT TEAM



PR Development LP and Essex Storage LP are affiliates of Potentia Renewables Inc. (“PRI”) and PR Development LP is the Qualified Applicant under the Ontario IESO Expedited Long Term 1 Request for Proposals (“E-LT 1 RFP”). Essex Storage LP is a subsidiary of PR Development LP and will be the Proponent under the E-LT1 RFP. PRI is a Canadian developer, owner, and operator of renewable energy assets with over 1,200 MW of solar and wind projects that are in operation, under construction or under contract.

PRI is owned by Power Energy Corp., a wholly owned subsidiary of Power Corporation Canada, a company listed on the Toronto Stock Exchange. Our team has been involved in either the development, construction, or operation of 30% (or 2.4 GW) of utility-scale renewable energy projects in Ontario.

Please visit www.potentiarenewables.com to learn more.



BW Solar’s mission is to play an active role in the energy transition by empowering communities to rely on clean energy to power their lives. Being a privately held company gives BW Solar the agility to adapt to the fast-moving regulatory and technological landscape. We focus on maximizing development value rather than short-term cash flows, ensuring that we can provide the lowest levelized cost of energy.

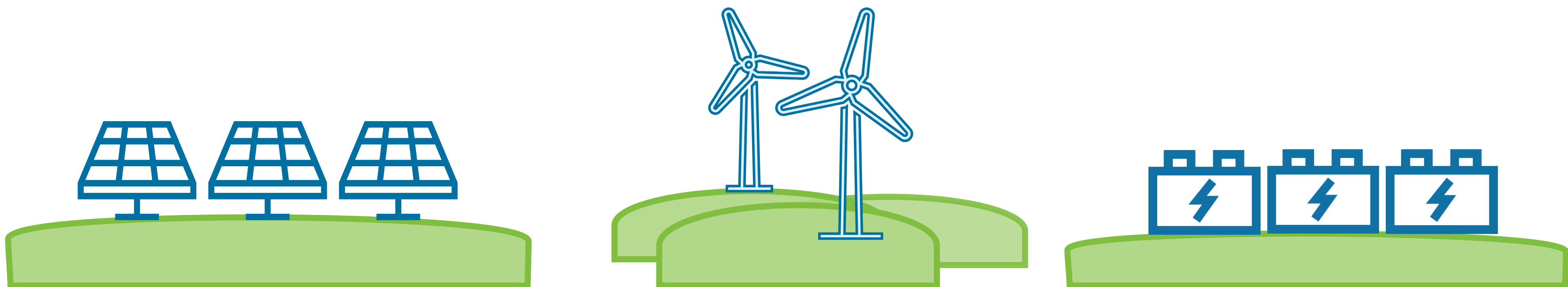
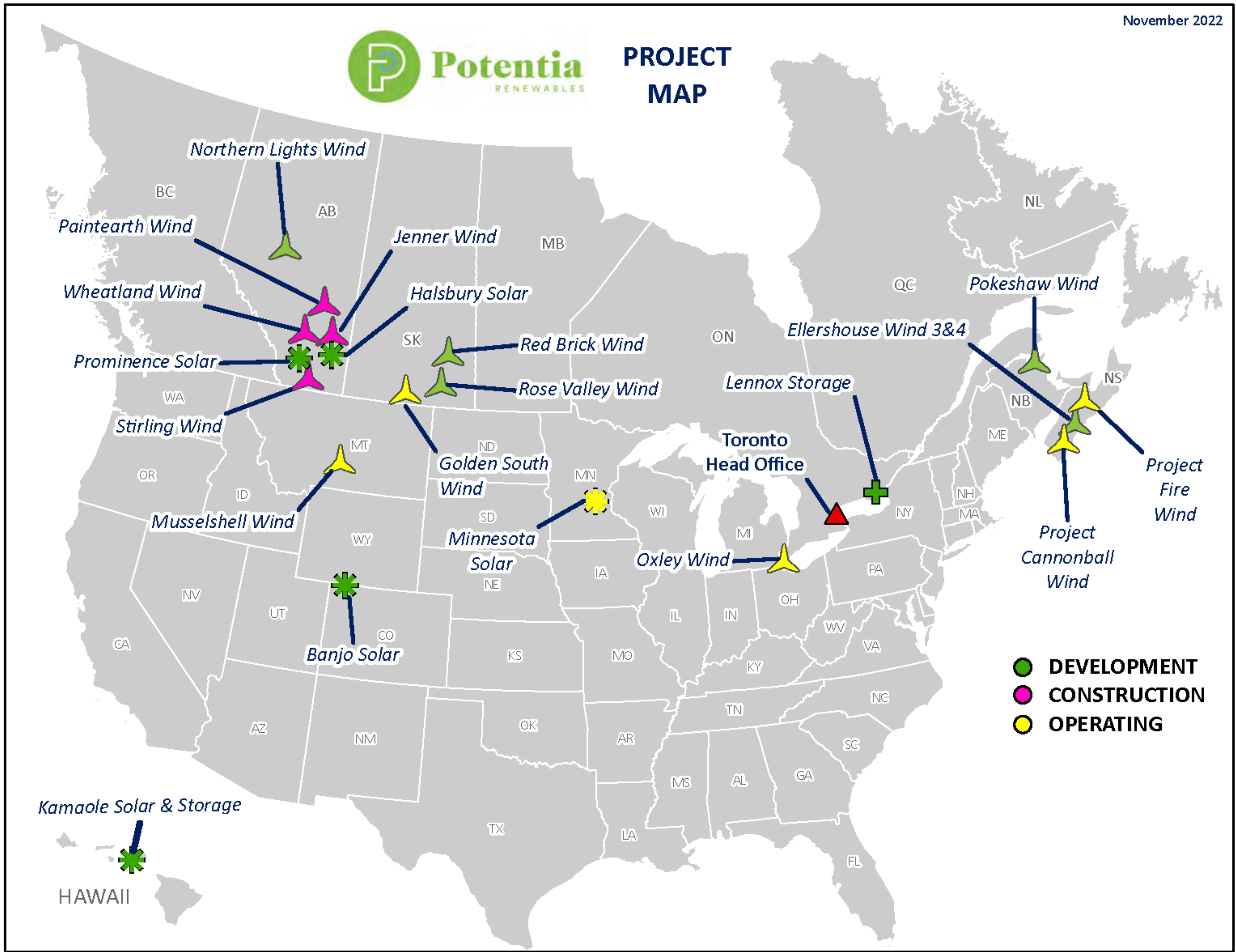


BW SOLAR

BW Solar is headquartered in Waterloo, Ontario, Canada, supported by BW Group’s global team of development, technical, operational, financial and legal professionals.

Please visit <https://bw-group.com/our-businesses/bw-solar/> to learn more.

POTENTIA RENEWABLES PORTFOLIO



PROJECT DETAILS

PROJECT NAME

Essex Battery Energy Storage System
(Essex BESS)

NAMEPLATE CAPACITY

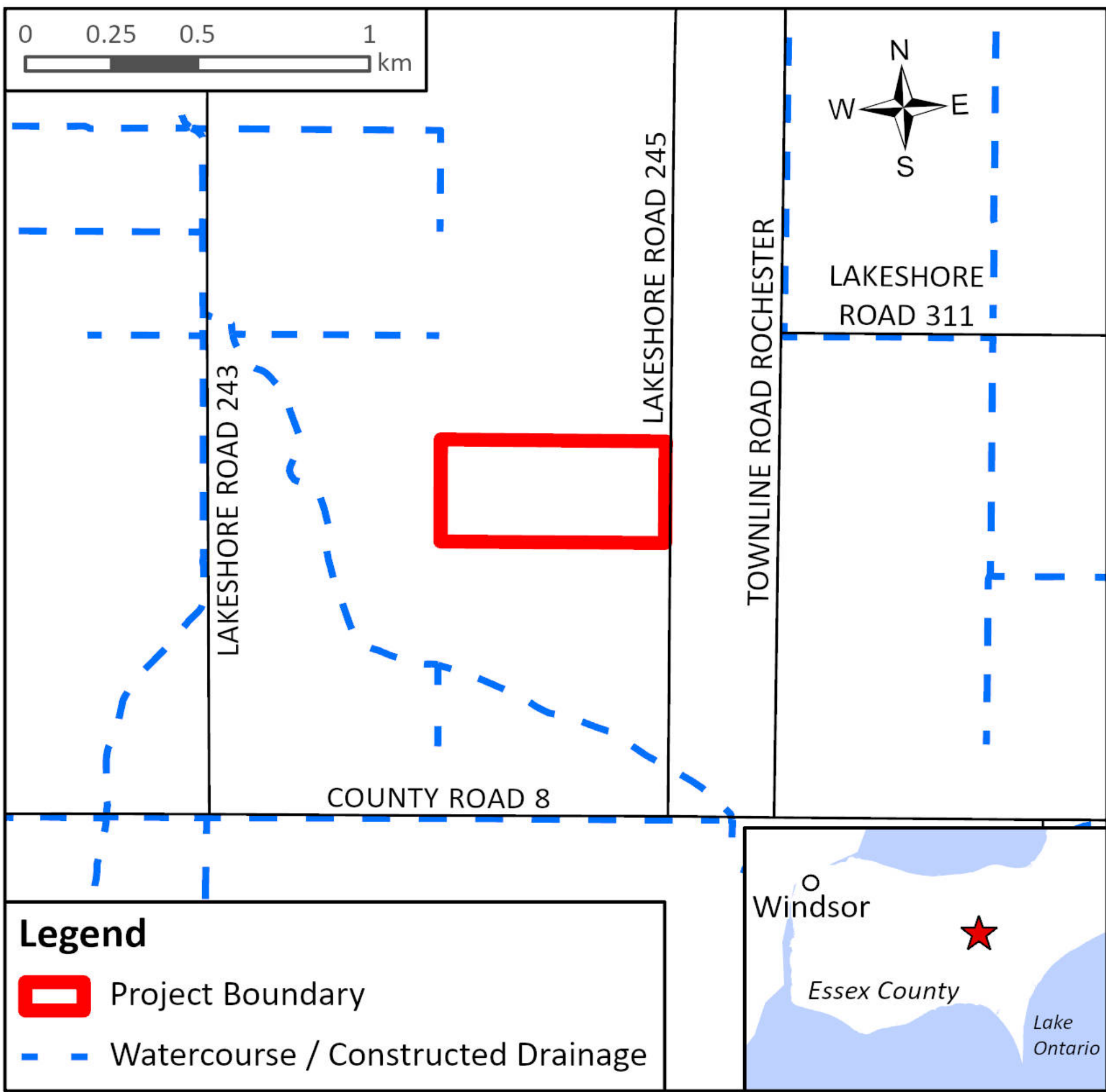
Up to 350 Megawatt (MW) over four hours (1,400 MWh), Lithium-ion battery

STORAGE TECHNOLOGY

Lithium-ion battery

LOCATION

Municipality of Lakeshore, occupying approximately 35 acres of land within a 50-acre parcel located at 2873 Lakeshore Road 245



PROJECT COMPONENTS

- **Batteries** (BESS): lithium-ion DC cell blocks placed in a rack within a temperature-controlled enclosure that stores and release energy.
- **Power Converter System** (PCS): controls the current and voltage of the electricity received from the grid and adjusts the batteries via inverters and medium voltage transformers.
- **Energy Management System** (EMS): a.k.a. the brains of the facility, which commands, controls, monitors and manages the functionality of a project.
- **Substation**: the electrical connection point to the grid composed of main power transformers and protection and control equipment.
- **Other**: underground collector cables, roads, noise walls, foundations and more.

CONNECTION POINT

Essex BESS will connect to Hydro One’s newly constructed 230kV line(s) that run south from the Lakeshore Transmission Station towards Leamington and the surrounding area.

DEVELOPMENT & OWNERSHIP

Essex BESS was developed by Essex BESS Limited Partnership (Essex LP), previously doing business as BW Storage 1 Limited Partnership. Currently, Essex BESS is developed jointly by Essex LP and PR Development LP.

ENERGY STORAGE FACTS

- Energy storage works by storing energy when it is most plentiful and supplying it during periods of peak demand. This helps to maximize the use of our existing electrical grid and reduces the need for additional transmission infrastructure. The figure below illustrates a sample charge and discharge cycle of an energy storage project.
- Over the last 10 years, prices for lithium-ion batteries have fallen by more than 50% while their energy density has increased by more than 50%.
- Lithium-ion batteries (used in cell phones and laptops) are a mature technology and the primary form of energy storage used in grid-scale applications due to their cost competitiveness, density and financeability.
- There are 4,600 MW+ utility-scale battery storage projects operating in the USA.
- Batteries can provide a host of valuable services to help balance and control the grid.

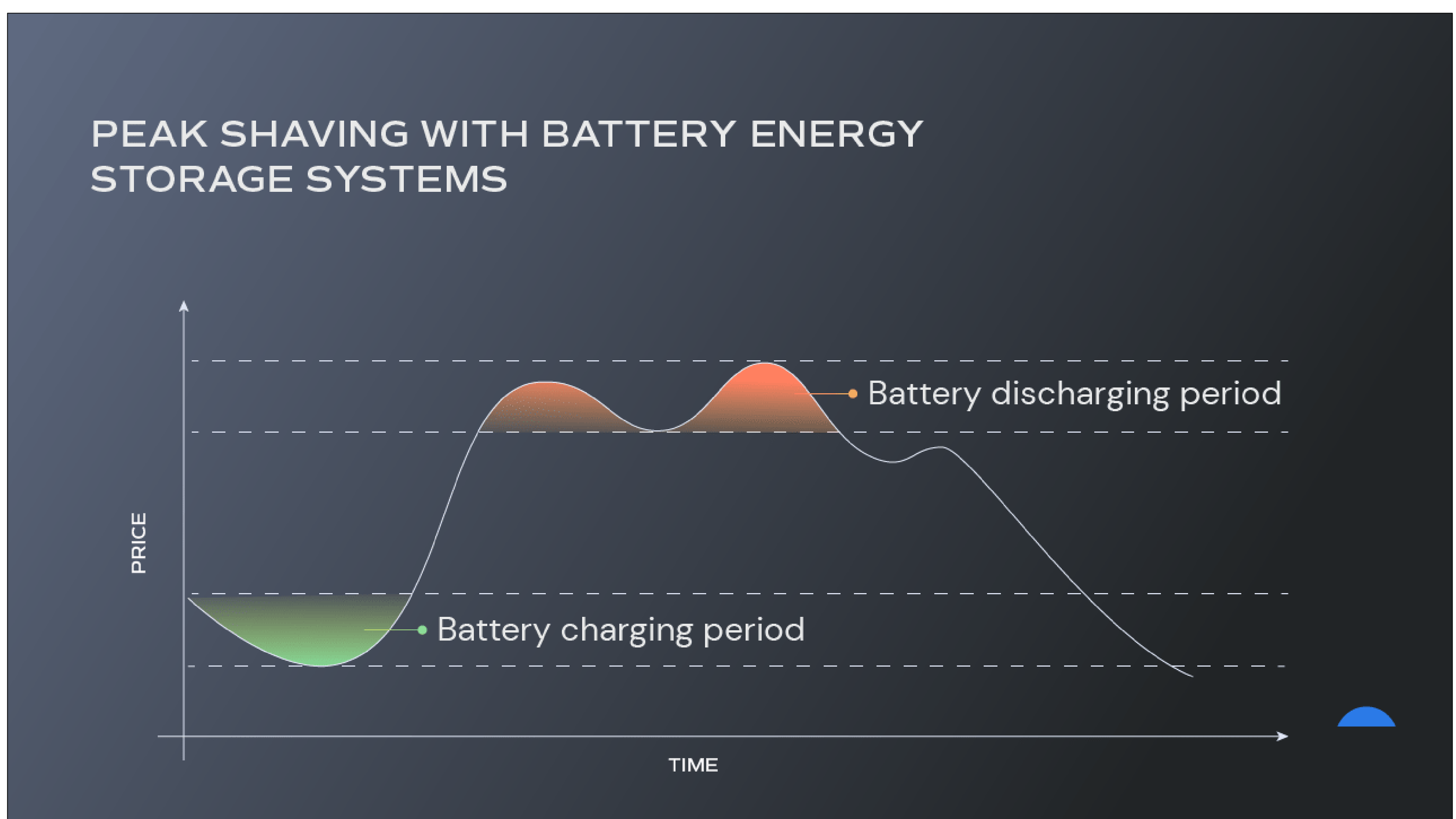
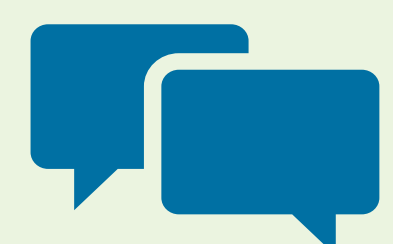


Figure sourced from: <https://www.exro.com/industry-insights/peak-shaving>

YOUR INPUT IS IMPORTANT TO US!

Fill out a feedback form or speak to a Project team member

You can also send your questions, feedback or comments to info@essexbess.ca after this Open House.



COMMUNITY BENEFITS

Long-Term Tax Revenue

Over the course of its life span, the Project will be a source of significant and reliable contributions to the Municipality's tax base while requiring minimal municipal services. The Municipality can use the increased tax revenue to fund roads, schools and improve municipal services.

Local Employment

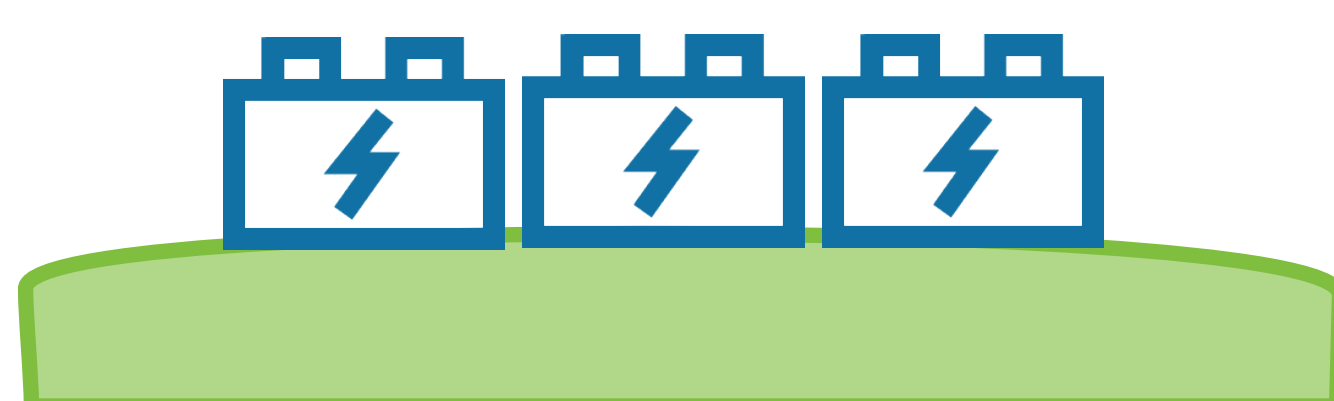
Jobs created during construction will include those related to land surveying, road construction, concrete and aggregates supply, equipment installation, substation construction, electrical testing and technical commissioning to name a few.

Boosting the Economy

Construction site services, materials, and contractors will be sourced locally as much as possible subject to meeting quality, quantity, and workmanship requirements. Workers may also require local accommodation and services while working on the Project. In addition to the direct jobs, the Project will increase electrical capacity enabling further investment in Southwest Ontario.

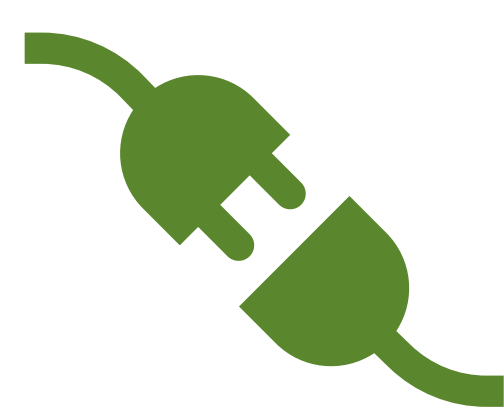
Reducing Emissions

The Project will also help to reduce Ontario's emissions by limiting the need to run natural gas generators during times of peak loads.



WHY HERE?

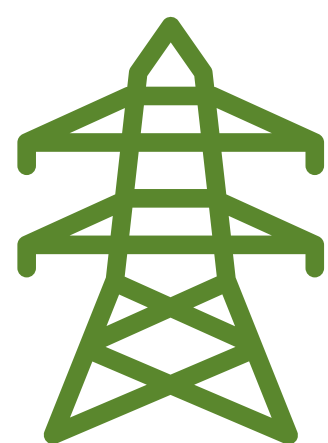
The Essex BESS project site was chosen for the following reasons:



The Independent Electricity System Operator (IESO) is forecasting a need for 4,000 MW by 2030 and is in the process of administering various procurement programs to address this need. The Essex BESS will be able to contribute to Ontario’s growing need for additional capacity.



The Project is in an area identified by the IESO as a preferred location for new energy storage projects.



Proximity to existing power line infrastructure with the capability of interconnecting the Project.



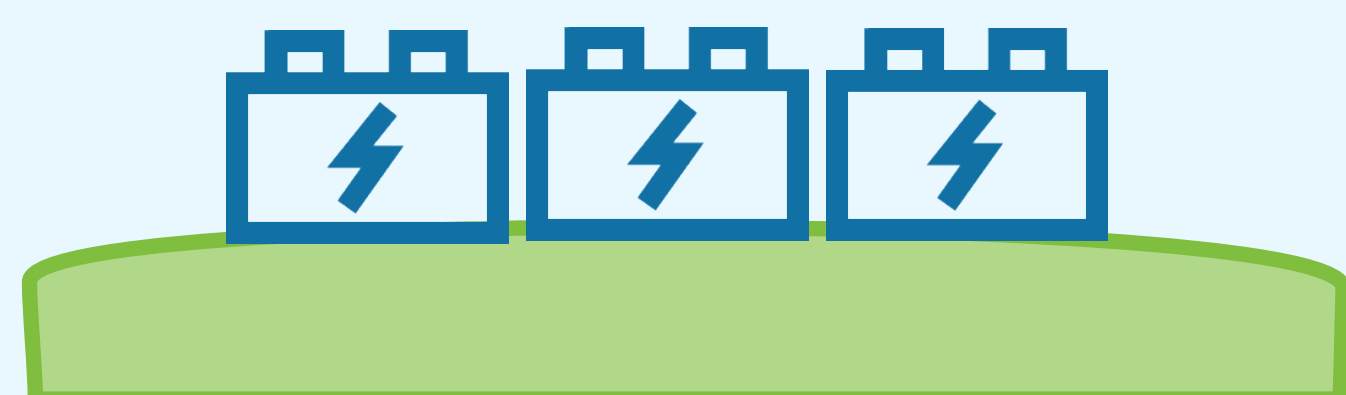
Minimal impact on the local environment.



Relatively flat terrain for construction and suitable site access.



A willing landowner.



HAVE A COMMENT OR QUESTION?
FILL OUT A FEEDBACK FORM OR SPEAK TO
A PROJECT TEAM MEMBER

WHY ENERGY STORAGE?

Flexibility

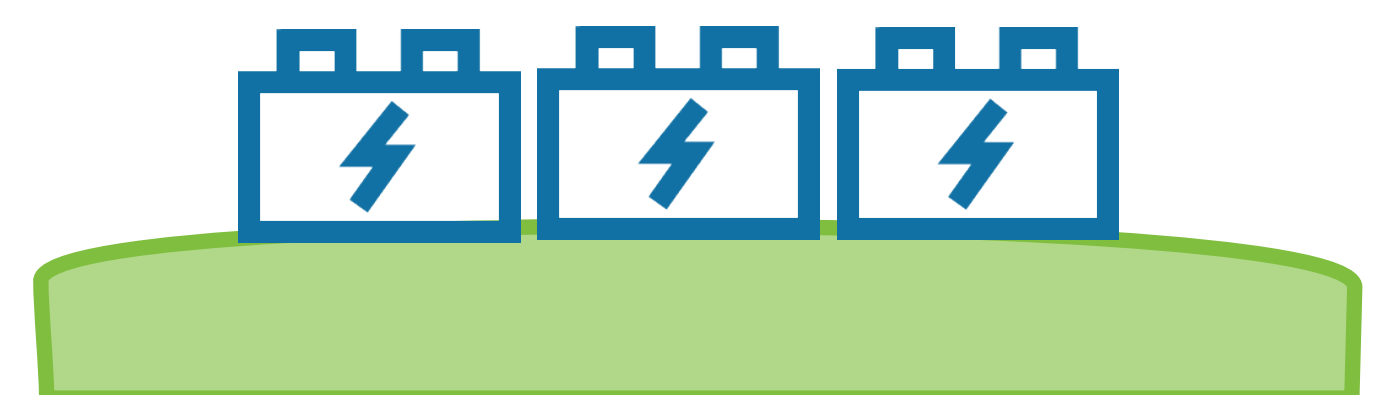
Essex BESS will allow energy produced during periods of low demand to be stored and released to the grid during periods of high demand. Balancing the supply of energy over the course of the day means better use of our mixed energy sources (renewables, nuclear, hydro) and reducing our reliance on out-of-province energy sources.

Timing

In comparison to building a new transmission line infrastructure, energy storage can be deployed relatively quickly. The timely installation of energy storage will help ensure the electrical grid supports our growing economy.

Procurement

The Ontario Independent Electricity System Operator (IESO) has released a procurement opportunity for additional capacity, the E-LT1 RFP. The Essex BESS has been designed specifically to support local system needs and bring much-needed energy capacity to southwestern Ontario and the surrounding area. The Project will be submitted to the E-LT1 RFP procurement process in early 2023.



This image is not representative of the battery storage technology to be installed for the Essex BESS.

PRELIMINARY PROJECT SCHEDULE



Summer
2022

★ We are here

IESO identifies additional energy demand and starts Qualification process
IESO releases Qualified Applicants list

Late
January
2023

Submit bid to the IESO Expedited Long-Term Request for Proposals (E-LT1 RFP)

Spring
2023

IESO Contract Award

Summer
2023

Apply for Land Rezoning and Site Plan Approval, Progress Interconnection Studies

Spring
2024

Anticipated Start of Construction

Summer
2025

Anticipated Start of Operations

CLASS EA PROCESS UPDATE

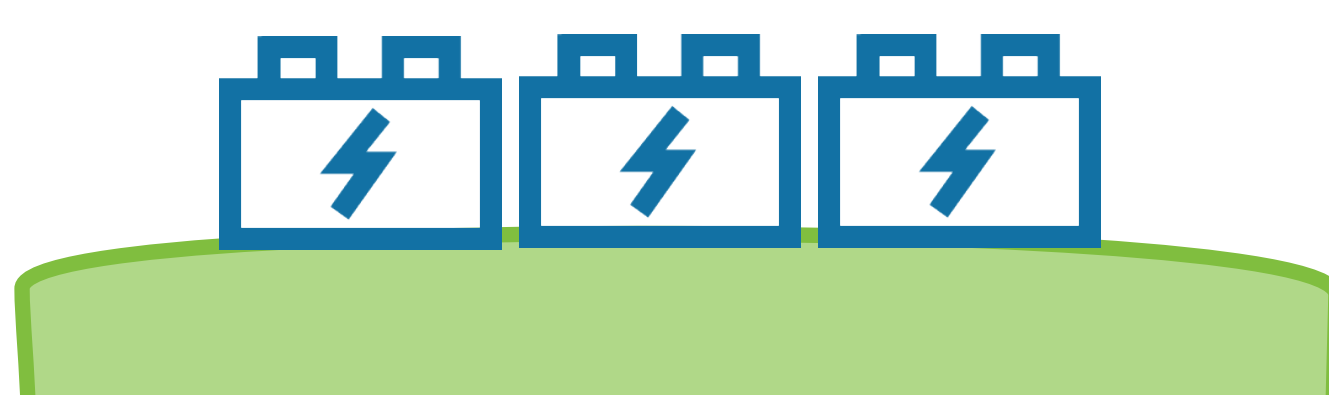


WHAT IS A CLASS ENVIRONMENTAL ASSESSMENT?

PR Development LP and Essex Storage LP are initiating a Class Environmental Assessment (Class EA) for Minor Transmission Facilities for Essex BESS. The Class EA for Minor Transmission Facilities sets out a planning and decision-making process for projects with predictable environmental effects that can be mitigated.

Key Components

- Identify the need for the Project.
- Define the Study Area and potential alternatives.
- Consultation with Indigenous communities, community members, elected officials, interest groups and government agencies.
- Collection of environmental inventory.
- Identification and evaluation of alternative methods.
- Identification of potential effects and mitigation measures.
- Selection of a preferred alternative.
- A draft Environmental Study Report (ESR) that will be made available for a 30-day public review and comment period.
- Submission of Statement of Completion and Final ESR.



CLASS EA

EVALUATION CRITERIA

Natural Environment



- Vegetation
- Water bodies or aquatic habitat
- Terrestrial wildlife
- Natural hazards (erosion, flood plains, etc.)
- Species at risk/sensitive species

Socio-Economic Environment



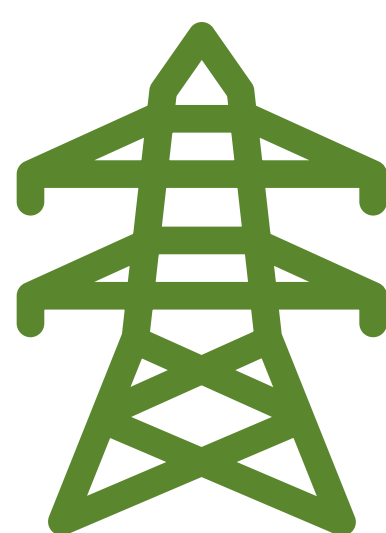
- Residences
- Commercial operations
- Existing infrastructure (roads, pipelines, transmission lines, etc.)
- Agricultural lands, resources and operations
- Archaeological or built heritage resources

Indigenous / Traditional Land Use



- Indigenous interests (cultural sites, traditional areas, historical lands and resources)

Technical and Costs

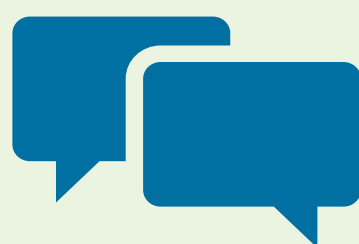


- Construction complexity
- Cost

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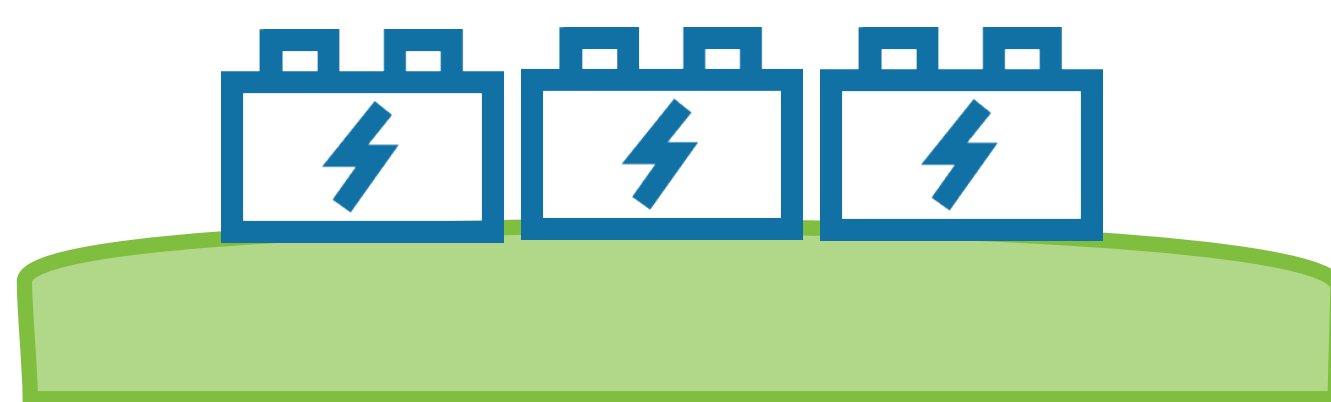
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**THANK YOU
FOR ATTENDING!**

If you have questions or feedback about the Essex Battery Storage System (Essex BESS), ask our team today, fill out a feedback form, or contact us at:

info@essexbess.ca

www.essexbess.ca



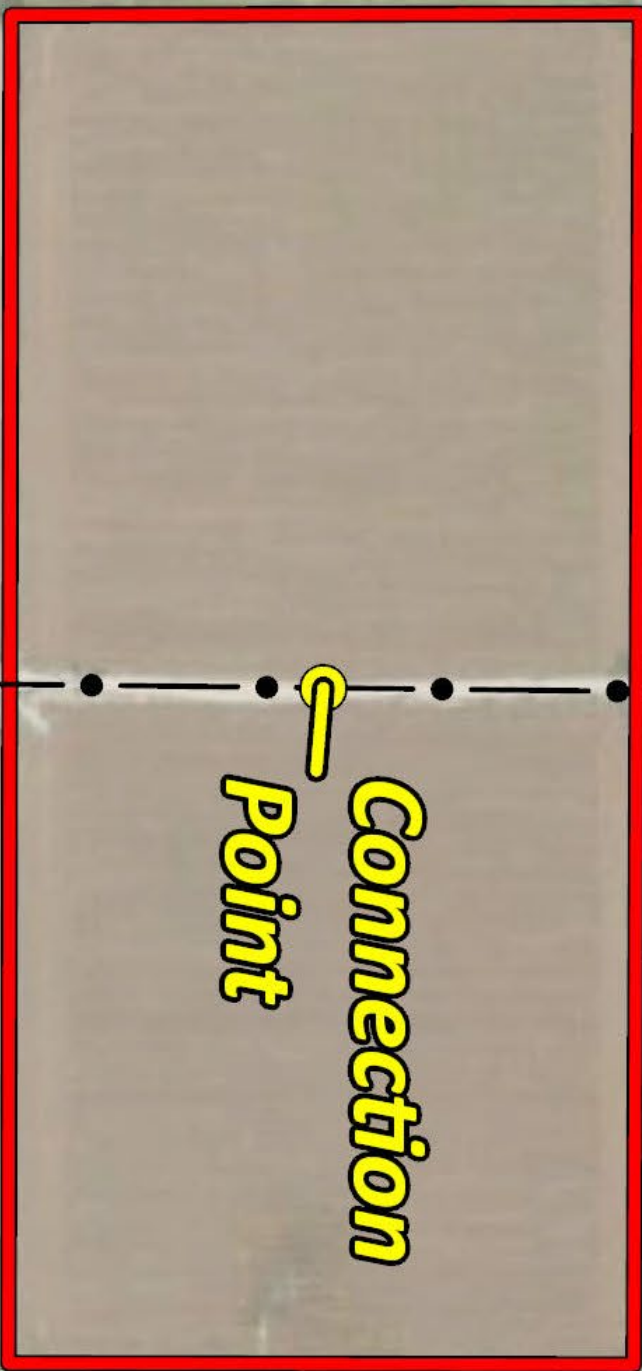
All personal information included in a submission – such as name, address, telephone number and property location – is collected, maintained and disclosed by the Ministry of the Environment, Conservation and Parks for the purpose of transparency and consultation. The information is collected under the authority of the Environmental Assessment Act or is collected and maintained for the purpose of creating a record that is available to the general public as described in s. 37 of the Freedom of Information and Protection of Privacy Act. Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential. For more information, please contact the Ministry of the Environment, Conservation and Parks' Freedom of Information and Privacy Coordinator at foi.mecp@ontario.ca.)

SCALED PROJECT MAP



LAKESHORE ROAD 243

Project Site



Connection
Point

230kV Transmission Line

LAKESHORE ROAD 245

TOWNLINE ROAD ROCHESTER

LAKESHORE ROAD 311

COUNTY ROAD 8

SUNNYSIDE COURT

HIGHWAY 77