Oxford Battery Energy Storage Project

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February 12th, 2025

About Boralex

Canadian-based company.

Leader in renewable energy in **North America** and **Europe.**

More than **30 years** of experience, including over **10 years in Ontario.**

Over 3 GW of installed capacity.

We **develop, build, and operate** wind, solar, hydro electricity generation systems, and storage.

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Why Is This Project Needed?

- Ontario requires new electricity resources, such as energy storage, to meet our energy needs for **this decade**.
- To address this need, the Independent Electricity System Operator (IESO) secured approximately **3,000 megawatts (MW)** through competitive bids, including the **Expedited Long-Term Request for Proposals (E-LT1 RFP)** and **Long-Term Request for Proposals (LT1 RFP)** processes.
  - Boralex was the **Leading Contract Awardee** in E-LT1, with **two Storage Projects totalling 380 MW / 1.5GWh**.
  - On May 9, 2024, Boralex, in partnership with Six Nations of the Grand River Development Corp., won a contract for the **Oxford Battery Energy Storage Project** to provide **125 MW** of storage capacity through the LT1 RFP process.

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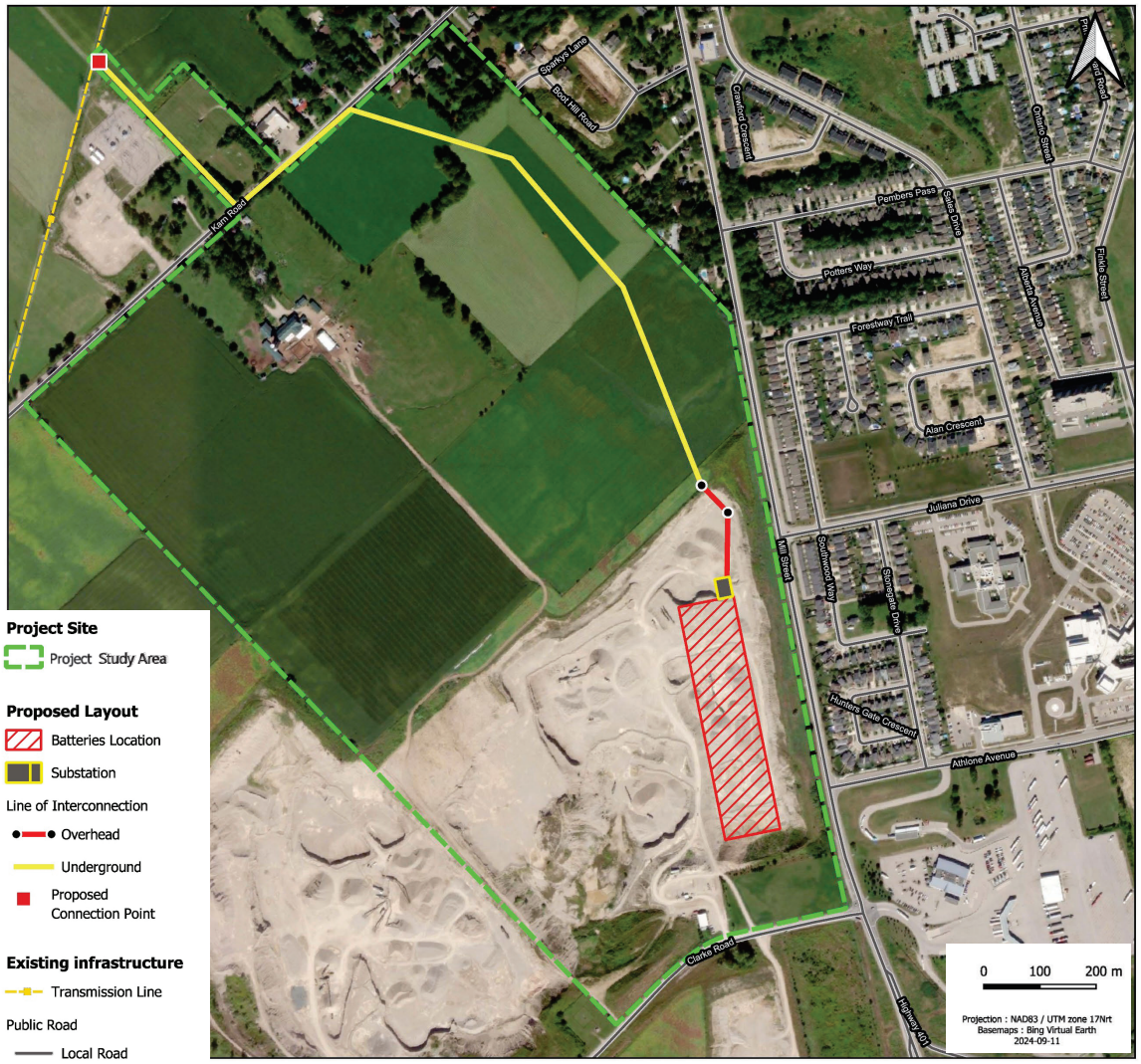
Project Description



- Located in the Township of **South-West Oxford**.
- **125 MW** for 4 hours capacity.
- Connection to the existing 115 kilovolt (kV) transmission line.
- Majority of the 1.5 km interconnection line will be underground.
- The project will be located in an aggregate facility to **minimize environmental impact and repurpose non-arable land**.
- The inherent sound barriers formed by the surrounding aggregate pit walls make this **site naturally conducive to sound reduction**.

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Project Phase Overview

PERMITTING

- **Class Environmental Assessment (EA)** for Transmission Facilities to be obtained from the Ministry of the Environment, Conservation and Parks (MECP).
- **Zoning Bylaw Amendment & Official Plan Amendment**.
- **Environmental Compliance Approval (ECA)** for stormwater to be obtained from the MECP.
- **Other as required.**

CONSTRUCTION

Implement standard construction mitigation practices

Elements that will be carefully considered:

- Air Quality
- Sound
- Environment & Wildlife
- Local Traffic Safety
- Fire Management
- Erosion and Sediment Control

OPERATION

Comply with requirements

Procedures that will be carefully enforced:

- Emergency Response
- Fire Management
- Sound
- Environment
- Vegetation Management

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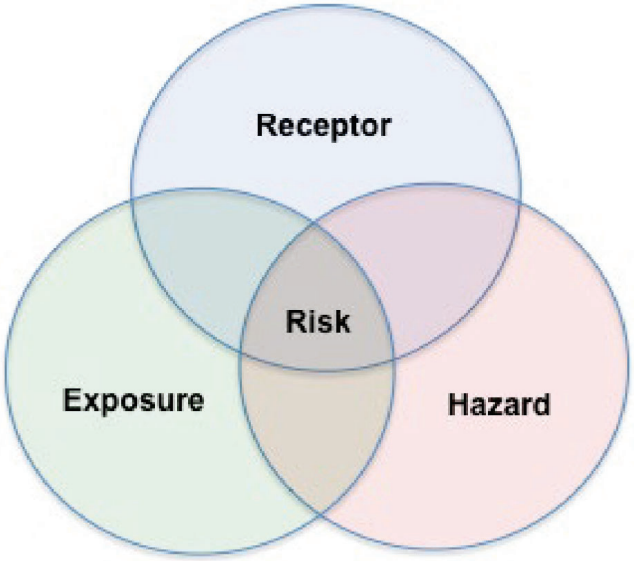
Community Risk Assessment (CRA)

The purpose of the CRA is to review the potential impacts of BESS on the **health and safety** of the community's residents and to develop mitigation plans that help **avoid and minimize** the potential and severity of potential impacts.



The CRA is being finalized:

- In the highly unlikely event of a fire, chemical emissions to air will not impact the general public.
- Potential impacts to local groundwater are not expected. The facility will be constructed and operated according to the requirements set out by MECP through an ECA.
- Normal operations of the facility will adhere to stringent MECP sound standards.
- Construction activities will be similar, or less, than those occurring daily in the aggregate pit.
- Design and operations standards for BESS facilities have improved significantly in the past five years.
- Recommendation to complete an Emergency Response Plan (ERP).

The Oxford BESS will not pose an undue risk to the community.

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Commitment to Fire Safety

PREVENTION

- Retain a **verified third-party Fire Safety Expert.**
- Selecting BESS equipment designed to meet **National Fire Code of Canada, NFPA 68 and/or 69 standards.**
- Batteries are designed and manufactured to **adhere to and pass evolving safety tests** prior to operation including **UL 9540 and UL 9540A**.

MONITORING & DETECTION

- Thermal **management systems (fans, ventilations, cooling)** to maintain safe operating temperatures.
- In equipment **safety controls (sensors)** to detect potential abnormal battery behaviours.
- Control room **monitors to detect potential** variances in battery behaviors.

EMERGENCY RESPONSE

- Prepare **comprehensive emergency response plan** in collaboration with third-party Fire Safety Experts and local fire departments.
- Provide rigorous **Safety Training for first responders & onsite** personnel.

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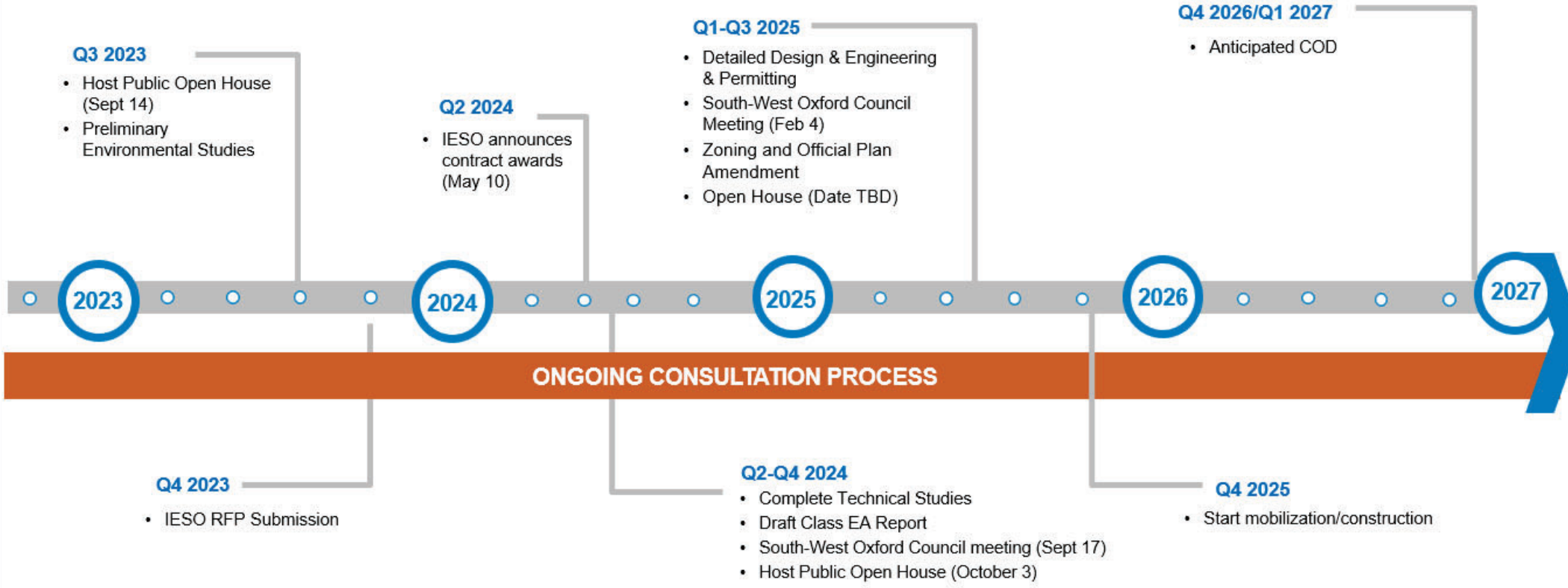
Anticipated Timeline



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Thank You!

Any Questions?

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Appendix

Community Benefits

Employment

Creating jobs in host communities: ~ 100 Jobs created during construction. **~ 1-2 full time employees** for operation.

Economy

Procuring local: Expect to procure **materials and services** from host communities (e.g., aggregates, civil works, machinery).

Consumers

Reduce energy bills: Significant benefits to **Ontario's ratepayers** by **reducing the need and cost** associated with using gas-fired power plants during times of peak demand.

Environment

Sustainable Energy: Fosters **penetration of renewable energies** by reducing carbon emissions from traditional energy systems (e.g., fossil fuels).

Supporting the Local Community

Boralex is dedicated to being a good neighbour and an integrated part of the community.

Every year we support local non-profit organizations, charities, and events that contribute to the vitality of the area.

We believe a successful project benefits the entire host community.

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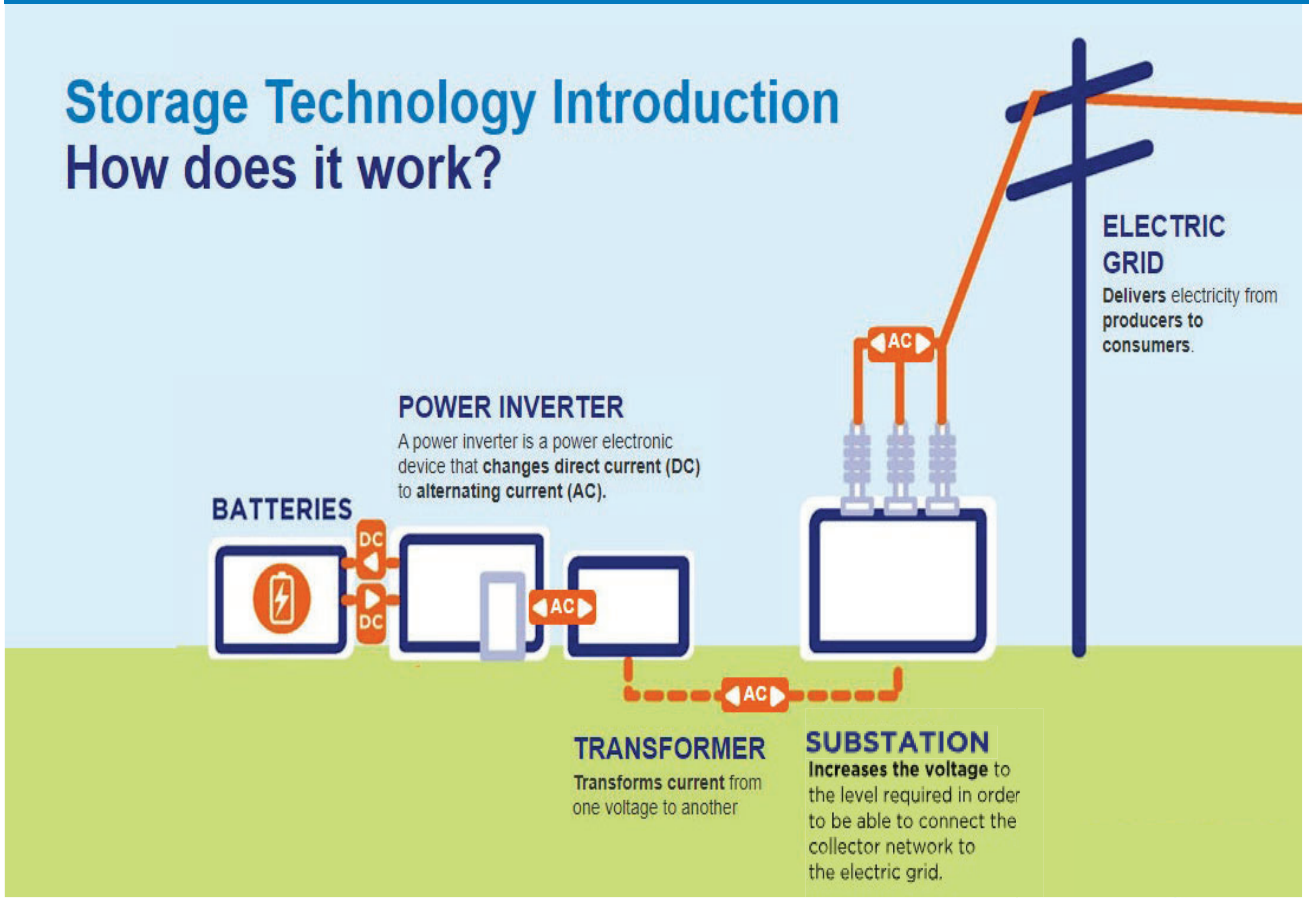
How Does Battery Storage Work?

ENERGY STORAGE IS THE PROCESS OF CAPTURING AND RETAINING ENERGY AT ONE POINT IN TIME, SO THAT IT CAN BE USED AT ANOTHER POINT IN TIME.



- Energy is generated from various sources.
- This energy enters the grid.
- The energy is constantly metered and monitored by a battery management system.
- If there is surplus energy, energy from the grid is converted from alternating current (AC) to direct current (DC) for storage in the BESS.
- The energy is stored and the battery management system continuously monitors and controls the flow of energy and optimizes how batteries are charged/ discharged.
- When there is a need for more energy on the grid, energy is discharged from the BESS and converted from DC to AC to feed back into the grid.

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