

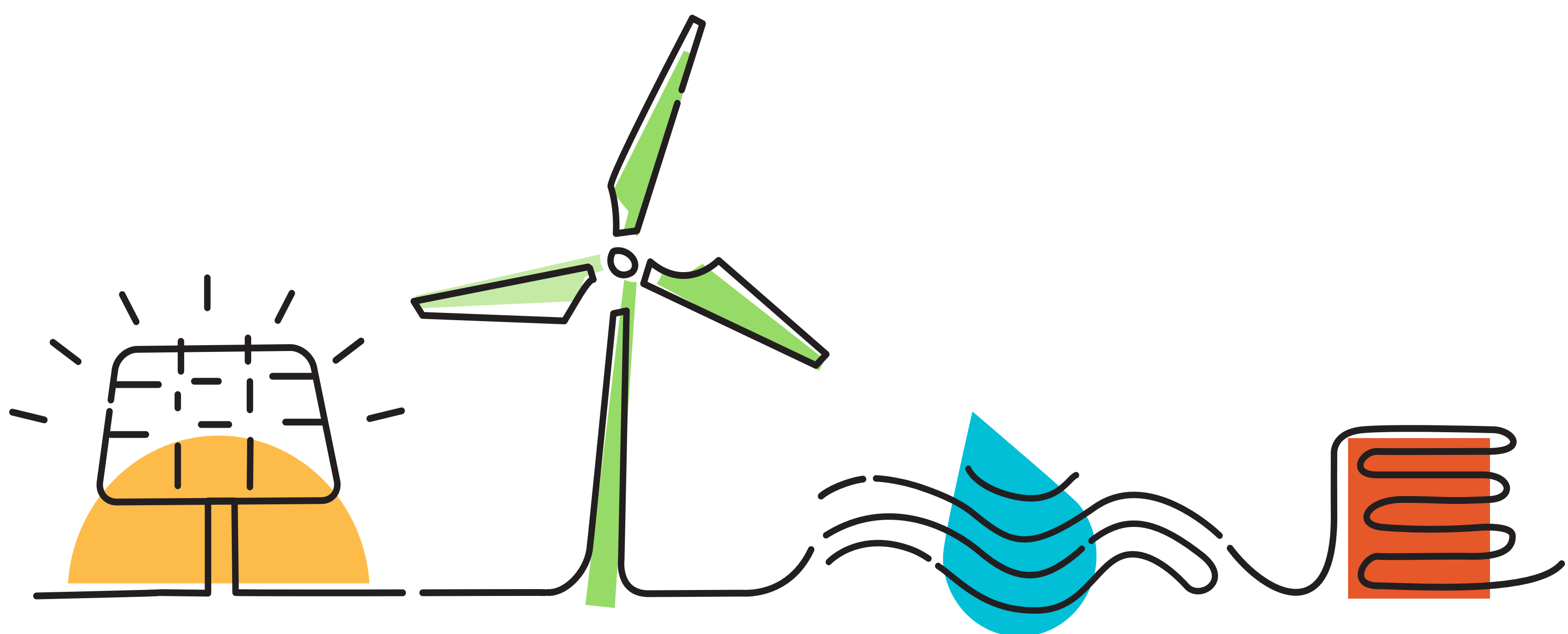
WELCOME TO THE

Seaforth Storage Project Public Community Meeting

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

If you have questions or comments, please ask one of our representatives.

Thank you for attending!

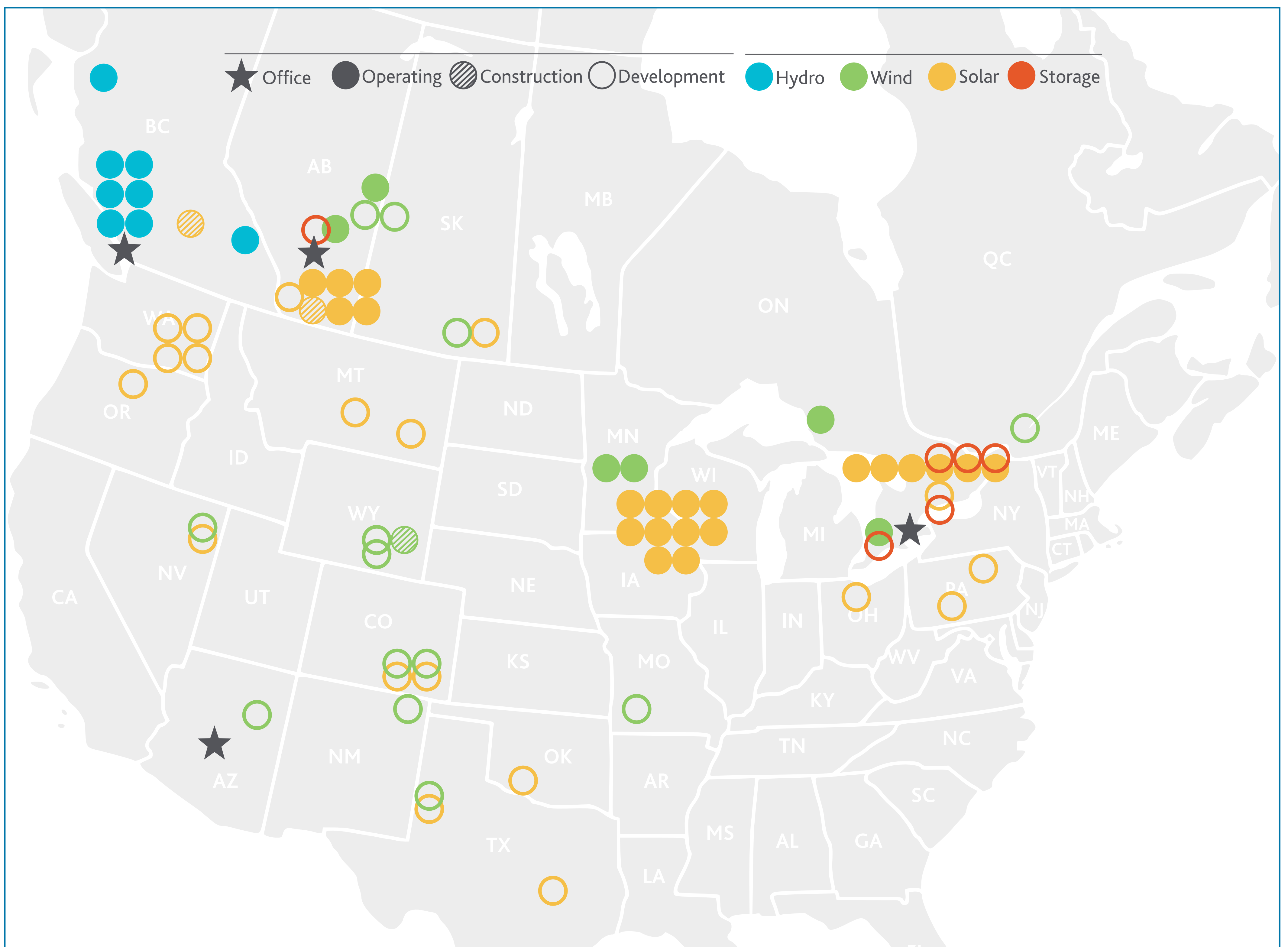


About BluEarth Renewables

BluEarth Renewables brings together extraordinary people with the power to change the future[™] by delivering renewable energy to the power grid every day. We are a leading, independent, power producer that acquires, develops, builds, owns, and operates wind, hydro, solar and storage facilities across North America. Our portfolio includes 1 GW MW_{AC} (gross) in operation, under construction and contracted pre-construction, and over 8 GW of high-quality development projects that are actively being advanced.

For more information, visit blueearthrenewables.com.

Our Portfolio



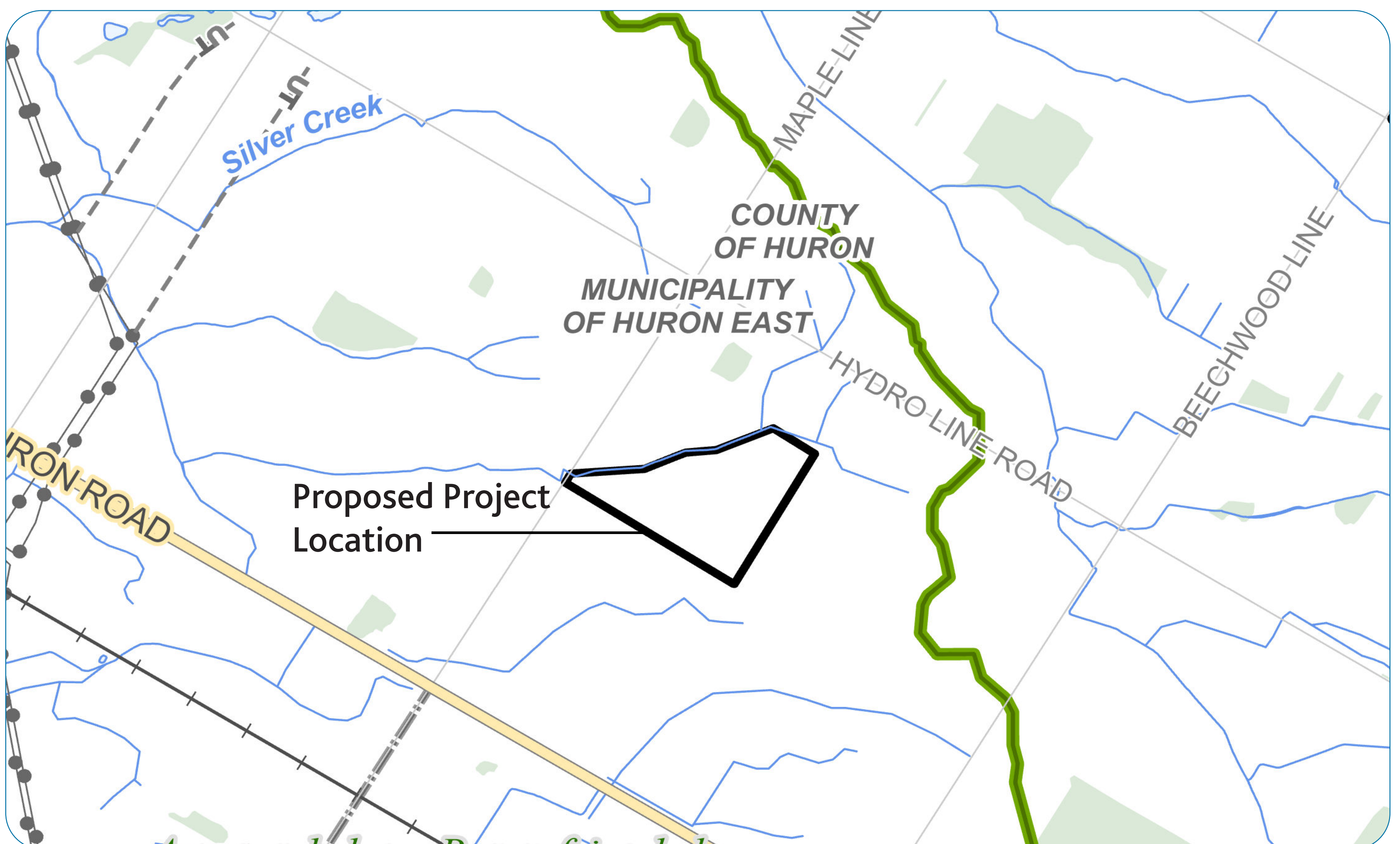
Power to Change THE FUTURE[™]

Seaforth Energy Storage Project

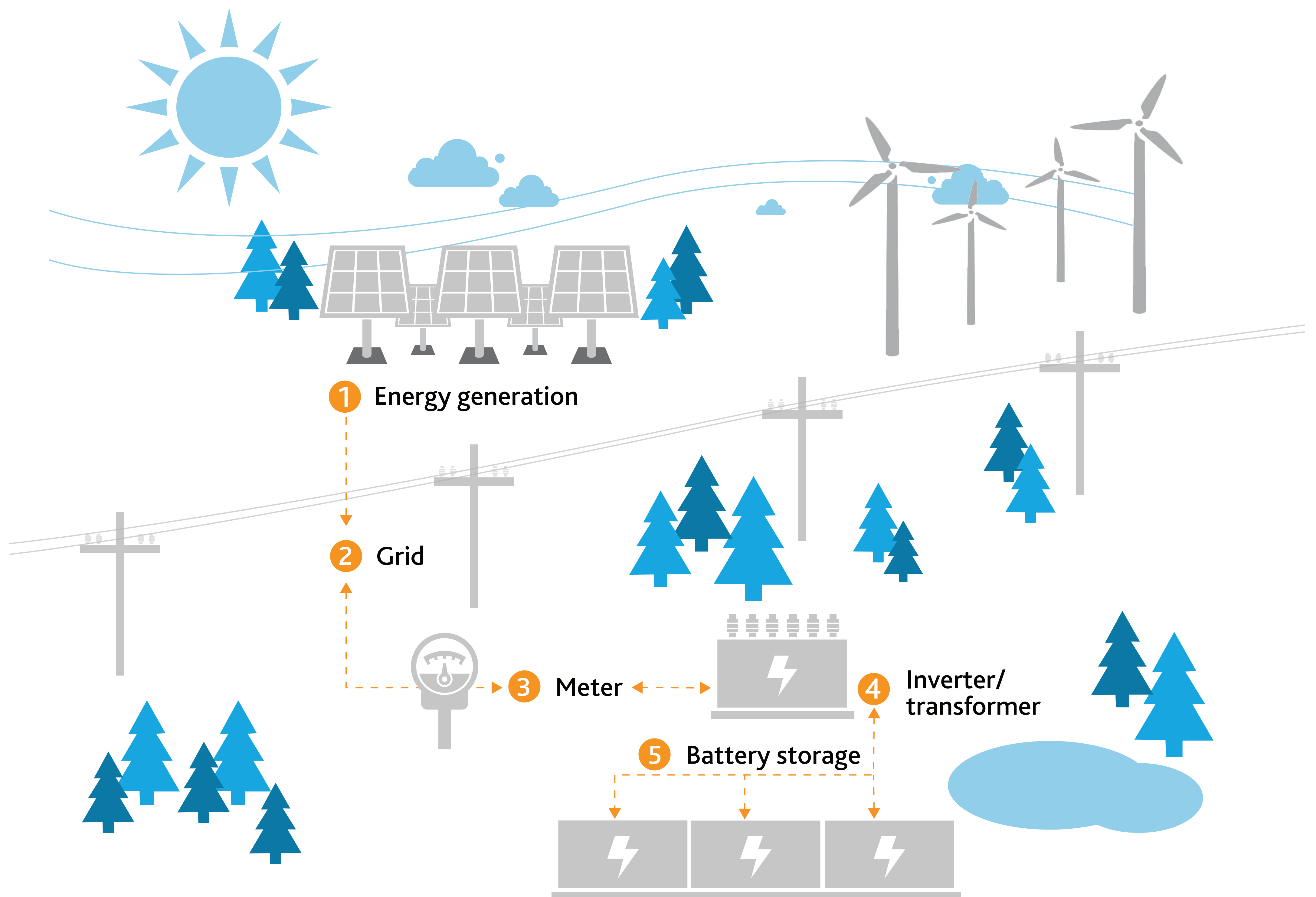
Project Description

The Seaforth Storage Project has a nameplate capacity of 200 MW, which is enough to power approximately 184,000 homes in Ontario for four hours during times of grid instability.

- The proposed Project is located on leased land within the Municipality of Huron East, approximately 4 km from the town of Seaforth.
- The Project will consist of a battery energy storage system and associated infrastructure including inverters, collector lines, fencing, access roads and a substation. The Project is anticipated to have a capacity of up to 200 MW/800 MWh and will interconnect to the existing Hydro One transmission system.
- By storing surplus electricity during off-peak periods of high supply or low usage and providing electricity during critical peak times, the Project will help increase the overall reliability and stability of Ontario's electricity system.



How Does Energy Storage Work?



1. Energy is generated from sources including wind, solar, natural gas, hydro, nuclear, etc.
2. This energy enters the grid.
3. The electricity is constantly metered and monitored.
4. If there's more energy supply than demand, energy from the grid is converted from alternating current (AC) to direct current (DC) for storage in the battery system.
5. The energy is stored and a management system runs continuously to monitor and control the flow of energy and optimize how batteries are charged/discharged. BluEarth's Remote Operating Center monitors the status of the storage facility and determines when to charge, store, and discharge energy as required by the electrical grid. When electricity is needed, it flows through the power conversion system (PCS) where it is converted from DC back to AC for distribution, and use in homes and offices.

Seaforth Energy Storage Project

Building an Energy Storage Facility

The steps to construct an energy storage facility include:

1. Civil Works.

The ground area is prepared to ensure the facility is built on a flat surface.

2. Perimeter Fencing.

A fence and safety signage are installed around the perimeter of the facility.

3. Foundation Work.

Concrete slabs will be installed as foundations that will accommodate the battery modules and electrical components.

4. Battery Installation.

Modular containers that host the batteries are installed in conjunction with a power conversion system (PCS) and medium voltage (MV) transformer.

5. Electrical Components.

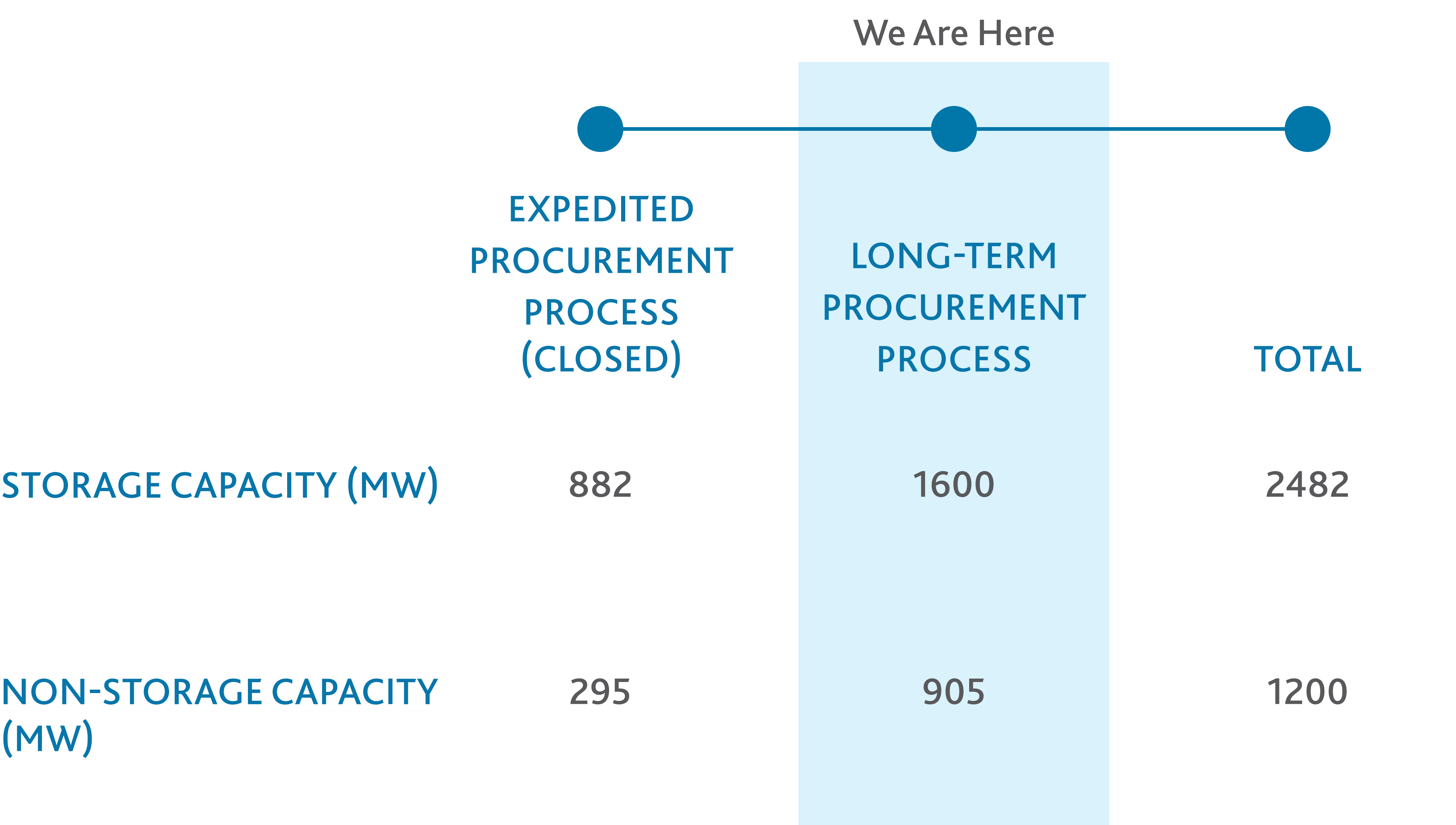
Balance of electrical equipment includes a project substation with High Voltage (HV) metering, breakers, main power transformer and control building. Alternating current (AC) collection cables are used to interconnect the project substation to the battery system rows.



Why Storage?

The Seaforth Storage Project is being proposed in response to the Independent Electricity System Operator’s (IESO) goal to secure approximately 2500 MW of new capacity through competitive procurement processes.

- The process is being undertaken by the IESO to address an upcoming period of emerging electricity needs in the province driven by increased demand, the retirement of the Pickering nuclear plant, the refurbishment of other nuclear generating units, as well as contracts for existing generation facilities that will be expiring in the next few years.
- Energy storage provides reliability and stability to electricity systems by storing surplus energy during off-peak periods of high supply or low usage and providing electricity during critical peak periods.



Community Benefits

We are committed to strengthening the local economies where we live, work and operate by investing in and giving back to the local community for decades to come. Below are some of the local community benefits of the proposed Project.



Local employment.

During construction, the Project will provide approximately 70 to 100 jobs including land surveying, road construction, concrete and aggregates supply and installation, equipment assembly, construction of electrical connection and associated infrastructure, and material transportation. During operations, the Project will provide full-time, local operations and maintenance positions.



Long-term tax revenue.

Over the course of the Project's lifespan, it will provide ongoing contributions to the community's tax base without requiring municipal services such as water and wastewater services.



Increased grid reliability.

This Project has a nameplate capacity of 200 MW, which is enough to power approximately 184,000 homes in Ontario for four hours during times of grid instability.



Local economic benefits.

Construction site services, supplies, components and contractors will be sourced locally to the extent possible, while meeting quality, quantity, and workmanship requirements. Some workers may also require accommodations and services while working on the Project.

Benefits of Energy Storage

Energy storage helps balance supply and demand on the electrical grid and can provide the following benefits:



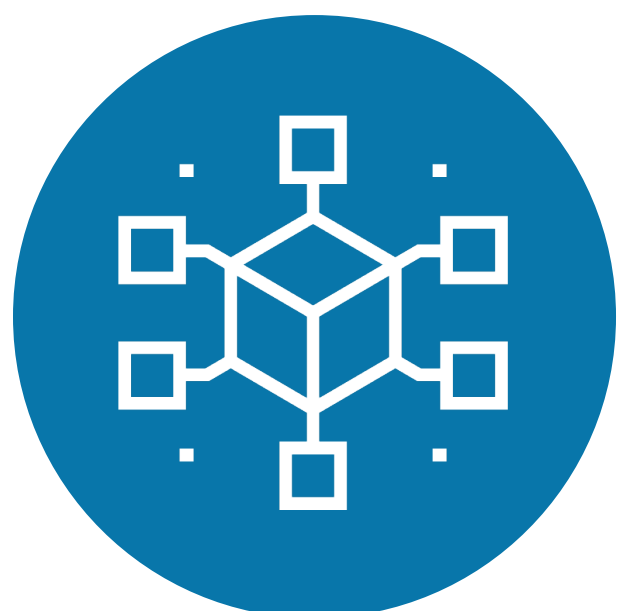
Cost savings

Increases the efficiency and capabilities of existing electricity generation and transmission networks.



Reliability

Improves grid reliability by providing backup power during grid disruptions and other emergencies.



Flexibility

Energy storage can inject or extract electricity from the grid to exactly match demand patterns. This pairs well with renewable generation sources such as wind and solar.



Lower environmental impacts

Relying on energy storage to regulate the electrical grid allows all generating facilities to operate more efficiently, which can reduce fuel consumption from conventional gas fired facilities.

Environmental Assessment

We are pursuing an extensive field study program for the Project and our team is committed to incorporating the information obtained from field studies into the Project design to ensure that impacts to wildlife and wildlife habitats are avoided or minimized.

Based on initial feedback provided from regulatory agencies and stakeholders on the Project, we are planning or have completed the following studies/assessments:

- Environmental field studies and habitat verification (Completed Spring/Summer 2023)
- Archaeological assessment
- Cultural heritage evaluation
- Hydrology study
- Waterbody assessment to support potential Ausable Bayfield Conservation Authority permitting
- Visual impact modeling
- Stormwater management assessment
- Acoustic modeling
- Air quality dispersion modeling and risk assessment

The results of these studies, the majority of which will be completed in 2023, will inform the overall site design and regulatory schedule. Below is a high-level schedule for obtaining the main approvals/permits for the Project:

- Environmental Assessment (EA) Screening: Oct – Nov 2023
- Ministry of Tourism Culture and Sport (MTCS) Cultural Heritage Confirmation Letter: Oct – Nov 2023
- MTCS Archaeological Assessment Confirmation Letter: Oct – Nov 2023
- Environmental Compliance Assessment (ECA) Approval: Oct – Dec 2025
- Environmental Activity and Sector Registry (EASR) Registration: Oct – Dec 2025
- Ausable Bayfield Conservation Authority Permit (if required): Oct – Dec 2025
- Municipality of Huron East Site Plan Application and Approval: Oct – Dec 2025

Stormwater Management

Minimizing and mitigating potential stormwater impacts are top of mind for BluEarth and we are planning to complete geotechnical and hydrology studies in the Project area to better understand the existing conditions and potential impacts associated with Project activities.

The results of these studies will be used to inform the overall design of the facility, including the development of a stormwater management plan. The stormwater management, erosion, and sediment control mitigations included within the stormwater management plan will also be incorporated into the Environmental Protection Plan (EPP) for the Project. The EPP will ensure that all potential impacts are appropriately mitigated throughout all phases of the Project, including ensuring that adjacent properties are not impacted by runoff from the proposed Project site.

BluEarth will also be likely seeking an Environmental Compliance Approval from the Ministry of Environment and Parks (MECP) for potential impacts to stormwater management systems. The timing of these studies is dependent on the results of the IESO procurement, which we expect to receive in May/June 2024.

The Project is still in the early stage of development and final site design will be informed by studies, such as those mentioned above.



Fire Protection

Ensuring the safe operations of all our facilities is of the utmost importance to BluEarth. We place the safety of the community, our team, and our projects above all else.

The storage system and battery containers are designed with fire detection and suppression capabilities. In addition, all BluEarth facilities have a site-specific emergency response plan (ERP) and a plan would be developed specifically for this proposed facility which will consider the battery technology selected and the overall design and layout of the Project, including access points. In the event of a fire, emergency services would be called and would focus on preventative measures to ensure nothing else is impacted.

The BESS technology for this Project is still being finalized, however BluEarth is looking at technology that has the following safety features:

- Heat detector
- Smoke detector
- Combustible gas detector (CO, G2, CHx)
- Fire suppression (dry gas)
- Strobe and horn alarms
- Local and remote emergency shutoffs (BluEarth has 24/7 remote operations monitoring and four local operations staff in the area)
- Thermal management
 - Liquid cooling/heating for batteries
 - Air cooling for electrical components
 - Humidity control

BluEarth will engage with the local fire department and emergency service providers throughout the development of the Project to receive input on the overall site design and layout, as well as the emergency response plan. We are committed to ensuring that these service providers are adequately resourced and trained to respond to any emergency event(s) associated with the Project.

Seaforth Energy Storage Project

Common Questions

We believe in working together with honest and transparent communications. If you have a question about the Project, please ask a member of our team.

How much energy will be stored and for how long?

The amount of energy stored depends on the overall Project capacity, which is influenced by a variety of factors such as Project location, land size and interconnection constraints. BluEarth is currently considering a power capacity range of up to 200 MW, with a targeted storage duration of four hours. That equates to energy storage capacity of approximately 800 MWh.

How long do storage batteries last?

Batteries used in energy storage last approximately 20 years, or 7,300 cycles of charging. As the battery ages, the performance will gradually decline with time and based on the frequency with which it charges, similar to batteries used in everyday electronics such as your smartphone. To compensate for this aging process, batteries can be replaced or additional batteries can be added to a storage project in order to maintain overall storage capacity.

What size are the battery structures? How many will there be?

The exact number of battery containers is still being determined and is contingent on both the battery supplier and the Project capacity. Our preliminary estimates assume 400 containers. The proposed battery structures are similar to a sea can, and the dimensions are roughly 6 m long x 2.5 m wide x 3 m wide.

What happens to the facility and batteries once they are retired?

Once the storage facility has reached the end of its usable life, the facility will be decommissioned. Decommissioning includes de-energizing the facility, removing all above ground equipment and structures, and restoring the land to its prior condition. At the end of a battery's useful life, up to 95% of the battery can be recycled for use in new batteries.

Seaforth Energy Storage Project

What's Next?

We intend to submit this Project in the Independent Electricity System Operator's Request for Proposals Process to support future energy demands in Ontario.

Should BluEarth be successful in this procurement process, the Project will be awarded a contract by June 2024. Tentative Project schedule dates based on this milestone date are outlined in the table below.

Project Milestone/Activity	Timeline
RFP Submission	December 2023
RFP Contract Award	May/June 2024 (tentative and subject to change)
Environmental Field Studies	April 2023 - October 2024
Technical Design and Engineering Studies	April 2023 - September 2025
Permitting	October 2024 - September 2025
Construction	October 2026 - May 2027
Commercial Operation	May 2027

The background of the slide is a photograph of a grassy field with several large, light-colored storage containers in the distance under a clear blue sky. The text is overlaid on this image.

Thank you for attending!

We appreciate the opportunity to share more information with you about the Seaforth Storage Project.

We look forward to working with you to strengthen the local economy by investing in and giving back to the community for decades to come.

Visit: www.blueearthrenewables.com

Email: projects@blueearth.ca

Phone: 1-844-214-2578