

Compass Renewable Energy Consulting Inc.

Public Open House for Almonte BESS 2 (“Project”)

Date: November 30, 2023 / 4:00 to 8:00 PM

Location: Almonte Civitan Community Hall

Proponent Legal Name:	Almonte BESS Limited Partnership
Proponent Contact Information:	info@almonteenergystorage2.com
Project Name:	Almonte BESS 2
Maximum Nameplate Capacity:	Up to 10 Mega Watts (MW)
Storage Technology:	Lithium-ion Battery Storage

PRESENTERS

Compass Renewable Energy Consulting Inc.

Jonathan Cheszes

James Marzotto

Rishabh Mundhra

Elijah Garrett

Guillermo Gutierrez

Antler Group

Logan Barrett

ATTENDEES

Councillor Denny Ferguson

Brad Lowry

AGENDA

The Public Open House provided attendees with the chance to view poster boards displaying key Proponent and Project information. The presenting team engaged attendees, responded to their questions, and solicited their feedback on the Project.

Displayed poster boards covered the following topics:

- About Us
- Ontario's Power Needs
- What is Battery Energy Storage?
- Why your Municipality?
- About the Project
- Regulatory Compliance and Environmental Assessment
- Safety Standards

OVERVIEW OF OPEN HOUSE

Please see Appendix A for photos taken at the public open house, including photos of the project poster boards. Please see Appendix B for the poster boards displayed at the public open house, which includes the Project details.

Welcome Board

Compass welcomes everyone to the public open house for the Almonte BESS 2 Project.

Board 1 - About Us

Board 1 introduced Compass Renewable Energy Consulting and its projects across Canada, and discussed previous development success in the Independent Electricity System Operator's (IESO) Expedited Long Term 1 (E-LT1) procurement.

Board 2 - Ontario's Power Needs and Previous Procurements

Board 2 provided the growth forecast of Ontario's energy demand and the IESO's procurement plan to add 4,000 megawatts of new capacity through the E-LT1 and Long-Term 1 (LT-1) procurements. The reasons for increasing provincial energy demand are discussed, including growth in the residential and commercial sectors, the effects of electrification of transportation, the recent growth of the agriculture sector, and the retirement of key generation plants.

Compass' affiliate, Wahgoshig Solar FIT5 LP, a partnership with the Apitipi Anicinapek Nation, is acknowledged as a Qualified Applicant for long-term procurement and Almonte BESS Limited Partnership as the Proponent submitting the proposal for the Project.

Board 3 - What is Battery Energy Storage?

Board 3 provided an overview of battery energy storage systems (BESS). The essential component that forms these energy storage systems will be lithium-ion battery cells, similar to what is found in an average Smartphone or Laptop. The batteries provide support to the grid by charging during low-demand hours and discharging during high-demand periods, alleviating grid congestion, improving the stability and quality of grid power, and reducing the price burden on consumers in the long run. BESS projects have been procured by the IESO since 2014.

It was mentioned that the BESS Project will range from 1 to 5 acres and will be housed in multiple 20 to 40-foot containers or enclosures, well equipped with standalone HVAC (to ensure optimal operating conditions for the battery cells), and be certified to several internationally accredited safety standards. The Project will be fully fenced, remotely monitored 24/7, and have scheduled site visits to ensure adequate maintenance across the life of the system.

Board 4 - About the Project

Board 4 showed the site plan for the proposed Project, which demarcates the Property outline, the proposed Project site, the access road, and the Connection Line to the 44kV feeder along the Connection Point. The board showed a zoning map of the parcel, which is located at 6299 County Rd 29, Mississippi Mills, ON, K0A 1A0, and is zoned Rural (RU). The proposed Project site would cover up to 1 acre of land, which would translate to a nameplate capacity of up to 10 Mega Watts (MW).

Board 5 – Why your Municipality?

Board 5 discussed the local benefits of the BESS project. This includes grid stability & flexibility, employment opportunities, financial benefits, industrial growth, diversification, electrical grid support, intelligence, and resilience. Additionally, the project will support the Municipality of Mississippi Mills Community Official Plan, the 2020-2023 Strategic Plan, and other climate change policies, aiding further integration of renewable energy into the grid.

Board 6 - Regulatory Compliance & Environmental Assessment

Board 6 informed that the team is engaging the relevant authorities having jurisdiction (AHJs) for the project. This included the Township of Mississippi Mills, the Ministry of Environment, Conservation & Parks, the applicable utility companies, the Ministry of Energy, the IESO, and the Electrical Safety Authority (ESA). The Project would also consult with any other AHJs identified through the project development stage. Additionally, the Project would commit to sponsoring training for the Mississippi Mills Fire Department to better equip them with the knowledge and information to deal with any emergency events.

The board also identified that a Noise Impact Assessment would be completed as part of the Environmental Assessment process for the Project, taking into consideration noise from the system components such as HVAC and step-up transformers.

QUESTIONS ASKED DURING THE OPEN HOUSE

If there was an emergency shutdown, how would Compass be alerted that there is an emergency taking place? How quickly would there be a response and who would oversee it?

The presenting team responded that the time it would take to respond depends on the nature of the alarm; it would vary from a 0:30 to 4-hour response depending on the type of alarm. There would be a local subcontractor who is qualified to work in high voltage equipment that would come to monitor the situation as part of the service agreements. Compass is talking to several battery suppliers, all of which provide Long-Term Service Agreements that ensure the operational safety of these batteries. Compass' local operations and maintenance subcontractors would swiftly be notified in the event of an emergency and respond as appropriate in coordination with the local fire department.

Would the proposed project lead to further development later?

The presenting team responded that since only a certain number of projects can be connected to the powerlines in each region, the amount of interconnected assets is dependent on the current capacity of the lines. If the proposed project is successful, it will be selected because it does not exceed the maximum capacity of the distribution infrastructure. The Project's nameplate capacity was subject to a process called the Deliverability Test which determines the feasibility of the proposed Project's connection configuration and power delivery into the provincial electricity grid. The proposed Project passed the Deliverability Test, and Compass has confirmed with the local distribution company, Hydro One, that the Project would be able to successfully connect and operate at the current nameplate capacity. Since the proposed Project will occupy electrical capacity on the Almonte Transformer Station, it will limit the scope and size of any other proposed BESS Projects in the future.

What is the zoning for the proposed project site?

The presenting team responded that the parcel in which the proposed project is located is a mixture of rural and agricultural zoning, however, the project site is located within rural zoning. The zoning for the proposed project was based on the parcel's proximity to electrical infrastructure and municipal Zoning By-Law #11-83, which allows for both zoning types to be used for non-residential purposes such as class A pits, wayside quarries, and portable concrete plants.

Can the lithium from these systems be recycled?

The presenting team responded that once the system reaches the end of its operation, there are various options for it to be recycled. Canadian companies such as Li-Cycle have been making progress in enabling batteries to be recycled efficiently and sustainably, with some batteries allowing for 95% of critical battery materials such as lithium carbonate to be recycled. Closer to the date of decommissioning, Compass would consider these recycling companies as an environmentally friendly way to give new life to battery components.

APPENDIX A - PHOTOS FROM THE PUBLIC COMMUNITY MEETING



Figure 1. Venue preparation



Figure 2. Project Poster boards on display



Figure 3. Welcome poster on display

APPENDIX B – POSTERS FROM THE PUBLIC COMMUNITY MEETING

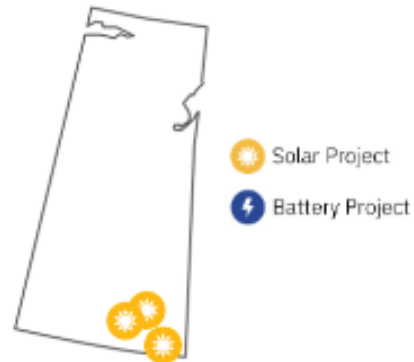
Compass Projects in Canada



Ontario



Saskatchewan



Success in previous IESO Procurement

On behalf of Walker BESS 4 Limited Partnership, Compass submitted four (4) battery energy storage system proposals into the Expedited Long Term 1 (E-LT1) procurement, all of which were contracted.

Walker BESS 4, 5, and 6



Location	Windsor, Ontario
Contract Capacity	3 x 4.749MW @ 4 hours
IESO Zone	West
Local Utility	EnWin Utilities
Anticipated Start	2025

Almonte BESS



Location	Mississippi Mills, Ontario
Contract Capacity	4.749MW @ 4 hours
IESO Zone	East
Local Utility	Hydro One
Anticipated Start	2025

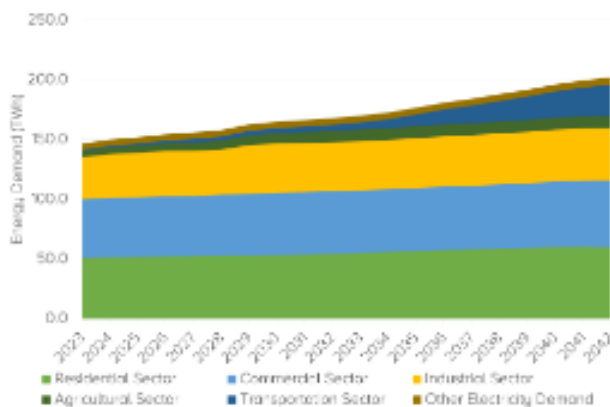
Ontario's Power Needs



Ontario's Independent Electricity System Operator (IESO) has identified the urgent need to bring 4,000 megawatts (MW) of new supply onto the electricity grid by 2030 as energy demand is expected to grow 30% over 20 years.



Ontario's Energy Demand Forecast



To close this supply gap by 2030, the IESO planned two major procurement cycles over 2023-24 – the Expedited Long-Term 1 (E-LT1) RFP and the Long-Term 1 (LT1) RFP.

What is causing this Growth?

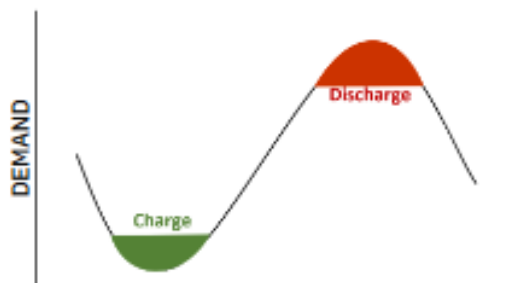
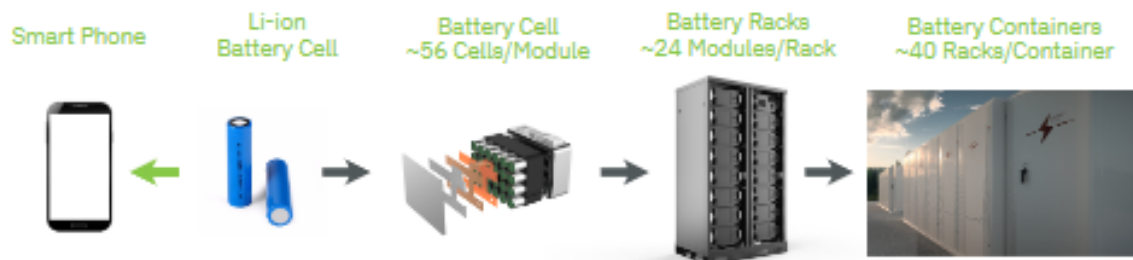
- **Provincial Growth**
Residential and commercial sectors are growing, so does their electrical demand
- **Electrification of Transport**
Transition from internal combustion to electric vehicles and buses
- **Agricultural Sector**
Increase in greenhouse sector
- **Retirement of Generation**
The Pickering Nuclear Generating Station along with other expiring natural gas and other contracts has left a material supply gap in Ontario.

Wahgoshig Solar FIT5 LP, a Compass-affiliate, is recognized as a Qualified Applicant for both procurements, having the experience and capability to construct new projects in the Province.

What is Battery Energy Storage?




Battery System Components and Integration



- Lithium-ion battery cells are the building blocks of Battery Energy Storage Systems (BESS).
- BESS take power from the grid (charge) when demand is low and put power back on the grid when demand is high (discharge).
- BESS improve the stability and quality of grid power and reducing the price burden on the consumers in the long run.
- BESS has been procured by the IESO since 2014.

About The Project



- Red** - Property Outline
- Blue** - Proposed Project Site
- Yellow** - Access Road
- Purple** - Connection Line
-  - Connection Point

Almonte BESS Limited Partnership

The project will be located at **6299 County Rd 29, Mississippi Mills, ON K0A 1A0**. It will take advantage of connecting into the Hydro One powerlines that run along County Rd 29.

The proposed Nameplate Capacity will be up to 10 Mega Watts (MW) and the Project will utilize up to 1 acre of land.

Zoning



- Zoning of the location for the BESS is Rural (RU).
- Per Zoning By-Law #11-83, this zoning allows for pit, Class A.

Why your municipality?



Mississippi
Mills

Battery energy storage is a key component in facilitating more renewable energy in Ontario's grid and support further decarbonization of our provincial energy system. Greater renewable energy will support electrification of transport and climate change goals that are consistent with the Municipality of Mississippi Mills plans.

Ontario's Energy Demand Forecast

The Municipality of Mississippi Mills have published plans that are in line with the development of a lithium-ion BESS in your municipality. The Plans emphasize a need to reduce greenhouse gas (GHG) emissions through renewable energy generation. Lithium-ion batteries minimize the need for natural gas peaker plants and support/complement the ongoing development of renewable energy systems.

- **Mississippi Mills Strategic Plan 2020-2023**
 - *Community Value Statements - ENVIRONMENT - Ensure a clean, safe and sustainable environment*
- **Municipality of Mississippi Mills Community Official Plan**
 - *4.1.2 Air Quality and Greenhouse Gas Emissions - This Plan recognizes that one component of long-term economic prosperity involves providing opportunities for increased energy generation, supply and conservation, including alternative energy systems and renewable energy systems.*
 - *The policies developed for energy, air quality and greenhouse gas emissions are as follows:*
 - 6. *Increased energy supply shall be promoted by providing opportunities for energy generation facilities to accommodate current and projected needs, and the use of renewable energy systems and alternate energy systems, where feasible.*
 - 7. *Alternate energy systems and renewable energy systems shall be permitted in Almonte, Pakenham Village, villages and rural settlement areas, in rural areas and agricultural areas in accordance with provincial and federal requirements. In rural areas and agricultural areas, these systems should be designed and constructed to minimize impacts on agricultural areas.*

Local Benefits

Local benefits associated with the project are key infrastructure within the region to provide power to meet growing demand, provide additional revenues for landowners, property taxes for the Municipality of Mississippi Mills and economic activity within the region.

Employment — High skill, 'green' collar jobs in construction — civil works, mechanical installation, electrical connection, landscaping.

Financial — Property tax benefits, diversified income stream for rural landowners, especially on underutilized land.

Growth and Diversification — Needed energy capacity allows for increased development in your municipality.

Natural Gas and Transmission Line Offset — Distributed energy provides electrical grid support, intelligence, and resilience.

Regulatory Compliance



Compass has made careful note of the regulatory bodies that it must engage to secure the permits and approvals.

Authorities Having Jurisdiction

- Municipality of Mississippi Mills
- The Mississippi Mills Fire Department
- Hydro One
- Ontario Ministry of Energy
- Independent Electricity System Operator
- Ontario Ministry of Environment
- Local Conservation Authorities
- Electrical Safety Authority

Compass will consult with Mississippi Mills Fire Department to ensure the preparedness of the Emergency Response Plan and adequate National Fire Protection Association (NFPA) compliance training for Fire Stations.



Environmental Assessment



As a part of the Environmental Assessment permitting process, a Noise Impact Assessment for the Project will be conducted. In this report, the ambient noise survey will identify the 'noise envelope' for the Project location based on zoning, proximity to highways and other factors that may affect sound levels in the area. Once a survey is conducted, any potential risks of the BESS exceeding the 'noise budget' and violating any provincial norms would be mitigated based on suggested noise mitigation efforts that may be required to successfully secure an environmental permit.

- Each container or battery storage cabinet will have its own HVAC system and meet provincial sound limits.
- Noise levels from the project will be below provincial requirements of 40 decibels (dba) at the nearest receptor or home.
- 40 dba is equivalent to a library, refrigerator, quiet street at night.

Safety Standards



Safety of people, first responders and neighbours are our priority. We take a proactive approach to ensuring a safe and efficient operation.

Safety is addressed with a multi-layered approach:

- Battery Chemistry: Lithium Iron Phosphate (LFP) batteries have a lower energy density and less likely to overheat
- Equipment selection and track record, planning and testing, monitoring, automation, isolation, and suppression
- 24 hour monitoring of battery operations and cell temperatures, including gas detectors, smoke detectors and temperature detectors.
- If any abnormality in the operations are detected, the system shuts down and alerts the operator
- the battery system adopts a multi-compartment design with each compartment having a 1-hour fire rating

Local Fire Department Training

As part of our development plan, we will sponsor training with the local fire department to ensure they have the necessary knowledge to address any emergency events.

Safety Standards

Stationary Battery Energy Storage Systems are subject to several local, and some new safety standards, that work to identify and address risks of thermal events early and contain any hazards or fire.

Standards:

- UL9540 Energy Storage Systems and Equipment
- UL9450 A Test Method for Fire Propagation in Battery Storage Systems
- UL 1642 Standard for Lithium Batteries
- National Fire Protection Association (NFPA) 855 - Installation of Stationary Energy Storage Systems
- UL 1973 Batteries for use in Stationary Power Applications
- UL 1741 - Inverters, Converters Controllers and Interconnection