

# Arcadian PROJECTS

## BESS OVERVIEW

INTEGRATED ENERGY SOLUTIONS | MULTI-TRADE SERVICES

 [arcadianprojects.ca](https://arcadianprojects.ca)

Powin Energy

Learn More



# Supporting real change in our community.



At Arcadian Projects, we believe the future is built through strong relationships, practical innovation, and people who care about making a real impact.

We take great pride in our purpose: *Creating opportunities and resiliency in our people, our clients, and our communities, to drive meaningful progress for the future.*

As a solutions integration partner with in-house multi-trade teams, we work collaboratively with clients, technology providers, utilities, and industry partners to help accelerate the adoption of impactful technologies across the energy, institutional, commercial and industrial sectors. Our focus is on operational savings, energy optimization, decarbonization, and delivering practical solutions that create long-term value.

We are passionate about moving the needle on innovation and efficiencies within the construction industry while maintaining a strong commitment to accountability, trust, and partnership. Most importantly, our experienced and diverse team members are the foundation of everything we do. Their dedication and pride in their work are what allow Arcadian Projects to consistently deliver results.

Thank you for taking the time to learn more about Arcadian Projects. We look forward to building the future together.

*Luke*

# Energy Services

We provide value to our clients by leveraging our comprehensive knowledge of energy-efficient technologies.  
We support our clients energy efficiency goals through:

## Renewable Energy

### Solar PV | O&M

- Electrical contracting services
- Consulting
- Subcontracting services
- Design and manufacturing of modular control buildings
- O&M packages
- Net metering systems for commercial and industrial applications
- Contract administration

## Energy Storage Systems

### Containerized | EV Chargers

Integrating battery energy storage systems to help our clients with:

- Peak shaving
- Load shedding
- Grid stabilization
- Reliable backup power
- Global adjustment reduction

**Arcadian has installed over 100MW hours of battery storage in Ontario!**

## Conservation Initiatives

### Building Services | Air & Heat

- Building Services: heating, cooling and process heat management
- Turnkey solutions for air movement and heat loss
- Power analysis/Power factor correction
- Service upgrades and electrical contracting

## Energy Management

### Commercial | Industrial | Institutional

- Monitoring and targeting
- Smart building integration
- Global Adjustment management
- Energy auditing
- Data Analytics
- Feasibility studies
- Energy incentive program support

# Battery Energy Storage Systems



Battery energy storage systems (BESS) help manage energy demand, maintain operations during outages, and improve overall system resilience by storing and deploying power when it's needed most.

Arcadian Projects has delivered commercial-scale lithium-ion battery installations across industrial and commercial sites, including systems supporting microgrid applications in manufacturing environments and projects in Northern Canada.

By combining electrical installation with strong project coordination, we deliver safe, efficient, and reliable energy storage solutions that enhance performance in both grid-connected and remote applications.



# Arcadian Builds BESS



Arcadian provides full-service EPC energy contracting for the design, build, transport, integration, and commissioning of battery energy storage systems.

Solutions are custom designed to suit application requirements, climate-controlled, and compliant with applicable building codes.

Experience includes 8 sites in total, including a 23 MW / 32 MWh containerized system (21.5 MW / 25 MWh constructed in custom enclosures) and a 10 MW / 42 MWh site-constructed installation.



# See Our Work



ELECTRICAL, PLUMBING  
MILLWRIGHTING & HVAC

**Arcadian**  
PROJECTS

INTEGRATED  
ENERGY SOLUTIONS

arcadianprojects.ca

1-800-804-9697

## Progressive Customers | Progressive Projects

We work with clients looking to improve their building operation efficiency and environments. We support smarter, greener and sustainable builds, using innovative products and technologies.

To learn more about our solutions, projects and people, see our comprehensive company overview at <https://arcadianprojects.ca/arcadian-projects-company-overview/>

Projects



# Stratford Battery Energy Project



Arcadian Projects completed the electrical scope of work, including procurement, coordination, and integration of the proprietary Powin Energy Stack140 battery storage system.

The system consists of four lithium-ion battery arrays two with 2 MW capacity and two with 2.4 MW capacity delivering a total storage capacity of 8.8 MW / 40.8 MWh. The installation included more than 300 battery racks housing thirteen batteries per rack.

**Trade:** Electrical



# Integrity Mold Battery Installation



Installation of a Lithium Ion, commercial scale battery energy storage system on the Integrity Mold site to help combat Global Adjustment.

The battery will help reduce energy demand during provincial peak periods.

Arcadian completed the electrical scope of work, including procurement, and managed the engineering and civil construction required to deliver the project.

**Trades:** Electrical



# Kitchener Battery Project



This project included the installation of battery integration to cell enclosures and associated system components.

The system consists of a 12 MWh installation with four 500 kW inverters connected to 60 battery stacks housed within six sea can containers. The system delivers a total output capacity of 2 MW at an operational voltage range of 500–750 VDC, providing up to 6 hours of energy storage and discharge capability.

**Trade:** Electrical



# Bimbo Bread



Arcadian Projects acted as EPC contractor for Enel X North America on a 3 MW, 2-hour BESS supporting Global Adjustment.

The system included three 1 MW BESS containers, a 27.6 kV grounding transformer, and associated switchgear and protection systems, with underground electrical works and site restoration.

Delivered at Grupo Bimbo's Hamilton facility, the project was executed in a constrained operational site requiring careful coordination to maintain ongoing plant operations. Commissioning was completed during a single planned shutdown to minimize disruption. Coordination was completed with Hydro One.

**Trade:** Electrical



# KIA Mexico



A 12 MW / 12 MWh battery energy storage system supporting a microgrid solution for the Kia plant in Mexico.

The facility is powered by seven natural gas-fired Wartsila turbines (129 MW total), with the BESS providing backup functionality in the event of engine trips and the ability to operate as a load bank.

The system consists of four containers housing six battery arrays and 86 battery stacks. Design considerations included minimizing container count, optimizing for climate conditions (temperature, humidity, and insulation R-value), and ensuring transport and craning constraints were met.

**Trade:** Electrical



# Affiliations & Certifications



## Energy



## Construction



## Business | H&S



# Contact Information



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