

**SUMMERSIDE
SUNBANK**

**THE
FUTURE
STARTS
HERE**



City of
Summerside
Prince Edward Island
Canada

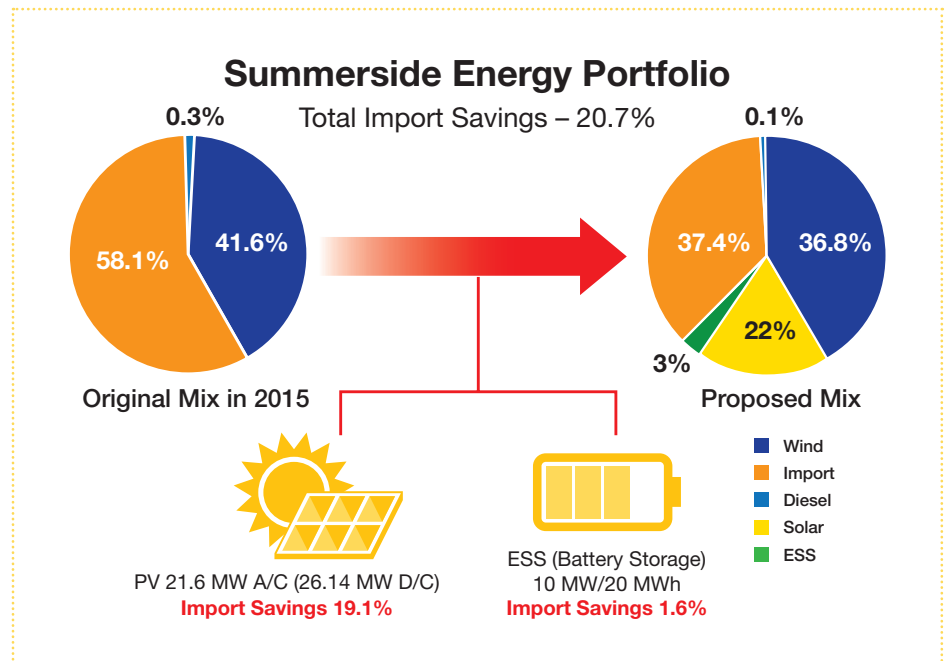
A Major Milestone in Renewable Energy

Summerside...
Taking its
renewable
generation
to over 62%

Summerside PEI is again revolutionizing the way utilities and communities deliver and consume power by creating an energy system that puts environmental, economic and social needs first.

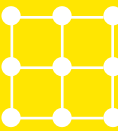
For our city, our province, our country

With the development and installation of the Sunbank Solar/Battery Energy System, the City of Summerside on Prince Edward Island is advancing the integration of variable renewables into an electrical grid and enabling seamless delivery. Furthering the ways in which utilities, communities and customers can create, deliver and consume electricity, it is a system that puts environmental, economic and social needs first.



Sunbank combines 21.6 MW of solar PV energy from the City's solar farm with 10 MW/20 MWh of stored energy from the system's revolutionary new power transfer battery.

Building on Summerside's existing wind power generation—while leveraging capability in forecasting, scheduling and operating resources—Sunbank is expected to reduce imports of electricity from 58% to 38% and enable the City to become 62% green for all its electricity needs.



Pushing to PARIS 2030

Meeting/exceeding 62% of the City's electricity needs with renewable sources while reducing carbon dioxide emissions by 21,000 tonnes per year!

Exemplifying the active role that even small jurisdictions can and should play, the Summerside Sunbank Project aligns with Canada's push towards Paris 2030, directly achieving Federal and Provincial decarbonization goals in the process.

- Increased grid utilization
- Increased automation of supply/load balancing
- Leveraging existing data sources and communications networks
- Increasing local renewable generation
- Adoption of energy storage technologies for value streams

Bringing Significant Benefits to PEI Now



- Local partnership with global brand brings huge derivative impact
- Generating over \$21 Million of incremental gross domestic product
- Supporting over 200 full-time equivalent jobs
- Boosting labour income by \$10,356,666
- Increasing annual incremental taxation revenue to over \$3 Million
- Increase in excess of \$7 Million on local food spending, shelter services, transportation, health and personal care, recreation, gifts and charitable donations.

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A Triumph of International Partnership

The City of Summerside first connected with its Sunbank partner, Samsung SRE in 2016 and began their decarbonization journey. Based on the City's robust infrastructure, innovation ambitions and Living Lab/Xchange Program—and Samsung SRE's global expertise in renewable energy and smart city solutions—the parties struck a collaborative agreement to innovate in the City of Summerside.

The basis of the partnership was to enhance Summerside's leadership position in Canada by deploying next generation technical solutions, and showing other jurisdictions in North America how to replicate Summerside's approach.



The Plan for Further Success

Summerside is out to achieve national recognition as the City of Excellence, Green Initiatives and Innovation.

To accomplish this goal, we intend to:

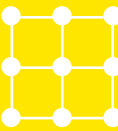
- Develop Summerside as the centre for testing and validation of green solutions and next generation innovation
- Solidify relationships with additional partners for mutual advancement of business interests

Enhanced Service for PEI

Sunbank is firstly designed to move Summerside forward, while bringing technology reliability to the Province of PEI through every innovative aspect of the system.

Our partnership will then extend beyond provincial borders to become a best practice model for sustainable green energy development throughout North America.





A Healthy Return on Investment

Summerside is proud to have collaborated with both the public and private sector, fostering economic growth and creating job opportunities during the construction of Sunbank and its ongoing maintenance

Element	Outcome
Project Budget	
Project Budget	\$68.8 Million
Federal ICIP Contribution	\$26.3 Million
Provincial ICIP Contribution	\$21.9 Million
Municipal ICIP Contribution*	\$20.53 Million
*Samsung Technical Investment	\$3.02 Million
*City Ineligible ICIP Project Expenses	\$2.99 Million
*City of Summerside General Fund	\$3.03 Million
*FCM Grant	\$1.5 Million
*FCM Financing	\$10 Million
Project Capacity	
Solar Capacity	21.6 Megawatts <i>which equates to 22% of all electricity needed in the City</i>
Battery Capacity	10 Megawatt 20 Megawatt Hour <i>which equates to the energy needed for 1000 electrical heated homes</i>
Summerside Renewable Increase	Topping 62% <i>which equals 226 days of 100% green power for the City of Summerside</i>
Annual GHG Reduction	8,128 tonnes <i>which equates to 1750 passenger vehicles</i>
Solar Farm Footprint	68 Acres
Total Number of Solar Panels	48,000+
Total Size of Battery	1 acre
Estimated Commissioning Date	December 2023
Electrical Import Reduction	20% <i>representing keeping over 2 million energy dollars in PEI's economy</i>
Estimated Annual Production	31 GWh (25% of annual load) <i>or 2500 homes</i>
Economic Impacts	
Labour Wages Increase	\$10 Million
Indirect Economic Benefit	\$7 Million
Construction Jobs	210 FTE's
Annual Tax Revenue	\$3.8 Million

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The global opportunity

Summerside's ambition is to integrate innovative community solutions for the benefit of stakeholders worldwide. Through partnership, we work to ensure staying ahead of the curve in shaping technology, research and community advancement.

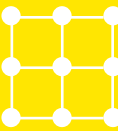
It is our sincere belief that by leveraging our unique, controlled and clustered infrastructure, the City of Summerside can establish leadership in the global picture. In fact, we are well positioned to grow, attract investment and succeed in advancing our community's desire to reach net zero in reducing our environmental impact.

Canada's First Net Zero City

It is no secret that Summerside is out to become **Canada's first Net Zero City**. As an island community, it is a truly meaningful goal to reduce our carbon footprint by becoming the leader in innovative technologies.

It is a mission that calls for collaborative partners who would benefit from sharing our vision.





THE FUTURE STARTS NOW

LET'S TALK

Summerside's comprehensive approach encompasses a well-rounded strategy for addressing the challenges of climate change and creating a more sustainable future.

If you are interested in just some of our future ambitions and exciting projects, let's talk.

Implementing fibre connectivity to every home and business for a smart and efficient city.

Building smart and connected subdivisions, addressing the needs of diverse demographics from seniors to youth.

Distributing energy and storage, small-scale power generation and storage technologies to enhance energy reliance.

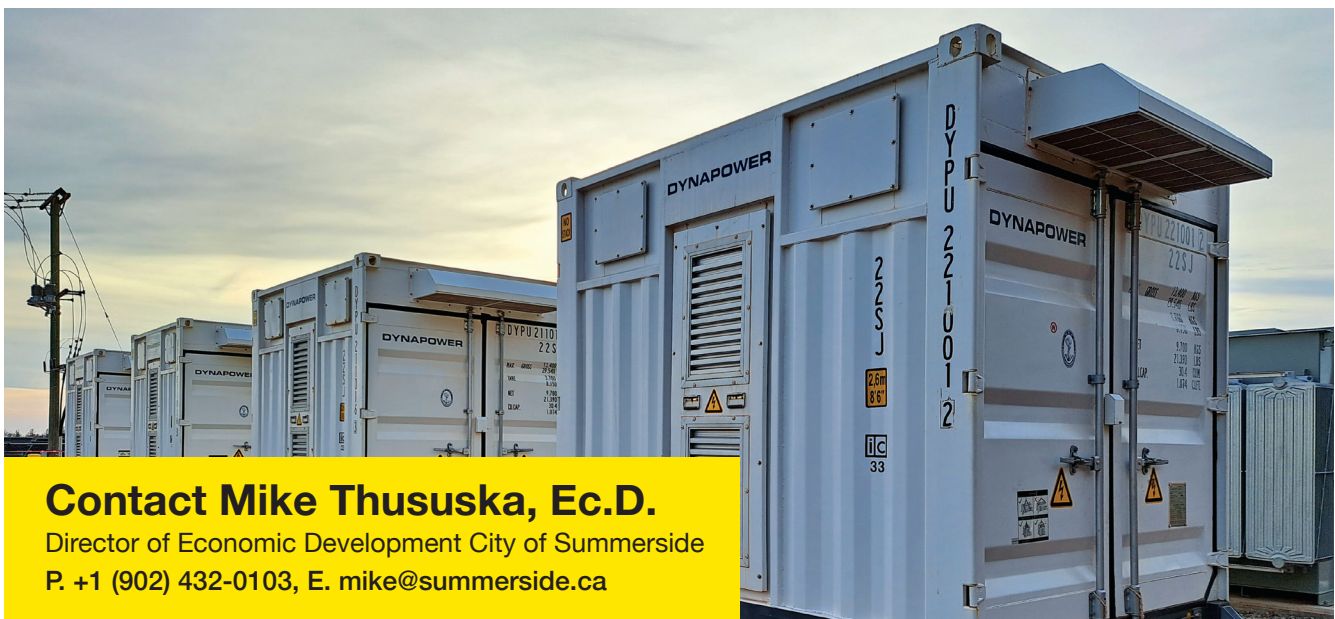
Decentralizing energy sources and empowering consumers to participate in energy management.

Decarbonizing buildings on both new and retrofit projects for long-term sustainability.

Venture capital funding for clean tech enterprises.

Exploring hydrogen as a fuel source, aligning with global efforts to reduce reliance on fossil fuels.

Encouraging innovators to seek net zero industrial space in the Summerside Eco Industrial Park.



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The Evolution of Summerside's INNOVATION

