



Kensington, PEI

Location Kensington, Prince Edward Island, Canada

Description Town of Kensington, Wastewater Treatment Plant

Annual electrical consumption 280,000 kWh per year

HARNESSING AN ISLAND'S NATURAL RESOURCE

The strong coastal winds that blow on Prince Edward Island (PEI) are no secret—they are part of the scenic landscape that draws visitors from around the world to the beautiful beaches, rolling hills, and the infamous home of "Anne of Green Gables" author, Lucy Maud Montgomery. PEI is home to 133,000 people and over 50 wind turbines that have helped the island stay green by utilizing clean energy and reducing electrical costs. So when it came time for the town of Kensington, a small hamlet in the heart of PEI, to find ways to balance their town budget they turned to wind.

Kensington was faced with a \$50,000 annual electrical bill for their wastewater treatment plant—a significant expense for a community of only 1500 residents. By harnessing the wind resource blowing through their town, they were able to quickly identify that with the right turbine, they could pay for their capital investment and start reaping the benefits of free energy within five years.

“The Northern Power 100 fits our facility like a glove—it matches our load perfectly.”

—GEOFF BAKER, TOWN MANAGER, KENSINGTON, PRINCE EDWARD ISLAND



Northern Power™ 100: The Right Fit

With tourism, fishing and farming as the cornerstones of the island's economy, it has long been a priority to preserve the picturesque quality of PEI, thereby making the community scale Northern Power 100 an ideal fit for the town of Kensington:

THE RIGHT AMOUNT OF POWER The Northern Power 100 will match the energy needs of Kensington's waste water treatment facility allowing them to offset 60% of their electrical costs.

COMMUNITY FRIENDLY DESIGN The low height profile, elegant design, safe and quiet operation make the turbine a welcome addition to this small town.

RELIABLE TECHNOLOGY The turbine's advanced gearless design ensures reliable energy production for 20+ years.

Results*

Energy produced per year	168,000 kWh
Percentage of electrical needs met	60%
Electricity savings	\$30,000 per year
Economics	8-year payback
Carbon emissions offset	133 tons per year**

*Projected results based on customer data. Individual results may vary based on site conditions.
 **CO₂ offset estimated by using EPA Greenhouse Gas Equivalency Calculator: <http://www.epa.gov/RDEE/energy-resources/calculator.html>

A Smart Investment

The town of Kensington will be saving tens of thousands of dollars annually with their Northern Power 100 turbine. The "green" saved will result in countless benefits for the community's residents whether the money is diverted to improve educational programs, expand social services or simply balance town budgets—all while supporting an environmental agenda that protects the pastoral setting that PEI is known for.

Kensington's town manager, Geoff Baker, is excited about his municipality embracing a wind power solution to counter rising energy costs, "this project positions us as a leader in the community in terms of sustainability and green power." The turbine will act as a quiet symbol of Kensington's commitment to energy independence and a sustainable future by harnessing the wind that blows across its region.

“Even though the project received government incentives that offset 50% of the project costs, the financial benefits still would have been significant without the additional support.”

—GEOFF BAKER, TOWN MANAGER, KENSINGTON, PRINCE EDWARD ISLAND



Feasibility, engineering, and installation services for the Kensington installation were performed by Gorman Controls.

CS-0910