Renovations on the Island

Closer to energy efficiency; closer to family

Wayne Briggs faced an uphill battle keeping his new Georgetown, P.E.I. home warm in the winter after moving to the Island from Ontario three years ago to be closer to his family.

The historic house, built around 1850 and abandoned for nearly a decade, presented severe challenges, including drafty air leaks, lack of insulation and no electricity.

Wayne's first winter was harsh, with frigid temperatures and skyrocketing heating bills as he struggled to make his home livable and energy-efficient.

He relied on a portable propane heater that could only warm one room at a time.

Attempts to improve heating with baseboard and wall-mounted heaters were inefficient and costly, with electricity bills soaring over \$600 per month.

A \$1,200 grant from the provincial government provided by the Red Cross temporarily eased the burden, but Wayne knew he needed a long-term solution.



Pic. Briggs in the middle of renovating his Georgetown, P.E.I. home.

To reduce costs and discomfort, Wayne explored a variety of energy-saving solutions, including government programs.

Wayne's Recommended Solutions

Wayne used federal and provincial grant programs for the project, receiving \$3,000 from the Canada Greener Homes Grant and Efficiency P.E.I.

Government Rebate Programs



Wayne understood that securing rebates for his renovations would help with cost savings. He applied for various government rebate programs for energy efficiency upgrades, such as the Canada Greener Homes Grant and provincial initiatives managed by **Efficiency P.E.I.**

Here is a list of <u>programs</u> available in Atlantic Canada to consider for your energy efficiency upgrades.



Insulation and air sealing <



Wayne took on a comprehensive insulation project, sealing air leaks and replacing old windows. This significantly reduced drafts, making the home more comfortable.

"When the houses were made in 1850, they didn't have any insulation in the walls"



Smart meter system <



Wayne installed a smart meter system that allows him to track his electricity usage.

The system provides detailed data on consumption and helps him budget and identify energy-inefficient appliances that need replacing with more efficient ones.



Heating system upgrades \checkmark



Finally, Wayne took advantage of the P.E.I. free heat pump program under Efficiency P.E.I., which helped reduce his heating costs.

"The heat pumps helped out a lot."

Ensure your home is well-enveloped to enjoy the benefits of using a heat pump. A well-enveloped home means it is well-insulated and sealed to prevent drafts and energy loss.

Different Heating Systems

The table below summarizes the heating systems Wayne had tried and their pros and cons.

Heating System	Description	Pros	Cons
Portable Propane heater	A portable propane heater uses propane gas to produce heat and can be moved from room to room.	 Portable and easy to move. Provides quick, intense heat. Useful during power outages. 	 Improper use can lead to fire risks. Can cause mold due to moisture buildup. Requires ventilation to Prevent carbon monoxide poisoning. Not ideal for wholehouse heating. Propane may run out during harsh weather.
Baseboard Heater	 An electric or hydronic heating system installed along the baseboards of the walls. Allows for zone heating (individual rooms). 	 Quiet operation. Easy to install. Allows for zone heating (heating individual rooms). 	 High electricity consumption. Slow to heat up. Inefficient for heating large spaces. Limited placement options due to furniture and window placement.
Wall-Mounted Heater	An electric heater mounted on the wall often used for supplemental heating.	 Space-saving design. Provides direct heat to specific small spaces. Easy to install 	 High electricity consumption. Limited heating capacity (better for small spaces). Can be expensive to run continuously.
Heat-Pump	A device that transfers heat from outside air or ground into the home using electricity. Heat pumps are designed to switch direction, providing both heating and cooling	 Uses less energy than traditional heating systems. Reduces utility bills with efficient heating and cooling. Provides both heating and cooling in one unit. Has a long lifespan with minimal maintenance. 	 Higher initial installation cost. There are programs that can help offset these costs. Requires a well-insulated home for optimal performance.

Tips for Homeowners



Wayne's experience taught him important lessons that other homeowners might benefit from. He emphasized prioritizing structural improvements and rigorous air sealing before upgrading heating systems.

Wayne also kept organized, calling for detailed documentation of expenses and project progress to participate and progress in government programs.

Prioritizing home enveloping is crucial for creating an energy-efficient home. The "envelope" refers to the exterior elements — walls, roof, windows and doors — that separate the interior of your home from the outside environment.

Proper enveloping can significantly reduce energy consumption and costs.

Personal approaches to enveloping your home



Install energy-efficient windows and doors to improve thermal performance.

Ensure that your walls, attic and basement are well-insulated to prevent heat loss in winter and keep your home cool in summer.

Use caulk and weatherstripping to seal gaps around windows, doors and other openings to prevent drafts.

A heat pump is a highly efficient system that can both heat your home in winter and cool it in summer.

Government Recomendations

The Conservation Council of New Brunswick recommends that governments take steps to help households improve their energy efficiency.

This would reduce the demand for energy in homes, easing the burden on the energy supply and supporting a sustainable future.

Expand Rebate Program



Increase the availability and awareness of rebates and grants for energy efficiency upgrades, especially for heat pumps and home insulation. These programs should be easy for all homeowners to access.

Provide Technical Assistance

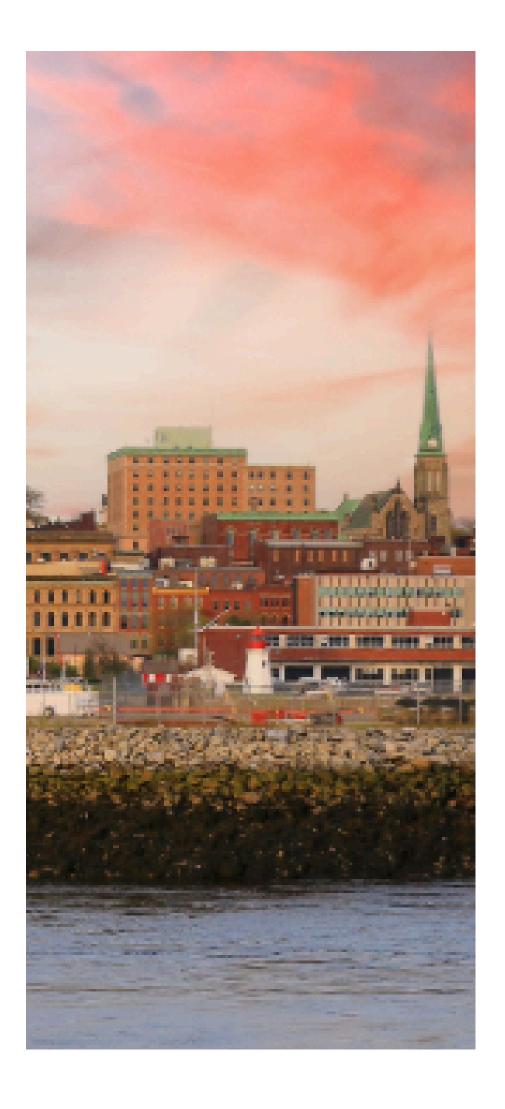


Offer resources like workshops, online guides, and direct help to homeowners to make energy efficiency improvements easier to understand and implement.

Comprehensive home audits



Encourage homeowners to get comprehensive energy audits by offering incentives. These audits help identify areas where energy efficiency can be improved, leading to better energy savings.



Established in 1969, the Conservation Council of New Brunswick is the province's leading public advocate for environmental protection.

A member of the United Nations' Global 500 Roll of Honour, we work to find practical solutions to help families and citizens, educators, governments and businesses protect the air we breathe, the water we drink, the precious marine ecosystem and the land, including the forests, that support us.



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