

Learning Brief: Energy Efficiency



Energy efficiency plays a pivotal role in meeting Nova Scotia's climate change goals by reducing overall energy consumption and greenhouse gas (GHG) emissions associated with energy production. The concept is to accomplish more with less energy.

Energy efficiency includes:

- Building retrofits
 - Reducing energy demand in buildings through upgrades such as insulation, windows, mechanical systems, and onsite renewable energy.
- Heating and cooling upgrades
 - Replacing oil and natural gas systems with electric and other energy efficient alternatives, such as heat pumps.
- Timing of energy use
 - Implementing strategies to manage when energy is consumed to avoid peak periods where demand is high.
- Behavioural change related to energy usage
 - For example, encouraging individuals to adopt energy-conscious behaviours, and enhancing climate literacy in the building industry.



Energy Efficiency and Energy Poverty

According to EfficiencyOne, approximately 43% of Nova Scotians live in energy poverty. A household is generally defined to be in "energy poverty" when more than 6% of household income goes to energy use.

While Nova Scotia is in many ways a leader in energy efficiency, we still have a lot of work to do to ensure that all Nova Scotians are lifted out of energy poverty, particularly in communities that face systemic barriers.

Some of the work that is being done to combat energy poverty includes:

- HomeWarming
- Affordable Multifamily Housing
- Mi'kmaw Home Energy Efficiency Project
- Moderate-income Rebates

Questions? Contact Us:

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More Information:

www.tribenetwork.ca/youth-climate-action-challenge



The Nova Scotian Context

Nova Scotia is a leader in energy efficiency. Efficiency Nova Scotia was created as Canada's first energy efficiency utility in 2014. Since then, energy efficiency programs have helped save households \$180 million and reduce GHG emissions by one million tonnes every year. Efficiency Canada, which creates an annual Canadian Energy Efficiency Scorecard, ranked Nova Scotia second in 2022.

In the Nova Scotia's Climate Change Plan for Clean Growth, energy efficiency initiatives are identified as one of the most cost effective ways to reach our provincial target of reducing greenhouse gas emissions at least 53% below 2005 levels by 2030.

The Province's commitments to improve energy efficiency include:

- Reduce heating oil use by at least 20% by 2030 by retrofitting 60,000 homes
- Provide energy efficiency upgrades to more low-income households
- Help new building developments install shared heating systems to make multi-building heating more efficient
- Support the construction and renovation of net-zero homes and apartment buildings, including net-zero affordable housing



Questions to consider

- What will encourage individuals to adopt energy-saving behaviours in their homes?
- How can we reduce the rate of energy poverty in Nova Scotia?
- How can industrial processes be improved by being more energy efficient?
- How can we encourage homeowners to complete deep energy retrofits on their houses?
- How can we ensure that all Nova Scotians have equitable access to the benefits that energy efficiency offers?
- How do we fill gaps in the existing labour force to meet demand for retrofits and energy efficient housing?
- How do we ensure rapid development of affordable housing while still meeting our climate goals?
- How do we promote diversity in the building sector?

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