Efficiency Nova Scotia

Ecology Action Centre
Better Building Series
February 18,2021





Our Story

2009

Efficiency Nova Scotia Corporation Act

Creates non-profit, independent administrator for energy efficiency and conservation

2014

Electricity Efficiency and Conservation Restructuring Act

Creates Canada's first energy efficiency utility

2015

EfficiencyOne

Efficiency Nova Scotia is a franchise operated by EfficiencyOne, official Licensee of the Province of Nova Scotia.





About Efficiency Nova Scotia

- 3rd party administrator of energy efficiency (electric and non-electric)
- Independent from government and utility
- Led by independent Board of Directors: regulated by UARB
- Since 2015 ENS has sold cost-effective "saved energy" to Nova Scotia Power in competition with other energy sources (wind, hydro, coal, biomass, etc.)
- Canada's first energy efficiency utility



Why Energy Efficiency?

- Economic benefits:
- Lowest cost option; reduces high energy costs
- Improves business productivity & competitiveness
- Investing in local economy
- Building Nova Scotia energy efficiency industry
- Environmental benefits:
- Fewer emissions; helps meet federal & provincial requirements
- Improving our environment has health benefits
 - Energy efficiency benefits all Nova Scotians; not only those who use our services.





Efficiency Services for All Nova Scotians

For Residential

- New Home Construction
- Home Energy Assessment
- HomeWarming
- Green Heat
- Appliance Retirement
- Instant Savings
- Residential Solar
- Residential Direct Installation of Efficient Products
- Financing

For Business

- Business Energy Solutions
- Business Energy Rebates
- New Construction Projects
- Custom Projects
- Rental Properties and Condo upgrades
- Commercial Solar
- Affordable Multi-family Housing
- Building Optimization
- Energy Planning and Management
- Mercury Collection



Eligibility for SolarHomes

- Single family, semi-detached, townhouse
- Home must have a residential electrical utility account
- Systems may be either net metered or off grid
- Minimum installation for rebate of 1 kW
- Rebate is \$.60 / Watt (\$600 kW)
- No maximum installation capacity however rebate will be limited to the lesser of \$6000 or 35 percent of the total cost excluding HST

New Home Construction: Building a New Home

- Rebate program for new, electrically-heated homes in Nova Scotia
- Expert advice and incentives to build a more energy efficient house
- Cost to homeowner is \$99 (covers home energy assessment)
- Mix and match energy upgrades





Home Energy Assessment

Who's it for?

Open to all existing homes regardless of their primary heating source

What is it?

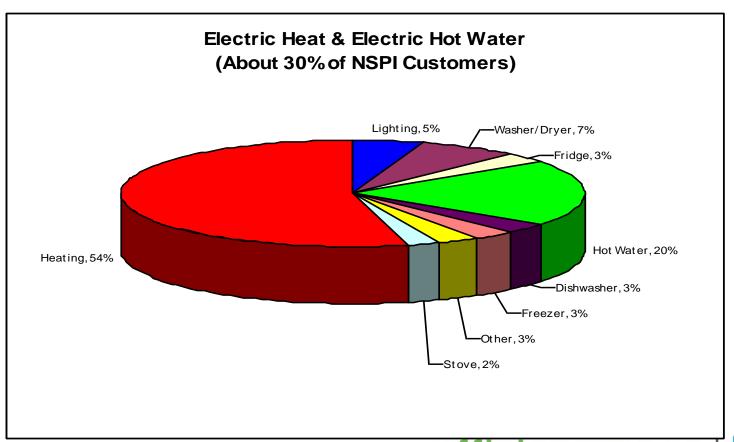
Information for increasing a home's efficiency rating through insulation, air sealing and ENERGY STAR windows, doors and skylights.

How do you access it?

- Schedule initial assessment
- Cost of assessment is \$99
- Complete upgrades within 12 months
- Rebates for qualified improvements up to \$5,000 or low interest financing up to \$25,000





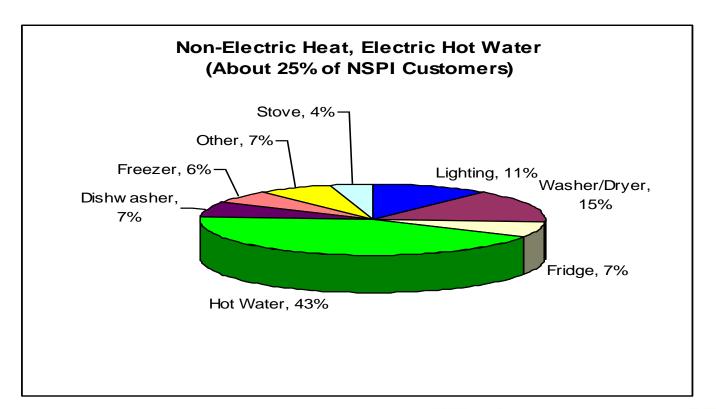




















So where are our heat losses?















Attic Insulation

 Usually the fastest, easiest way to prevent heat loss, can be done by a professional or a do it yourself project







Basement insulation

If you haven't insulated your basement walls ,you have definitely been wasting a lot of heating dollars







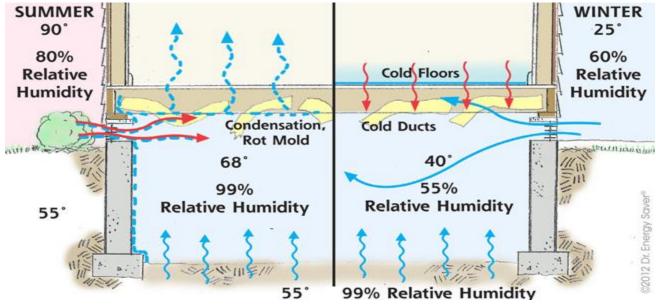






You know the old saying

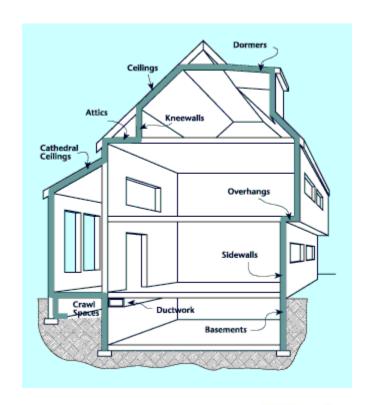
- If your feet are cold so is the rest of you
- Insulating over unheated areas and crawlspaces is important not only for comfort but energy savings as well







Exterior Insulation







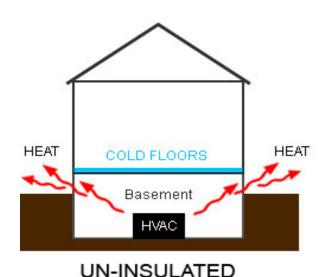


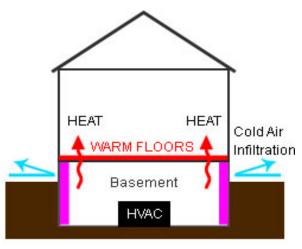






How Heat Moves in an Uninsulated Basement





INSULATED















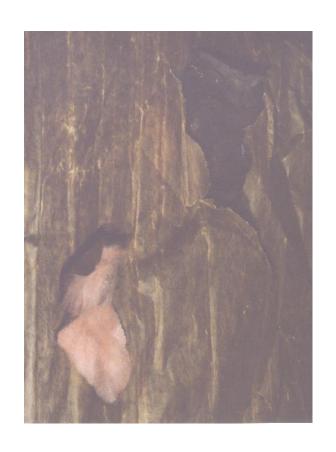
Basements / Crawlspaces

- Concrete often not insulated
- 25-30% of heat loss
- Insulate from inside or outside
- Rigid insulation against wall
- Don't insulate unless moisture problems fixed



Batt Insulation Will Not Stop Air Movement











Typical Attic Air Leaks







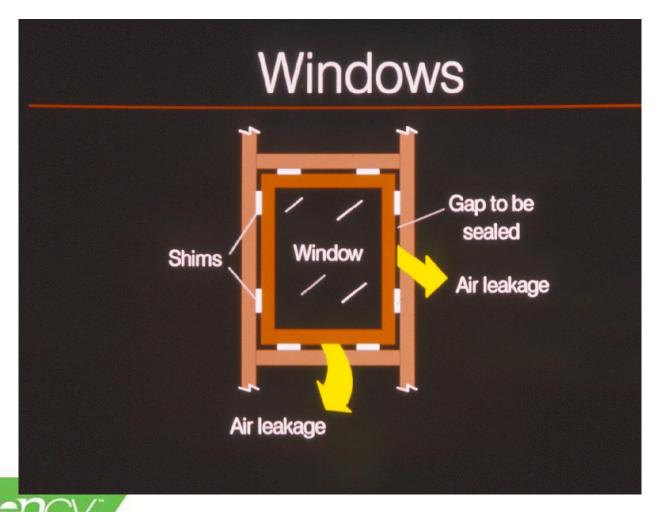
Attic Air Leaks







Why You Feel a Draft!





Energy Efficient Window

Energy Efficient Glass

- -R2 to R4
- -Low e coatings
- -Argon gas fill
- -Insulated spacers







Reduce window condensation low e plus argon / low e only





Other air leaks



Simple tricks to save money

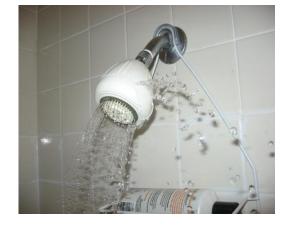






Save Water and Energy!

The Shower Timer is a savings to your bottom line, and helps preserve the environment!







Weather sealing windows

















Caulking and sealing around frames







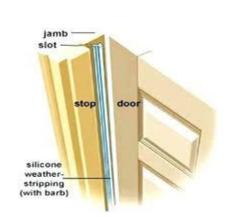




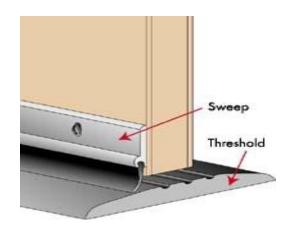


Weather stripping around doors























Overview

- HomeWarming helps low income Nova Scotians save money on heating bills and feel more comfortable in their homes all year-round
- Participants receive no-cost energy assessments and, where appropriate, energy efficient upgrades like insulation and draft proofing
- Co-administered by Efficiency NS & Clean Foundation





HomeWarming Service

Who's it for?

- Low-income homeowners (income level verified using Canada Revenue Agency Notice of Assessment)
- Open to both electric and non-electric heat sources
- Owns home

How do you access it?

- Apply directly to Efficiency Nova Scotia, Clean Foundation, or by referral by the Nova Scotia Department of Community Services
- Program has limited space in some regions due to demand





HomeWarming What the service looks like

We install energy efficient upgrades that are right for the client's home

- Attic insulation
- Main wall insulation
- Basement insulation
- Draft proofing









Green Heat

Who's it for?

- Existing single family homes
- Electric and non –electric heated homes are currently eligible for rebates on qualified ductless heat pumps etc
- Any heating equipment must qualify for rebates

What is it?

- Switch or supplement electric heat to:
 - Wood or wood pellets
 - Central ground or air source heat pumps or air-to-water heat pumps
 - Ductless or split system heat pumps that are certified as Cold Climate units





Appliance Retirement

- Who's it for?
- Any Nova Scotian who owns qualifying appliances
- Free removal of old, inefficient appliances ,refrigerators, deep freezers and window mount air conditioning units
- Appliances must be in working condition
- Appliances must be minimum 10 year old





Product Installation

Who's it for?

- Homeowners
- Renters

What is it?

- Free installation of energy efficient products including:
 - LEDs
 - Pipe and tank wrap
 - Faucet aerators
 - High efficiency shower heads
 - LED night lights





Residential Direct Installation of Energy Efficient Products

- Call 1 877 999 6035 to book an appointment Residential Direct Install
- Available to those who rent or own.















So what else can I do to save energy

We try to focus on the no cost —low cost energy saving measures

Small things that can be done quickly and easily by the householder without a high up front cost

Many energy conservation measures are simple lifestyle changes, actions that should be done without really thinking about them





So how can we save energy in our homes and offices

You probably wouldn't leave a tap running in your home

You probably turn lights off in rooms that are empty







 So what are the most commons items that get left on?







How can I tell what's using electricity

Do I see a light ?



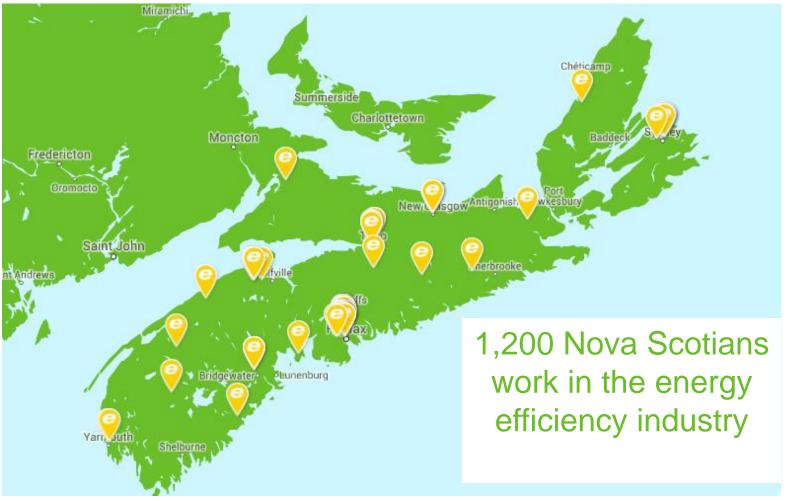
Is the appliance warm to the touch?

Does it have an instant on function?





Businesses delivering energy efficiency





Questions & Answers



Need More Information?





