Assessments and Incentives for New Construction and Existing Home Retrofits

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City Green Solutions
City Green Solutions is an enterprising non-profit with a mission to excite, inspire and lead British Columbians in finding innovative home and building energy efficiency solutions.

Founded in 1999, we have performed over 15,000 home energy assessments across BC.
City Green Solutions Services

• EnerGuide Rating Service for new and existing homes
• Thermal imaging services
• Pre-drywall air leakage testing
• Passive design consulting and quantification
• Energy assessments for commercial and institutional buildings
• Sustainability assessments for businesses
• Energy management services
• Customized energy efficiency outreach programs
• Research and evaluation services
• Education and training
Benefits of Home Energy Efficiency

• Environmental
• Economic
• Health
• Comfort
Assessments and Incentives for Existing Home Retrofits
Energy savings of 10% to 70% can be achieved in homes with conventional energy efficiency upgrades. Deep Energy Savings and ‘Net Zero’ can also be achieved.

Work with a Certified Energy Advisor for unbiased advice, prioritized energy saving retrofit options, and access to incentives and rebates for your upgrades, including LiveSmart BC grants.
Blower Door Test

Blower door tests air exchange per hour and pinpoints air leaks from windows and doors, basement header space, baseboards, electrical outlets, and other problem areas.
Air Leakage Areas

The average 20 year old home has leaks that would add up to a round hole 16 inches across.

Left unsealed, these leaks are like leaving a small window open all year round, making the home drafty and more expensive to heat.
Air Leakage Areas

Attic Hatch
Air Leakage Areas

Chimney Masonry
Air Leakage Areas

Interior Partition Walls
Home Energy Assessment

Advisor prepares a report with prioritized, customized recommendations for improving your energy efficiency.
You Choose Your Upgrades

• You can work with the contractor of your choice and/or do the upgrades yourself.

• You can do as many or as few of the recommendations as you choose.

• Be sure your upgrades meet the energy efficiency criteria.

• Save your receipts!
Follow-Up Assessment

After your renovations are done, advisor returns to check improvements and calculates your EnerGuide rating.

Your Advisor handles all the paperwork and applies for the grants for you.
How to Access LiveSmart BC grants:

1. Complete a pre-retrofit home energy assessment \textit{before} renovations
2. Complete renovations
3. Complete a post-retrofit home energy assessment (within 18 months of your pre-retrofit assessment, or before March 31, 2013, whichever comes first.)

Then receive a rebate cheque and enjoy the savings in a more comfortable, efficient home
Home Energy Assessment Cost

• $150* for the first assessment
  – $60 rebate offered by Regional District of Nanaimo
  – **Cost to you: $90**

• $150* for the follow-up home energy assessment

*Initial home energy assessment is valued at $300. $150 subsidy offered by the BC Ministry of Energy and Mines. Prices do not include tax. Other charges may also apply.
Examples of Selected Maximum Grants – Over $7000 Available

<table>
<thead>
<tr>
<th>Retrofit</th>
<th>Grant</th>
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</thead>
<tbody>
<tr>
<td>Air Sealing</td>
<td>$400</td>
</tr>
<tr>
<td>Attic Insulation</td>
<td>$600</td>
</tr>
<tr>
<td>Wall Insulation</td>
<td>$1200</td>
</tr>
<tr>
<td>Basement Insulation</td>
<td>$1000</td>
</tr>
<tr>
<td>Air Source Heat Pump</td>
<td>$1500</td>
</tr>
<tr>
<td>Windows, Doors, Skylights</td>
<td>$60/item</td>
</tr>
<tr>
<td>Solar Water Heater</td>
<td>$500</td>
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Utility Incentives

Make the switch* to natural gas, install an ENERGY STAR® heating system and get a $1,000 rebate.

Switch
Change your oil or propane heating system to natural gas**, install a new ENERGY STAR rated high-efficiency heating system*** and you may qualify for a $1,000 cash rebate.

* Rebate is not applicable when switching from wood or electric space heating systems.
** Oil to propane conversion only available in propane service areas.
*** A forced air furnace with an AFUE rating of 90 per cent or higher, a boiler with an AFUE rating of 85 per cent or higher, or a condensing combination system used for both space and water heating.
Utility Incentives cont’d

**Fridge Buy-Back Program**
BC Hydro will pick up your old fridge, recycle it and give you $30 for it.

**Home Electronics**
Buy ENERGY STAR labelled televisions and save at least 50% compared to standard TVs.

**Windows Offers**
Check here for limited time promotions on ENERGY STAR labelled windows.

**Lighting Specials**
Power Smart specials on fixtures and bulbs.

**Mail-in Rebates**
ENERGY STAR phones, low flush toilets, outdoor clotheslines, energy saving kits and showerheads among our current mail-in coupon offers.

**Appliance Rebates**
Save on ENERGY STAR appliances. Rebates from $25 to $50 on select clothes washers, refrigerators, dishwashers and all ENERGY STAR freezers.

**Product Incentive Program**
For businesses, Power Smart offers money-saving incentives for energy-efficiency upgrades.

**Programs for businesses**
Power Smart helps commercial and industrial customers with programs and incentives.

**e.Catalog for business**
Over 8,000 energy-efficient products in one place.

**Low-income program**
Low-income customers may qualify for our Energy Saving Kit and/or Energy Conservation Assistance Program.
Mortgage Loan Discounts

CMHC offers 10% rebate of your mortgage loan insurance premiums if you retrofit your home above EnerGuide 40 and increase by a minimum 5 EGH points.
Financing

Many financial institutions and mortgage brokers offer ‘green’ loans.
Energy Conservation Assistance Program (ECAP)

Free home improvements worth up to $2,000 for low-income households that are high electric consumers.

The Energy Conservation Assistance Program is a Power Smart initiative for BC Hydro customers with higher electricity consumption who may not be able to afford to make their homes more energy efficient.

Qualified applicants can receive a free home energy evaluation and energy efficiency upgrades to help reduce their consumption and save money on their bills.
And More!

- Visit [www.citygreen.ca/incentives](http://www.citygreen.ca/incentives) for energy efficiency incentives/rebates and available across the province.
Assessments and Incentives for New Construction
Benefits of Energy Efficient New Homes

• Use less energy and have reduced operating costs
• Improved resale value due to low energy bills
• More comfortable, healthy, and quiet
• Reduced carbon footprint
• Can access government and utility incentives
• Builders of energy efficient homes can:
  – Market third-party verified energy efficient homes
  – Prepare for upcoming BC Building Code energy efficiency requirements
Which is More Efficient?
EnerGuide Rating System

• The EnerGuide Rating System (ERS) is Natural Resource Canada’s system for the energy rating and labelling of products and homes.
• A rating of 0 represents a home with extremely high energy consumption.
• A rating of 100 represents a house that requires no purchased energy on an annual basis.
EnerGuide Rating System

<table>
<thead>
<tr>
<th>Type of House</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Building Code (performance path)</td>
<td>77</td>
</tr>
<tr>
<td>Upcoming BC Building Code target</td>
<td>80</td>
</tr>
<tr>
<td>Energy-efficient new house (eg: ENERGY STAR, Built Green Platinum, R-2000)</td>
<td>80-90</td>
</tr>
<tr>
<td>House requiring little or no purchased energy</td>
<td>91-100</td>
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EnerGuide Rating Service

Have a New Homes Energy Assessment with a Certified Energy Advisor to access:

• Energy Modelling: know how your plans rate
• Upgrade Options for Improving Efficiency: what will improve energy efficiency the most? eg:
  – Building Envelope
  – Framing Techniques
  – Heating, Hot Water, and Ventilation Systems
• EnerGuide Rating of completed home
ENERGY STAR for New Homes Initiative

• A “best in class” marketing program that promotes energy efficient new homes.
• Specifically focused on energy efficiency.
• Approximately 25% more energy efficient than homes built to standard building code requirements.
• Federally-administered program. Not affiliated with any one builder association.
Which is More Efficient?

A

B
Incentives for Energy Efficient Design

- BC Hydro Power Smart for New Homes
- CMHC Mortgage Loan Insurance Rebate
- RDN Sustainable Development Checklist
BC Hydro Power Smart for New Homes Program

- $1,500/Single Family Home with an EnerGuide rating of 80 or higher
- Additional $200/home with an ENERGY STAR Appliance Package
- Power Smart Marketing (certification logo use, BC Hydro media promotion)
BC Hydro Power Smart for New Homes Program

To access:

1. Get an EnerGuide rating from a Certified Energy Advisor (~$500 for a typical house)
2. Complete a two-page form and submit to BC Hydro
CMHC 10 % Mortgage Loan Insurance Rebate

• Step 1: Get an EnerGuide Rating from a Certified Energy Advisor. If it is at least EnerGude 80, it qualifies. If not, increase your score by at least 5 points and to a minimum overall rating of 40.

• Step 2: Homeowner applies for Mortgage Loan Insurance Rebate from CMHC.
Two paths:

a) LEED or Built Green Certification

b) Step-by-Step section, including:
   i. Net-Zero design
   ii. Reduced Energy Demand/Passive Design
   iii. EnerGuide Rating 80/ENERGY STAR qualification

– $500 - $1000 available for qualifying new homes
In Conclusion

Energy assessments + incentives help you:
• save energy,
• save money,
• save the planet, and
• enjoy the savings in your cozy, healthy home
Questions?

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