

CONSIDERING PURCHASING A HEAT PUMP WEBINAR – November 8th, 2022

Township of Langley Heat Pump Webinar-Follow Up Questions.

For the most up to date information on what rebates are available in your area please visit betterhomesbc.ca or contact an Energy Coach by emailing ask@betterhomesbc.ca or calling 1-844-881-9790.

What support is available?

CleanBC Better Homes is BC's online hub for homeowners and businesses to access information, rebates and support to reduce energy use and greenhouse gas emissions in new and existing homes and buildings. Support includes:

- Easy to use [rebate search tool](#) for when you are renovating a home or building a new home
- Information and answers to frequently asked questions on energy efficiency upgrades and [accessing rebates](#)
- [Free Energy Coaching Services](#) for homeowners and businesses undertaking renovations, including a phone and email hotline staffed by energy coaching specialists
- Search tool to find registered EnerGuide Rating System [energy advisors](#) for residential renovations and new construction
- [Contractor directories](#) to find registered contractors in your area

What rebates are available?

[CleanBC Better Homes and Home Renovation Rebate Program](#) – this provincial program provides rebates for upgrades such as insulation, heat pumps, windows and doors, and more. Review the [Program Requirements](#) and [Additional Terms and Conditions](#) to ensure you are eligible for the program. All upgrades must be completed by a contractor with a valid BC business license.

Heat Pump Rebates*

- You must hire a Home Performance Contractor Network (HPCN) member for your heat pump installation to be eligible for heat pump rebates. Find members on the [Contractor Search Tool](#) or [Registered Contractor in Progress list](#).
- [Ductless Mini-Split Heat Pump](#) – up to \$6,000 + up to \$500 with the [Heat Pump Group Purchase Rebate](#)
- [Central Ducted Heat Pump](#) – up to \$6,000 + up to \$500 with the [Heat Pump Group Purchase Rebate](#)
- [Dual-Fuel Ducted Heat Pump Rebate](#) – \$3,000 + up to \$500 with the [Heat Pump Group Purchase Rebate](#)
- [Combination Space and Water Heat Pump](#) – up to \$4,300 + up to \$500 with the [Heat Pump Group Purchase Rebate](#)
- [Hydronic Heat Pump](#) – \$3,000 + up to \$500 with the [Heat Pump Group Purchase Rebate](#)
- [Electrical Service Upgrade](#) – \$500
- [Electric Heat Pump Water Heater](#) – \$1,000
- [CleanBC Better Homes Low-Interest Financing Program](#) – receive a loan of \$1,000 - \$40,000 for installing an eligible heat pump

- [Heat Pump Group Purchase Rebate \(GPR\)](#) – receive an additional up to \$500 when switching from fossil fuel to a heat pump. The GPR rewards groups of homeowners working together to reduce greenhouse gas emissions by switching from an oil, natural gas, or propane heating system to an air source heat pump. The GPR ranges from \$200 per home, for a group of 2 homes up to a maximum of \$500 for a group of 20 to 30 homes. To register for the GPR, visit www.betterhomesbc.ca/gpr-register.

CleanBC Income Qualified Program –Based on your household income, this program offers enhanced rebates to make energy-saving home upgrades more affordable. Visit the program’s page for more details on the income requirements and other eligibility details. Please review the [Rebate Eligibility Requirements](#), [Participant Terms and Conditions](#), and [Contractor Terms and Conditions](#). Keep in mind that **all upgrades must be completed with an Income Qualified Program Registered Contractor**. After completing the upgrade, the contractor will submit the rebate application and deduct the rebate from the final cost of the upgrade.

- You may be eligible to receive enhanced rebates that cover 60-95% of your home upgrade costs, with maximum rebate values of:
 - [Ductless Mini-split, ductless multi-split and central ducted heat pumps](#) – up to 9,500
 - [Dual fuel ducted heat pumps](#) – up to \$9,500
 - [Air-to-water heat pumps](#) – up to \$9,500 or up to \$13,000 for a combined space and water heat pump
 - [Heat pump water heaters](#): Up to \$3,500
 - [Electrical service upgrade](#) – up to \$3,500
- Additional rebates are available for necessary health and safety, ventilation, and electrical panel upgrades.
- Free energy coaching, virtual energy assessments, and support in multiple languages can help identify the home upgrades and rebates that are best for you.
- For more information, please contact the Income Qualified Program directly at 1-833-856-0333 or email incomequalified@betterhomesbc.ca

Canada Greener Homes Grant- this [federal program](#) offers up to \$5,600 in rebates for homeowners completing energy efficient upgrades on their home, including insulation, air sealing, windows, heating systems, solar systems, and resiliency measures. **Up to \$5,000 is available for installing a heat pump.** The completion of an [EnerGuide Home Evaluation](#) before and after upgrades is required to be eligible. You can access rebates from both the Greener Homes program and the CleanBC Better Homes and Home Renovation Rebate Program, however eligibility requirements and application steps differ. Carefully read the Greener Homes [eligibility page](#) to confirm your home is eligible and the [eligible retrofits page](#) to learn about efficiency requirements and available grants for each retrofit.

Webinar Questions:

We often hear electricity costs more than gas for monthly utilities. If you had a new efficient gas furnace vs a new ducted heat pump, would the monthly utility costs be equal or would gas still be cheaper?

The comparison between natural gas and electric heat pumps is not as simple as comparing electric baseboards and a heat pump for example. Because the units of energy for measuring electricity and natural gas are different (kWh vs GJ), you cannot do a straight comparison of the utility cost between natural gas and electricity.

For example, the most efficient natural gas furnaces today operate at an efficiency of up to 97-99%, or a 1:0.97 ratio compared to a heat pump that can operate with an efficiency rating of 300-400%, a ratio of 1:3. What this means is that for 1 unit of energy, a heat pump can generate 3 units of heat (1:3 ratio) compared to a natural gas furnace that uses 1 unit of energy and generates 0.97 in heat (1:0.97 ratio).

When considering the difference in cost of natural gas and electricity currently in B.C., in a well-insulated home, both systems can be comparable on a monthly utility comparison; however individual patterns, temperatures preferences, day to day operation of the system, and size and layout of home will all impact your utility costs. If you do a straight swap out of a natural gas furnace to a heat pump heating system without doing other upgrades in your home – it may be more expensive to heat with a heat pump. For this reason, it is wise to consider other upgrades, and accessing other financial rebates, when upgrading your heating system.

What is the life span of the average heat pump? Thank you.

Like all heating systems, air-source heat pumps have a service life of between 15 and 25 years. The compressor is the critical component of the system. The compressor is located in the outdoor unit. Most heat pumps are covered by a one-year warranty on parts and labour, and an additional five- to ten-year warranty on the compressor (for parts only). However, warranties vary between manufacturers, so check the fine print.

Proper maintenance is critical to ensure your heat pump operates efficiently, reliably, and has a long service life. You should have a qualified contractor do annual maintenance on your unit to ensure everything is in good working order. In addition, make sure the outdoor unit is kept clean and clear of debris year round, this will help maintain its operation – the user guide typically includes care instructions for homeowners.

Aside from annual maintenance, there are a few simple things you can do to ensure reliable and efficient operations. Be sure to change or clean your air filter every 3 months, as clogged filters will decrease airflow and reduce the efficiency of your system. Also, be sure that vents and air registers in your home are not blocked by furniture or carpeting, as inadequate airflow to or from your unit can shorten equipment lifespans and reduce efficiency of the system.

How much square footage will a single unit cover? Do you need to have heads for every room in the home?

The amount of space that a unit can heat or cool will depend on the size of the system. Typically, a single ductless head can cover approximately 800 square feet of space. Further, single head installations are only eligible for rebates in homes that are 1200 square feet or less through the provincial rebate program.

[Ductless mini split systems](#) provide zonal heating to a space, depending on the size and layout of your home you may need multiple indoor units. This can depend on how open-concept your living space is.

You may not however need a heat pump unit for each indoor space, but rather indoor units strategically placed where heat will be distributed to all or most of your home. If the home already has electric baseboards it is common for these to be continue to be used in some areas. Many homeowners will install the one or more electric baseboard for lesser used rooms that the heat pump won't directly service. With ductless systems, there are a number of installation options to maximize the spaces they serve in a home.

My house is a very small rancher. Is the inside unit quiet or does it make a lot of noise?

Each heat pump system has a different sound rating, this noise is created by the fans and compressors. The type of heat pump, as well as the individual model, will affect the level of noise that the heat pump will produce. Like different models of dishwashers, some heat pumps are noisier than others. Newer systems are much quieter than older systems as well.

It is recommended to look for heat pumps with variable speed motors, as they tend to run more smoothly and quieter than single- or two-stage motors. Additionally, regular maintenance will play a role in the sound produced. Well-maintained equipment will operate more efficiently than equipment that has not been maintained.

If noise is a concern, ask your contractor for a quieter system and ask for the technical specification sheet. This sheet will show you the sound rating of both the indoor and the outdoor units. To learn more about heat pump noise, too see sound comparisons, and to learn about how good installation practices and outdoor unit placing can address noise concerns check out the FAQ on heat pumps and noise here: <https://betterhomesbc.ca/products/are-heat-pumps-loud/>

TOL is moving to Step Code 4 in Jan 2023. Will heat pumps be mandatory in your opinion? What is the cost vs. traditional furnace/air conditioner systems?

The TOL has proposed going to Step 4 for Part 9 buildings in 2023, but this has not yet gone to council so the exact timing is not set yet.

You will also see [here](#) it says "proposed changes" but it is always a good idea to double check with the building department! You could also email Greenbuildings@tol.ca

Assuming if we have already done the EnerGuide evaluation in the past, we would need to do it again to be eligible for these federal rebates?

If your evaluation was done before April 1, 2020, you need a new evaluation. If you are still interested in the grant, we recommend you start your application so you can have a new evaluation done for your home.

If your evaluation was done between April 1, 2020, and June 30, 2021, you can use your evaluation for the federal Canada Greener Homes Grant, however you will not receive a grant for the evaluation itself.

If your evaluation was completed on or after July 1, 2021, you can receive the grant for both your evaluations and your retrofits. You will receive the grant only if you go all the way through the process – meaning that you complete both the evaluations and at least one recommended retrofit.

For any rebates offered through the provincial [CleanBC Better Homes and Home Renovation Rebate Program](#) – an EnerGuide Home Evaluation is not required. For more information on the federal rebate program follow [this](#) link.

Can the Energy coach answer questions about the federal programs?

The Energy Coach Service can answer some basic questions about the federal grant program, however their scope is limited. For more detailed support for Canada Greener Homes Grant inquiries, you can contact the program directly at 1-833-674-8282 or [send an email](#).