

Considering Purchasing a Heat Pump?

Experience the Benefits of a Heat Pump

The Community Energy Coach supports communities, local governments, and industry stakeholders in the promotion of CleanBC rebate programs and education of heat pumps.



Land Acknowledgement

We like to acknowledge with respect the Coast and Straits Salish and WSÁNEĆ peoples on whose traditional, unceded territory we are presenting today, and the Lekwungen, Songhees, Esquimalt, and WSÁNEĆ whose historical relationships with the land continue to this day.

We would also like to acknowledge the traditional territories of the Coast Salish peoples and in particular acknowledge our relationships with the Katzie, Kwantlen, Matsqui, and Semiahmoo First Nations.

AGENDA

1. What is an Air Source Heat Pump (Heat Pump)
2. Heat Pump Types
3. Benefits
4. Know before you Buy
5. Operating a Heat Pump
6. Consumer Testimonials
7. Available Rebates
8. Low-Interest Financing Program
9. Heat Pump Group Purchase Rebate
10. Finding a Heat Pump Contractor
11. CleanBC Energy Coach
12. Q&A



WHAT IS A HEAT PUMP AND HOW DOES IT WORK?



What is Heat Pump?

- A system that uses **electricity** to either heat or cool your home.
- **3 to 4 times more energy efficient** as a high-efficiency natural gas heating system, an electric furnace, or baseboard heating ([NRCan](#)).
- **Climate-friendly. In BC, electricity is the cleanest source of energy** and emits the lowest amount of pollution and greenhouse gas emissions.

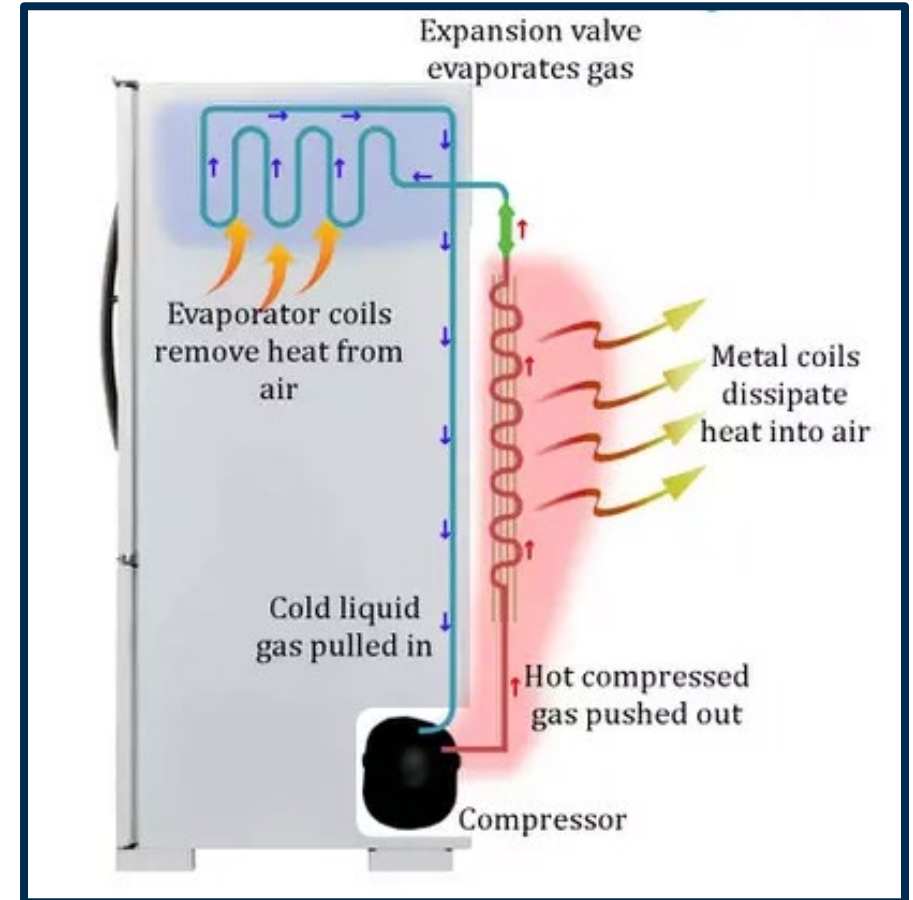




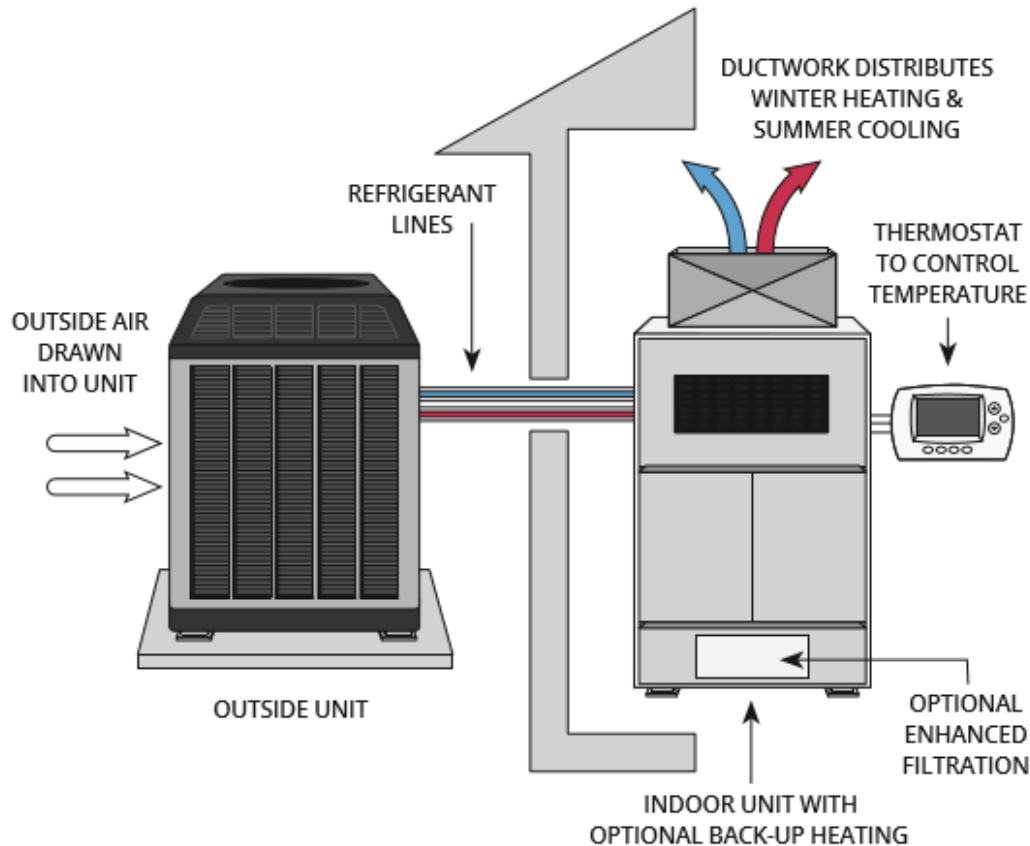
Did you know that you have a heat pump at home?

Your Refrigerator Is...

- **An insulated box with a type of heat pump in it.**
- Heat is removed from inside a refrigerator and the temperature inside the refrigerator drops.
- The coils on the back of the refrigerator give off the heat that is removed from the refrigerator.



How Do Heat Pumps Work?



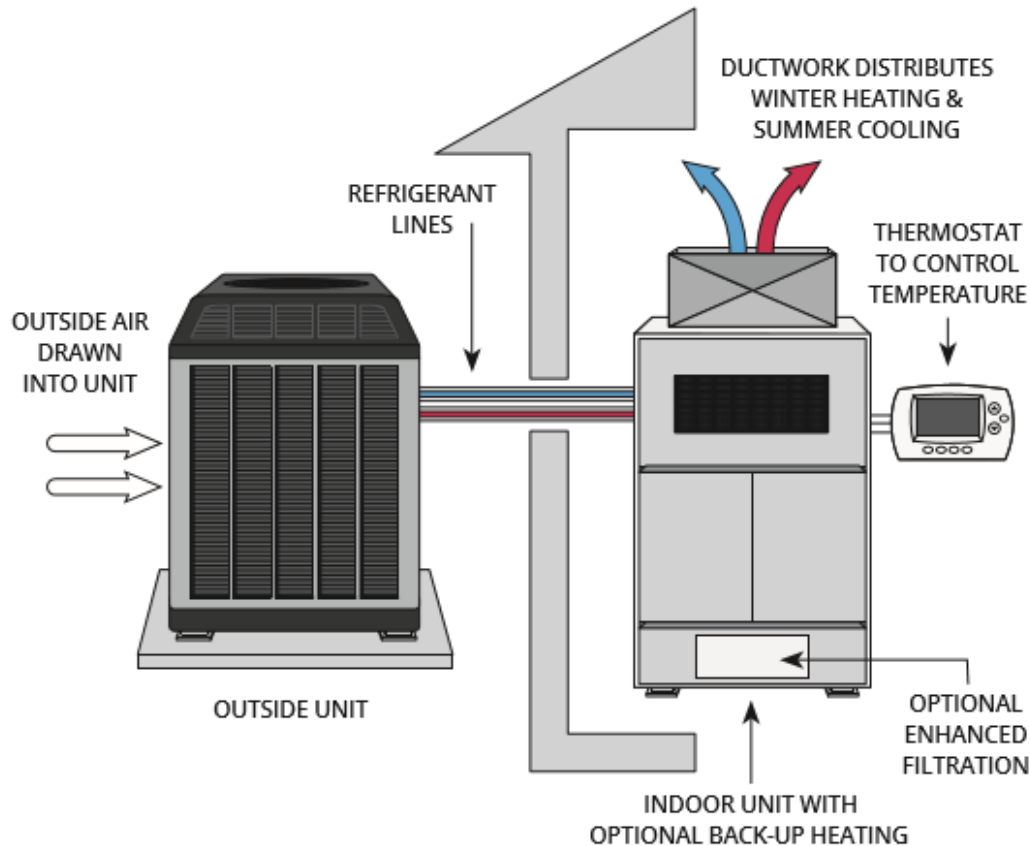
Heat pumps

- Provide **both heating and cooling** for a home
- Extract heat from the surrounding air and move it to another location
- Uses a refrigerant and a compressor to pump surrounding air up to a higher temperature level.

HEAT PUMP TYPES



Central Heat Pump



A central heat pump uses **ductwork connected to vents** in your home to circulate warmed or cooled air. Central heat pumps provide whole home heating and cooling.



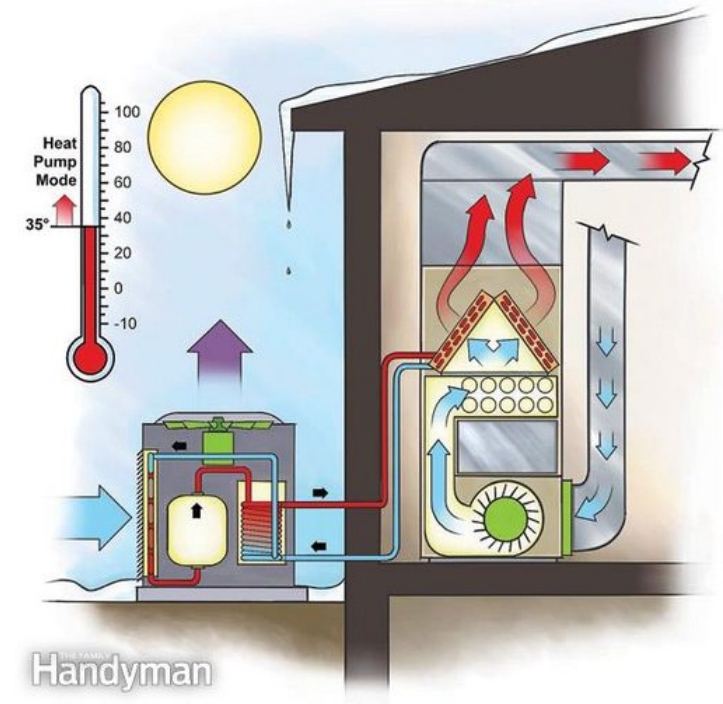
Dual Fuel Central Heat Pump*

A **dual fuel** heat pump allows for the integration of a **natural gas**, or **propane** furnace, with a central ducted heat pump.

Dual Fuel systems provide a **backup heat** source for colder temperatures determined by the **outdoor switch over set point**.

The heat pump acts as the primary heating system of the home, determined by a **heat load calculation** provided by the installation contractor.

*For homes already heated by a natural gas or propane furnace.



Ductless Heat Pump

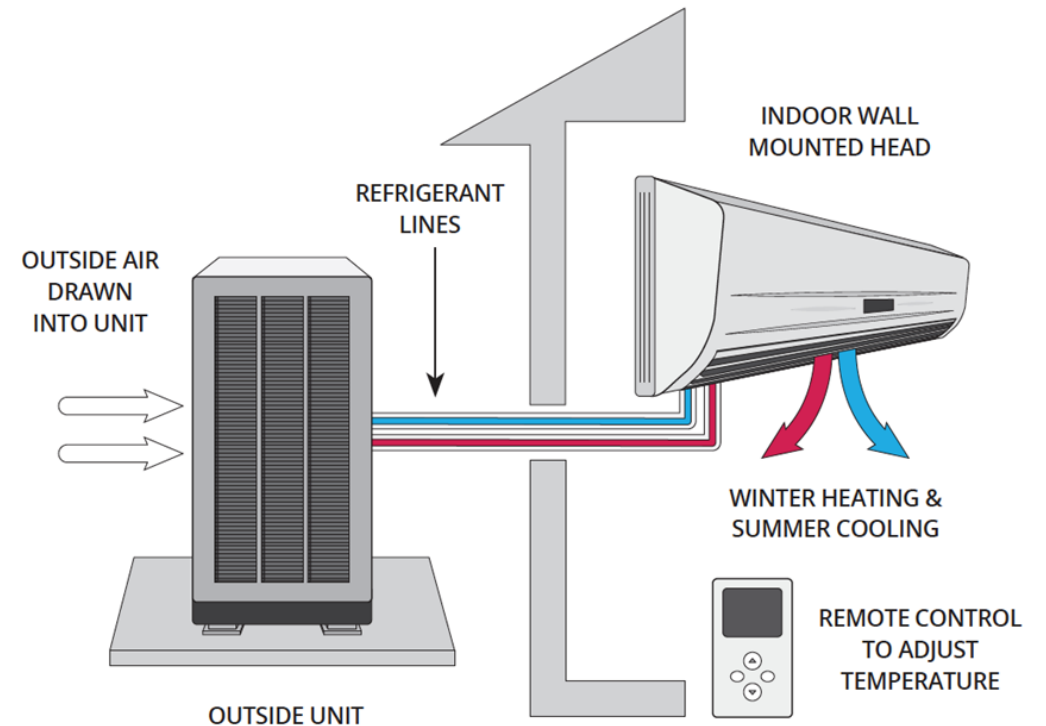
A ductless heat pump provides heating and cooling via indoor heads, without the use of ducts. Ductless heat pumps provide zonal heating and cooling.



Other common names for ductless heat pumps include:

- Mini-split
- Multi-split
- Split system
- Ducted mini-split*

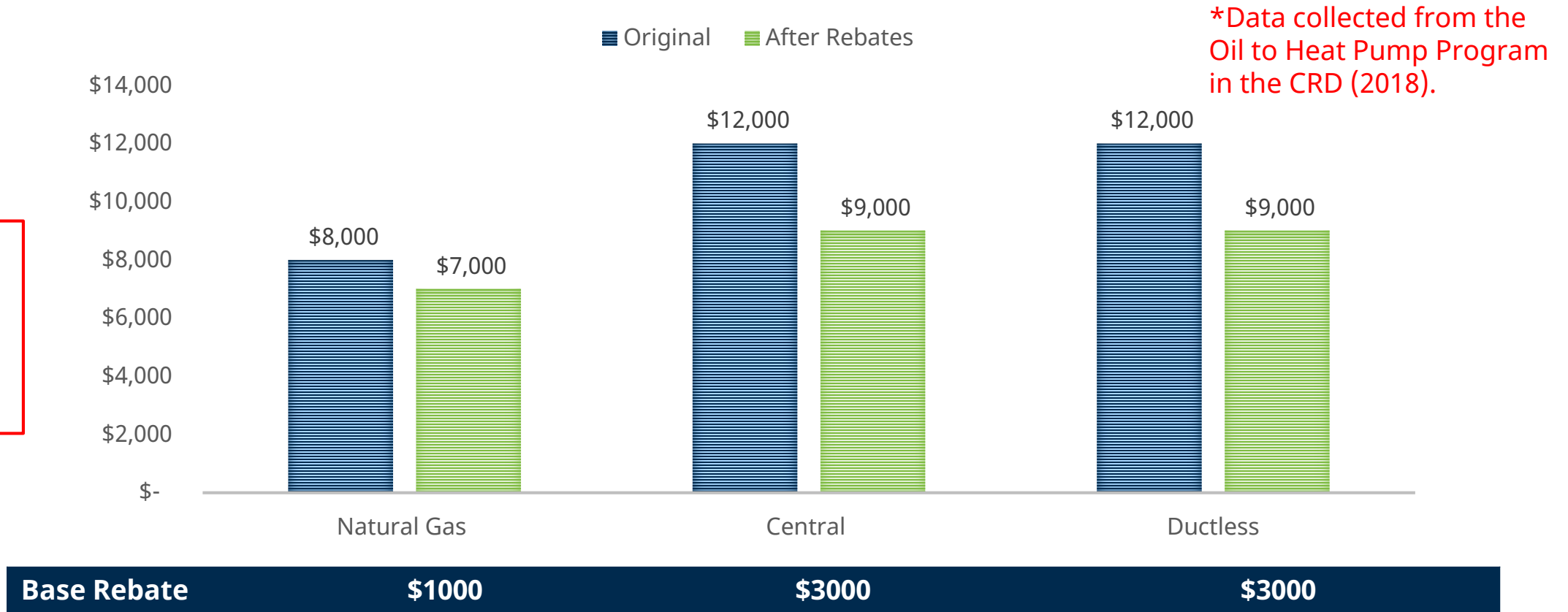
*Some ducted mini-split systems may be classified as a central heat pump, check [Qualifying Product List](#).



Central Systems Vs. Ductless Heat Pumps

Factor	Central Heat Pump	Ductless Heat Pump
Air Conditioning	✓	✓
Zonal Heating		✓
Ductwork Required?	✓	
Air Filtration & De-Humidification	✓	✓
Ideal Installation in Homes:	✓ With existing ductwork ✓ Need for central heating ✓ With need for more effective air filtration	✓ Want zonal heating ✓ With open concept layout ✓ With no ducting or older inefficient ducting ✓ With electric baseboards or wood stoves ✓ Interest in removing ductwork in basement ✓ Interest in lower cost system for part of home (common area, basement suite, addition)

Heat Pump vs Gas Furnace Installation Costs (Average Cost Range)



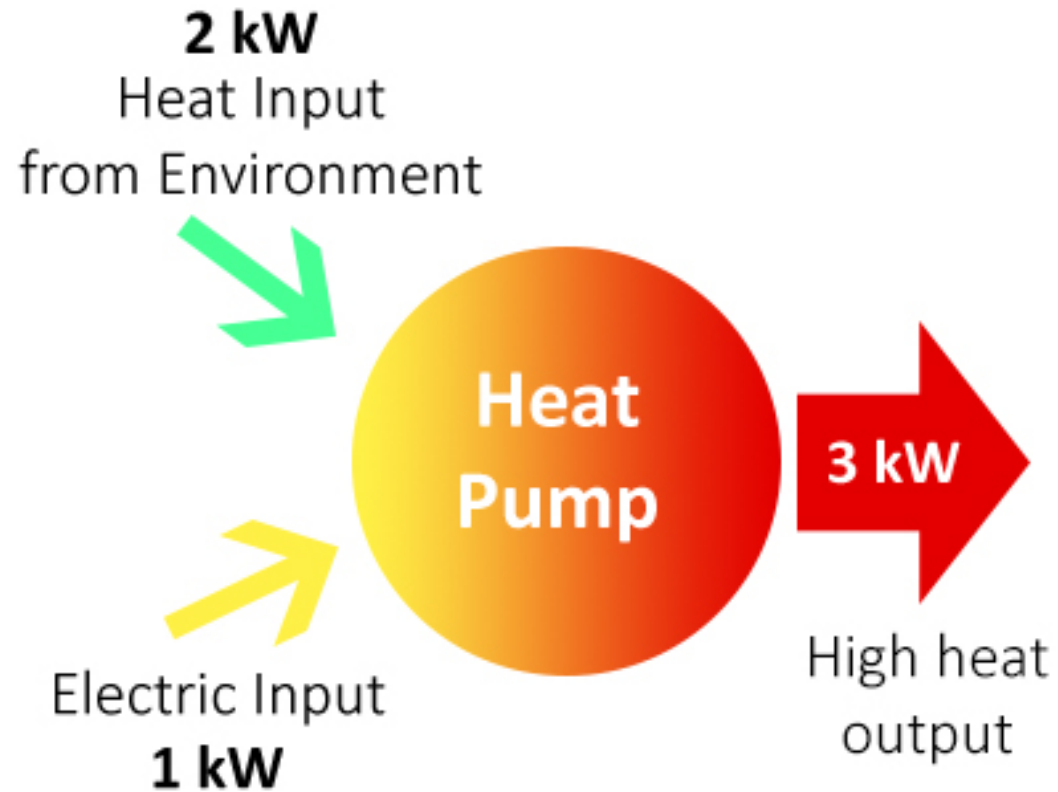
BENEFITS OF A HEAT PUMP



Benefits of a Heat Pump

- Year-round comfort
- A climate-friendly home
- The most **energy efficient heating and cooling system** currently available
- Healthier home
- You pay no carbon tax on your energy bill





Heat pumps are the most energy-efficient heating and cooling system currently available – three times more efficient than natural gas or electric baseboard heating systems.

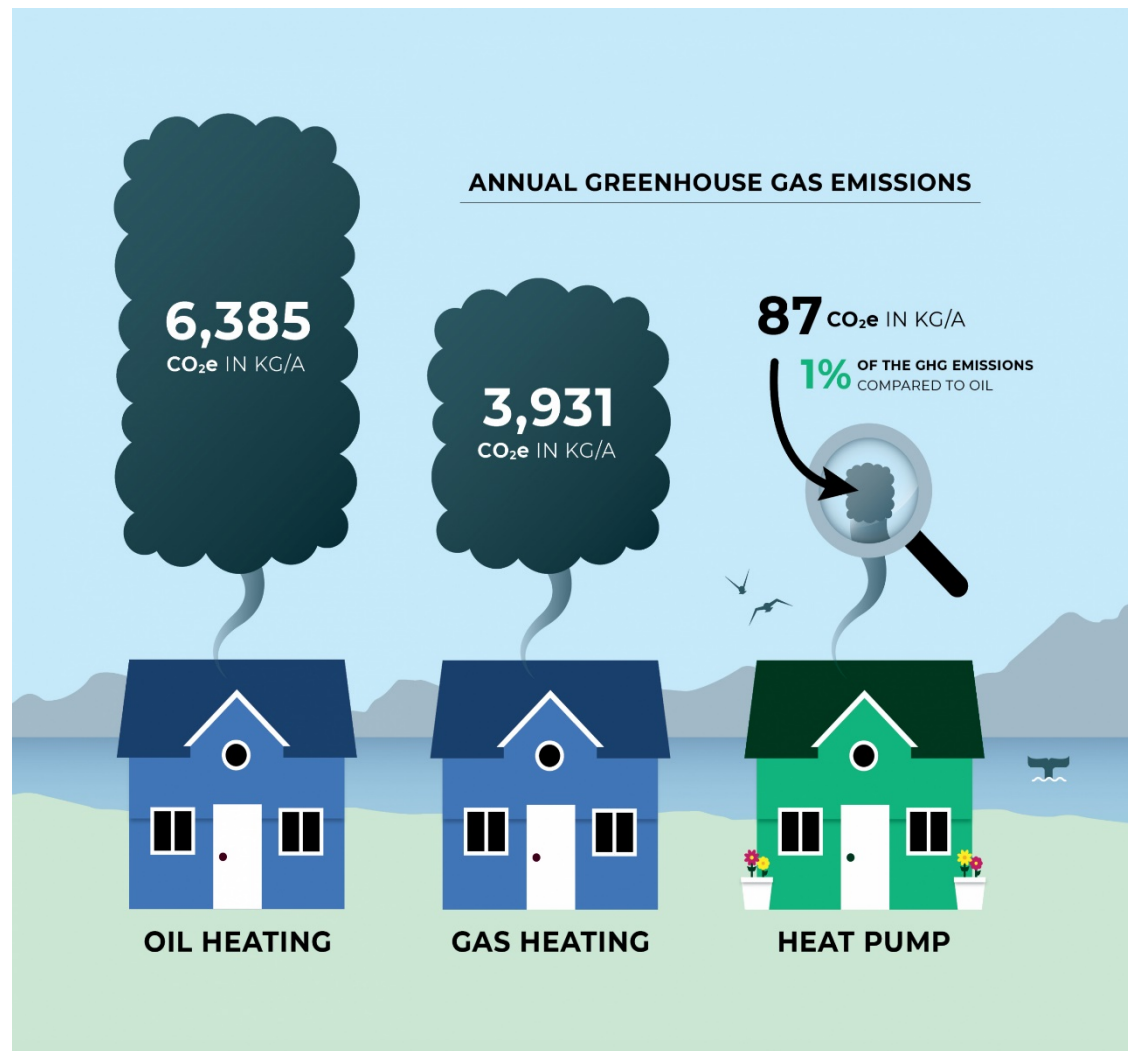
MAXIMUM EFFICIENCY



Jens, Saanich

COST EFFECTIVE HEATING

The most cost effective
electric heating option.



CRD (2020).

CLIMATE-FRIENDLY

Heat pumps offer the most climate-friendly heating and cooling system available in B.C.



Heat pumps provide air filtration and humidity control that helps rid your home of indoor pollutants, dust, pollen, and other allergens.

BETTER INDOOR AIR QUALITY



Don, Saanich

EASE OF USE

Set it and Forget it.
Enjoy a low maintenance
home, efficient air
conditioning, and
affordable energy bills.





Efficient heating of rooms
you are using.

Meets the comfort needs
of different members of
the household.

Different heating controls
for different areas of a
home or separate
systems for rental or
inlaw suite.

ZONAL HEATING



Ted and Carol, Saanich

Like electric vehicles,
efficient heat pumps are
the heating systems of
the future

MODERN – THE HEATING SYSTEM OF THE FUTURE



Lorne, Saanich

**NO MORE CUTTING OR
HAULING WOOD**
(unless you want a fire for ambiance)

Heat pumps are ideal for
upgrading wood heated
homes



HEAT PUMPS: Know Before You Buy

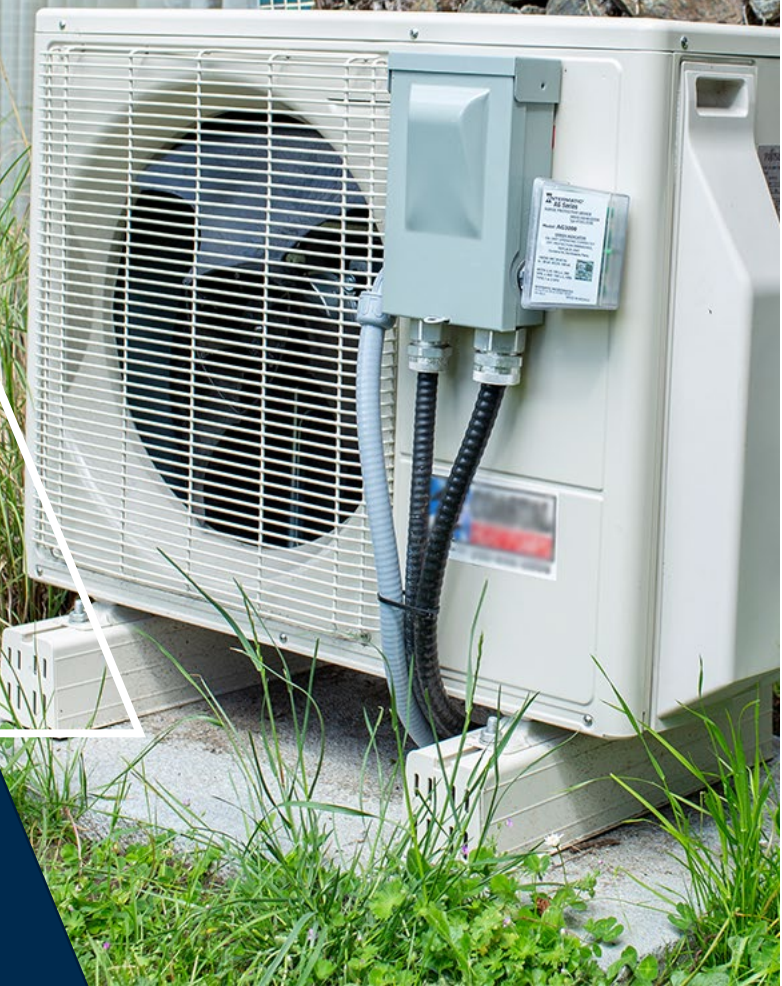


Buyer Best Practices

- ✓ Buy your system through a **qualified installer**, avoid buying wholesale or online.
- ✓ Obtain **multiple quotes** from different installers.
- ✓ **House as a System** - Address air leakage and insulation issues before purchasing your system to ensure high performance, comfort and affordability.
- ✓ Select a heat pump that is **properly sized for your home**, designed for your climate, and includes a supplementary heating system if necessary.



EFFICIENTLY OPERATING YOUR HEAT PUMP



Heat Pump Operation Tip #1

Set It & Forget It:

In really cold weather, best practice is to **set your thermostat to your preferred comfort temperature and then let it be.**

A heat pump is designed to maintain a steady temperature and work gradually and efficiently.



Heat Pump Operation Tip #2



Set your Thermostat to a Comfort Level:

Depending on the outside temperature, the efficiency of your home and the placement of your heating ducts or interior heat pump heads – you may need to set the temperature higher to feel the comfort level you want to enjoy.

Maintenance Considerations

☐ Regularly:

- ✓ Check the manufacturer's manual
- ✓ Clean the indoor filters of dust and pollen
- ✓ Check the batteries in the remote control and replace if necessary

☐ Seasonally:

- ✓ Clear the outdoor unit of any debris, leaves, snow, and dirt

☐ Annually:

- ✓ Schedule a servicing appointment with your installer

What to Expect After Installation

✓ No more intermittent blasts of hot air

- Heat pumps produce lower temperature heat, which takes more time to reach desired room temperature. Once they reach the set temperature, they work continuously at a very high efficiency to maintain that temperature.

✓ Changes to your hydro bill

- If you are switching from fossil fuels you will see an increase in your electricity consumption, which will be offset by a decrease in your fossil fuel consumption.

✓ Outdoor Noise

- The outdoor units of heat pumps do make some noise. The lower the sound rating is, the quieter the unit will be. The Township of Langley has a bulletin about [noise and heat pumps here](#).

WHAT CONSUMERS SAY ABOUT HEAT PUMPS



Consumer Survey Results Satisfied With Heat Pump*

97%

Would install a heat pump
again
for a different home

81%

Were **satisfied or happy with their
energy bills** after the heat pump
installation.

*Oil to Heat Pump Incentive Program Participant Survey – 2018



Consumer Survey Results: WHY install Heat Pump?*

92%

Found **replacing oil heating** to be an important factor in choosing a heat pump.

81%

Upgraded to a heat pump to be more **climate friendly** and reduce their greenhouse gas emissions.

76% - Make a high quality investment in home

80% - Reliability of heating system

83% - Improve home comfort

83% - Reduce energy bill costs

*Oil to Heat Pump Incentive Program Participant Survey – 2018

AVAILABLE REBATES





[Rebate Search Tool](#)

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Better Homes helps British Columbians find rebates that save energy and lower greenhouse gas emissions.



Find rebates
for
renovating
a home



Find rebates
for **building**
a home

Not sure where to start? Follow our step-by-step guide



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CleanBC –Energy Coaching

Self-Serve Online Resources

- Incentives, rebates, and financing search tool
- Resources to learn about energy efficiency products and services
- Frequently asked questions

Energy Coaching Support

- Website: www.betterhomesbc.ca
- Phone (toll-free): 1-844-881-9790
- Email: ask@betterhomesbc.ca



Rebate Search Tool

Rebate Search Tool

What **type of project** are you completing?

Renovating a home

Where is the home **located**?

Enter municipality or regional district

How is the home **currently heated**?

If the home has more than one system, select the main heat source.

- ☐ Electricity (baseboard, furnace)
- ☐ Natural Gas or Propane (furnace, boiler, fireplace)
- ☐ Oil (furnace, boiler)
- ☐ Wood (stove, fireplace)
- ☐ District energy (locally created energy)
- ☐ Heat Pump
- ☐ Geothermal
- ☐ Not sure, view all rebates

Submit

Limited Time Offers

Double the Rebate Offer

Upgrades must be completed and invoiced by June 30, 2021

Registration Closed

Heating

Install a Heat Pump

Central Air Source Heat Pump Rebate

Compatible with a new or existing duct system

\$1,200 - \$3,000

Mini-Split or Multi-Split Air Source Heat Pump Rebate

Compatible with homes with no duct system

\$1,000 - \$3,000

CleanBC Dual-Fuel Central Air Source Heat Pump Rebate

Integrate an existing fossil fuel heating system with a central heat pump

\$3,000

CleanBC Air-to-Water Heat Pump Rebate

Air-to-water space heating systems

\$3,000

CleanBC Combined Space and Hot Water Heat Pump Rebate

Space heating and domestic hot water system

\$1,000 - \$4,000

Have Double the Rebate Promo Code?



Limited Time Offer

For a limited time,
Double the Rebate on
select offers!

[Click for more information](https://betterhomesbc.ca/rebates/double-the-rebate/)

[https://betterhomesbc.ca/
rebates/double-the-
rebate/](https://betterhomesbc.ca/rebates/double-the-rebate/)

Receive **Double the Rebates** on all heat pump rebates and the electric service upgrade rebate when switching from a fossil fuel heating system.
Access up to \$6,500 in rebates!

1. **Registration for a promo code closed on March 31, 2021** – remember to include the promo code if you have one.
2. Heat pumps must be installed and invoiced between **October 1, 2020** and **June 30, 2021**
3. Apply within 6 months of your invoice date using your Promo Code

Have Double the Rebate Promo Code?



Receive Double the Rebates for **electrically and wood heated homes** if you receive your Promo Code **prior to December 31, 2020**.

Participants (electrically and wood heated homes) who registered for a promo code by December 31, 2020 must

1. Get their double the rebate upgrade installed and invoiced by June 30, 2021
2. Apply within 6 months of your invoice date using the Promo Code

<https://betterhomesbc.ca/rebates/double-the-rebate/>

Heat Pump Rebates – Eligibility Criteria

- Heat pumps must be installed in an eligible home (Single family, side-by-side rowhome or duplex, mobile home on permanent foundation)
- Rebate values are dependant on the participant's **primary space heating system prior to the heat pump installation**
- Heat pump must serve as the **primary space heating system** for the home;
- **Maximum one (1) primary space heating system** rebate per home;
- **Rebates cannot exceed the cost** of the invoice and paid cost of the upgrade;
- Heat pump must be found on the **Heat Pump Qualifying Product List**.
- Counts as one bonus-eligible rebate towards the bonus-offers.

Heat Pump Rebates:

Electrically heated homes*

- Electrically heated homes must meet a **minimum electricity consumption** to be eligible.
 - Check eligibility by entering your BC Hydro account number and home's square footage at bchydro.com/hero/eligibility

Heat Pump Type	Rebate Amount
Variable Speed Mini Split Air Source Heat Pump – Single Head HSPF ≥ 10.00, SEER ≥ 18.00	\$1000**
Variable Speed Mini Split Air Source Heat Pump – Multi Head HSPF ≥ 9.30, SEER ≥ 16.00	\$1000**
Variable Speed Tier 2 Central Air Source Heat Pump HSPF ≥ 9.30, SEER ≥ 16.00	\$2000**

*Replacing or adding to an existing heat pump is not eligible for rebates

**Homeowners who received a Promo Code prior to Dec 31st, 2020 can access Double the Rebates if the heat pump is installed prior to June 30th, 2021.

Heat Pump Rebates:

Wood heated homes

For homes converting from a wood-fired primary heating system or homes that heat with electric baseboards and wood, and do not meet the minimum electricity consumption determined at bchydro.com/hero/eligibility.

Heat Pump Type	Rebate Amount
Variable Speed Mini Split Air Source Heat Pump – Single Head HSPF ≥ 10.00, SEER ≥ 18.00	\$1000*
Variable Speed Mini Split Air Source Heat Pump – Multi Head HSPF ≥ 9.30, SEER ≥ 16.00	\$1000*
Variable Speed Tier 2 Central Air Source Heat Pump HSPF ≥ 9.30, SEER ≥ 16.00	\$2000*

*Homeowners who received a Promo Code prior to Dec 31st, 2020 can access Double the Rebates if the heat pump is installed prior to June 30th, 2021.

Heat Pump Rebates:

Fossil fuel heated homes

For converting from oil, natural gas, or propane to a heat pump

Heat Pump Type	Rebate Amount
Variable Speed Mini Split Air Source Heat Pump – Single Head HSPF $\geq$ 9.30, SEER $\geq$ 16.00	\$3000*
Variable Speed Mini Split Air Source Heat Pump – Multi Head HSPF $\geq$ 9.30, SEER $\geq$ 16.00	\$3000*
Variable Speed Tier 2 Central Air Source Heat Pump HSPF $\geq$ 9.30, SEER $\geq$ 16.00	\$3000*
Dual Fuel Central Air Source Heat Pump HSPF $\geq$ 9.30, SEER $\geq$ 16.00 (no variable speed required)	\$3000*

*Homeowners who received a Promo Code prior to March 31st, 2020 can access Double the Rebates if the heat pump is installed prior to June 30th, 2021.

Heat Pump Rebates:

Fossil fuel heated homes... Continued

For converting from oil, natural gas, or propane to a heat pump

Heat Pump Type	Rebate Amount
Central Tier 1 Air Source Heat Pump HSPF $\geq$ 8.50, SEER $\geq$ 15.00 (no variable speed required)	\$1,200
Air-to-Water Heat Pump	\$3000*
Combined Space & Hot Water Heat Pump	Up \$4000* + \$300
Electric Service Upgrade Upgrade electrical service to 100, 200, 400 amp service	\$500*

*Homeowners who received a Promo Code prior to March 31st, 2020 can access Double the Rebates if the heat pump is installed prior to June 30th, 2021.

Heat Pump Water Heaters

For converting from electric and fossil fuel heating systems

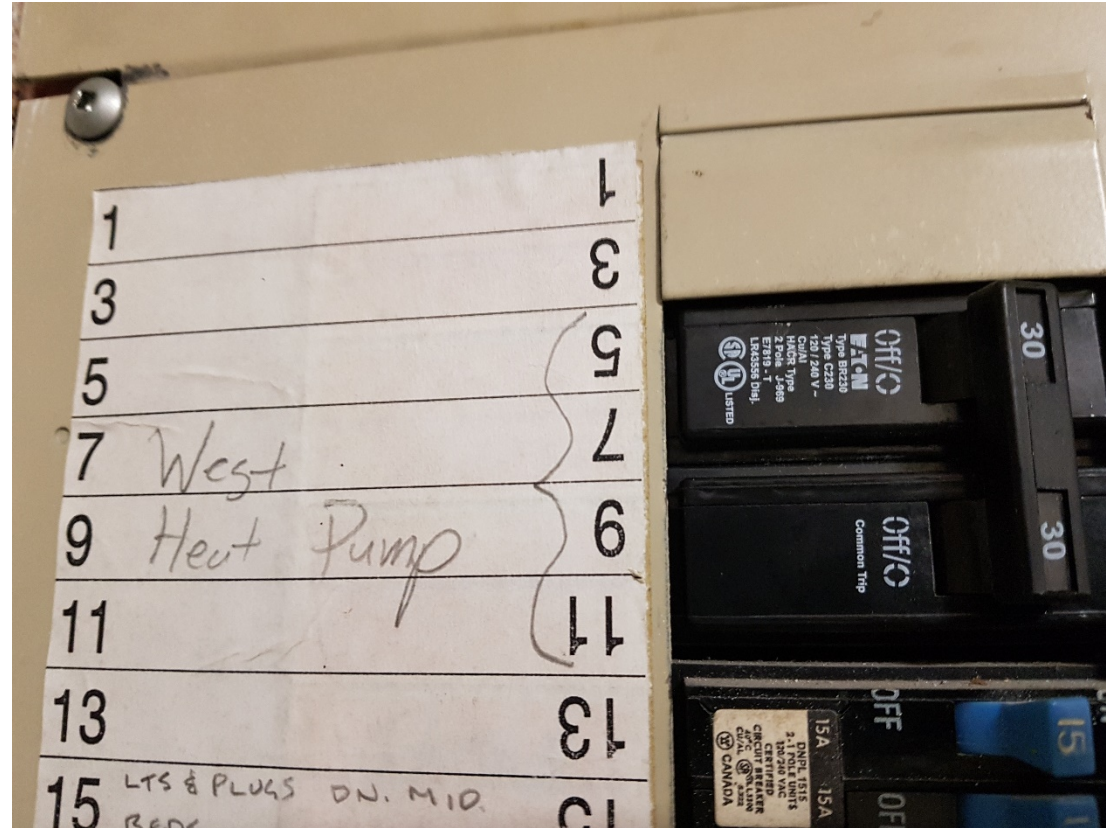
Heat Pump Type	Rebate Amount
Heat Pump Water Heaters	\$1000*

*Double the Rebates when installed prior to June 30th, 2021, for homeowners who:

- A) Received a Promo Code **prior to December 31st, 2020** and are upgrading their **electric** water heating
- B) Received a Promo Code **prior to March 31st, 2021** are upgrading their **fossil fuel** water heating

Electrical Service Upgrade Rebate

- \$500 rebates for upgrading electrical service to 100, 200, or 400 amp service
 - When in combination with any heat pump space heating or water heating rebate for system that were previously fossil fuel fired equipment.
- Municipal top ups may also be available



Heat Pump Low-Interest Financing Program

Heat Pump Type	Efficiency	Primary Fuel Before Upgrade	Interest Rate
Mini-Split or Multi-split	• HSPF ≥9.30 • SEER ≥16 • Variable speed compressor required	• Oil, • Propane, or • Natural gas	0%
Tier 2 Central System	• HSPF ≥9.30 • SEER ≥16 • Variable speed compressor required	• Oil, • Propane, or • Natural gas	0%
Tier 2 Central System with fossil fuel back up (dual fuel)	• HSPF ≥9.30 • SEER ≥16 • Variable speed compressor not required	• Propane, or • Natural gas	0%
Tier 1 Central System	• HSPF ≥8.50 • SEER ≥15 • Variable speed compressor not required	• Oil, • Propane, or • Natural gas	4.99%
Air-to-Water Heat Pump	• See Qualified Product List	• Oil, • Propane, or • Natural gas	0%

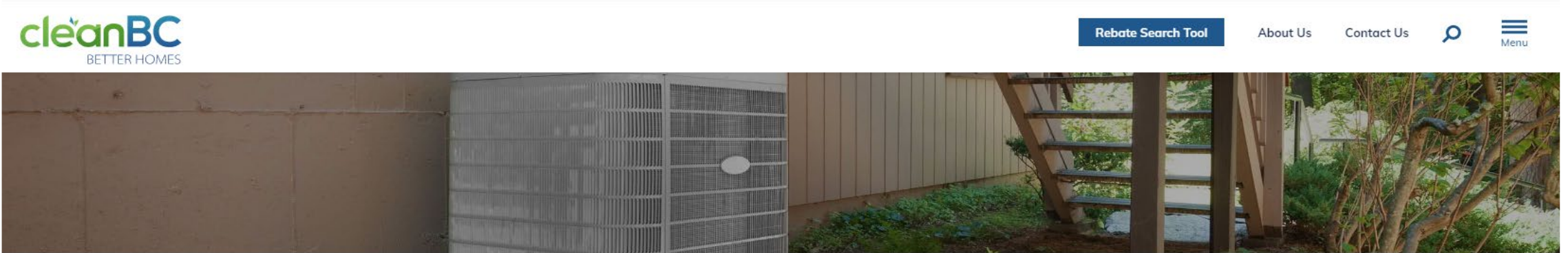
- Upgrades **must** be installed by a **Finance Registered Contractor**.
- You must have a residential utility account with FortisBC, BC Hydro or a municipal utility.
- Your home must be **primarily heated** with:
 - Natural Gas
 - Propane
 - Oil
- Premises primarily heated by wood or other solid fuels are not eligible.

<https://betterhomesbc.ca/frc/>

Financing

- Interest Rates of 0% or 4.99%, depending on heat pump efficiency over 60 months (5 years).
- Loans of \$1,000 to \$40,000 available
- Access CleanBC financing **OR** the CleanBC heat pump rebate, **but not both**.
- Municipal Offers, the Heat Pump Group Purchase Rebate, and the Electrical Service Upgrade Rebate are available on top of the financing. No additional application is required.

Group Purchase Rebate



Heat Pump Group Purchase Rebate

The Heat Pump Group Purchase Rebate (GPR) is an additional rebate offer that 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. Participants are encouraged to spread the word about their heat pump purchase group, as the larger each group becomes, the larger the rebate will be. The Group Purchase Rebate 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. The Group Purchase Rebate is additional to the individual air-source heat pump rebate of up to \$3,000 available from CleanBC and any local government top-ups that may be available.

The GPR rewards groups of homeowners working together **to switch from natural gas, oil or propane heating to an air source heat pump. Up to \$500 more in Rebates.**

GPR Rebate Amount is Based on Group Size

<https://betterhomesbc.ca/rebates/gpr/>

Available Rebates

The size of the rebate a participant can access depends on the size of the group using the same GPR Code.

Size of Group	Each Participant Receives
2-4 homes	\$200
5-9 homes	\$275
10-14 homes	\$350
15-19 homes	\$425
20-30 homes	\$500

- The [CleanBC Better Homes and Home Renovation Rebate Program](#) is offering \$3,000 heat pump rebates for fuel switching from fossil fuel to a heat pump in addition to the Group Purchase Rebate.
- Select municipalities have [Municipal Offers](#) of up to an additional \$2,000 that can be accessed only when converting from fossil fuel heating (natural gas, oil, or propane) to an electric air-source heat pump.

FINDING A HEAT PUMP CONTRACTOR



Finding a Heat Pump Contractor

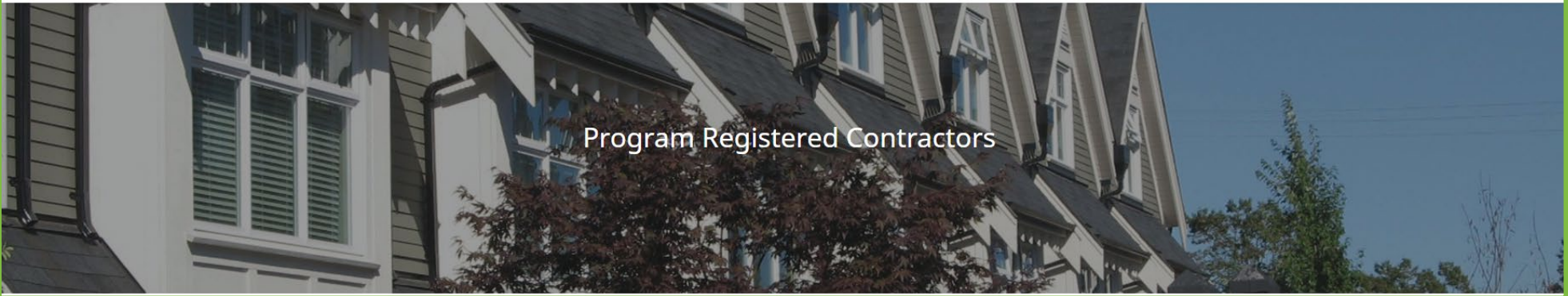


[Rebate Search Tool](#)[About Us](#)[Contact Us](#)





Menu



Program Registered Contractors

Find a Program Registered Contractor near you

What **type** of efficiency upgrade are you planning?

Heat Pump

Where is the home **located**?

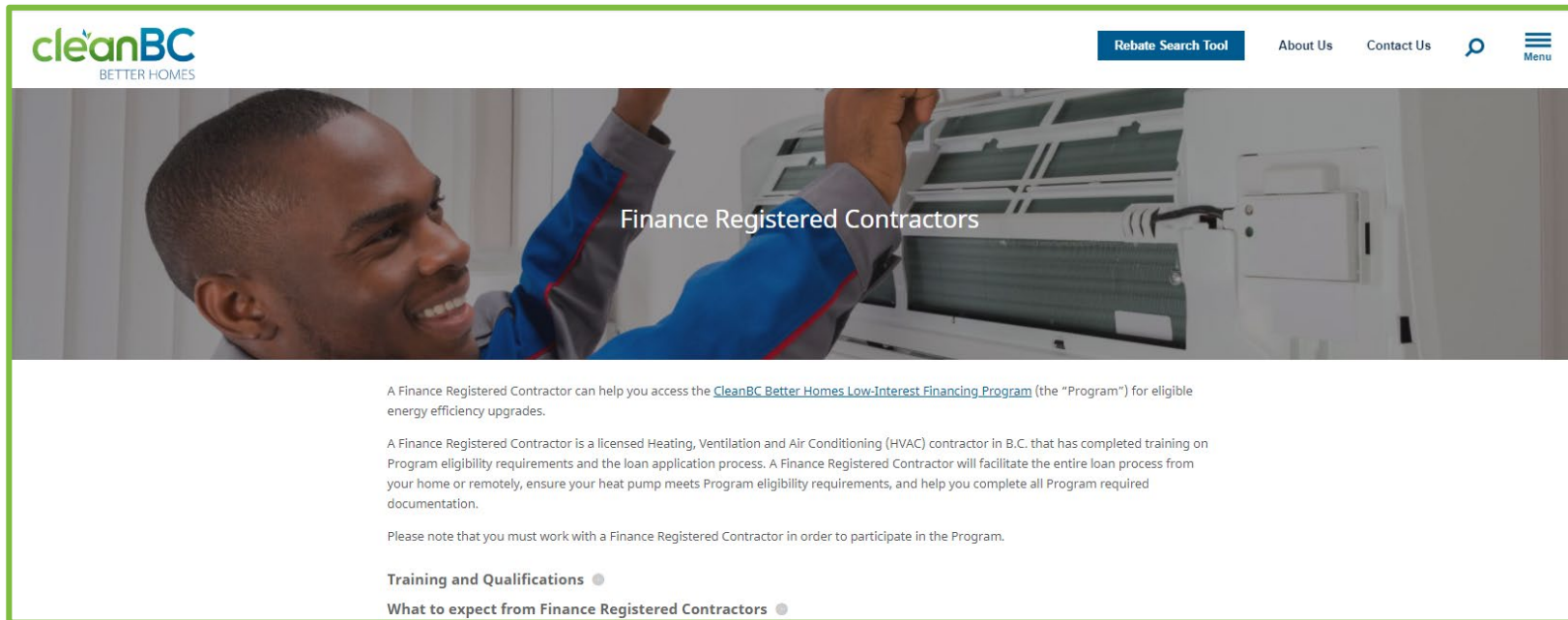
Enter municipality or regional district

Submit

<https://betterhomesbc.ca/prc/>

[Become a Program Registered Contractor](#)

Finding a Finance Contractor



- Homeowners looking to access the **CleanBC Better Homes Low-Interest Financing Program** **must work** with a Finance Registered Contractor.
 - Just like the PRC Search Tool, find a contractor based on your location.

<https://betterhomesbc.ca/frc/>

Questions, Contacts

- CleanBC Energy Coach Service
 - 1-844-881-9790
 - ask@betterhomesbc.ca
- BC Hydro Program Admin
 - 1-877-338-3347 ex.3
 - homerebates@bchydro.com
- FortisBC Program Admin
 - 1-855-909-2329
 - homerebates@fortisbc.com





**Township of
Langley**
Est. 1873

Green Buildings Team



Kevin Ramlu
Green Buildings
Manager



Ajeen Surendran
Building Energy
Specialist



Sarah Maleska
Green Buildings
Technical Assistant

Questions? Email us at greenbuildings@tol.ca

Or call 604-533-6018 and you will be transferred to one of us

YOUR QUESTIONS?

