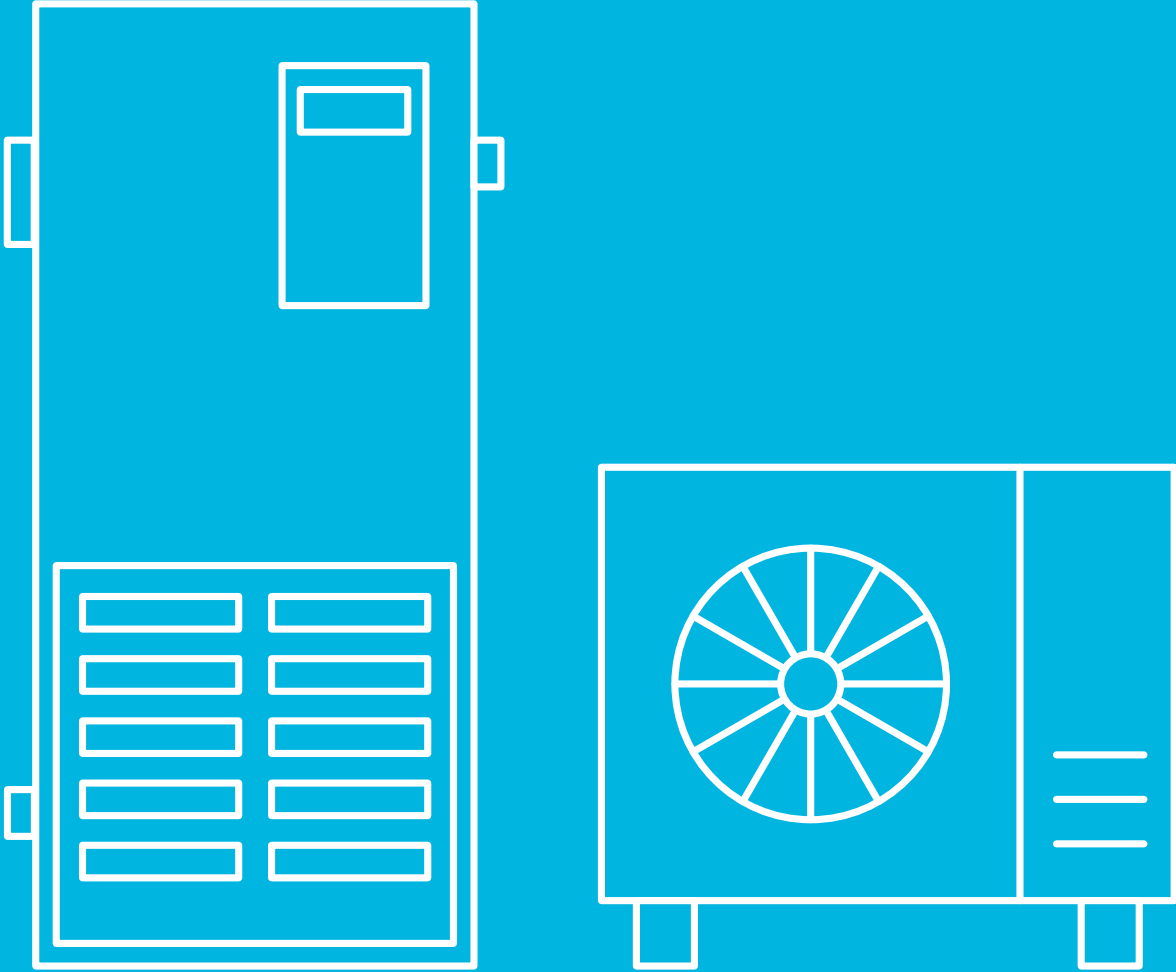


Bringing the heat:

British Columbians concerned over energy costs, unaware that going all in on gas does not make dollars or sense.



Bringing the heat: British Columbians concerned over energy costs, unaware that going all in on gas does not make dollars or sense.

The cost of energy is causing growing concern for British Columbians, especially with colder weather just around the corner, causing home heating to become top of mind. Heating a home during the cold winter months is often one of the biggest household expenses and recent increases in natural gas prices are further adding to those costs. As a result, it is now cheaper to heat with an electric heat pump. However, many British Columbians still think natural gas is the cheapest option causing them to miss out on savings as well as the opportunity to reduce their carbon emissions by switching energy sources.

Highlights

- A recent survey¹ conducted on behalf of BC Hydro finds British Columbians are increasingly concerned with home heating costs with the colder months arriving—especially those that rely on natural gas who have seen the cost increase by 31% and set to go higher for some.
- In contrast, BC Hydro rates are among the lowest in North America and decreased by 1.4% this year.
- Of those with natural gas as a main heating source:
 - 59% are more worried this year than in previous years about their home heating bills.
 - 77% said they are concerned about the rising cost of natural gas.
 - 77% also said they expect their heating costs to go up this winter.
 - 53% said home heating is taking up a larger part of their household budget this year.
- Yet, many British Columbians have a misconception that natural gas is the least expensive way to heat their home.
- In fact, with the increase in natural gas costs, most British Columbians (56%) are unaware that if they switch to using a heat pump the average customer will see savings².
- Despite a rise in cost, many (45%) still think it is more expensive to heat a home with an electric heat pump than with a natural gas furnace, and 44% who do not use a heat pump said they would not consider switching to a heat pump.
- Electric heating with a heat pump is a much cleaner, and less expensive option in B.C. where 98% of the electricity BC Hydro generates comes from clean or renewable resources that are mostly powered by water.

Solutions

An electric heat pump is the clean, low-cost way to heat and cool your home. For the average household in B.C., it is less expensive to heat with an electric heat pump than a natural gas furnace. A natural gas furnace costs around \$731/year to operate, compared to \$642/year for an electric heat pump, with natural gas rates set to go even higher for some British Columbians.

- Switching to an electric heat pump powered by water will reduce the average household's greenhouse gas emissions by about two tonnes per year while saving your household money.
- BC Hydro offers up to \$3,000 in rebates for switching from a fossil fuel based system, which can be combined with provincial and federal rebates for a total savings of up to \$11,000 on cost and installation with some municipalities adding additional rebates on top of that. Up to \$2,000 in rebates are available for customers switching from electric baseboard heating, with an additional \$5,000 in federal rebates available.

¹ Online survey conducted by Majid Khoury of 800 British Columbian households who pay for their home heating from Sept 12–16, 2022—margin of error 3.46%.

² Updated Nov. 2, 2022

Expenses increasing

Inflation has steadily increased over the past year, driven by heightened consumer demand and challenges to supply chains across the country³. The rising cost of everyday necessities is a worry for many British Columbians and adding to that is growing concern over the cost of the energy they use to heat their homes over the winter months.

However, a recent survey conducted on behalf of BC Hydro finds despite increasing concern over energy costs, many British Columbians have a misconception that natural gas is the least expensive way to heat their home.

This report will examine how with the recent increase in natural gas prices, British Columbians may be missing out on savings by not switching fuel sources as well as the opportunity to reduce their personal carbon footprint.

Costs heating up

Colder weather is just around the corner and heating a home is often one of the biggest household expenses over the colder winter months. In fact, 53% of British Columbians said they are concerned about the cost of heating their home this winter. Compared with previous years, 70% said they expect the cost of heating their home to rise.



53% of British Columbians are concerned about the cost of heating their home this winter.

When considering a heating system, the monthly cost matters to most—51% said how much it costs per month to heat their home was a main factor in choosing a heating source. Despite this, many British Columbians (43%) heat their home primarily with a natural gas forced air system and think natural gas heating is the least expensive option—and this could be costing them, and the environment.

Natural gas rising

The cost of natural gas is on the rise—up about 31% since the spring—with prices set to go even higher for some customers, and British Columbians with natural gas heating are starting to take notice of their costs going up, often unaware that there is a cheaper, cleaner electric option. For example, 77% of those with a natural gas furnace said they are concerned about the rising cost of natural gas, with another 77% expecting their heating costs to go up this winter.



The cost of natural gas is up about 31%

In fact, 64% of those that heat their home primarily with natural gas said they often pay on average between \$100–\$299 in heating bills over peak winter months (December to March). In contrast, 16% of those that use a heat pump said they pay under \$100 over the same peak winter months.

³ Statistics Canada—Portrait of Canadian Society 2022

Top cost concerns of households with natural gas heating



77% concerned about the rising cost of natural gas.



59% more worried this year than in previous years about their home heating bills.



53% said home heating is taking up a larger part of their household budget this year.

Rate comparison

Despite a rise in cost, many (45%) still think it is more expensive to heat a home with an electric heat pump than with a natural gas furnace.

In fact, with the increase in natural gas costs, most British Columbians (56%) are unaware that if they switch to using a heat pump the average customer will see savings. BC Hydro rates are among the lowest in North America and decreased by 1.4% this year.

So, with the cost of natural gas on the rise, it is now less expensive to heat a home with an electric heat pump than a natural gas furnace, and it is also much better for the environment.

For example, a natural gas furnace costs around \$731 a year to operate, compared to \$642 a year to operate an electric heat pump (see chart below). However, the exact savings will depend on home size and region. While Lower Mainland and Vancouver Island residents will see the most cost savings from making the switch, the cost gap in Northern B.C. and the Southern Interior is closing. Rebates of up to \$11,000 are also available to help make the switch to a heat pump easier. Combined rebates of up to \$14,000 are also available for eligible Northern customers that switch from a fossil fuel heating source to an electric heat pump.

Cost of heating with a heat pump vs gas per year for average B.C. household

**Fortis BC
\$731**



**BC Hydro
\$642**



*Based on 47 GJ of energy for home heating; a furnace efficiency of 92.5% and a heat pump with a Coefficient of Performance (COP) of 2.55.

Making the switch

Heating a home with an electric heat pump is a much cleaner, and now less expensive option in B.C., where 98% of the electricity BC Hydro generates comes from clean or renewable resources that are mostly powered by water.

However, 44% of British Columbians surveyed said they would not consider switching to a heat pump. For those who live in single family or townhomes where they have control over the heating method, this may be in part due to the misconception that heating with natural gas is a less expensive option. In fact, 42% said it is more important to them to save money on their energy bills than to lower their greenhouse gas emissions.

An electric heat pump is the clean, low-cost way to heat and cool your home. For the average household in B.C., it is less expensive to heat with an electric heat pump than a natural gas furnace. Switching to an electric heat pump powered by water will reduce the average household's greenhouse gas emissions by about two tonnes per year while saving your household money.

BC Hydro offers up to \$3,000 in rebates for switching from a fossil fuel based system, which can be combined with provincial and federal rebates for a total savings of up to \$11,000 on cost and installation with some municipalities adding additional rebates on top of that. Up to \$2,000 in rebates are available for customers switching from electric baseboard heating. Combined rebates of up to \$14,000 are also available for eligible Northern customers that switch from a fossil fuel heating source to an electric heat pump. Currently, BC Hydro does not offer heat pump rebates on multi-unit residential buildings, however it is looking at working with partners on policies to encourage fuel switching in these types of dwellings. Apartments, condos and townhomes may have rules against installation since they often use a central system for the whole building.

If installing a heat pump is not an option at your home, BC Hydro recommends draftproofing around windows and doors to reduce heat loss by 10%. Also, avoid cranking up the thermostat—cranking up the thermostat does not heat the home up faster than turning it up a degree or two at a time.

For more information on heat pumps and heat pump rebates visit [bchydro.com](https://www.bchydro.com).

