

# HEAT PUMPS: YEAR-ROUND COMFORT FOR CANADIAN HOMES

RELIABLE. EFFICIENT. ALL-SEASON COMFORT.  
*EVEN IN CANADIAN WINTERS*







## DID YOU KNOW?

HEAT PUMPS ARE USED IN 60% OF HOMES IN NORWAY – AND THEY WORK IN CANADIAN WINTERS TOO!

# WHY HEAT PUMPS?



## Heat pumps are the future of home heating and cooling

-  The most **sustainable** way to heat a home and reduce greenhouse gas emissions
-  Use the same **trusted technology** that keeps food safe in your freezer
-  **Proven in cold climates:** in Norway, 60% of homes use a heat pump for heating
-  **Safer:** no risk of gas leaks or carbon monoxide




## There are different types of heat pumps

- Air-source heat pumps (ASHP):** Work by exchanging heat with outside air
- Cold climate air-source heat pumps (ccASHP):** Optimized to perform at low temperatures
- Ground-source heat pumps (GSHP):** Draw heat from the earth or water source



## Matching Heat Pumps to Your Home

Your contractor can help you decide which heat pump option works best for your home.

Current system:	Recommended heat pump:
 Centrally ducted	Most heat pumps
 Radiators or boilers	Air- or ground-to-water systems
 Baseboard heating	Heat pump with a mini- or multi-split distribution system

## Will I Need a Backup Heat Source?


All-electric heat pumps can efficiently heat most Canadian homes throughout the winter.

Many cold-climate models continue to operate efficiently with high output down to -25°C!

Many models include a built-in backup heater for extra warmth on the coldest days.

You can pair a smaller heat pump with a furnace, boiler, or other system that takes over heating below a set temperature. This may be a good option if:

- You own a newer furnace or boiler
- Your existing ductwork is undersized
- An all-electric cold-climate heat pump is outside your budget

 Ask your contractor to use a **heat load calculation** to determine the right size for your heat pump



# WHY HEAT PUMPS ARE A SMART UPGRADE

- Cozy, even heat makes your home **more comfortable**
- **One system** that heats in winter and cools in summer
- The **most energy efficient** way to heat and cool your home
- Can **lower bills** in homes with baseboard, propane or oil heating
- **Safer for your family** – no risk of carbon monoxide
- Helps Canada **cut climate pollution**, one home at a time
- A smart, **one-time upgrade** with a big, **lasting impact**



## How Does Heating with a Heat Pump Compare to a Furnace?



- Delivers **steady, even warmth** instead of bursts of hot air



- Works best when **kept at a consistent temperature** – no need to lower the thermostat at night



- Provides both **heating and cooling** in one system



- Both **heat pumps and furnaces require electricity** to operate – neither will run during a power outage\*



- **Lower gas bills** help offset added electricity costs



- Can be powered with **rooftop solar** for **greater energy independence**



“Natural gas furnaces seem like an extremely outdated technology in comparison to heat pumps, like still having a landline instead of a cell phone!”

– Rebecca, Victoria

*\*A hybrid system with a furnace backup can more readily be powered by a generator during an outage.*



# WHAT QUESTIONS SHOULD I ASK MY CONTRACTOR?

To make sure you get the right heat pump for your home, choose a contractor who takes the time to understand your needs and can confidently answer questions like these:

- ☐ Are you a registered Home Performance Contractor Network (HPCN) member?  
Membership may be required to access incentives.
- ☐ Do you use heating load calculations to size the system?
- ☐ Will you assess my ductwork and air flow to size the system?
- ☐ Will my home need electrical or other upgrades?
- ☐ Where will the equipment be installed?
- ☐ What is the total installed cost, and will I be eligible for any incentives?
- ☐ For hybrid heat pumps, at what temperature will the system switch to backup heat?
- ☐ Will you show me how to maintain the system and program the thermostat?
- ☐ Tell me about your warranties, qualifications, experience and references.

✓ **Tip: It's a good idea to compare quotes from a few qualified installers to find the best fit for your home.**



Look for a registered Home Performance Contractor Network (HPCN) member to access incentives – contractors with training on best practices and provincial rebates. Visit [homeperformance.ca/find-a-contractor](http://homeperformance.ca/find-a-contractor) to check.



## Learn More

**Canada's Home Electrification Toolkit** can help you electrify all aspects of your home, and avoid an electrical panel upgrade.

## Presented by:

**The Building Decarbonization Alliance** is a non-partisan and cross-sector coalition working towards a future where electrified buildings are part of an affordable and resilient energy system that contributes to a prosperous, sustainable, and decarbonized Canada. [buildingdecarbonization.ca](http://buildingdecarbonization.ca)

**Plumbing+HVAC Magazine** is Canada's largest and most qualified circulation to the mechanical trades with more than 25,000 readers. [plumbingandhvac.ca](http://plumbingandhvac.ca)

Founded in 1968, the **Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)** is a non-profit national trade association that represents more than 1,150 member companies in the heating, ventilation, air conditioning and refrigeration (HVACR) industry. [hrai.ca](http://hrai.ca)

The **Building to Electrification Coalition (B2E)**, powered by Zero Emissions Innovation Centre, is a broad coalition working together to electrify buildings in BC to reduce their climate impacts and reliance on fossil fuels. [b2electrification.org](http://b2electrification.org)

The **Home Performance Stakeholder Council (HPSC)** works with qualified contractors committed to working together to advance home performance in British Columbia. [homeperformance.ca](http://homeperformance.ca)

