State of Play

Tracking the **progress of building electrification** across Canada

2026 Edition

June 23, 2026

BUILDING DECARBONIZATION Alliance
POUR LA DÉCARBONATION DES BÂTIMENTS

What’s Inside?

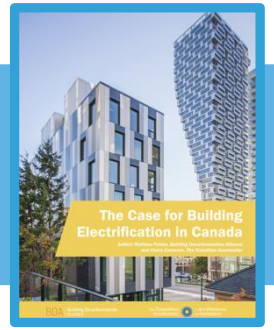
About the State of Play

- **What it is:** an annual snapshot tracking the progress of building electrification across Canada.
- **Why now:** space and water heating are the largest levers for electrifying buildings, yet progress remains uneven across provinces.
- **What’s inside:** where heat pump and electrification adoption stands today, where it is on and off track, and the opportunities to accelerate it.

Three reports, now in one

Previously published as three standalone reports, refreshed and combined here into one concise, updated picture

1

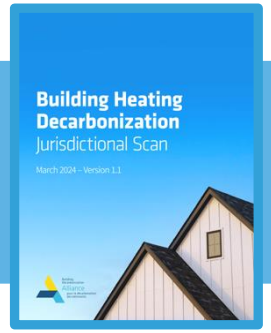


The Case for Building Electrification
Where adoption stands today across homes and commercial buildings.

2

Pace of Progress
How fast electrification is advancing versus where it needs to be.

3



Jurisdictional Scan
Progress in different provinces and internationally.

A summary of where things stand on building electrification

1

Buildings dominate end-use electricity demand

a. Buildings account for most of Canada's electricity demand
b. Space and water heating are the biggest levers to electrify buildings
c. Efficient electrification leads to savings for most Canadians

2

Residential heat pumps are gaining ground, but adoption is uneven and still off track in most provinces

a. Canadians are adopting heat pumps, led by the Atlantic provinces
b. Heat pumps can help address the rise in cooling demand
c. Heat pumps outsell other household cooling and heating equipment
d. Apartment renters are being left behind on heat pumps
e. Technology adoption roughly follows an S-curve
f. Residential heat pump adoption is still not on track in most provinces
g. Homes with electric resistance are a major opportunity for heat pump conversion
h. Heat pump adoption increases as the electricity to fuel cost ratio drops
i. Residential electric water heater adoption is on track in most provinces
j. Awareness of heat pumps is rising, and owners recommend them

3

Commercial electrification has room to grow

a. Electrifying space heating in commercial buildings is largely not on track
b. Electrifying water heating in commercial buildings is not on track

4

What is happening elsewhere?

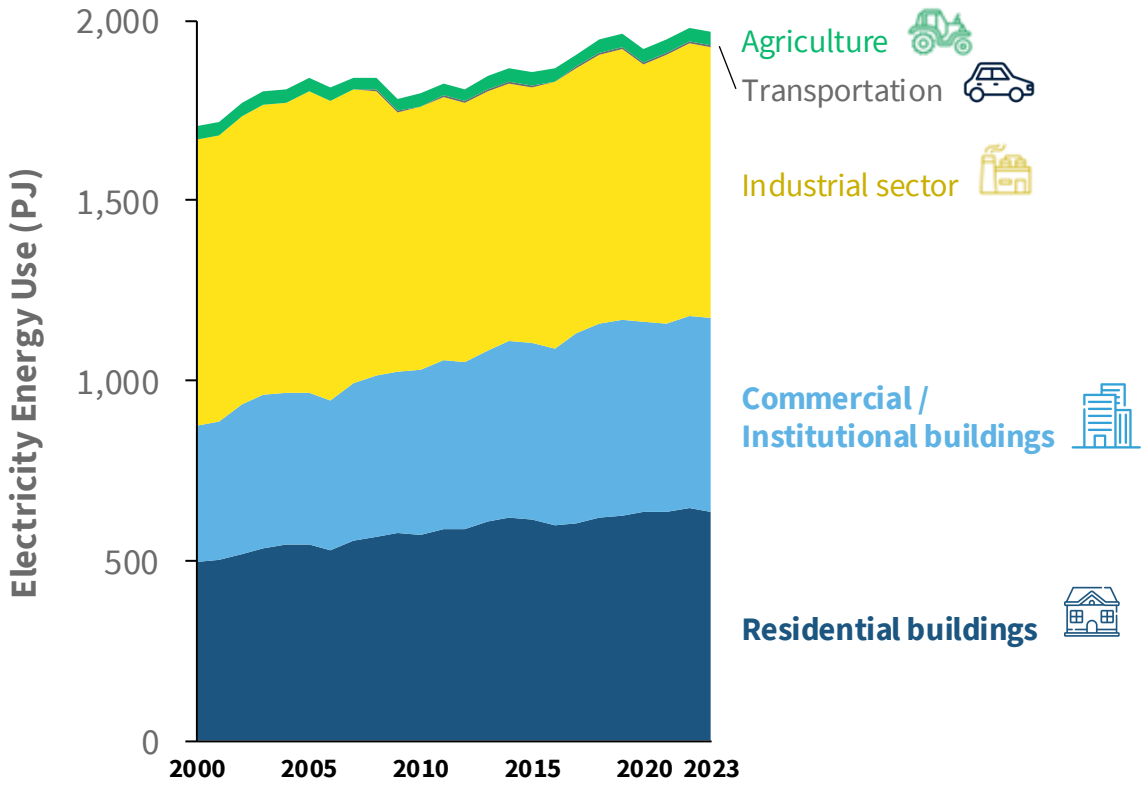
a. Notable progress is encouraging building electrification around the world

Buildings dominate end-use electricity demand

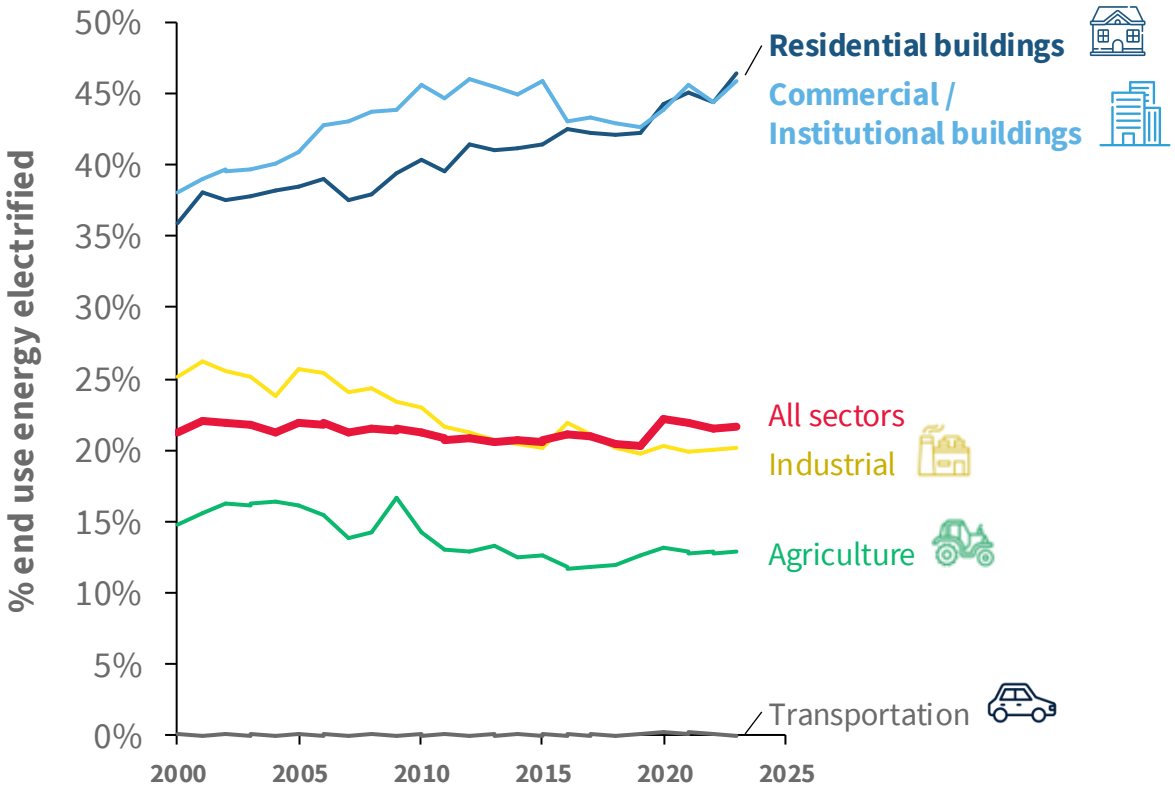
1.a. Buildings account for most of Canada's electricity demand

The majority of Canada's end-use electricity demand comes from the building sector, and this will only increase as buildings electrify.

Commercial and residential buildings account for 60% of Canada's overall electricity demand



And there is still opportunity for that demand to grow

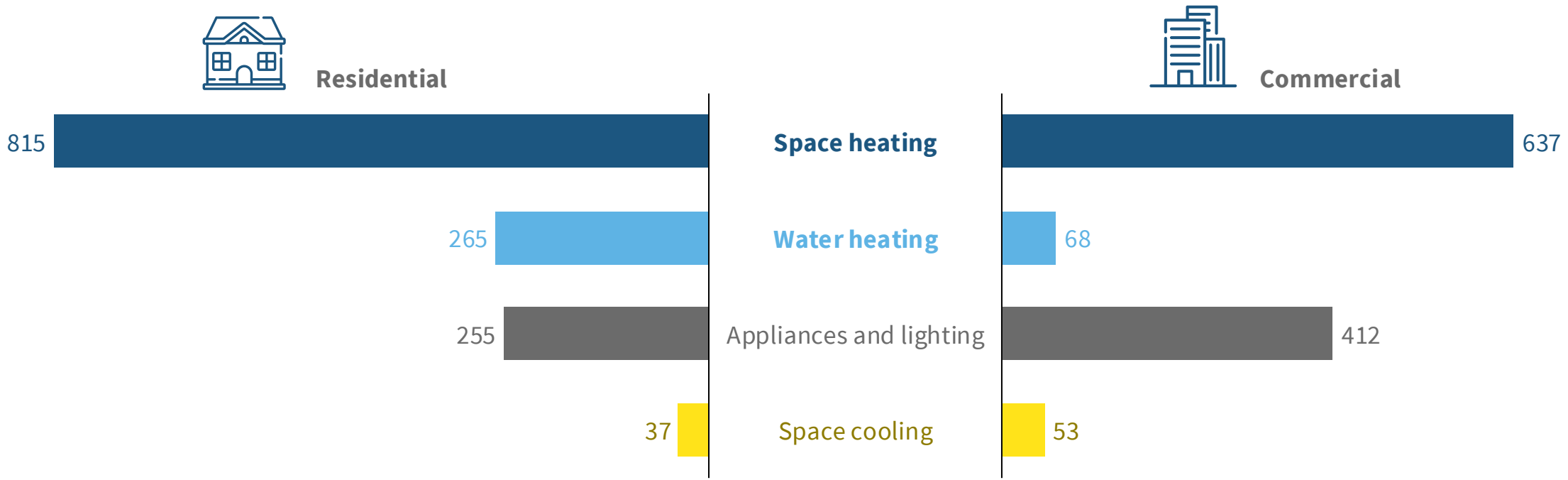


Source: Comprehensive energy use database, 2023 data.

1.b. Space and water heating are the biggest levers to electrify buildings

Space and water heating dominate building energy use, making them the highest leverage areas to help build the foundation of an electrified economy.

Space and water heating respectively account for 57% and 13% of total Canadian building energy use (PJ)

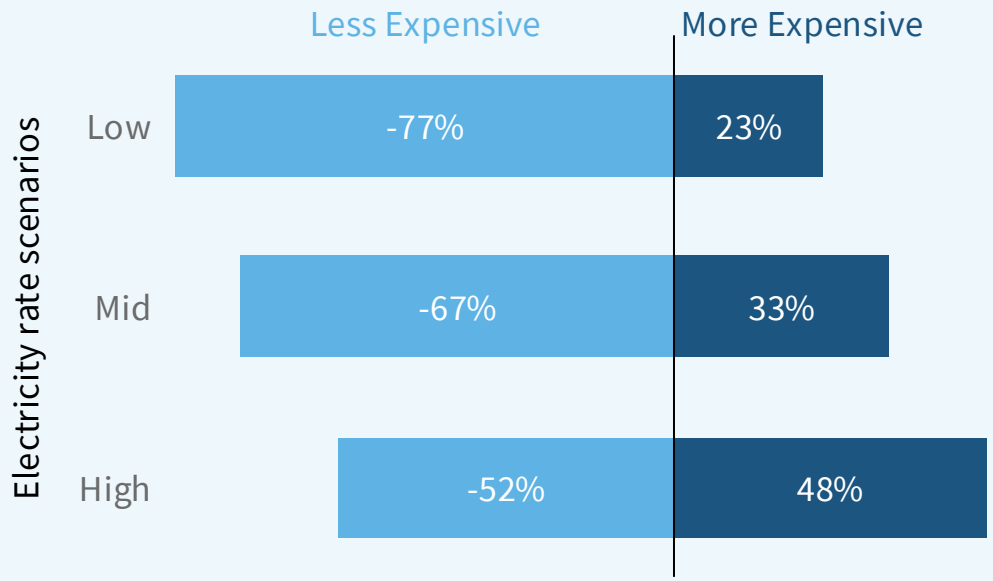


Source: Comprehensive energy use database 2023 data

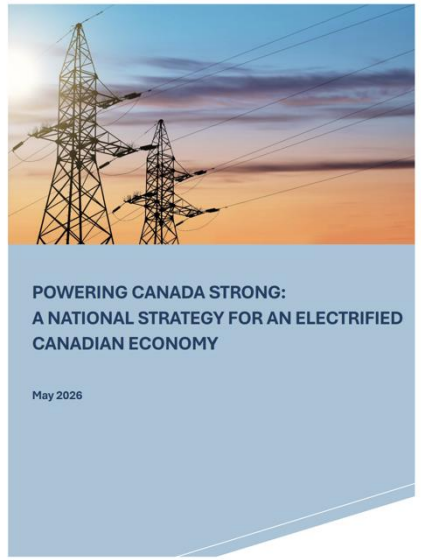
1.c. Efficient electrification leads to savings for most Canadians

Done right, **electrification could save Canadians $15 billion in energy costs**, with **7 out of 10 Canadian households paying less by 2050**, but only if demand and the grid grow at the same pace.

Electrification can lead to savings for most households by 2050



[Powering Canada Strong](), the national electricity strategy, sets a goal of doubling Canada's electricity supply by 2050.



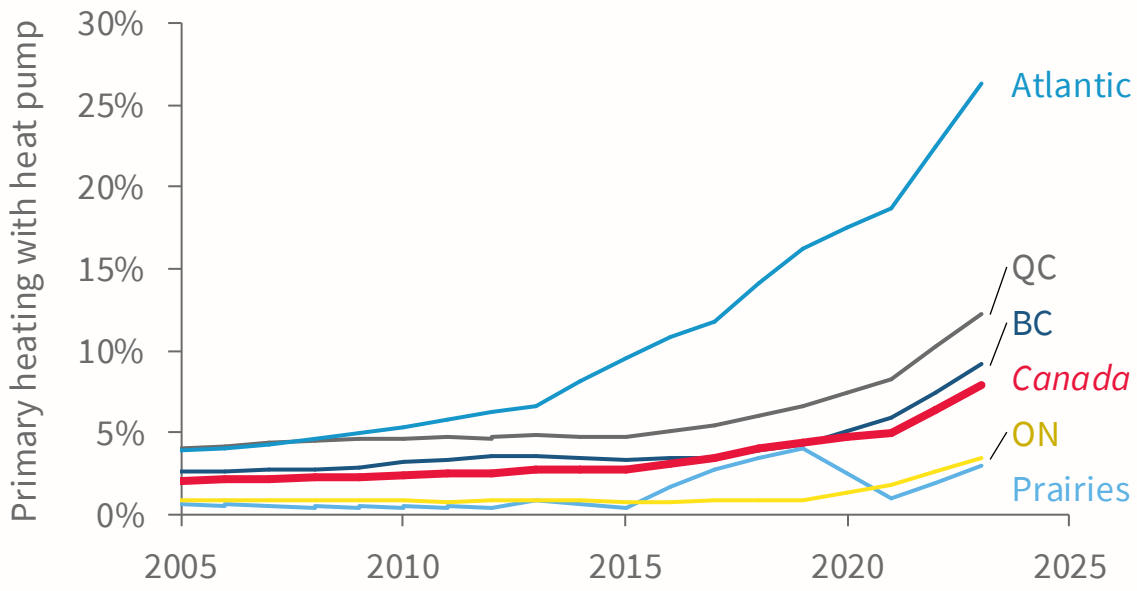
Households with more expensive energy wallets tend to be: ones that do not own a personal vehicle, which are disproportionately low-income, and ones that currently heat their homes with natural gas and reside in regions with high 2050 electricity rates.

Residential heat pumps are gaining ground, but adoption is uneven and still off track in most provinces

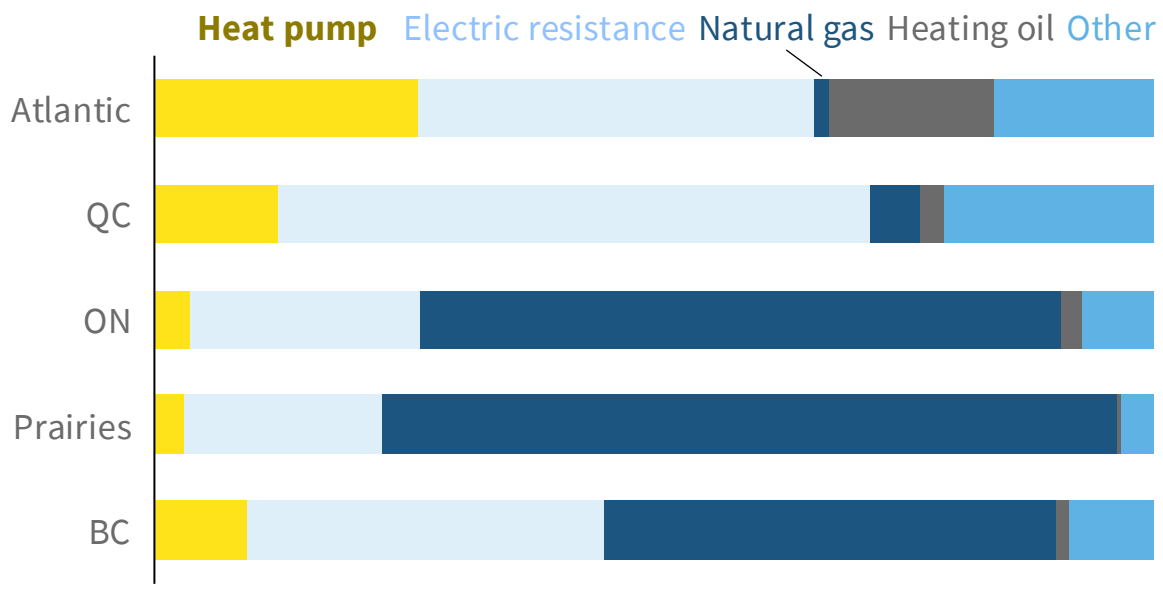
2.a. Canadians are adopting heat pumps, led by the Atlantic provinces

By 2023, nearly **8% of Canadian homes used heat pumps** as their primary heating source, with the Atlantic provinces leading the way

Heat pumps increased as primary heating source



Atlantic region has greatest proportion of heat pumps



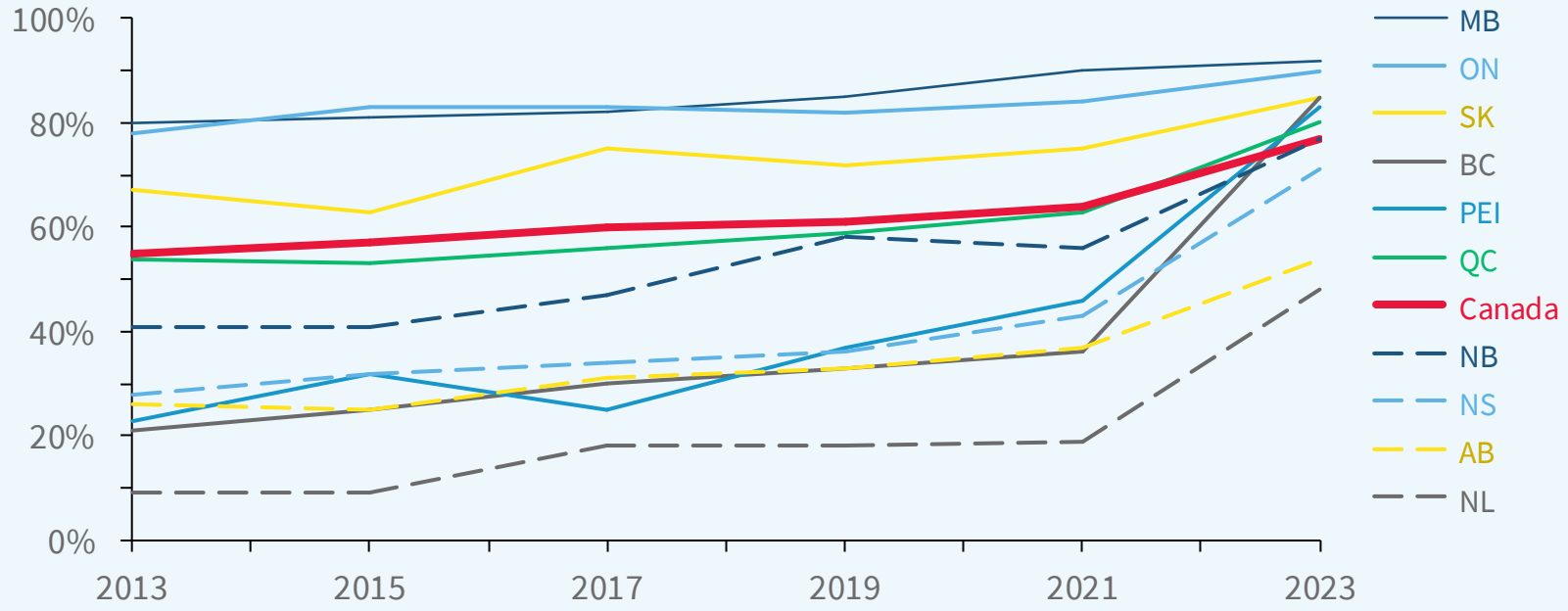
Source: Comprehensive energy use database 2023 data

Notes: Other includes wood, propane, and dual fuel heating systems. How respondents classify the primary system in dual-fuel homes can significantly affect the results and lead to volatility, especially in the

2.b. Heat pumps can help address the rise in cooling demand

At the same time, nearly **4 out of 5 Canadians have access to air conditioning**, but this varies significantly by province

Air conditioning adoption is rising across Canada



Demand for cooling supports heat pump adoption

Clean Energy Canada's survey shows cooling is a significant motivating factor for heat pump purchases:

- **30%** replaced an old central air conditioning system or added cooling for the first time.
- **44%** replaced or supplemented fossil heating, gaining cooling in the process.

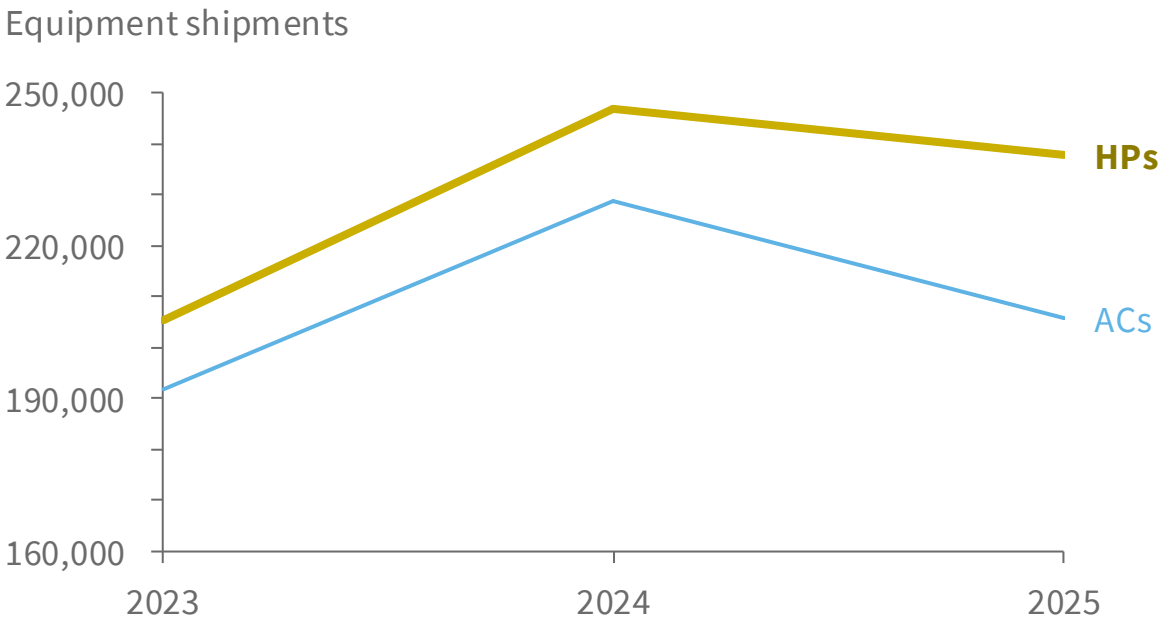
Every new cooling purchase is a chance to install a heat pump instead of an air conditioner, one of the best opportunities to grow heat pump adoption.

Source: Statistics Canada, Table 38-10-0019-01.
Chart shows % of air conditioners, with heat pumps blended into this category.

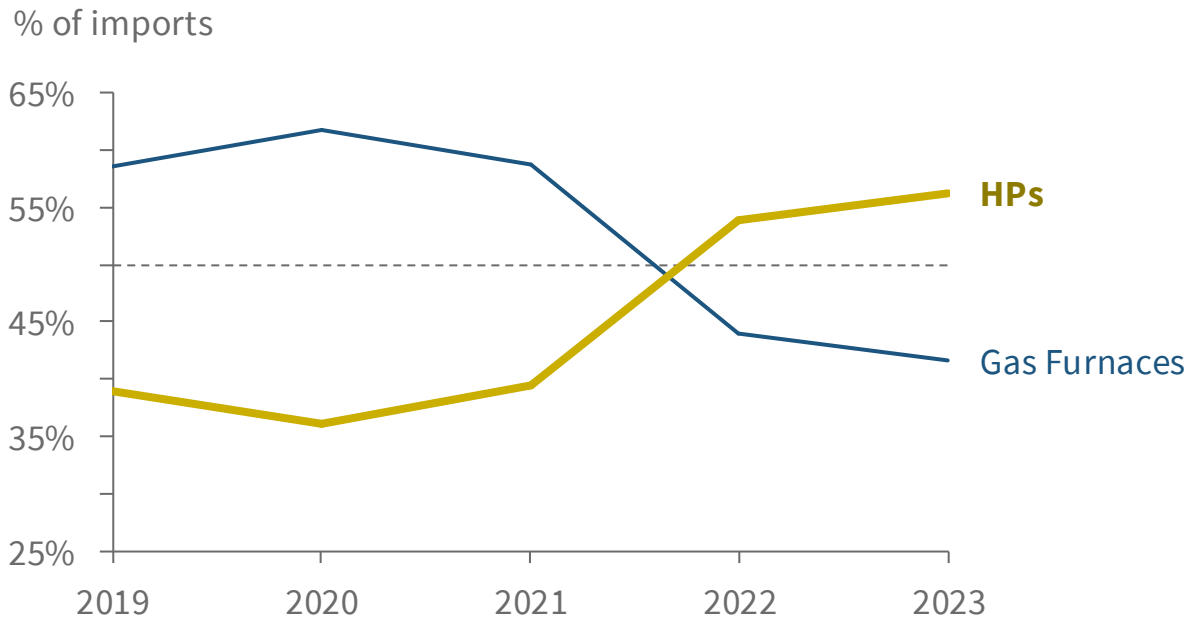
2.c. Heat pumps outsell other household cooling and heating equipment

Residential **heat pumps (HPs) outsell air conditioners (ACs)** across Canada and outsell gas furnaces in BC

HP shipments outnumber AC shipments across Canada



BC HP imports exceeded those of gas furnaces

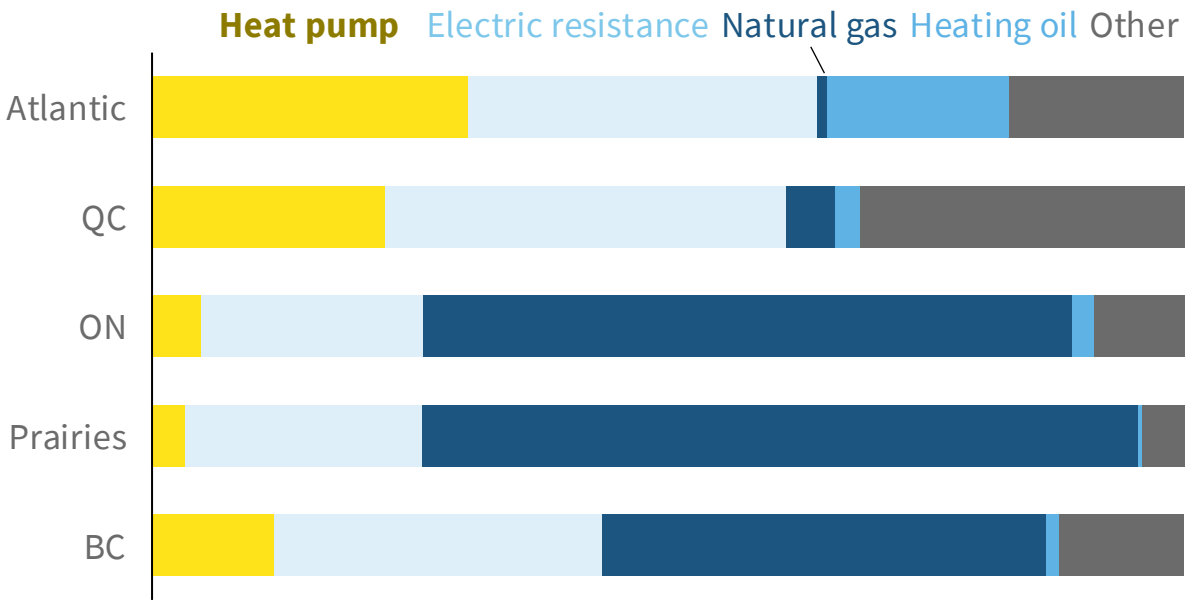


Sources: Canadian shipments from HRAI (1, 2, and assumes *Ductless Split Systems* are 90% HPs and 10% ACs)
BC import data extracted from Gov of BC Powering our Future: BC's Clean Energy Strategy. The HP-vs-furnace comparison is shown for BC only, the only province to publish furnace data.
Notes: We use shipments and imports as proxies for equipment sales. HP stats include minisplits, even though one home may need multiple units to replace a single furnace.

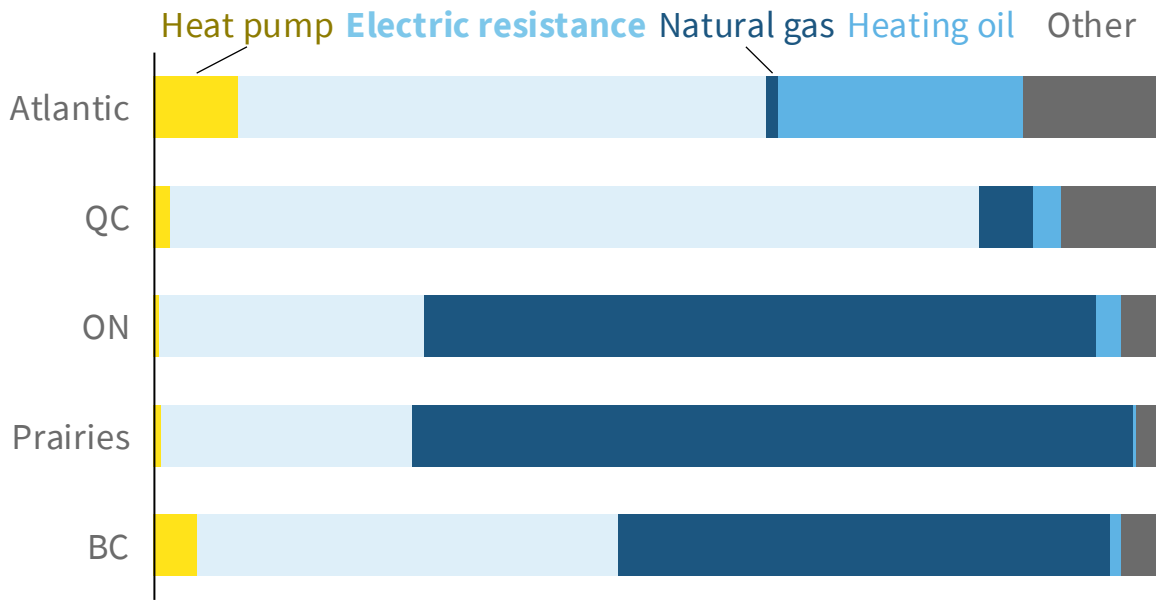
2.d. Apartment renters are being left behind on heat pumps

While **single family homes are increasing their heat pump adoption, apartment buildings continue to rely on electric resistance heating** — locking renters into higher-cost heating as landlords delay retrofits.

Heat pumps are becoming common in **single family homes**



Electric resistance is common in **apartment buildings**

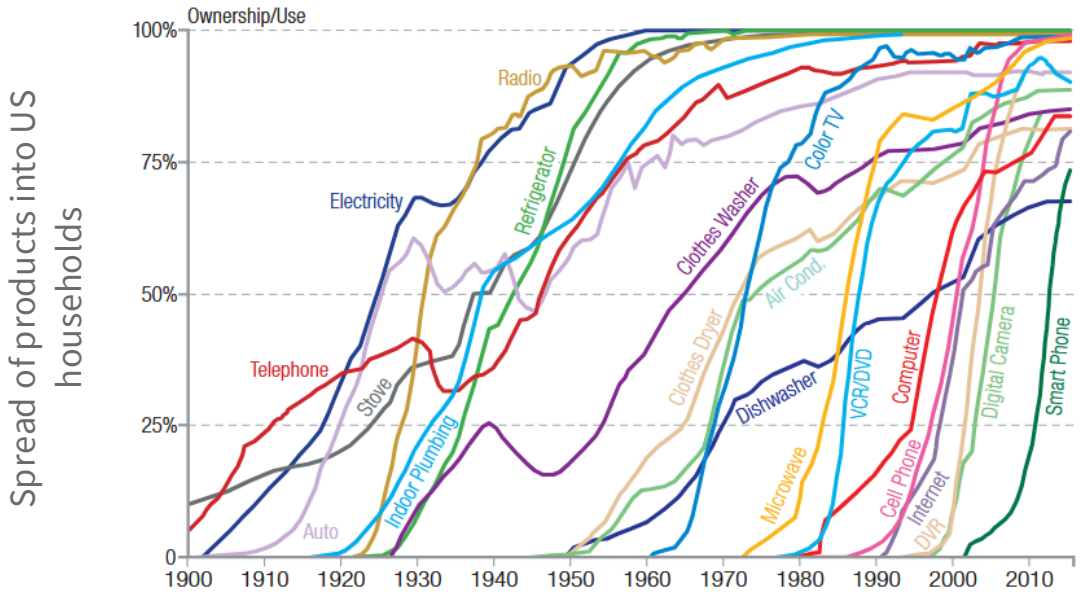


Comprehensive energy use database, 2023 data.
Other includes wood, propane, and dual fuel heating systems.

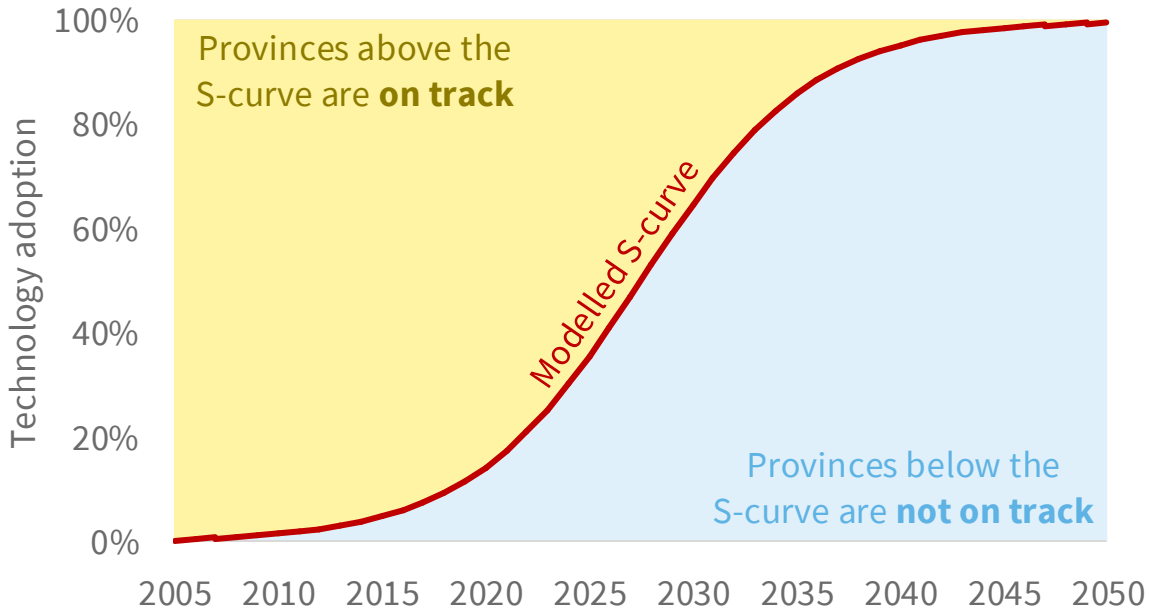
2.e. Technology adoption roughly follows an S-curve

We can **see where adoption levels are today relative to where they should be** to achieve 100% heat pump adoption in 2050

Historical technology adoptions have followed S-curves



Comparing adoption to an S-curve helps show progress

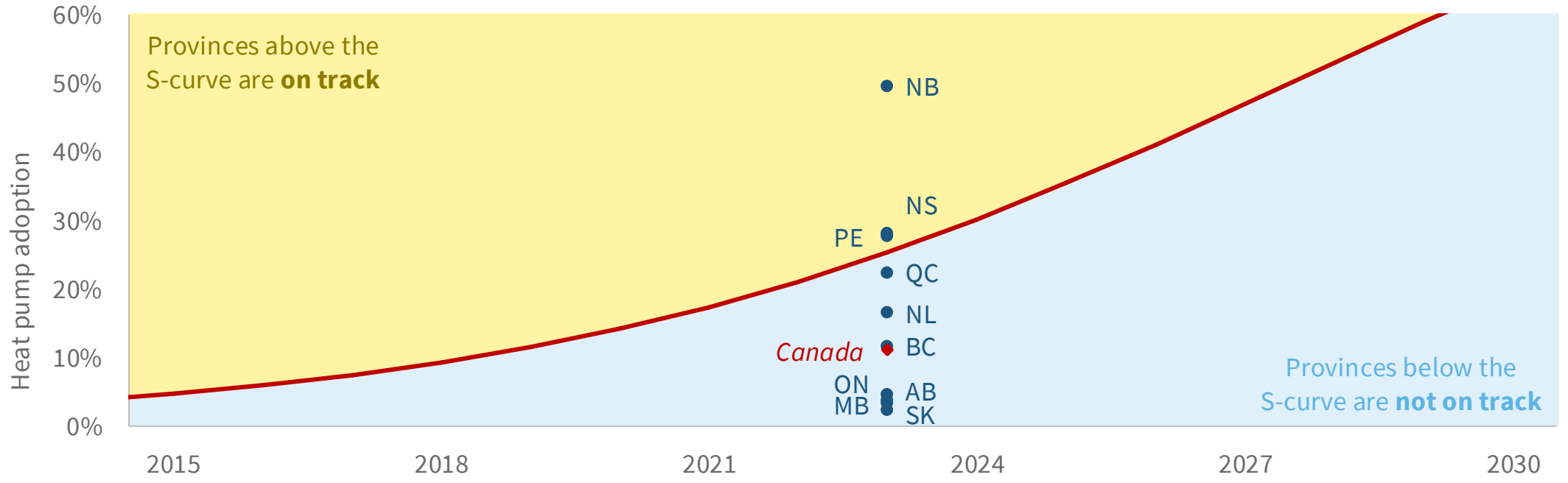


Source: Cox and Alm (2016). Onward and Upward.
We've assumed the S-curve (red-line) goes from near-zero penetration in 2005 to 100% adoption by 2050

2.f. Residential heat pump adoption is still not on track in most provinces

Heat pump adoption in single family homes is **only on track in the Maritimes**

Provinces are at different places on the S-curve for heating system stock

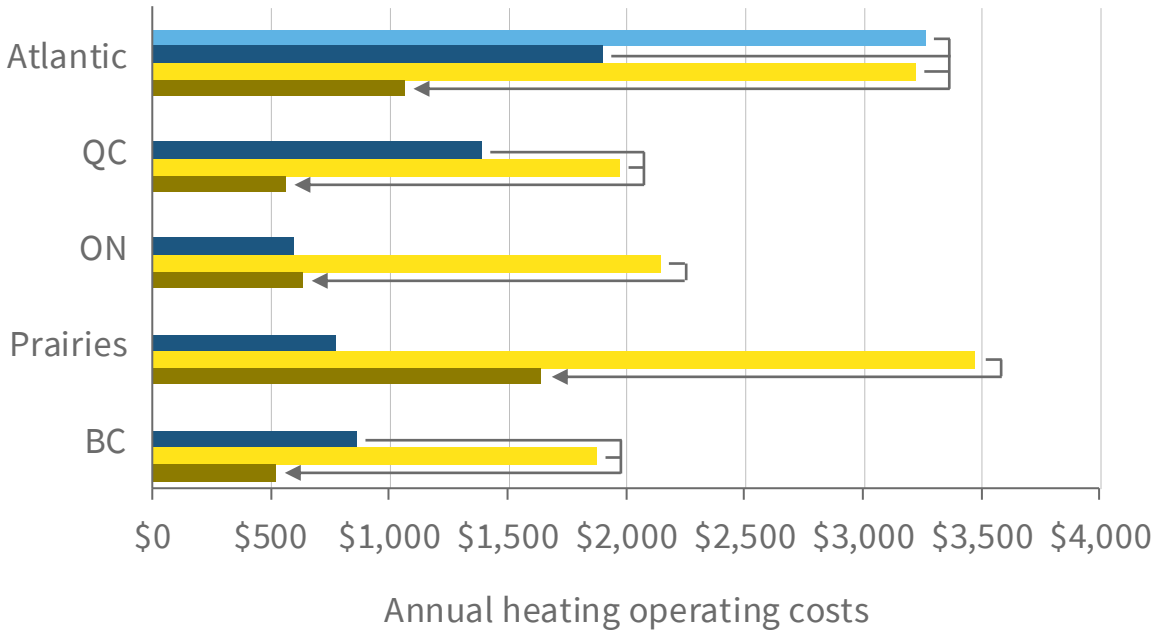


Source: Comprehensive energy use database, 2023 data.

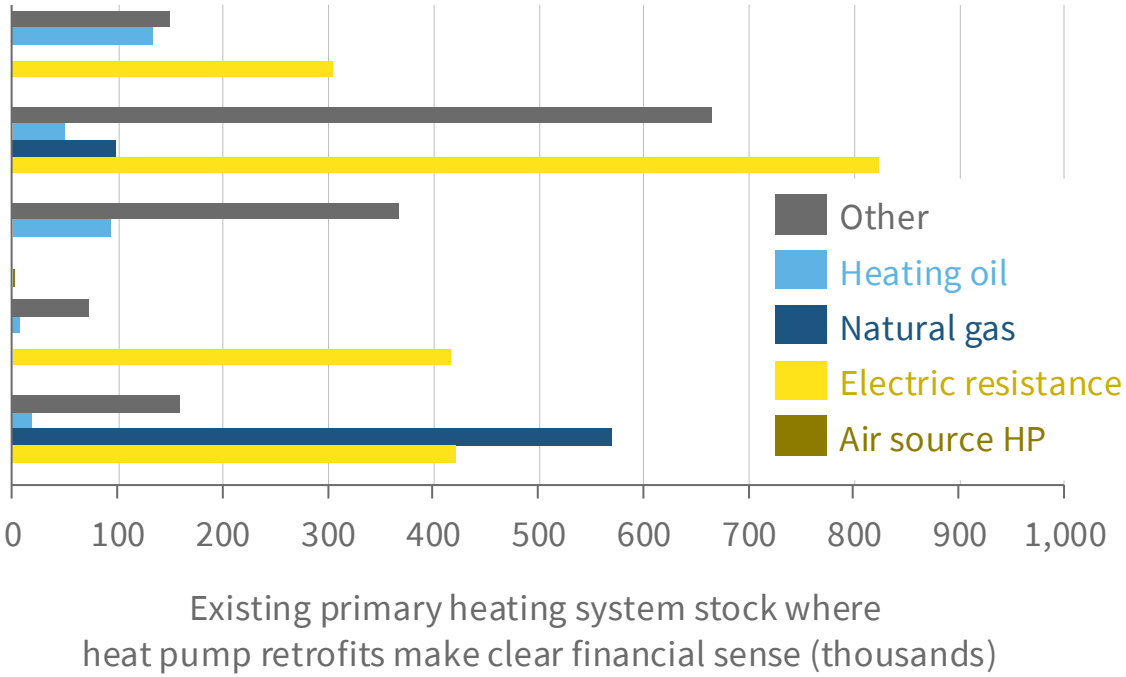
2.g. Homes with electric resistance are a major opportunity for heat pump conversion

Many homes currently heated with electric resistance, propane, or heating oil can **significantly cut their heating bills** by switching to heat pumps

Heat pumps can significantly cut heating costs



Heat pumps make clear financial sense in more than 3 million Canadian homes

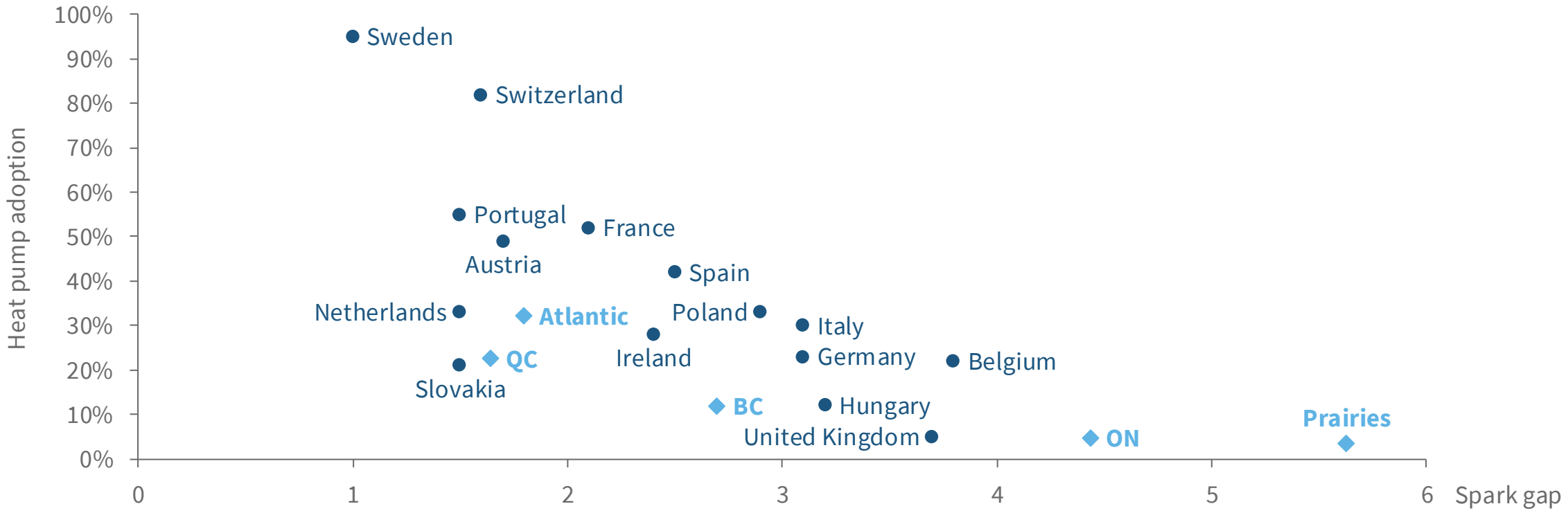


Sources: Comprehensive energy use database, 2023 data. BDA's Demand-Side Pathways Model using Jan 2026 utility rates for the largest city in each province and includes all variable fees but no fixed fees. For Atlantic Canada, heating oil was modeled in NL, PE; natural gas was applied in NB, NS. Heating with propane is also expensive, see https://www.globalpetrolprices.com/
Other includes wood, propane, and dual fuel heating systems.

2.h. Heat pump adoption increases as the electricity to fuel cost ratio drops

Heat pump **adoption is highest** in regions with low electricity to fuel cost ratios (often referred to as the spark gap)

Heat pump adoption is higher when the electricity to fuel cost ratio is lower

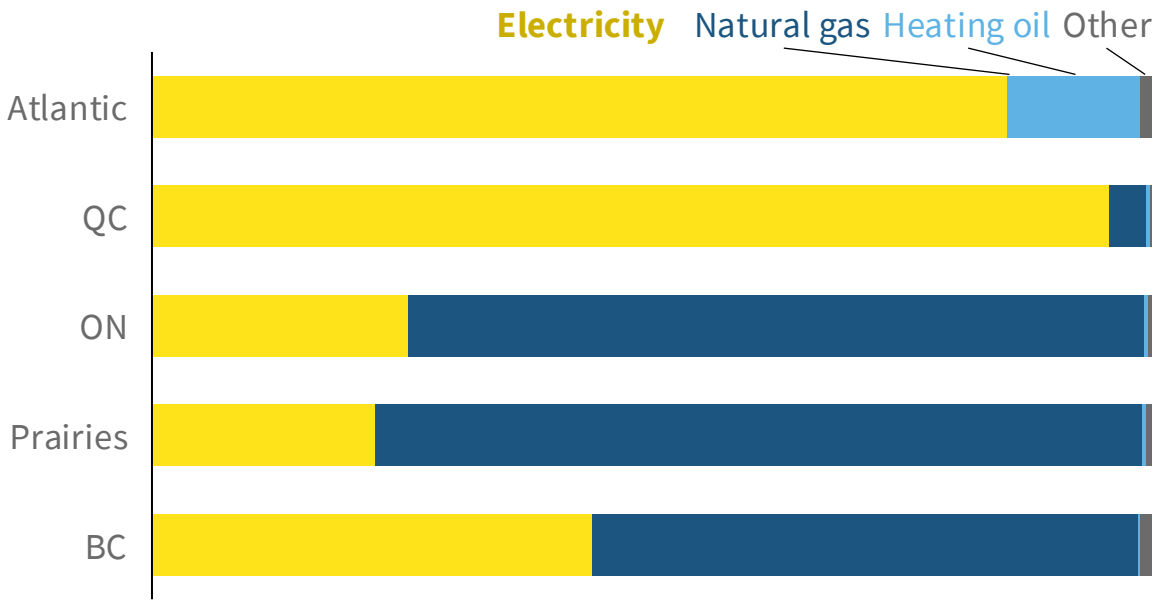


Sources: Comprehensive energy use database 2023 data for provinces, UK Progress in reducing emissions 2025 report to Parliament Figure 2.4 for other countries
Note: Heat pump adoption is not displacing gas in the Atlantic Canada, as it's moving away from heating oil, or in Québec, aiming to reduce peak demand

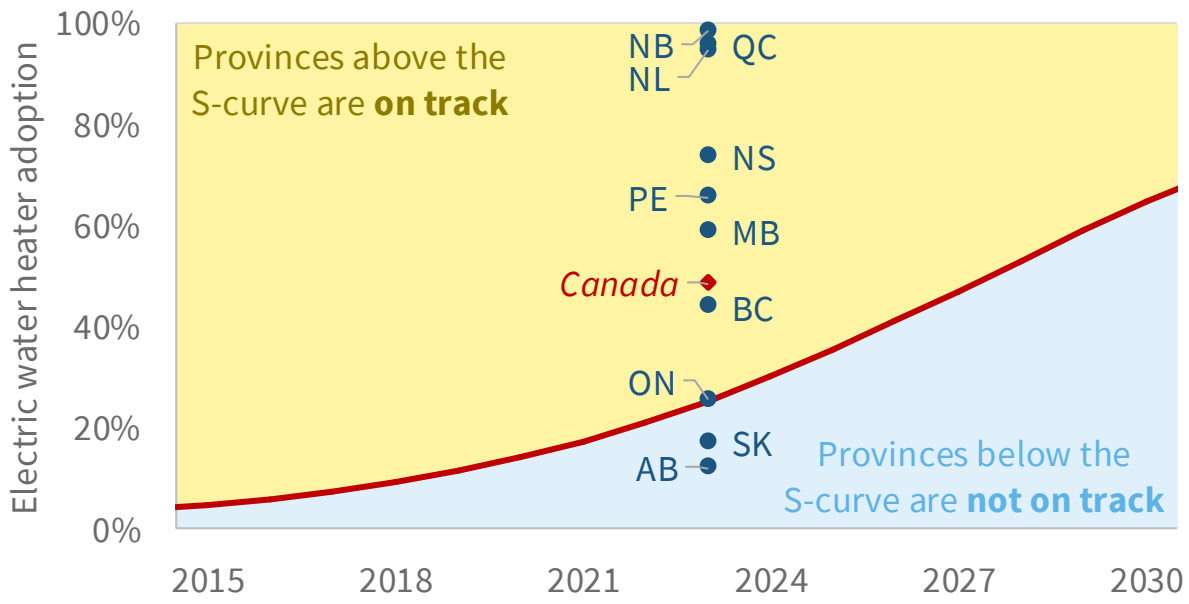
2.i. Residential electric water heater adoption is on track in most provinces

Water heating electrification is largely on track, with the Atlantic and Quebec showing significant adoption. While Heat pump water heaters are more efficient, there is no publicly available data on their adoption.

Electric water heaters are common in all regions



Electrification of water heaters is on track in most provinces

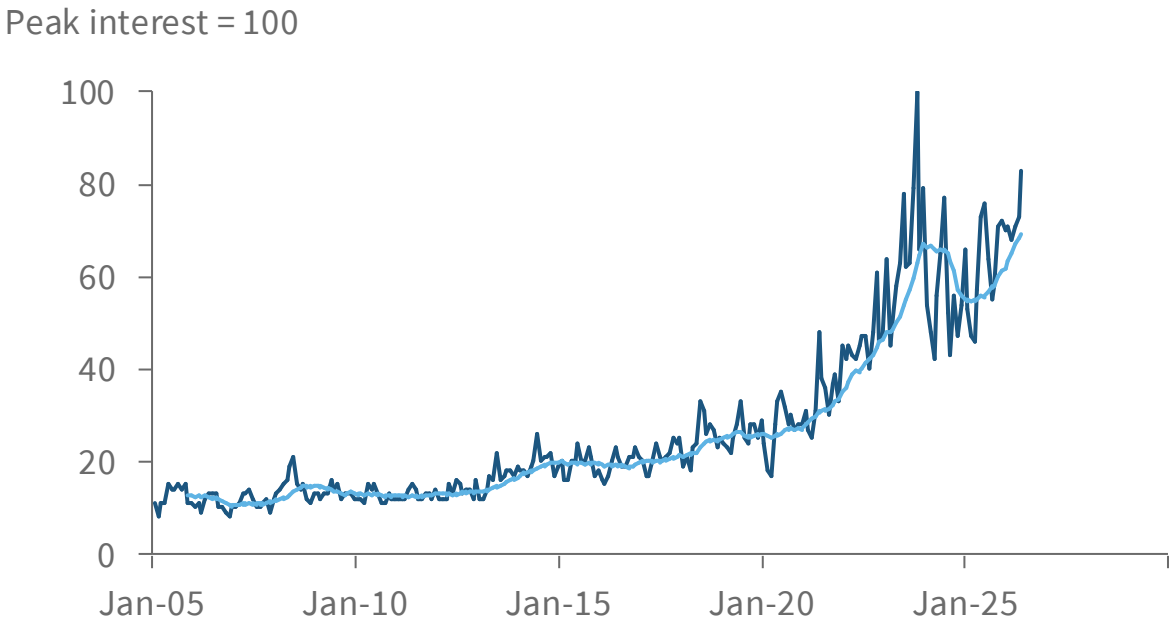


Source: Comprehensive energy use database 2023 data
Note: Progress assumes S-curve starts in 2005 with 0% adoption and ends in 2050 with 100% adoption

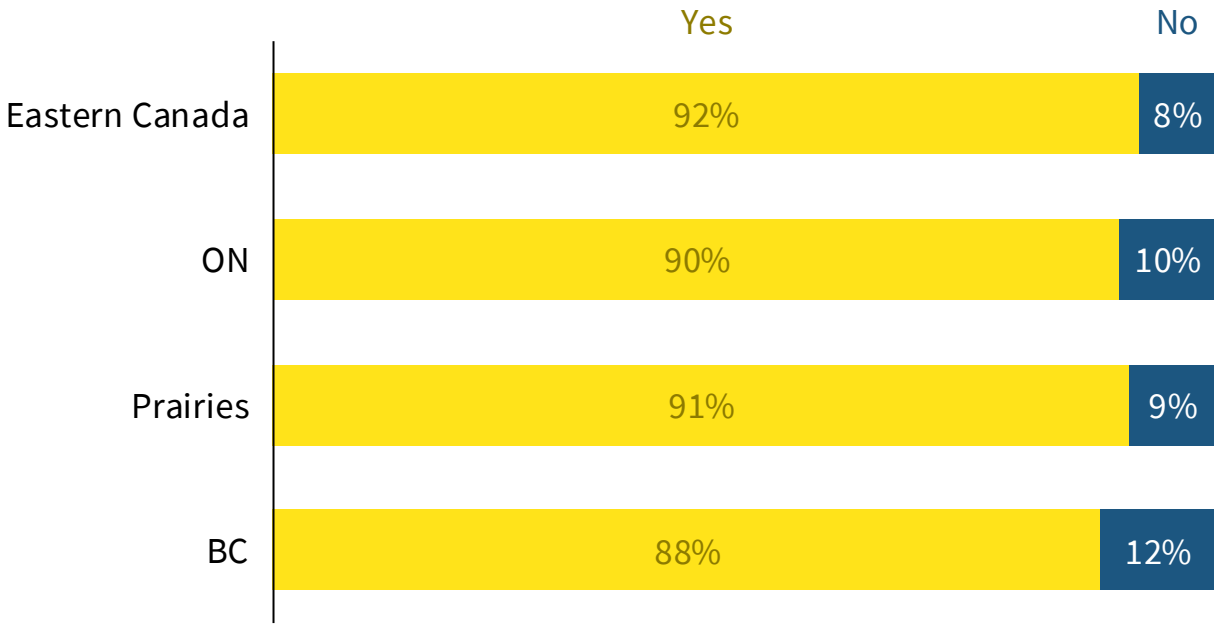
2.j. Awareness of heat pumps is rising and owners recommend them

Demand signals are building; searches for heat pumps are near all-time highs and owners are happy to recommend them to friends and neighbours

Google web searches for heat pumps have increased



Heat pump owners would recommend a heat pump to a friend or neighbour



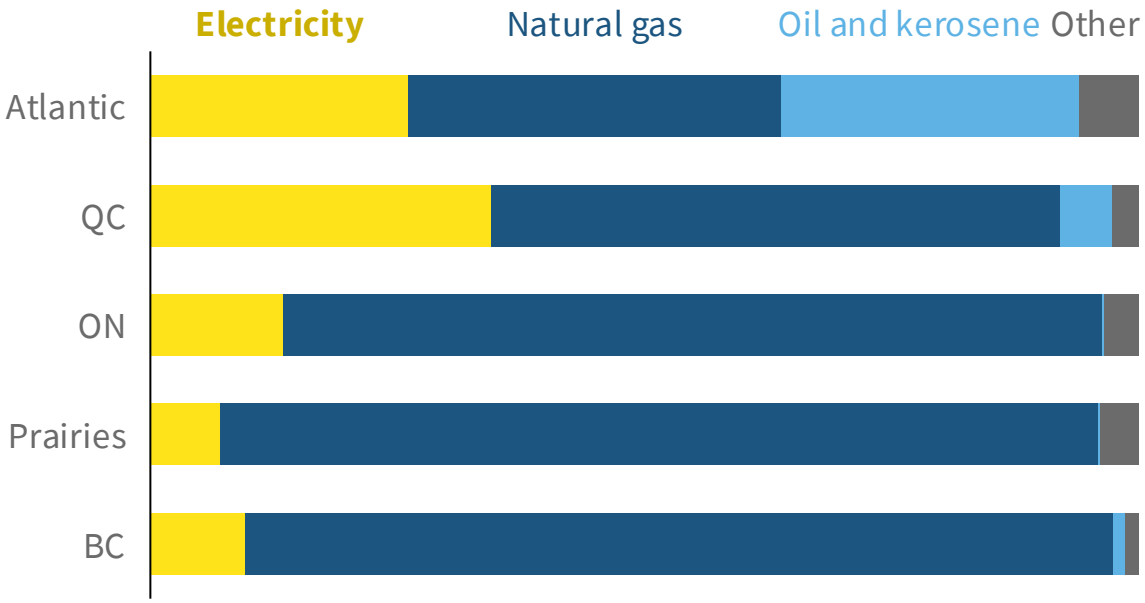
Sources: Google trends search of "heat pump" in Canada between Jan 1, 2005 and Jun 3, 2026.
Clean Energy Canada and Summerhill Group survey of 3,797 Canadians Nov 1 2025 to Feb 16, 2025.

Commercial electrification has room to grow

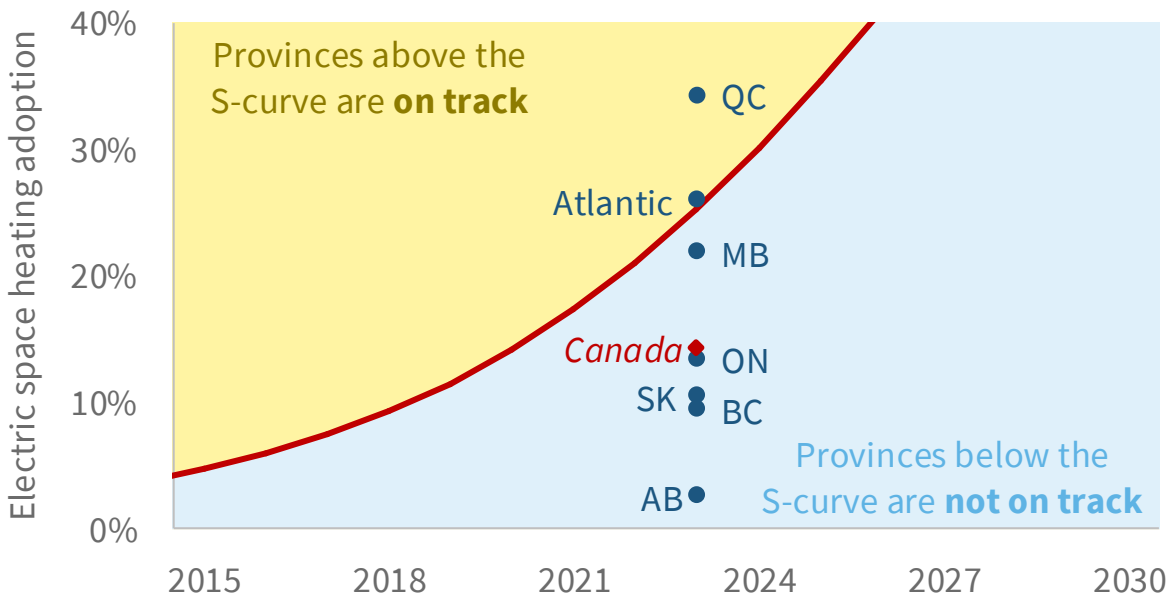
3.a. Electrifying space heating in commercial buildings is largely not on track

Commercial space heating electrification is **highest in Quebec and the Atlantic** but progressing slowly overall. There is a lack of publicly available data on commercial space heating heat pump adoption and equipment sales.

Electric space heating is highest in Quebec and the Atlantic



Electrification of commercial space heating is not on track

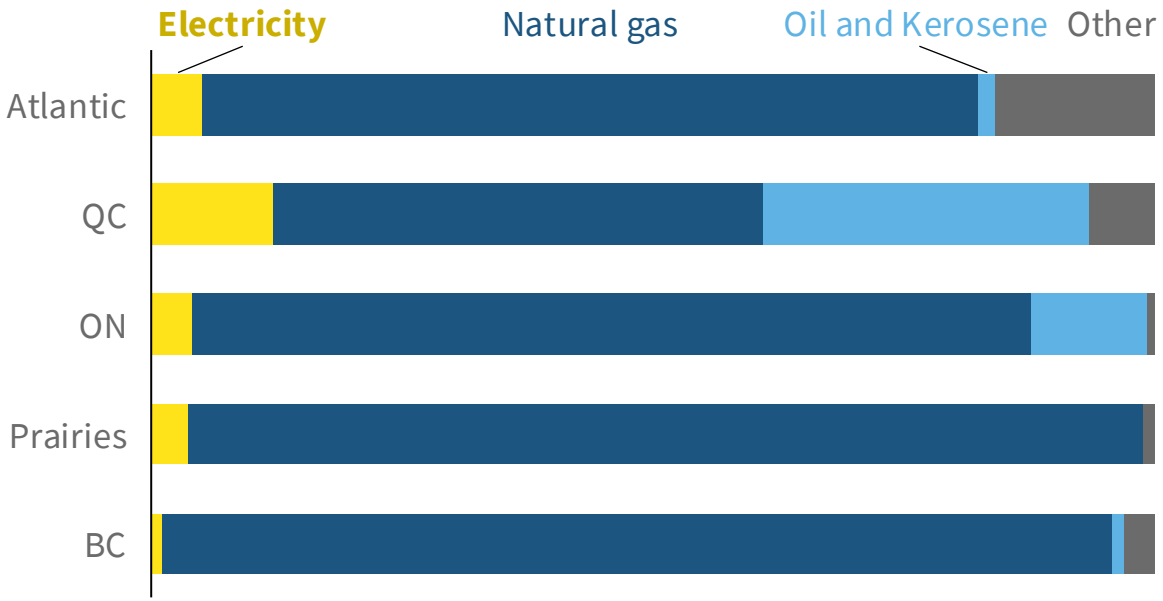


Sources: Comprehensive energy use database 2023 data
Notes: Progress assumes S-curve starts in 2005 with 0% adoption and ends in 2050 with 100% adoption

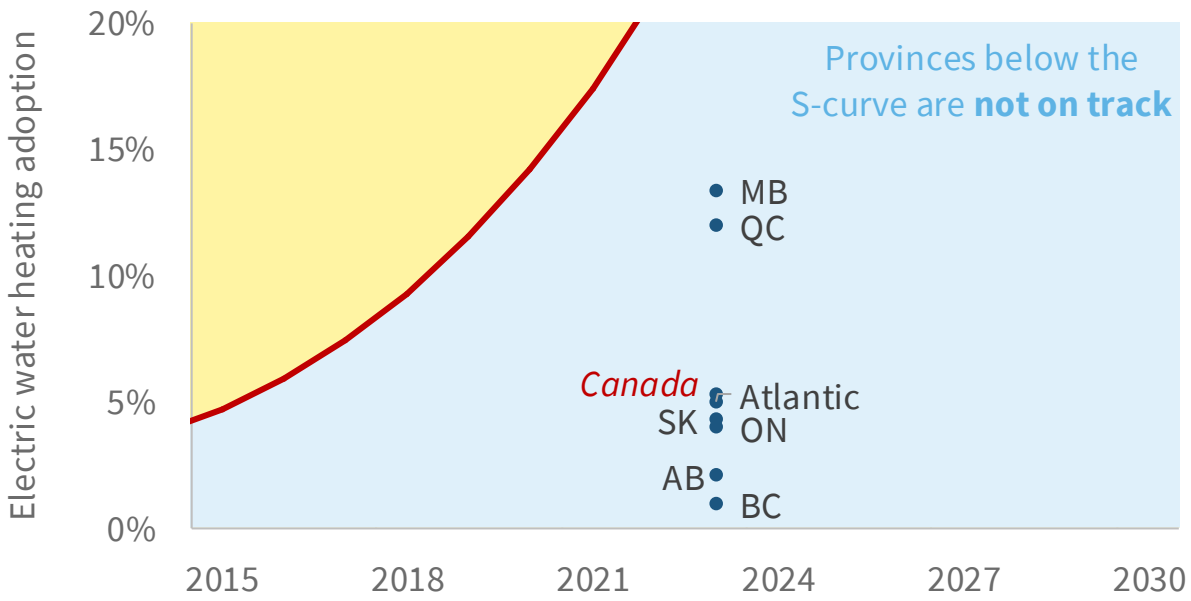
3.b. Electrifying water heating in commercial buildings is not on track

Commercial water heating electrification is **low across the country**. There is a lack of publicly available data for commercial water heater heat pump adoption and sales

Electric water heating is uncommon in most regions



No region is on track to electrify commercial water heating



Sources: Comprehensive energy use database 2023 data
Notes: Progress assumes S-curve starts in 2005 with 0% adoption and ends in 2050 with 100% adoption

What is happening elsewhere?

4.a. Notable progress is encouraging building electrification around the world

Supportive policies, clear targets, and evolving market trends continue to accelerate heat pump adoption.

The IEA World Energy Outlook 2025 reports global heat pump sales grew 27% from 2020 to 2024 and could meet nearly 40% of space heating demand in key regions by 2035.

Canada's 2026 National Strategy for an Electrified Economy notes continued support for building electrification, including energy-saving retrofits for up to one million households (e.g., enabling households to electrify home heating by transitioning from propane, oil, or electric resistance).

At least 17 US utilities now offer heat pump-specific rates, and 12 US States are working to end rules that charge existing gas customers for the cost of gas pipeline expansion.

4.a. Notable progress is encouraging building electrification around the world

Supportive policies, clear targets, and evolving market trends continue to accelerate heat pump adoption.

A new ordinance in Berkeley, California requires home sellers and buyers to replace fossil-fuel appliances or make green upgrades at point of sale.

UK's Clean Heat Market Mechanism has introduced heat pump sales targets, requiring UK boiler manufacturers to ensure 6% of sales are heat pumps or face financial penalties.

France announced new heat pump grants for low-income households to accelerate electrification and energy independence, and a ban on gas boilers in new buildings, starting in 2027.

See our Jurisdictional Progress on Building Heating Decarbonization 2025 update for further insights.

About the Building Decarbonization Alliance

Canada's competitive future depends on abundant, affordable, and secure clean electricity. As Canada's voice for building electrification, the Building Decarbonization Alliance (BDA) positions buildings at the foundation of our electrified economy, where heat pumps, smart controls, solar, storage, and EV chargers become flexible grid resources for a stronger energy system.

An initiative of the Transition Accelerator, the BDA is a non-partisan, cross-sector coalition working to advance smart electrification as a driver of productivity, energy security, and competitive advantage. Together with more than 350 partners across the building ecosystem, we inspire and inform industry and government leadership, and accelerate market transformation — modernizing Canada's buildings into engines of prosperity.

If you are interested in supporting our work, visit our website or reach out to us at info@buildingdecarbonization.ca to find out how you can help accelerate building electrification.

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