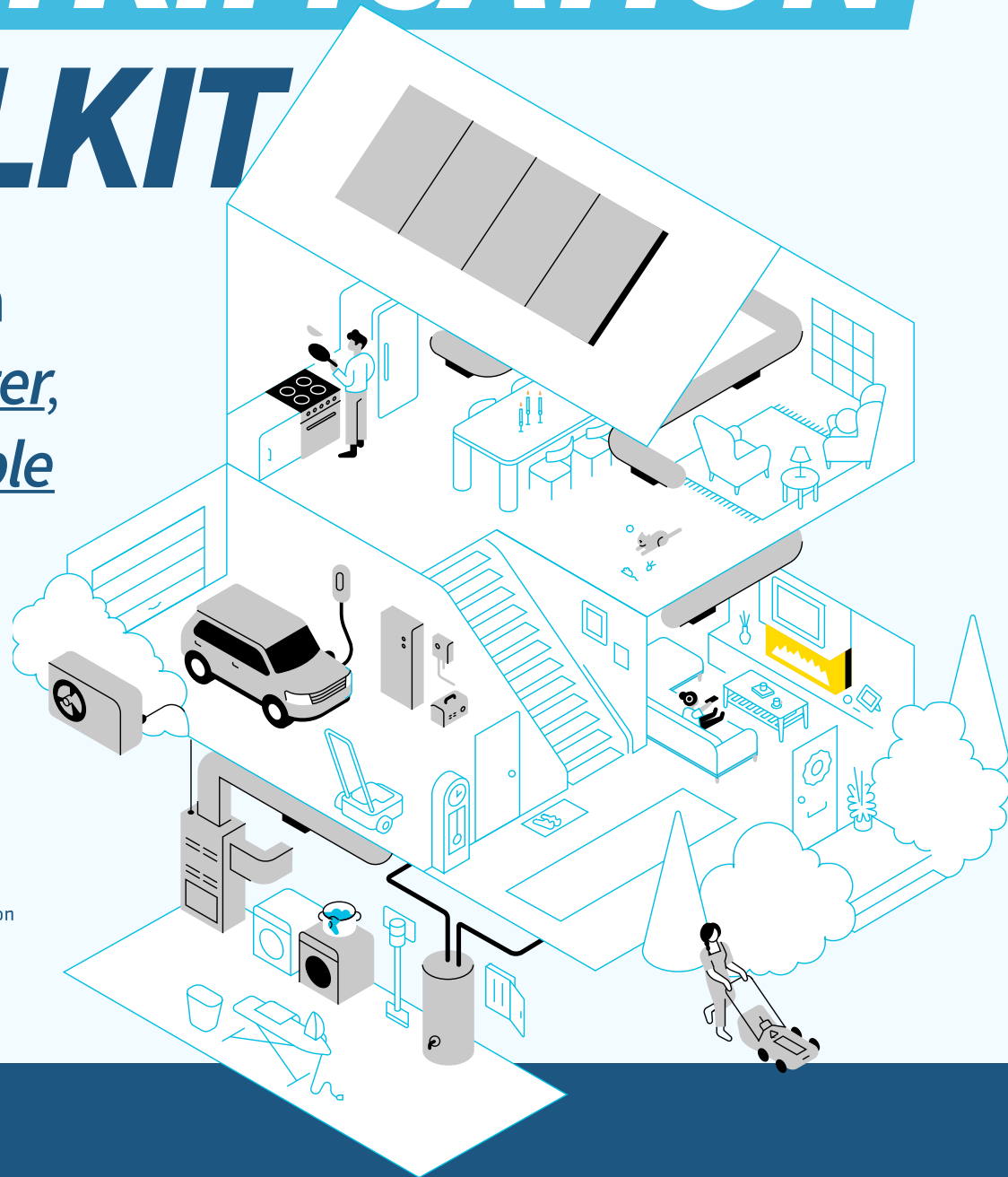


CANADA'S HOME ELECTRIFICATION TOOLKIT

Your guide to a
cleaner, smarter,
more affordable
home



ELECTRIFY YOUR:
FIREPLACES

Fireplaces at a glance

COST

Upfront costs:
\$\$-\$\$\$

IMPLEMENTATION

Easy to medium

BONUS

Improved indoor air
quality and safety when
replacing gas

ELECTRICAL NEEDS

120V 15 amp

(some exceptions)

EMISSIONS REDUCTION IMPACT

Low to medium

EQUIPMENT LIFESPAN

10-20 years

Fireplaces

“

We no longer build fireplaces for physical warmth, we build them for the warmth of the soul; we build them to dream by, to hope by, to home by.

—
Edna Ferber

If you are looking for a fireplace to dream, hope and home by, consider these electric options. They provide the cozy warmth and ambiance of a fire without the safety concerns that come with open flames, carbon monoxide, and other combustion byproducts. Modern versions allow for adjustable flame colours and brightness and look just like the real thing.

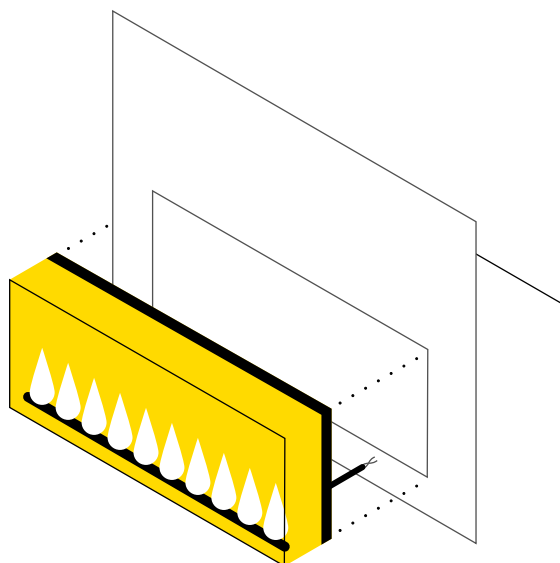
OPTIONS

Electric fireplace:

They use electric resistance heaters to generate heat. The illusion of dancing flames is generated using light reflection or a video display. These can fit in an existing fireplace, be mounted in or on a wall, or be free-standing.

Water vapour fireplace:

These fireplaces also generate heat with an electric resistance element, and they use ultrasound to break water into fine water vapour, making a fine mist that is lit up by LED lights creating a realistic illusion of fire. Water may be supplied by a tank that is refilled or the system may be connected to your home's plumbing.



FIREPLACES

ELECTRIC FIREPLACE FEATURES COMPARED TO GAS FIREPLACES:

Equipment	Outlet	Upfront cost	Operating cost*	Emissions*
Electric fireplace	120V 15 amp or higher	▼	△	▼
Water vapour fireplace	120V 15 amp	=	△	▼

*Updated April 2025, see appendix for breakdown of cost and emissions outcomes by province and territory

BENEFITS



Unlike wood or gas fireplaces, electric ones do not produce any soot, smoke, carbon monoxide or other combustion gases that can have health risks and reduce indoor air quality.



There are no open flames with an electrical fireplace and no opportunities for gas leaks or carbon monoxide poisoning, making them a safer option. Electric fireplaces will still get hot enough to cause burns, so be sure to keep young children away from the unit.



In most cases, these can be installed by a homeowner and plug into a standard electrical outlet.



In most provinces, the electricity used to power an electric fireplace will generate fewer GHG emissions than a gas fireplace will.



Since there is no smoke or other combustion products from an electric fire, you can seal up your chimney (either temporarily or permanently) and further reduce home air leaks.

CHALLENGES

- Electric fireplaces will not operate during a power outage unless connected to a battery.
- Some people find the artificial flames to be less realistic. It is advisable to explore various brands and compare flame effects. In general, higher priced models have more realistic flames.
- Depending on the size, an electric fireplace may not put out as much heat as a gas version.
- Water vapour fireplaces can increase the humidity of your home and may require filling a tank with water.

This section is part of the [Canada's Home Electrification Toolkit](#). The Toolkit provides clear, concise, and up-to-date information on space heating, cooking, fireplaces, home batteries and backup options, and other household equipment. It also includes tips for renters, strategies for avoiding potentially costly electrical panel upgrades, and case studies from satisfied homeowners.

ADDITIONAL SECTIONS ARE AVAILABLE FOR DOWNLOAD BELOW:

- [Space Heating](#)
- [Electric Thermal Storage](#)
- [Water Heaters](#)
- [Cooking](#)
- [Dryers](#)
- [Outdoor Equipment](#)
- [EV Chargers](#)
- [Home Batteries and Backup Generators](#)
- [Solar Power](#)
- [Avoiding an Electrical Panel Upgrade](#)
- [Energy Management Systems](#)
- [Options for Renters](#)
- [Electrification Incentives](#)
- [Amplifying the Impact Through Conversations](#)
- [Ways Community Groups Can Help](#)
- [Appendices](#)

Symbols and terms in this publication:

Upfront or operating cost (no incentives applied)

Symbol	Description
\$	Up to \$99
\$\$	\$100-\$999
\$\$\$	\$1,000-\$9,999
\$\$\$\$	\$10,000 and above

Implementation

Term	Description
Easy	Can be implemented by yourself if no electrical upgrade is required
Medium	Can be implemented by someone with DIY skills
Difficult	Generally requires a qualified electrician or other contractor

Emissions reduction potential (onsite emissions reductions using Canadian averages)

Term	Description
Low	1-9 kg CO2 per year
Medium	10-99 kg CO2 per year
High	100-999 kg CO2 per year
Very high	> 1,000 kg CO2 per year

When comparing electric to gas equipment on upfront costs, operating costs and emissions

Symbol	Description
=	Values differ by 10% or less
▽	Electric version is 10-50% lower
▼	Electric version is more than 50% lower
△	Electric version is 10-100% higher
▲	Electric version is more than 100% higher



CREDITS AND COPYRIGHT

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Visit buildingdecarbonization.ca/canadas-home-electrification-toolkit for digital downloads, updates, and other information about home electrification.

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