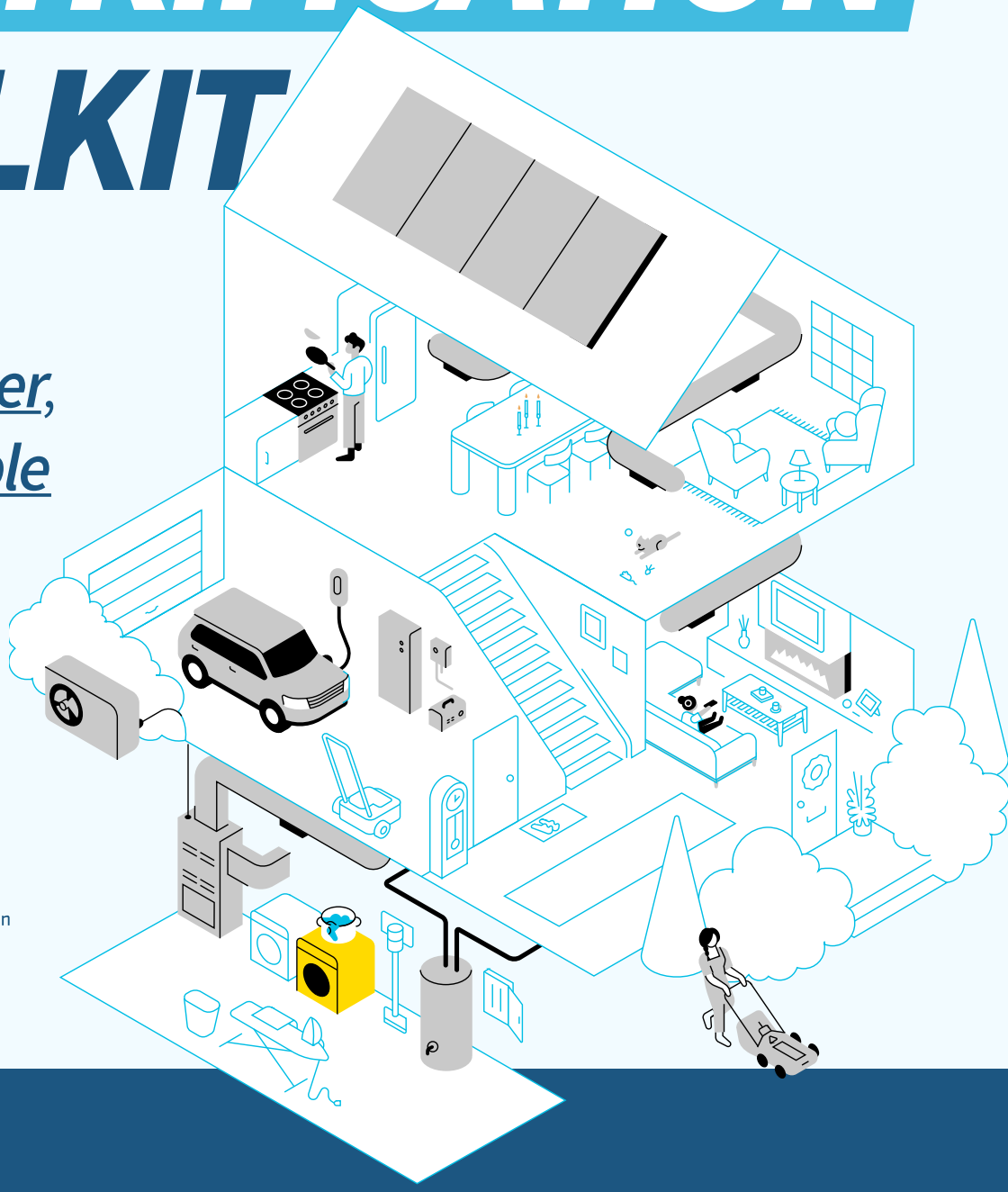
CANADA'S HOME ELECTRIFICATION TOOLKIT

Your guide to a ***cleaner, smarter, more affordable*** home



Building Decarbonization Alliance
pour la décarbonation des bâtiments

ELECTRIFY YOUR:

DRYERS

Dryers at a glance

COST

Upfront costs:
$$-$$$

IMPLEMENTATION

Easy to difficult

RENTERS

Consider a ventless dryer

ELECTRICAL NEEDS

120-240V and 15-30 amp

EMISSIONS REDUCTION IMPACT

Medium

BONUS

Some electric dryers are ventless

EQUIPMENT LIFESPAN

10-13 years

Links to further resources

- Consumer Reports
- List of EnergyStar dryers

Dryers

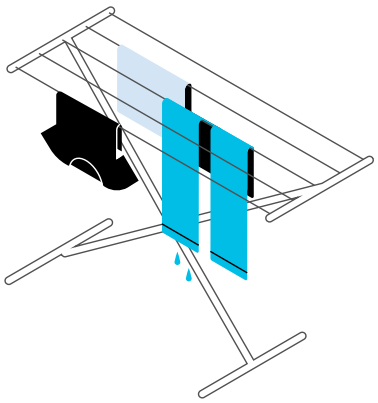
“

Wouldn’t it be great if we could put ourselves in the dryer for a short time and come out wrinkle free and two sizes smaller?

–

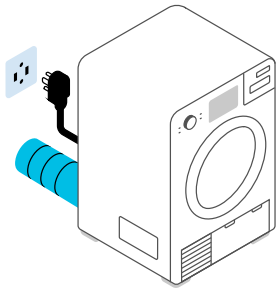
author unknown

Dryers use a lot of energy to remove the water from your clothes, which is why most electric dryers use a heavy duty 240V outlet. Fortunately, there are increasingly options available that plug into the same 120V outlet that a gas dryer uses. Condensing and heat pump dryers that do not require a vent to the outside are common in Europe and are now available in North America. Even better are the combo washer and dryers that do it all in one without your having to move your clothes. The best is when you can hang your clothes outside to dry in the fresh air.



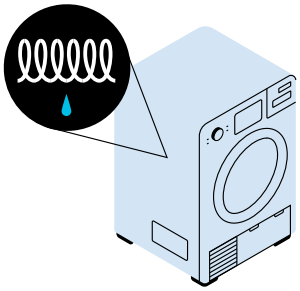
OPTIONS

Electric dryers:



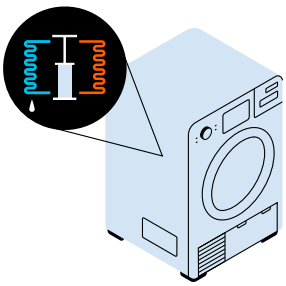
These dryers use electric resistance heaters to dry your clothes and require a vent to the outside to get rid of warm, moist air.

Condensing dryers:



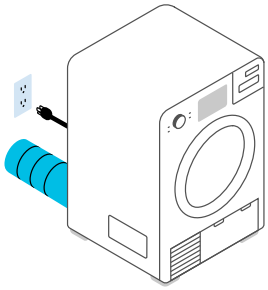
Condensing dryers use electric resistance heaters for drying, but instead of a vent to the outside they have a separate cooling element that acts like a dehumidifier to condense the water from the moist air, collecting it in a pan or sending it down a drain. They are more efficient than electric dryers and are handy when venting to the outside is not an option.

Heat pump dryers:



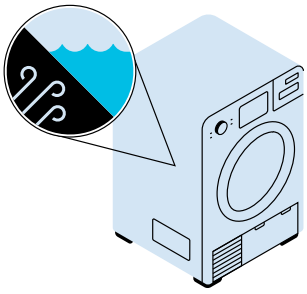
These dryers use a heat pump refrigeration cycle that moves heat. In this case they move heat into the air entering the dryer drum and pull heat from the air that exits the dryer drum to condense out the water into a drain or pan. That same air is then reheated before returning to the dryer drum. Think of it as a very efficient way of moving water from your clothes to the drain.

120V electric dryers:



Electric dryers that plug into the same conventional 120V outlet that gas dryers use. They are often condensing and/or compact models.

Combined washer-dryers:



Wash and dry your clothes in one go with one appliance. These use condensing technologies and will run on 120V.

BENEFITS

Electric dryers are safer than gas ones, for both people and planet, because they do not generate any hazardous carbon monoxide or climate-damaging carbon dioxide emissions during operation.

Unlike gas dyers, electric heat pump and condensing dryers do not require a vent to the outside. Sealing up the vent after installing a heat pump or condensing dryer is another way to reduce air leaks and heat loss from your home.

All electric dryer options use lower temperatures than gas ones, which is less harmful to fabrics, helping your clothes to last longer, but it does take longer to dry the clothes.

Condensing and heat pump dryers use far less energy because they recycle the warm air to continue drying after condensing out the water rather than venting it to the outside.

Condensing and heat pump dryers do not require a vent to the outside, so they are ideal when installing a dryer far from an outside wall or when adding a vent is not an option.

Condensing dryers are now available that can plug into a conventional 120V outlet. That means you can install one anywhere and it will leave space on your electrical panel for other electrification upgrades.

Combined washer-dryers mean no moving laundry from one appliance to the next: just add your clothes, choose your settings, and return later to clean, dry laundry.

DRYER FEATURES COMPARED TO GAS DRYERS:

Equipment	Outlet	Drying time	Capacity	Ventless option	Upfront cost	Operating cost*	Emissions*
Gas	120V 15 amp			N			
Electric	240V 30 amp	=	=	N	=	▲	▽
Condensing	240V 30 amp	△	▽/=	Y	△	▲	▽
Heat pump	240V 30 amp	▲	▽	Y	△	▲	▼
120V condensing	120V 15-20 amp	▲	▽/=	Y	△	▲	▽
Combined	120V 15-20 amp	▲	▼	Y	▲	▲	▽

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

DRYERS

CHALLENGES

- Check your dryer outlet before shopping for a dryer. You will want to make sure the plugs are compatible. If you are switching from a gas dryer to an electric one, you can have an electrician install a 240V outlet or choose one of many options that use 120V.
- Drying times can be much longer with condensing and heat pump dryers because they use lower temperatures that will also prolong the life of your fabrics.
- Condensing and heat pump dryers often have smaller capacities. With these you may have to run smaller laundry loads or hang dry some items.
- There can be more humidity around ventless dryers. If your dryer has a collection pan rather than emptying directly into the drain, be sure to empty the pan regularly and ensure air can circulate around the dryer.

OTHER CONSIDERATIONS

- Line drying is the most energy efficient way to dry your clothes and you can get that lovely “dried outside” scent.
- Using a high-speed spin cycle on the washing load will mean less water for the dryer to remove.
- Use the sensor setting instead of the timer to avoid wasting energy.
- Lint trapped in vents is a fire hazard and reduces appliance efficiency. Be sure to clean the lint trap after every load and clean the dryer vent pipe every 3-6 months (e.g. by disconnecting the vent pipe from the dryer and vacuuming from both ends).
- Dryers come in different sizes, always measure your space before shopping for a replacement.

Benefits of ventless dryers

Use far less energy

Can be installed anywhere

Lower temps are more gentler on fabrics

Reduce air leaks and heat loss from your home

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:

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

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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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