

# Are all-electric homes safe during power outages?

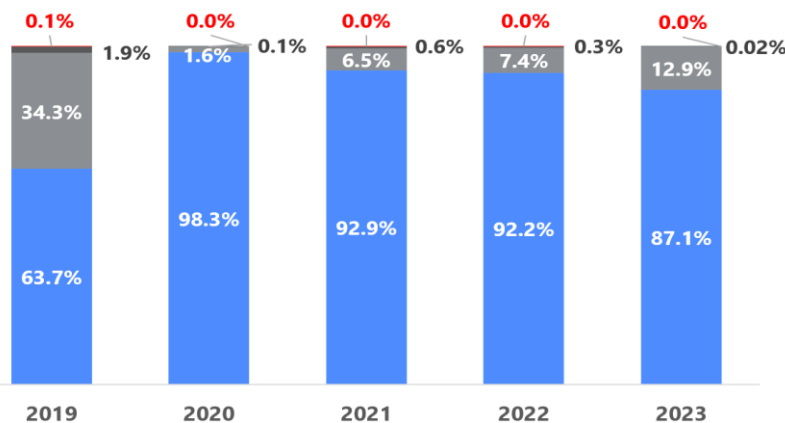


Electrifying your home is one of the best ways to reduce your carbon footprint and fight climate change. **But can an all-electric home be comfortable and safe during a power outage? Here's what you need to know.**

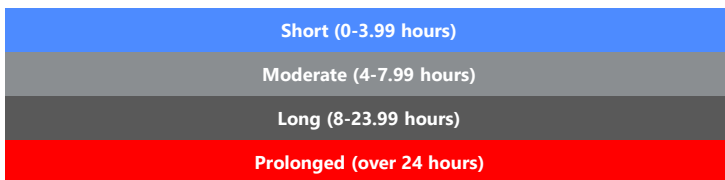
Prepared by Introba and Westerhoff Climate Strategies

## How often do power outages even happen in British Columbia?

While power outages can certainly be memorable, data shows that power outages – especially long ones – are actually rare in our province. The figure below draws from BC Hydro power outage data from the last five years.



The average interruption length per customer per year, 2019-2023



The average length of outage for most BC Hydro customers (between 63% and 98%) experiencing outages is just 4 hours, with a very small percentage experiencing an average outage of 8 hours or longer.

While they are rare, longer outages do occur. Urban areas experience very few longer outages, but *rural areas can experience up to five times more prolonged outages (over 8 hours) than urban communities.* It's important to consider heating options that make the most sense based on your location, wants, and needs for those times that your home may be without power.

## Did You Know?

**All-electric homes aren't that different from other homes.** Most types of equipment that we use in our daily lives require electricity to function or function safely, including gas fireplaces and ovens.

**Most natural gas furnaces and boilers don't function during power outages.** They rely on electricity to operate key parts of the system, including the ignition, blower motor, and thermostat.

**Homes built with energy efficiency in mind perform better during power outages.** A well-insulated home can keep the indoors warm for up to three days! The better your home's envelope, the better it can keep you comfortable.

# How to stay comfortable and safe during a power outage



## Back Up Power

Back-up power sources range from small units to power your devices, to whole-home systems that can keep you going for days.

- ❑ Home standby generators are installed on-site and directly connected to a home's wiring system. When a power outage occurs, an automatic transfer switch activates the generator, which then supplies electricity to the home.
- ❑ Portable generators are mobile units that can be used to power certain devices or services, like lights or hot water
- ❑ Solar panels equipped with certain types of inverters or that are completely disconnected from the power grid allow these systems to continue to power a home during power outages
- ❑ Home battery back-up systems store energy from the grid or a solar system for when it's needed.
- ❑ Portable solar-charged batteries can be used to charge devices and smaller loads



## Heating & Cooking

Alternative ways of heating your home or cooking are available to use when the power goes out.

- ❑ Wood-burning appliances, including fireplace inserts, woodstoves, pellet stoves, open hearth fireplaces, masonry heaters, and wood burning furnace can all be used to help heat your home
- ❑ Solar air heaters use sunlight to generate warmth for indoor spaces by converting sunlight into heat energy and using fans to circulate it around a space
- ❑ Wood cook stoves use wood or wood pellets to fuel both a cooking surface and oven, and provide heat to the surrounding space
- ❑ Camp stoves and BBQs can both be used to cook food so long as they are used outside where carbon monoxide gases won't pose a health risk



## Energy Efficiency

Improving the energy efficiency of your home ahead of time can help you stay comfortable during a power outage.

- ❑ Purchasing or renovating your home with a highly insulated envelope helps keep spaces warmer in the winter, and cooler in the summer
- ❑ Adding weather stripping around doors, installing window films, and putting blankets in drafty areas can all help keep warmth inside in the winter
- ❑ Adding window shades either inside your home (like curtains or blinds) or outside your home (like exterior blinds or vertical fins) help to keep the sun's rays from heating your home in the summertime
- ❑ Planting deciduous trees to the south and west of your home can help shade incoming sun in the summer
- ❑ Keeping windows closed during the day and opening them at night to let in cool air helps to keep cool in the summer

## Want to learn more?

Scan the QR Code for more information on back-up power, heating, and cooking options during a power outage, including information on their effectiveness, installation and cost.



## What if a power outage is already happening?

- Visit BC Hydro's webpages on how to [prepare your home for a power outage](#) and [what to do during a power outage](#) for tips on staying safe
- Read PreparedBC's [Severe Winter Weather and Storm Preparedness Guide](#)