

Hosting the holidays:

How a return to entertaining could mean increasing electricity use this holiday season



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Last year, COVID-19 stay-at-home measures meant fewer gatherings with family and friends and far less holiday hosting. This year, with an impressive provincial vaccination rate, British Columbians plan to make up for lost time by hosting, decorating and cooking big meals. While holiday dinners and gatherings will bring more holiday cheer, they could also result in higher than expected electricity bills.

Highlights

- BC Hydro data shows overall residential electricity load dropped on Christmas Day and Boxing Day in 2020.
- This drop in load can be attributed to the staying home and 'ordering in' behavior that COVID-19 created last holiday season.
- In fact, the most significant drop in load on these days happened in the evening between 4 p.m. and 10 p.m., when in normal years, most would have been entertaining guests.
 - Christmas Day evening load dropped by over four per cent and,
 - Boxing Day evening load dropped by about seven per cent compared to 2019.
- However, a new survey¹ conducted on behalf of BC Hydro finds most British Columbians will be making up for lost time by hosting more dinners and gatherings over the holidays— which could mean a big rebound in electricity use this year.
- Last year, over half (54 per cent) of British Columbians did not cook a big holiday meal at home – with some ordering in and many cooking a regular meal just for their household.
- This holiday season 37 per cent of British Columbians said they will be hosting more gatherings and 43 per cent will be attending more, which could lead to higher electricity use.
- In fact, 97 per cent plan on getting together with family and friends in person, and 44 per cent plan on cooking a big holiday meal.
- And when it comes to decorating, hosting guests seems to have led to the need to impress – 14 per cent said they will be decorating more outdoors, and 22 per cent will be decorating more indoors.
- In fact, 51 per cent will be putting up outdoor lights, and most plan to put up at least three to five strings.
- Another 13 per cent plan to decorate with multiple plug-in electronic decorations.
- Electronic lights and decorations will likely result in a load increase over the holidays, much like the one observed in 2018–2019, that was driven partially by an increase in holiday 'mega displays.'

Solutions

BC Hydro recommends the following energy tips for a jolly lower-cost and lower carbon holiday season, and beyond:

- Cook for conservation: If you are cooking a big holiday meal, use a microwave, toaster oven or instant pot whenever possible. These options use less than half the electricity of a regular oven.
- Use star power: Appliances can account for up to 20 per cent of a household's electricity use. Using ENERGY STAR certified appliances can help customers save on their holiday energy bills.
- Switch to LEDs: Save about \$40 over the holiday season by switching eight strands of incandescent lights to energy efficient LEDs. LED holiday lights also last 10 times longer and come in a variety of shapes, sizes and colours.
- Plug decorations into timers or use smart plugs to manage electricity use: Reduce electricity costs by only having lights on when needed.
- Give the gift of two in one heating and cooling: Replacing a gas furnace with a heat pump to cool in the summer and heat in the winter, will reduce a typical home's greenhouse gas emissions by up to two tonnes per year.

¹ Online survey conducted by Majid Khoury of 800 British Columbians from Nov 19–21, 2021 margin of error is 3.46%.

- Use MyHydro: See how cooking and decorating impacts electricity use by using the electricity tracking tools available on MyHydro, which can be accessed from a mobile device or at bchydro.com.

A new normal Noel

Last holiday season, most British Columbians stayed home over the holidays to help stop the spread of COVID-19. Gatherings with family and friends were largely out of the question, with most turning to virtual celebrations.

This year however, with multiple COVID-19 vaccine options, and an impressive provincial vaccination rate, the holiday season is set to look different. As a ‘new normal’ sets in, a recent survey conducted on behalf of BC Hydro finds most British Columbians will be making up for lost time by hosting more dinners and gatherings over the holidays– which could mean a big rebound in electricity use this year.

COVID-19 holiday electricity effect

BC Hydro data shows stay-at-home holiday behavior in 2020 resulted in noticeable changes in residential load from previous years.

Overall, there were obvious residential load reductions in the evening on weekends when comparing 2019 and 2020. This is likely due to less entertaining at home and not having guests over on weekend evenings during the holiday season.

However, BC Hydro data shows the most significant changes in residential load pattern during December 2020 were on Christmas Day and Boxing Day. In fact, overall residential electricity load dropped by .59 per cent on Christmas Day and over eight per cent on Boxing Day in 2020 compared to 2019. The most significant drop in load on these days happened in the evening between 4 p.m. and 10 p.m., when in normal years, most would have been entertaining guests. For example, Christmas Day evening load dropped by over four per cent, while Boxing Day evening load dropped by about seven per cent compared to 2019.

Holiday	Electricity load % Change 2019 to 2020
Whole day	
Boxing Day	-8.13%
Christmas	-0.59%
Weekday	4.63%
Weekend	0.98%
4 p.m.–10p.m.	
Boxing Day	-6.84%
Christmas	-4.23%
Weekday	2.57%
Weekend	-1.88%

Home for the holidays

The drop in evening load on Christmas and Boxing Day can be attributed to the stay-at-home behavior that COVID-19 created last holiday season. In total, 94 per cent of British Columbians said they complied with the health order restrictions over the holidays in 2020 and did not invite or gather with more people than allowed.

This lack of gathering is clearly demonstrated by the fact that over half (54 per cent) of British Columbians did not cook a big holiday meal at home at any point during the holiday season in 2020– with about five per cent ordering in and 30 per cent cooking a regular meal just for their household. Of those who ordered takeout, 65 per cent said they did so because of COVID-19 restrictions that prevented them from gathering.

For Christmas Day and Boxing Day specifically, compared to pre-COVID-19, 12 per cent said they ordered more takeout on these holidays specifically, and 40 per cent said they cooked fewer or smaller meals on these days, corroborating the stay-at home drop in electricity use data.



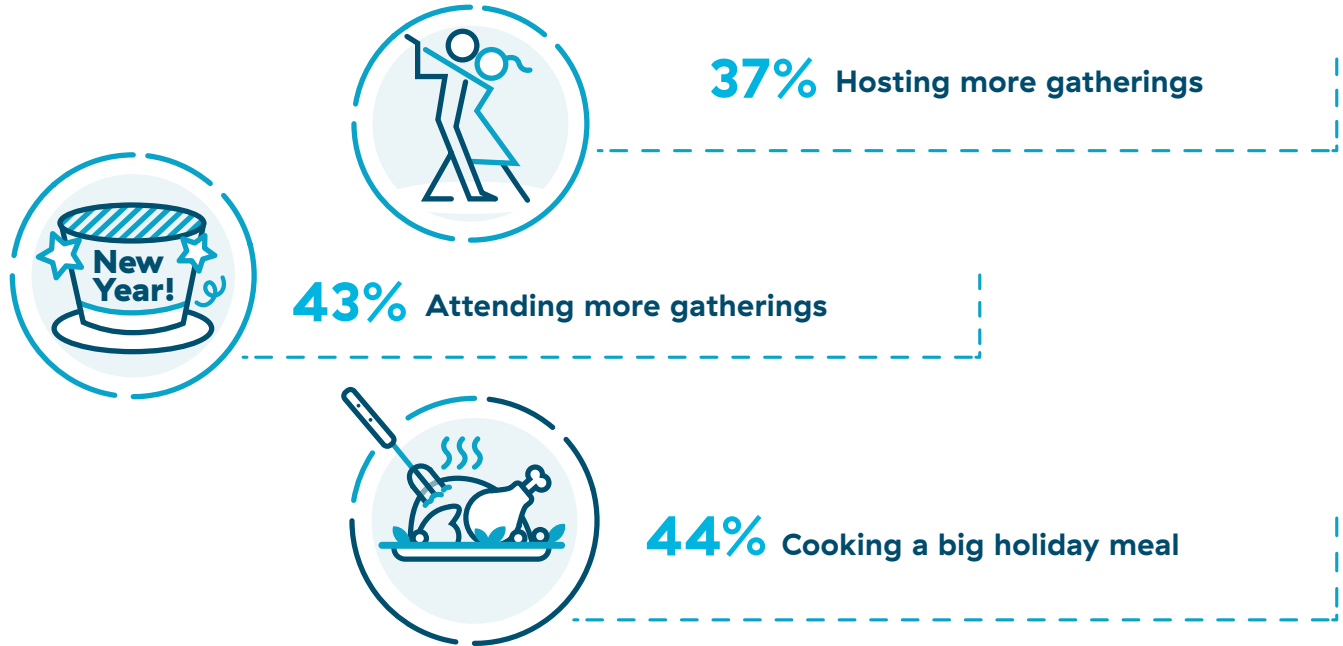
54%
Of British Columbians didn't cook a holiday meal last year

Holiday 2021 predictions

Given the high vaccination rate in B.C. and fewer COVID-19 restrictions, electricity use is predicted to rebound this holiday season as British Columbians make up for lost time with family and friends. Most British Columbians think this holiday season with family and friends will look different than 2020, and unlike last year, 97 per cent plan on getting together with family and friends in person.

When it comes to entertaining 37 per cent said they will be hosting more gatherings and 43 per cent will be attending more. On top of this, 44 per cent plan on cooking a big holiday meal, which could mean higher electricity use.

British Columbians' holiday plans 2021



More gatherings, more decor

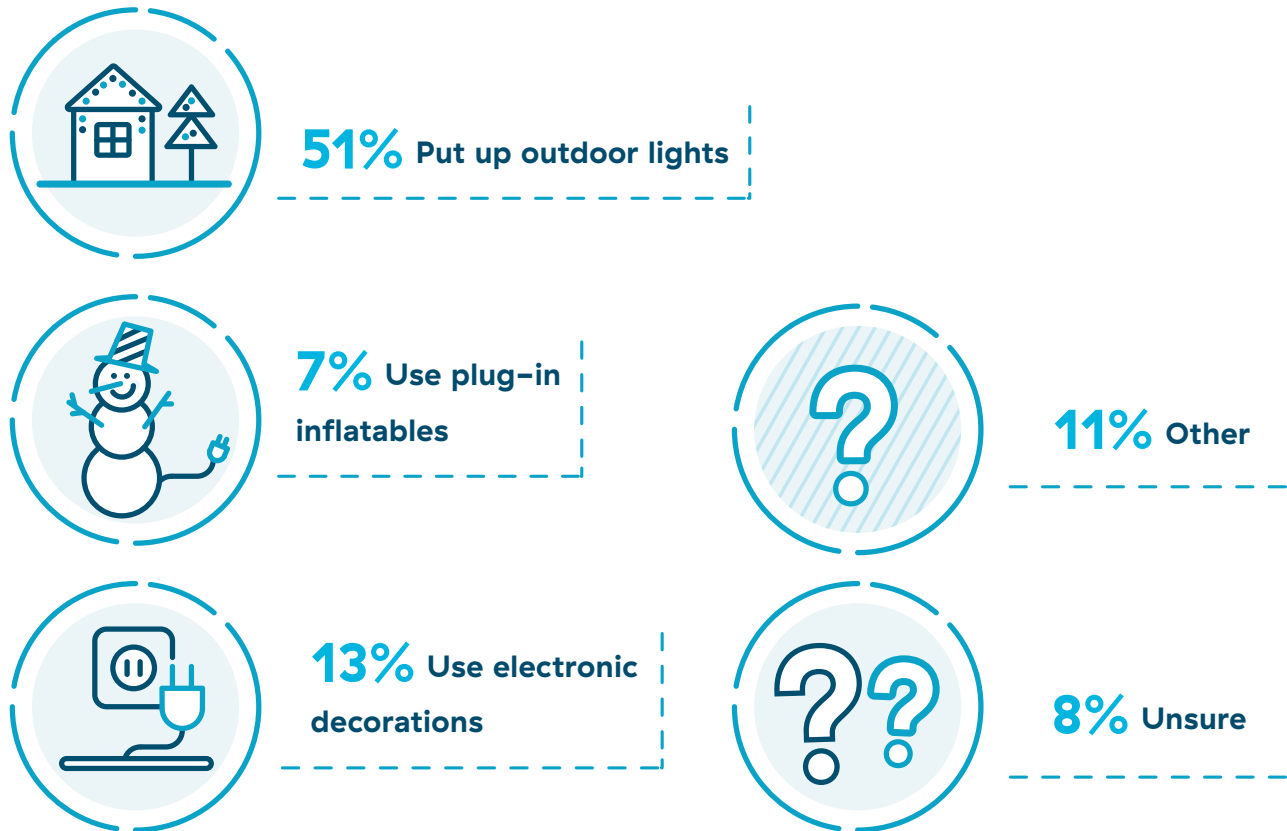
When it comes to decorating, hosting guests at home seems to have led to the need to impress – of those who said their holiday season will look different this year, 22 per cent said they will be decorating more indoors than they did last year, and 14 per cent said they will be decorating more outdoors.

As for decorating outside, 51 per cent will be putting up outdoor lights, and most plan to put up at least three to five strings. Another 13 per cent plan to decorate with multiple plug-in electronic decorations, and seven per cent plan on using plug-in inflatable decorations, which could significantly add to electricity costs. Inflatable decorations have become increasingly popular over the past decade and are costly because they are typically run 24/7 and use a lot more power than a strand of LED lights.

On the topic of LEDs, while many are putting up multiple strings of lights outdoors, 23 per cent are still using a mix of older inefficient incandescent lights with some LEDs, while four per cent use all incandescent lights, increasing their energy costs and consumption.

Because of the pandemic restrictions and changes in customer behavior, potential growth in holiday lighting load from 2019–2020 is difficult to determine. This year however, electronic decorations will likely result in a load increase over the holidays, much like the one observed in 2018–2019, that was driven partially by an increase in holiday ‘mega displays.’

Outdoor décor – how British Columbians plan to decorate



Keeping costs down and spirits bright

The holiday season can get expensive, and BC Hydro recommends taking steps to ensure your energy bill stays low while enjoying the festivities, and in the new year ahead.

If you are in the market for long-term energy savings, give the gift of two in one heating and cooling by replacing a gas furnace with a heat pump to cool in the summer and heat in the winter. It will reduce a typical home’s greenhouse gas emissions by up to two tonnes per year.

When hosting guests or cooking a big dinner use a microwave, toaster oven or instant pot whenever possible. These options use less than half the electricity of a regular oven. Appliances can be a major contributor to energy consumption – especially during the holiday season when they are working overtime. Using ENERGY STAR certified appliances can help customers save on their holiday energy bills.

If you are decorating, save about \$40 over the holiday season by switching eight strands of incandescent lights to energy efficient LEDs. LED holiday lights also last ten times longer and come in a variety of shapes, sizes and colours. Plugging into timers or using smart plugs to manage electricity use can also help with electricity costs by only having lights on when needed.

Ultimately, you can see how cooking and decorating impacts electricity use by using the electricity tracking tools available on MyHydro, which can be accessed from a mobile device or at bchydro.com. For more holiday energy-saving tips, and eco-friendly ideas visit holidays.bchydro.com.

