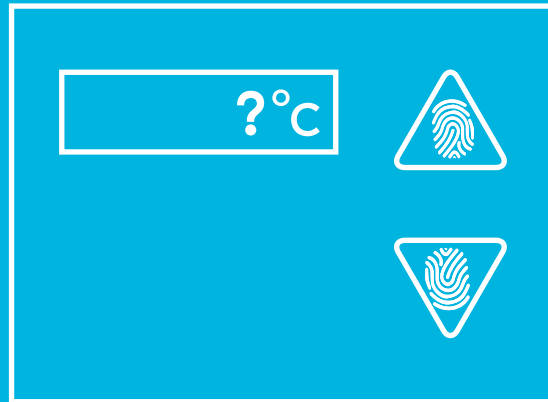


Thermostat wars:

How the battle over household temperature is turning up the heat on relationships



Report

February 2019

Thermostat wars: How the battle over household temperature is turning up the heat on relationships

As winter lingers on across the province, many British Columbian couples are at odds over what temperature to set the thermostat at and what's more important – comfort or savings?

Highlights

- A recent survey¹ commissioned by BC Hydro found more than 4 in 10 British Columbian couples admit to arguing over the temperature in their home.
 - 5% of these couples describe their arguments as an “all-out thermostat war”.
- An additional survey² highlights that much of this activity is done behind each other's backs, for example:
 - Nearly 60% admit to adjusting the thermostat when their partner was not looking.
 - More than 50% said they have waited for their partner to leave the home before adjusting the dial.
 - About 20% admit to changing the setting on the thermostat with the sole purpose of annoying their partner.
- When asked what was behind their thermostat adjusting behaviour, the survey revealed thermostat battlers are more than twice as likely to adjust the thermostat to be more comfortable, than to save money – despite the fact that heating costs can increase by as much as 140% during the winter months.
 - The comfort seeking thermostat adjusting is more common amongst baby boomers than younger generations.
- The survey also revealed household temperature is one of the most contentious household arguments – ahead of who is cooking dinner, what time the morning alarm is set for, and who forgot to turn off the lights when they left the house.
- And many arguments are often based on misconceptions around home heating and energy efficiency, for example:
 - Cranking up the thermostat does not heat the home up faster than turning it a degree or two at a time.
 - It is not more energy-efficient to keep the thermostat at a consistent temperature instead of adjusting it based on the time of day.
 - Turning on a space heater is not always a more energy-efficient way to keep warm.

Solutions

This report does not intend to solve disputes between couples when it comes to the number on the thermostat; however, from an energy efficiency perspective, BC Hydro does recommend an ideal temperature to set the thermostat at depending on what individuals are doing in the home, for example:

- 16 degrees Celsius when away from home or sleeping;
- 21 degrees Celsius when relaxing or watching T.V., and
- 18 degrees Celsius when cooking or doing housework.

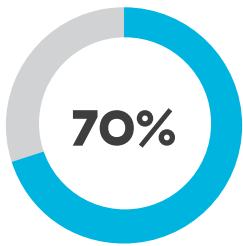
¹ Survey conducted by Insights West on behalf of BC Hydro between November 14 and 20, 2018.

² Survey conducted by Majid Khoury on behalf of BC Hydro through Angus Reid Forum between January 18 and 22, 2019.

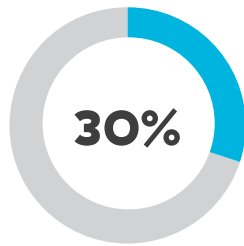
Heated arguments

Many B.C. couples squabble over the often contentious issue of what temperature to set the thermostat at. A recent survey conducted on behalf of BC Hydro found more than 4 in 10 British Columbian couples admit to arguing over the temperature in their home – with 5% describing it as an ‘all-out thermostat war.’

Reasons for changing the thermostat



to be more comfortable



to keep costs down

It appears that most of the activity in this “cold war” is happening behind each other’s backs. Close to 60% of those surveyed admit to having turned the thermostat up or down when their partner was not looking and over half said they have waited until their partner leaves home before adjusting the dial. On the farthest end of the spectrum, 1 in 5 involved in these thermostat wars admits to changing the thermostat solely for the purpose of annoying their partner.

The survey also revealed this behaviour is more prevalent amongst British Columbian couples with kids and younger couples. Couples with children were found to be 30% more likely to be battling with each other over the temperature, compared to couples without children in the home.

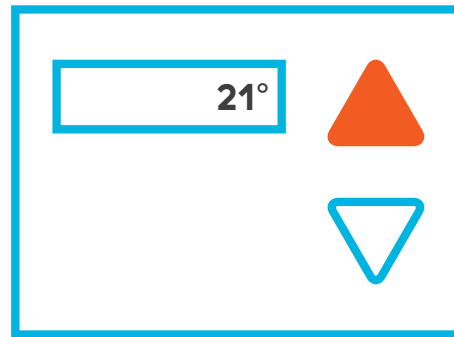
It appears those most committed to their thermostat settings are millennials (those aged 18 to 39) – with one in ten admitting to behind-the-back thermostat fiddling, while only one per cent of those over 60 admitted the same.

The great debate: comfort or savings?

For ‘thermostat battlers’, their temperature adjusting habits are far more motivated by comfort (they want to warm up or cool down) than to save money. In fact, the survey found that around 70% of British Columbians adjust the thermostat without their partner’s knowledge to be more comfortable, while around 30% said they do it to keep their heating costs down.

This response aligns with BC Hydro data that shows close to a quarter of British Columbians set the thermostat higher than the recommended temperature of 21 degrees Celsius, and one-third admit to heating all the rooms in their home at all times – even when no one is using them.

The survey found baby boomers were more likely to change the thermostat to be more comfortable than younger generations. In the winter months, British Columbian household heating costs can go up by as much as 140%. In fact, heating costs rise by about 5% for every degree above 20 degrees Celsius. This gives the cost conscious thermostat battler a strong case for their thermostat adjusting habits.



Heating costs rise by 5% for every degree above 20 degrees Celsius

Beyond the dial

“What’s for dinner?”

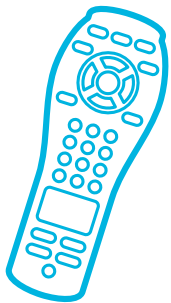
“I don’t want to watch this show.”

“You don’t need to set the alarm that early!”

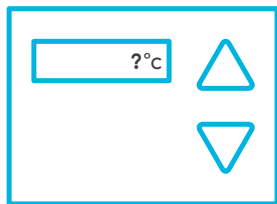
The survey commissioned for BC Hydro found that of those common tiffs between couples, the temperature of the thermostat is up there with the most contentious. According to both men and women, men are the most likely to win the argument about thermostat settings. However, these arguments are not just about the temperature setting. They are also about who has control over the thermostat and how long the heat stays on.

The survey found the majority of British Columbian couples argue more about the temperature of the thermostat than they do about what time the alarm clock is set in the morning, who is cooking dinner and who left the lights on when they left the house. The age old battle over control of the remote seems to persevere – with it being found to be the number one argument couples have. This may be indication that partners are willing to rescind on the temperature fight if it means they are not stuck watching ‘The Bachelor’ or stuck in a three hour long Food Network binge.

Household items that cause arguments between B.C. couples



1
WHO
CONTROLS
THE REMOTE



2
WHAT
THE THERMOSTAT
IS SET AT



3
WHAT
TIME THE
ALARM IS SET

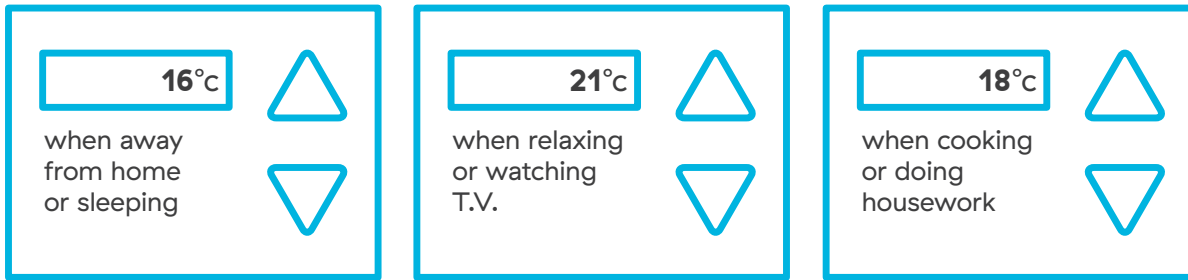


4
WHO
IS COOKING
DINNER

Setting the thermostat

In winter, heating costs can go up by as much as 140% compared to the rest of the year. Managing the thermostat by setting it at the right temperature is one of the most effective ways to control heating costs. Heating costs rise about 5% for every degree above 20 degrees Celsius.

This report does not intend to solve disputes between couples when it comes to the number on the thermostat; however, from an energy efficiency perspective, the ideal temperature to set the thermostat at depends on what individuals are doing around the house, for example:



Many British Columbians do not follow the recommended temperature settings, which may indicate why more than 40% have had an argument about the thermostat. BC Hydro found³ more than a quarter of British Columbians set their thermostat above the recommended 21 degrees Celsius, and this number jumps to 34% for people aged 18 to 34. Further, more than half of British Columbians leave the thermostat higher than the recommended 16 degrees Celsius when they are not at home or when they are sleeping.

Settling the debate

No matter what side of the thermostat war British Columbians are on, there are some common energy efficiency-related misconceptions that are often the root of couples' thermostat battles.

1 CRANKING UP THE THERMOSTAT

Myth: The higher the thermostat is on, the faster the home will heat up.

Reality: The truth is electric baseboards deliver heat at the same rate no matter how high the thermostat is set. Cranking the temperature way up is using more electricity as it will continue to heat the room even after it has passed the room's normal temperature.

2 KEEPING THE THERMOSTAT AT A STEADY TEMPERATURE

Myth: Leaving the heat on at a steady 22 degrees Celsius will save money because turning it up and down all the time ends up using more electricity.

Reality: It is better to adjust the temperature manually or use programmable thermostat to do it automatically depending on the time of day and what is happening in the household to ensure the temperature is only as high as needed. For example, when cooking or cleaning, the temperature can be lower than when relaxing on the couch in the evening.

3 USING A PORTABLE SPACE HEATER

Myth: Instead of turning up the heat to warm up the larger room, turn on a space heater.

Reality: Most portable space heaters use a lot of electricity so if the room is large, or there are multiple heaters in multiple rooms, electricity costs can rack up quickly. Space heaters work best to heat smaller rooms. Also, shut the doors to the room to keep that warm air in.

³ BC Hydro 2017 Residential End Use Survey

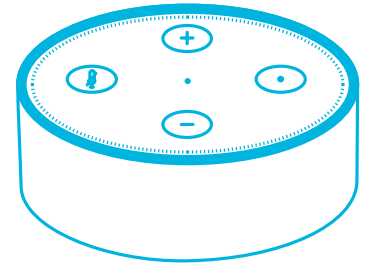
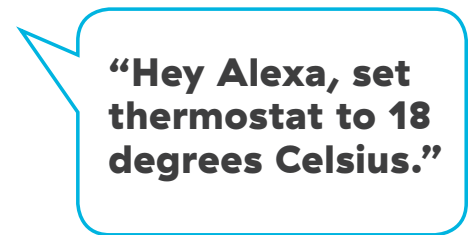
Solutions

Alexa, can you help solve our thermostat war?

Technology may provide the solution to the thermostat wars brewing in British Columbians' homes. Programmable thermostats can be set to different temperatures and will automatically adjust depending on the time of day, while 'smart' thermostats go even further.

A smart thermostat will learn a household's behaviour and then automatically adjust to the ideal temperature, and can be connected to a smartphone for controlling remotely via an app, or controlled through a smart speaker. Even if a household does not have a programmable or smart thermostat, BC Hydro data shows that those with a manual thermostat that consistently turn it down before leaving the home or going to bed have on average, a lower household temperature than those with a more advanced thermostat. This may be evidence that despite having the technology, many may not be using it properly or still setting the temperature too high.

Of those surveyed, 43% of British Columbians without a smart thermostat are interested in purchasing one in the near future.



Save energy, save date night

When it comes to improving the comfort of the home, draftproofing is a simple and very cost-effective solution. Gaps and cracks around windows and doors allow cold air in during the winter months – this not only makes a home feel drafty and uncomfortable, but also causes a household's heating system to have to work harder, leading to higher electricity costs. Sealing cracks around doors and windows to block out cold air and keep heat inside can save up to \$100 in a household's electricity costs during the fall and winter months.

Electric baseboard heaters and portable space heaters should only be turned on to heat the room that is being used. This prevents wasted heat and will keep electricity costs down. Cleaning electric baseboard heaters regularly will keep them running efficiently. Baseboard heaters clogged with dust and debris will not heat effectively and can increase electricity bills since they have to work harder to get to the desired temperature.

With BC Hydro's electricity tracking tools, households can see how adjusting their thermostat can impact their electricity use – and costs. With these tools, BC Hydro customers can:

- View electricity use right down to the hour.
- Compare their electricity use to similar homes nearby, to last year's electricity use, and to the average outside temperature.
- Set up alerts and reminders.
- Download their home's electricity use data for offline analysis.

