Generation gap:

How baby boomers and millennials stack up in their perceived and actual electricity use



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Entitled, delicate, and coddled – these are some of the accusations directed at millennials from older generations. On the other hand, millennials often place blame on baby boomers for the current state of the world – including their financial challenges and the state of the environment.

This report will examine how the differences in the lifestyles, habits and world views of these two often polarizing generations impacts their electricity use, and why baby boomers are not as 'power smart' as they may think.

Highlights

- A recent survey¹ commissioned by BC Hydro found despite thinking of themselves as the more energy conscious generation, baby boomers' annual electricity use is double that of millennials and their annual bills are about \$500 higher.
- Despite spending far less on their energy bills, millennials have a much rosier outlook on boomers' electricity use habits.
 53% of boomers think millennials use more electricity than them only 40% of millennials think boomers use more.
- There are three primary reasons boomers use more: they have larger homes, more appliances and luxury amenities, and more energy-consuming home habits. They are also more likely to have a secondary account for a recreational property.
- O Electricity use is generally higher in bigger homes.
 - 0 40% of boomers live in homes that are 2,000 square feet or larger, while 42% of millennials live in homes half that size or less.
 - In fact, millennials are three times more likely to live in homes smaller than 500 square feet.
- O Boomers' bigger homes also mean they are likely to have more electronics, appliances and luxury amenities inside. For example:
 - Boomers are twice as likely to have a pool and three times more likely to have a hot tub.
 - O Boomers are 60% more likely to have heated floors and 53% more likely to have a wine or beer fridge.
 - Boomers are also 25% more likely to have a built-in sound system or a home entertainment system.
- O Boomers and millennials have different lifestyles and habits at home.
 - When it comes to cooking dinner at home, more than one third of boomers cook seven nights a week, and use the oven a lot more, which is 80% more than millennials.
 - Boomers also love traditional T.V. with 85% still subscribing to a cable service. Between the T.V., PVR and other accessories to complete their home theatre system, a much larger portion of their bill goes to powering their entertainment than millennials who primarily use their tablets or laptops to consume media.

Solutions

While their larger homes, more appliances and luxurious 'extras' may have B.C.'s baby boomers using more electricity than their generation successors, this also means they have more opportunities to save.

BC Hydro recommends:

- O Taking advantage of BC Hydro rebates on energy-efficient home improvements, including up to \$1,200 for insulation upgrades.
- Opting for ENERGY STAR[®] certified models when shopping for new appliances these are much more energy–efficient than standard models.
- O Using a smart strip for older electronics and home theatre equipment to combat 'standby power'.
- O Unplugging and recycling a second fridge in the garage or basement.
- Cooking with smaller appliances, such as microwave, Instant Pot, toaster oven, or slow-cooker when possible they use up to 75% less energy than an electric oven.
- Using BC Hydro's free electricity tracking tools to track how daily habits can impact a household's electricity use and costs.

¹ Survey conducted by Majid Khoury on behalf of BC Hydro between February 15 and 19, 2018.

Consumption clash

A survey commissioned by BC Hydro revealed that despite living in larger homes with more lights, electronics and even 'luxuries' such as hot tubs and heated flooring, more than half of baby boomers surveyed think they use less electricity than their generational successors. Perhaps the notion that millennials are tech-addicted and spend countless hours with their phones and tablets plugged into an outlet, streaming hours of Netflix has created this perception– when in fact these devices use far less electricity than many of the standard items in boomers' larger homes.

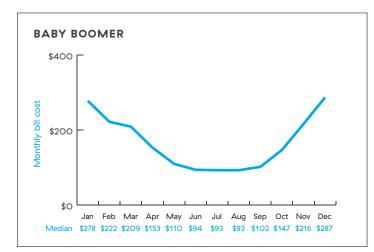
Despite the differing views, BC Hydro data shows that the average baby boomer living in a single-family home uses twice as much electricity as a millennial does living an apartment, and their annual electricity costs are around \$500 higher.

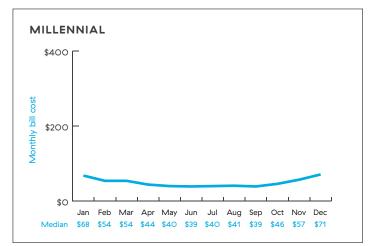
Tiny home vs. two-storey home

When it comes to the consumption differences between these two generations, the first and most obvious place to look at is housing type. According to survey commissioned by BC Hydro, 40% of boomers live in homes that are 2,000 square feet or larger – the majority of these being single–family homes. On the other hand, 42% of millennials live in homes half that size or less, with the majority being apartments and condos. Millennials are also three times more likely than boomers to live in a tiny home that is less than 500 square feet.

Not surprisingly, in the majority of cases – the bigger the home, the higher its energy consumption. This is because a home with a larger square footage will require a larger heating system and more lights. For example, the survey found nearly half of boomers have more than 30 lights in their homes compared to the majority of millennials that have less than a third of that.

Larger homes will also often have more electronics and will have all standard appliances – such as a dishwasher and washer and dryer, whereas smaller places may not.





In addition to typically having a larger primary residence, nearly 15% of boomers own or own a stake of a recreational property, such as a cabin or lake house; this is three times the number of millennials that do. This adds to their overall electricity consumption.

^{*}based on average square footage of a single-family home.

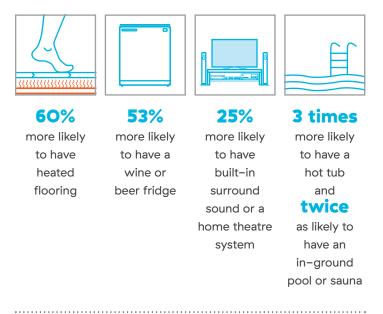
^{*}based on average square footage of an apartment.

Added luxuries

Heated flooring, a wine fridge, hot tub or a heated in-ground pool – these extras are typically not a possibility for millennials hunkered down in 500 square feet, but are a reality for some boomers.

The survey commissioned by BC Hydro found that boomers are much more likely to have these additional high energy– consuming items in their homes than millennials. And, some of these items, such as an in–ground pool can use as much as 1,250 kilowatt hours of electricity in one month. This is nearly four times the amount the average millennial uses in an apartment each month.

The survey also revealed baby boomers are:



Rental reality

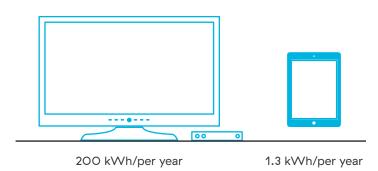
BC Hydro survey results show that boomers are more than twice as likely than millennials to own their home rather than rent. This is not surprising given the well-documented challenges of millennials getting in to the housing market in B.C. Research such as Royal LePage's Peak Millennial Survey highlights how the province's high home prices have left many wannabe homebuyers between the ages of 25 and 30 outside the real estate heat. So how does renting versus owning impact a home's electricity use? For starters, the majority of renters will not add additional appliances – such as a second fridge or chest freezer to their home. Renters are also unlikely to make investments in pricey upgrades and add items that are big energy sucks, such as a hot tub or heated floor.

Traditional T.V. vs. tablets

When it comes to their electricity use, one of the biggest differences between boomers and millennials is boomers' love for traditional television. About 85% of boomers use a traditional cable service – while only 50% of millennials subscribe to these types of services. About 60% of boomers admit to watching more than eight hours of T.V. a week, in addition to also recording more than eight hours of programming a week on a PVR.

The average PVR uses approximately 180 kilowatt hours of electricity per year – and much of this is attributed to standby power. This is because PVRs run 24/7 to allow for updates and ensure they do not miss recording the latest episode of 'Jeopardy'. Add a standard smart T.V. to this and it increases to approximately 200 kilowatts of electricity a year. In comparison, a tablet – the device most commonly used by millennials to watch shows and movies – uses a measly 1.3 kilowatt hours a year based on the same eight hours of viewing.

Baby boomers are also nearly 25% more likely to have a surround sound or home theatre system. Based on eight hours of usage a week, a home theatre system uses approximately 92 kilowatt hours of electricity per year. This means that boomers' television watching habits typically takes up a much larger portion of their home's electricity use than millennials.



*based on 8 hours of viewing per week

A home cooked meal

When it comes to cooking dinner at home, more than one third of boomers make dinner at home seven nights a week. They are also more likely to use the oven to cook those meals, which is one of the highest consuming single use appliances.

This is 80% more than millennials who are twice as likely as boomers to only cook half their meals at home. In general, millennials are nearly 170% more likely to eat out as often or more than they cook at home than boomers.

Tips to save

While baby boomers may use more electricity on average, this also means they have more opportunities to save – this is especially true for those that own their home. Energy–efficient home improvements, such as installing upgraded insulation, new windows and opting for ENERGY STAR[®] appliances, can significantly reduce a home's electricity use – and lead to lower electricity bills.

For homeowners looking to renovate, BC Hydro offers rebates on a variety of energy–efficient home improvements, including up to \$1,200 on insulation upgrades.

A household's appliances also offer opportunities to save as they can account for up to 20% of a home's annual electricity costs. For those looking to upgrade or replace an appliance, BC Hydro recommends opting for ENERGY STAR® certified models. These are much more energy–efficient than standard models and will offer the benefit of lower electricity bills over the lifetime of the appliance. BC Hydro also recommends unplugging and recycling a secondary fridge. This can offer significant savings as a fridge uses the most electricity out of any appliance in the home.

Limiting the use of larger appliances and using them more efficiently can also help. For example:

- O opting for smaller appliances to cook meals most use half the wattage of a full-sized electric oven;
- setting the fridge and freezer to the ideal temperatures this should be between 2 and 3 degrees Celsius for a fridge and –18 degrees Celsius for a freezer.
- O only running full loads in the washer, using cold water and hanging to dry when possible; and,
- O turning off the heat-dry cycle on a dishwasher to reduce its electricity use by 15%.



GENERATION GAP