

Understanding Household Electricity Use

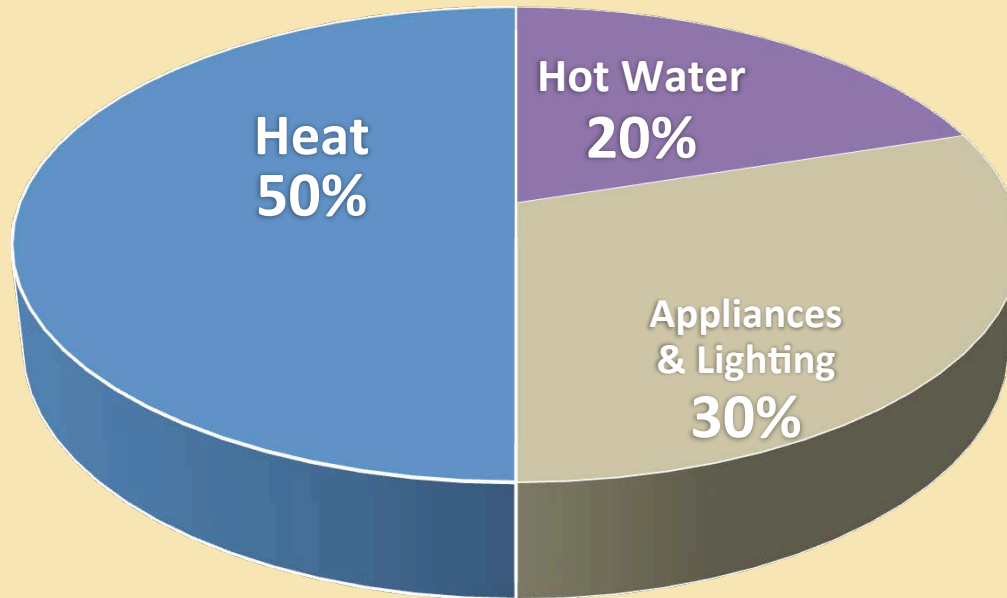


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 **Énergie NB Power**

Annual Energy Use in the Home

(for an average family of 3 – 4 people)



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Heat

50% of the annual energy used in an average home is attributed to heat

The amount of heat required depends on:

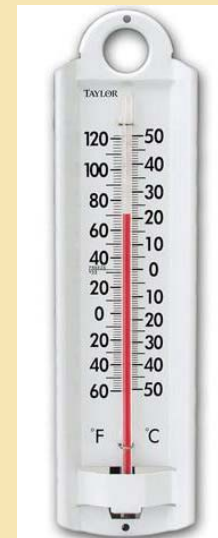
- The heat requirement of the occupants
- The houses ability to retain heat and
- Weather (outside temperatures)



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Heat

We do have influence over the requirement for heat by keeping inside temperatures as moderate as possible.



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Heat

It is important to make sure that your house can retain the heat that you put into it for as long as possible.

We can't stop heat from going to cold,
but we can slow it down by:

1. Insulating warm areas from cold
2. Air sealing drafty areas



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Heat

Weather in New Brunswick directly influences how much heat we use.

The colder it is outside, the more heat is required to maintain indoor comfort levels.

This effect is minimized by increasing your house's ability to hold heat.



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Hot Water

20% of the annual energy used in an average home is attributed to hot water.

The amount of energy required for hot water depends on:

1. The number of occupants
2. Their hot water usage habits and
3. Timely fixing of any leaks that may exist.

Hot water usage costs approximately 3¢ per gallon.



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NB Power Water Heater Rental Program

Program highlights:

NB Power tanks are custom manufactured for New Brunswick to reliably and efficiently deliver hot water year after year.

Our rental program includes a 24/7 service guarantee for worry free hot water.

Residential sizes available:

60 gallon (270 litres) up to seven people
\$8.53 per month

40 gallon (175 litres) up to four people
\$6.58 per month

22 gallon (100 litres) special purpose
\$6.58 per month



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Appliances and Lighting

30% of the annual energy use for an average family is attributed to lights and appliances.

The amount of energy required for appliances and lights depends on:

1. The lighting and appliances we choose to use and
2. How many hours we choose to use them!



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Calculate how much things cost

Calculate how much things cost

WE NEED TO KNOW THREE THINGS

1. **POWER** (measured in kilowatts. $1\text{kW} = 1000\text{W}$)
2. **TIME** (measured in hours)
3. **RATE** (NB Power's published rates in ¢ per kWh)



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Read the Label

To determine the number of watts the device uses.

The maximum wattage of any electrical device is found on the product label fixed to that device.

Read the label before you buy your device!



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Time

*Once you know how many kilowatts your device uses,
the only thing left is to know how many hours it will
operate!*



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NB Power Rates

(as of April 1, 2017)

Monthly Service Charge

Urban Areas \$21.60

Rural Areas \$23.69

Energy Charge: All kilowatt-hours 10.81¢ / kWh



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COST?

*How much does it cost to operate an average
baseboard or portable space heater?*

Power (kilowatts): 1.5 kilowatts (1500 Watts from label)

Time (hours): 1 hour

Rate (¢ per kWh): 10.81¢ per kWh

Cost of operation for 1 hour is about 16¢

(1.5 kW x 1 hours x \$0.1081 per kWh)

**How many hours per month do you
use your portable space heater?**



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COST?

How much does it cost to operate a hair dryer?

Power (kilowatts): 1.8 kilowatts (1800 Watts from label)

Time (hours): estimated at 5 minutes per day

*(5 minutes per day for 30 days =
150 minutes or 2.5 hours per month)*

Rate (¢ per kWh): 10.81¢ per kWh

Cost of operation for 1 month is about 0.49¢

(1.8 kW x 2.5 hours per month x \$0.1081 per kWh)



COST?

How much does it cost to heat 40 gallons of water?

Power (kilowatts): 3kW (3000 Watts from label or manual)

Time (hours): 4 hours

Rate(¢ per kWh): 10.81¢ per kWh

Cost of heating a 40 gallon tank of water is \$1.29. (3 kW x 4hrs x \$0.1081)

But if there is a leak, and the tank runs continuously it could cost as much as \$233.49 in just one month!
(3kW x 24hrs x 30 days x \$0.1081)



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COST?

How much does it cost to run a clothes dryer?

Power (kilowatts): 4.8 kW (4800 Watts from label or manual)

Time (hours): 1 hour

Rate (¢ per kWh): 10.81¢ per kWh

4.8kW x 1hour x \$0.1081= 52¢ per load

**How many loads of laundry
do you do in a month?**

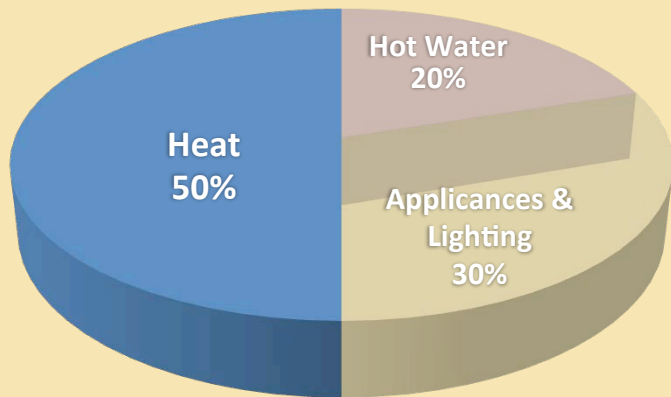


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Want to Save?



Here's some ways to save with heat:



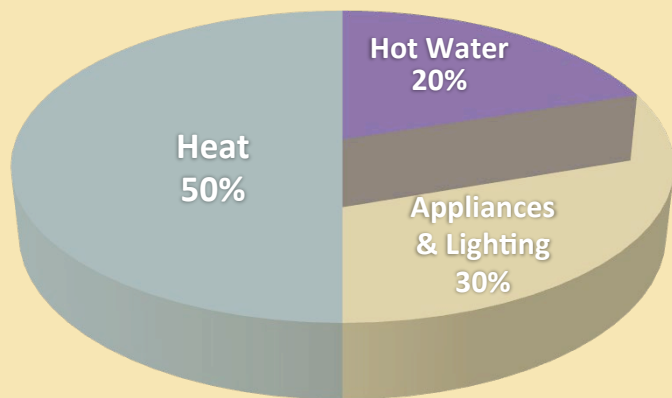
- Turn electric baseboard heaters off at the electrical panel until the start of the heating season.
- Don't overheat.
- Reduce thermostat set-points when away and at night.
- Consider installing a programmable thermostat to make reducing the set point easier.



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Want to Save?

Here's some ways to save with hot water:



- Fix leaks and drips in plumbing and fixtures.
- Limit shower time.
- Use a low-flow showerhead.

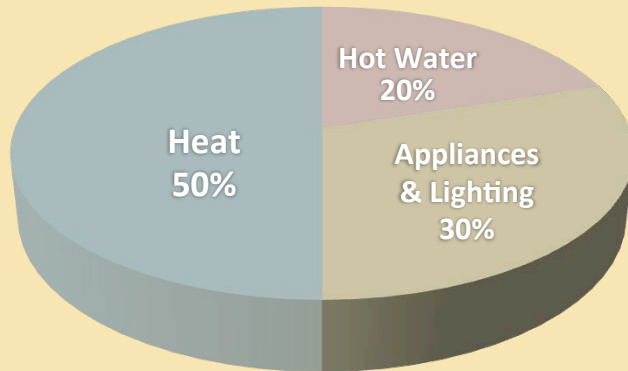


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Want to Save?

Here's some ways to save with appliances and lighting:

If you aren't using it....Shut it off!



- Use a timer to help reduce operating times
- Unplug that old, empty fridge or freezer.
- Use power bars for computer and home entertainment systems.



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How can NB Power Help?

Visit us at www.nbpower.com for energy saving tips and tools:



HEATING & COOLING

Heating is a fact of life in New Brunswick during the winter and typically accounts for 60% of an average 3-4 person family's annual energy bill.

[Learn Heating & Cooling Tips](#)



HOT WATER

Hot water use can account for 20% of an average 3-4 person family's annual energy bill.

[Learn Hot Water Tips](#)



APPLIANCES & LIGHTING

Shutting off all appliances and devices when they are not in use is the best way to save on your energy bill.

[Learn Appliance & Lighting Tips](#)



BUSINESS

Understand your energy consumption by knowing when energy is used and what equipment is using it.

[Learn Tips for Businesses](#)



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Remember

A KILOWATT-HOUR IS

A kilowatt multiplied by the number of hours used.

kWh

POWER

- Read the label:
 - Device manufacturer labels
 - Energy Star labels
 - EnerGuide labels
- Measure with [appliance meter](#)
- Average [appliance data](#)

TIME

- Limit operating hours:
- if it is not in use shut it off
 - use power bars
 - use timers



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Programs Offered by NB Power

- Equalized Payment Plan (EPP)
- Pre-authorized Payment Plan (PPP)
- Landlord Service Plan (LSP)
- Payment Arrangements
- NB Power online
- Home Insulation Energy Savings Program
- Home Energy Reports



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Equalized Payment Plan (EPP)

- Pay the same amount each month
- Monthly bills are issued based on pre-determined equalized billing payment amounts
- Any remaining balance is due at the end of one year of equalized billing payments
- If a credit remains it is carried forward and applied to your account



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Pre-authorized Payment Plan (PPP)

- Automatic withdrawal when payment is due
- On-demand one-time payment
- Saves you time and postage
- Worry-free, guaranteed on-time payments each month



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Landlord Service Plan (LSP)

- When a tenant vacates your property and requests a disconnection of service a meter reading is done and a final bill is issued to your tenant
- Service is transferred into your name without interruption
- You are not charged a service call fee



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Payment Arrangements

- We understand there are many reasons why you may not be able to pay your bill on time. We want to help.
- We'll review your account and ask lots of questions to help create the best payment plan for you.
- Spread larger invoices over an extended period
- Align payments with your pay periods
- Payment arrangements do not include future monthly invoices
- Avoid interruption of service, unwanted phone calls or letters



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Having trouble paying your bill?

If you are having a difficult time paying your bills there are organizations out there to help:

- Social Development: 1-866-441-4245
- Home Energy Assistance Program: 1-800-669-7070
- Senior's benefit: 1-800-669-7070
- You can also check with local non-profit organizations in your area.



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NB Power Online

NB Power customers have the ability to create an online profile and enjoy the convenience of our self-service options.

With your online profile you can quickly and easily:

- View and print your current and past bills
- View and print your account statement
- View your balance
- Set up a Pre-Authorized Payment Plan
- Make a one time payment
- Report a payment
- Set up and manage multiple locations where you have NB Power services



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Home Insulation Energy Savings Program

- This program is designed to help offset the cost of insulation and air sealing upgrades to your home.
- Energy advisors perform a home evaluation and make a list of recommended upgrades.
- Homeowner has 30 days to review upgrade list and notify NB Power which upgrades they intend to complete.
- Upgrades must be completed in 9 months.
- Visit www.nbpower.com/en/smart-habits to find more info and to apply
- Homeowners who do one major insulation upgrade through the Home Insulation Energy Savings Program will be eligible for a \$500 heat pump bonus.



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Home Energy Reports

- NB Power's home energy report portal gives you access to detailed information about your home's energy use and customized energy savings tips.
- For the first time, you'll be able to see your home's energy use and compare it with similar homes in your area.
- You'll see how your home's energy use changes over time and across seasons.
- You will find ways to save energy, including information on rebates and other special programs we offer.



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Thank you / Questions

www.nbpower.com



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