

## Home Appliance Assessment

How much electricity do you use in a day? Are there ways to lower that? Fill out the table to calculate how much energy different appliances use.

**Step 1:** Walk through your home and look for electric appliances. Think about anything that uses electricity/gets plugged in or charged. Over the course of one day, list in the A column each appliance you use.

### Some common electric appliances

Stove, refrigerator, toaster, dishwasher, coffee maker, microwave

TV, DVD/Blu-ray player, cable box, video game console

Computer, printer, tablet, cell phone, internet router

Clothes washer and dryer

AC unit, plug in space heater, fan, water heater

Lighting-Incandescent, CFL, or LED bulbs

**Step 2:** Estimate how many months/year you use each appliance and fill in column B. Predict which appliance will use the most electricity, and which one will use the least. Circle the one in the chart that will use the least, star the one that will use the most.

**Step 3:** Go to Efficiency Vermont's [Electric Usage Chart](#). Look up each appliance and fill in the kilowatt hours (kWh)/month in column C.

*Optional: If you have a Kill-A-Watt meter, you can use that to determine the kWh of your appliances. Go [here](#) for instructions on how to do that. You can borrow Kill-A-Watt meters from [VEEP/NHEEP](#) or find them at your local library.*

**Step 4:** Multiply columns B & C together to find the kWh/year and fill in column D.

**Step 5:** Multiply kWh/yr (column D) by \$.17 (the current cost per kWh) and fill in column E.

**Step 6:** Multiply kWh/yr (column D) by 1.2 lbs CO<sub>2</sub>e emissions (the current rate of emissions per kWh) and fill in column F.

**Step 7:** Total everything in columns D, E, and F in the last row to find out how many kWh these appliances use per year, and what the costs and CO<sub>2</sub>e emissions are for your energy use.



## Analyze

1. Which appliances use a lot of energy? Did anything surprise you? How did it compare to your predictions?
2. Which only uses a small amount? Any surprises? How did it compare to your predictions?
3. Are there appliances in your home you didn't count? List some here and say how you think their energy use would compare to the appliances you calculated.

*Extension: Add these extra appliances to your chart. Follow steps 1-7 above for every electric device in your home to calculate your home's total electricity usage per month and year. Compare this with your electric bill to see if your calculations were accurate.*

## Compare

1. See if you can get a copy of your home's electricity bill for a few different months. How many kWh/month does your family use on average?
2. How do you think your home compares to others'? Do you think you are higher than average? Lower? Give some reasoning for your guess.

### The average home

- in Vermont uses 6,765 kWh/year
- in New Hampshire uses 7,200 kWh/year

3. Multiply your monthly average by 12 to get your yearly average. How does your home compare? Are you higher than average? Lower? Is this what you expected?

4. How can you lessen your home's electricity use? List some ideas here.

### Take Action

After analyzing your household's appliance and electricity habits, where can you make change? Where can you choose to use less electricity or lower your emissions impact? Talk with your family and design an action plan to help change your habits to reduce impacts from electricity use. Check out how to "Be Electricity Smart: Use your Power Wisely" in our [VEEP/NHEEP 2020 poster](#) for ideas.

Actions	When/Timeline	How

For the next month, log any actions daily that are working towards your goal of reducing CO<sub>2</sub>e emissions from electricity. Use the table below or a blank calendar.

1)	2)	3)	4)	5)	6)
7)	8)	9)	10)	11)	12)
13)	14)	15)	16)	17)	18)
19)	20)	21)	22)	23)	24)
25)	26)	27)	28)	29)	30)

After 1 month, reflect:

1. Explain how successful you were with your goal. Do you feel like your habits changed?
2. Which actions will you continue to reduce emissions from electricity? Explain why.

## Extend Your Reach

- Share your emissions-reducing actions, reflections, or ideas on our social media!
  - [facebook.com/NHenergyed](https://facebook.com/NHenergyed) or [facebook.com/VTEnergyEducation](https://facebook.com/VTEnergyEducation)
  - [instagram.com/vtenergyed](https://instagram.com/vtenergyed) or [instagram.com/nhenergyed](https://instagram.com/nhenergyed)
- Share what you did to reduce emissions from your electricity habits with others. Talk with friends, classmates, and/or family. Encourage them to make action plans, too.
- Sign up for our Action Programs: [Vermont/New Hampshire](#)
- In NH, check out our NHSaves Education Challenge: a literacy challenge where you can create and submit individual or group projects with a written component answering questions about energy and energy efficiency. Prizes for winners!
  - [www.nheep.org/nhsaves-education-challenge](http://www.nheep.org/nhsaves-education-challenge)

**For next steps and ideas on how to take action to reduce emissions from electricity in your school, community, or state, check out our website.**

Vermont: <https://veep.org/poster-2020>

New Hampshire: <https://nheep.org/poster-2020-21>

For more information on how to reduce electricity use and costs in your home, check out [Efficiency Vermont](#) or [NHSaves](#).