

WINTER ENERGY EFFICIENCY GUIDE

INSIDE:

- It's All About Choice
- What is a Kilowatt-hour?
- Ways to Save Around Your Home
- Saving Energy 101
- FREE Energy-saving Kits

idahopower.com/save

It's All About Choice



Theresa Drake,
Manager of Customer
Relations and
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On the national scene, rapid growth in technologies supporting energy independence and the environment is providing exciting new options for managing home energy use.

Want to know how much electricity you used last week on laundry day?

Check out myAccount at idahopower.com from your smart phone or tablet to access data on your home's energy use.

Wish your power was generated by the sun? Join our new Community Solar Pilot program and help build a new solar array.

Want to manage your home's temperature from a smart phone app? See which smart thermostats qualify for an Idaho Power incentive. Idaho Power continues to provide options and give you the power to choose. We hope this semi-annual energy-efficiency guide gives you the information and ideas you need to make the most of the electricity dollars you spend. It's all about choice.

Learn more about your energy options:

idahopower.com/myaccount
idahopower.com/solar



Volts and Amps and Watts OH MY!

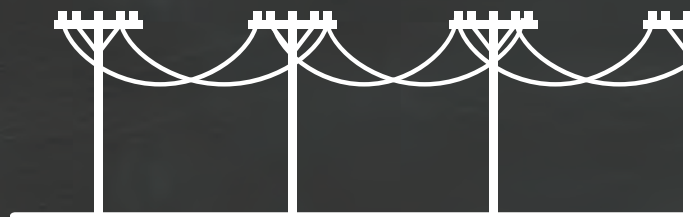
Few people take the time to learn how electricity use is measured. Your home's energy use doesn't have to be mysterious. It is precisely measured based on the activity in your house. Understanding a few basic facts can help you understand your bill and give you the power to make good energy choices.

An easy way to understand electricity is to think about your home's plumbing. The time it takes to fill a bathtub with water depends on the water pressure, the flow rate and the size of your pipes. High-pressure, fast-flow and large pipes mean you can fill a tub faster. However, a trickle will also fill

your bathtub over time. You get to decide if you want to open the faucet all the way or not. Either way, the amount of water that ends up in the tub can be measured.



Electricity works the same way. When you plug in a device or turn on a switch, the combination of pressure (volts), electron flow rate (amps) and resistance (ohms) determines how many electrons (watts) flow into your home. Decisions about what gets turned on and for how long are yours. Over the course of a month, your meter measures the watts that pass through it to power the various appliances and electronics in your home.



What is a Kilowatt-hour?



Electricity is measured in units — called Kilowatt-hours (kWh).

One kWh of energy is usually enough electricity to:

Cook breakfast for a family of 4



Vacuum for 1 hour



Brew 90 cups of coffee



Iron 11 shirts



Watch TV for 10 hours



How does your use compare?



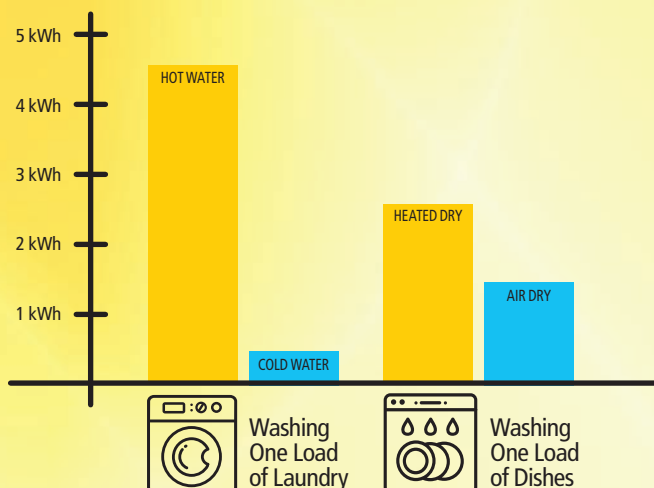
On average, a single family home in Idaho Power's service area uses about **1,000 kWh** per month!

To learn more about how much energy you use each month, view your account information with myAccount. Not registered? Signing up is easy — visit idahopower.com today!

Choices you make each day affect how many kWhs get used.

Here are some examples

- One load of laundry washed with hot water and rinsed with cold uses about 4.5 kWh. The same load of laundry washed and rinsed in cold water uses about 0.3 kWh.
- One dishwasher load of dishes washed with the heat-dry setting uses about 2.4 kWh. The same load with the air-dry setting uses about 1.3 kWh.



Measuring Watts

Ever wondered how much your entertainment system adds to your power bill or how much electricity your morning pot of coffee requires? Find out how much electricity it takes to keep the appliances and electronics in your home up and running.

Kill-A-Watt™ meters are available for check out (just like a book) at your local library. Take one home to learn about your energy use and identify ways to save.

The meter is easy to use. Plug the meter into a standard three-prong electrical outlet, then plug the appliance or electronic item into the meter. The meter measures the amount of power being used. This can help you identify savings opportunities.



HOW IT WORKS:



The Meter and the Bill

The meter on your house measures the watts that flow into your home over time. For instance, a 10-watt LED bulb burning for 10 hours would use 100 watt-hours (10 watts x 10 hours), whereas a 100-watt bulb burning for 10 hours would use 1000 watt-hours (100 watts x 10 hours).



To keep the numbers smaller on your power bill, we divide the number of watts used by 1000. This converts the watt-hours to kilowatt-hours. As of June 30, 2016, Idaho Power's average residential rate for one kilowatt-hour was 10.19 cents.

Ways to Save Around Your Home

In the
Winter

Bedroom

- Open blinds during the day to increase solar heat gain. If you can feel air flow around the window frame, caulk to seal gaps.

Living Room

- In the winter, reverse your ceiling fan so it runs clockwise (looking up).
- Use a smart power strip to turn off video games, computers and electronics when not in use.
- Save energy without sacrificing comfort. Install a programmable or smart thermostat to turn down the temperature at night and when you are away.
- Weatherstrip your doors.

Kitchen

- Use ENERGY STAR® certified LEDs. They save 80 percent or more on energy use and can last more than 20 years.
- When it's time for new appliances, choose ENERGY STAR. These products meet strict energy efficiency standards.
- Use your oven efficiently. Bake many items at once or one right after another.

Bonus Room

- Attic insulation saves energy and makes your home more comfortable year-round.
- Plug computers, chargers and other electronic equipment into a power strip and switch it off when not in use. Standby power can account for 6 percent or more of a home's energy use.
- Ductless heat pumps heat and cool homes quietly, evenly and at a lower cost than baseboard or wall heaters.

Bathroom

- Adjust your water heater temperature so the hottest water at the farthest faucet is 120° F.
- Use thermostatic shower valves and faucet aerators to reduce hot water waste.

Laundry Room

- Hang your clothes to dry.
- Wash full loads of laundry in warm or cold water and always rinse with cold.
- Seal leaky ducts with mastic or approved foil-faced tape.

Garage

- Invest in a home energy audit. A certified home performance specialist evaluates your home and provides recommendations to make it more comfortable and use less energy.
- Clean or replace your furnace filters at least twice each year.
- Consider recycling second refrigerators and freezers — especially pre-1992 models.

Saving Energy 101

You Can Do This!

You've decided it's time to save energy — but where do you start? It's easy to feel overwhelmed.

A good place to start is by looking at the lighting in your house. Which lights do you use the most? **Replace your five most-used light bulbs with LEDs** — it's super easy and takes little time. Plus, you won't have to worry about changing light bulbs for a long, long time. Keeping the bulbs clean is also a simple tip — dust can cut light output by as much as 25 percent.



Next, look at your heating and cooling. Can you **adjust the temperature down a few degrees in the winter** or up in the summer? Programmable or smart thermostats can make this easy—especially at night or when you are away from home.

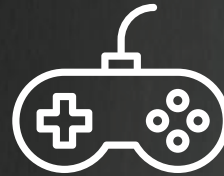


Smaller appliances use less energy, so think about **using your crock pot or microwave when making meals**. Match the size of your cooking pans to the size of the surface unit on your stove so you won't waste heat. When you do use your oven, bake multiple items.



What about your bathroom? Showers generally use less hot water than baths. Most folks like to warm up the shower before stepping in. Try to **keep warming time to a minimum**, or use a thermostatic shower valve to reduce the water to a trickle when it's ready.

When setting up a TV, cable box, gaming console or computer system, enable the power save settings, and **use a smart powerstrip**.



A few simple changes can reduce your energy use over time — saving you money while allowing you to live comfortably.

TIPS for College Students

- If you live in a dorm room with roommates, consolidate appliances (use only one TV and refrigerator).
- During warm winter days, open the blinds and let the sunshine in.
- Place your desk by the window so you can use daylight rather than a desk lamp.



Some smart power strips allow you to maintain one or two devices in standby mode while switching others off (to prevent the need for reprogramming).



Get nine LEDs in a FREE Energy-saving kit.

Order yours today at idahopower.com/save2day

See back page for more info.



Your Home's Envelope



Our homes provide shelter and comfort against the elements. They do this best when there's a solid, defined barrier between the inside and the outside. The physical separator between the temperature-controlled part of a building and its exterior is called the building envelope.

Walls, floors, ceilings, roofs, windows and doors can all be part of your home's envelope. The materials used to build your house and the way they were put together, determine the efficiency and comfort you experience.



Since up to 50 percent of your annual energy use goes to heating and cooling, it's worthwhile to make sure your home's envelope is well-sealed and insulated.

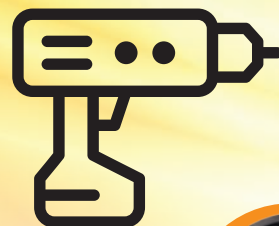
Insulation – How Much is Enough?

A well-insulated envelope acts like a warm sweater. Current code recommends attic insulation at either R-38 or R-49 depending on the climate zone, walls at R-19, and floors and crawl spaces at R-30. Even newer homes may need more insulation. Most contractors will assess your insulation levels for free. We recommend getting three bids if work needs to be done.

R-Value is a measure of a material's thermal resistance. Higher R-values indicate more resistance to heat loss.

Sealing the Gaps

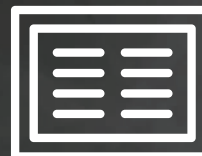
A well-sealed envelope adds the wind-proof layer. Home performance specialists have equipment to accurately measure, find and repair air leaks in your home. However, if you feel drafts or can see daylight around a door or window, you can seal openings yourself with caulk or weather-stripping.



TECH CORNER



To Close or Not to Close



Heating and cooling systems are designed to operate efficiently with a specific amount of airflow. Although closing register

vents in unused rooms may seem like a good idea, we do not recommend it unless your system was specifically designed to handle this practice. Closing registers reduces airflow over the indoor coil in heat pumps and central air conditioners. This can lead to a damaged compressor. Low airflow can also increase the temperature in furnaces and lead to cracks in the heat exchanger followed by safety concerns with carbon monoxide.

Smart Thermostats

Smart thermostats have many features not found in older thermostats, such as occupancy sensing, which adjusts the room's temperature when it senses no one is home. Some models have geo-fencing, in which the thermostat monitors your distance from home through your smart phone. At a pre-determined distance, your system will turn on. This feature can take the place of having to program a daily temperature schedule. You can even adjust your thermostat remotely using a phone app. The goal of these thermostats is to help put you in control of the energy use and operating costs of your heating and cooling system.

Idaho Power offers a \$75 incentive for having a qualified smart thermostat installed in a home with an electric furnace or heat pump.

68°

FREE

Energy-saving Kit

What you'll get:

- LED Bulbs
- LED night light
- High-efficiency showerhead and faucet aerators*
- Shower timer
- Digital thermometer
- And more!

*Sent only to customers with electric water heaters.

Installing these items will help you save energy and money.

Don't wait. Order your free kit today!



Save energy.
Save money.

Two easy ways to order:

1. Online at idahopower.com/save2day
2. Or, call 1-800-465-6045

Have your account number handy.



Limit of one kit per residence.

Quick Tips

Because it takes natural resources to generate electricity and family resources to pay energy bills, you may want to consider energy efficiency and conservation in your daily routine.

Lighting

1. Make good use of daylight.
2. When you need artificial light, use LED bulbs — especially in high-use areas.
3. Turn off lights and use automatic timers for outside and decorative lights.

Heating/Cooling

1. Set your thermostat to 68°F and even lower at night or when you are away during the day. Heat pumps perform best at a steady, moderate setting in winter.
2. Set your water heater at 120°F, refrigerators at 40°F and freezers at 0°F.
3. Wash full loads of laundry in warm or cold water and always rinse with cold. Hang dry clothes when possible.

Entertainment

1. Plug electronics into a power strip and switch it off when not in use.
2. Enable power save settings.

Wise energy use allows us to enjoy a higher quality of life and get more for each electricity dollar we spend.

