

Energy Efficiency

Guide

TAKE CHARGE of Your Energy Use

- Mobile App — My Account Now in Your Pocket!
- What is a Kilowatt-hour?
- Heating vs. Cooling Efficiency: Which Saves the Most?
- Finding the Truth About Energy Savings
- Working with a Contractor
- Ways to Save for Every Season
- Considering Rooftop Solar?

A glowing lightbulb with a green plant growing inside, symbolizing innovation and growth. The lightbulb is constructed from a network of blue lines and dots, resembling a digital or molecular structure. The plant inside is green and has two main stems with leaves. The background is dark blue with small white stars, suggesting a cosmic or futuristic theme.



As you know, Idaho's had some extreme weather these past few years. Believe it or not, outdoor temperature can have a big impact on home energy use. In this guide, we'll share our best advice to help you save energy without sacrificing comfort.

How does the outside temperature affect your bill? When we experience extreme hot or cold temperatures, our heating and cooling systems run more than they would on a day when outside temperatures more closely match our desired inside temperature. Folks also tend to spend more time inside on extreme weather days, which means using more lights, electronics, appliances and other household items.

One of the best ways to be energy aware, and reduce your use, is to use the tools in My Account — available on our website or through our new mobile app. Customers can view usage trends, sign up for outage and account alerts, and fill out the Energy Use Profile in the Energy Savings Center. When your Energy Use Profile is complete, you'll find tips and savings estimates customized to your home, along with approximate costs for any suggested home improvements.

My Account is also a great place to sign up for convenient programs like paperless billing, Auto Pay and Budget Pay — all make managing your Idaho Power account even easier. And our account and outage alerts let you know when your next monthly bill has reached an amount you set, if your bill becomes past due or if an outage impacts your home or business. While you're there, confirm that your contact information is up-to-date so we can reach you in case of an outage or billing issue.

We hope this Energy Efficiency Guide provides the tools and tips to help you save all year long. For more energy efficiency information, visit idahopower.com/save.

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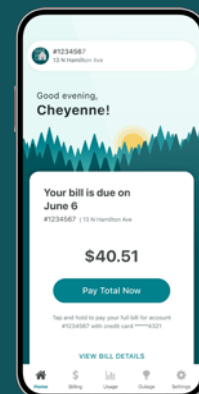


MOBILE APP

My Account —
now in your pocket!

Access everything you need to manage your Idaho Power account from the convenience of our **NEW mobile app!**

- Log in using touch or face ID
- Track your energy use
- Save payment methods for quick, secure payments
- Track power outages and view the outage map
- Sign up for billing and payment programs
- Sign up for and receive outage and billing push notifications

 Find Idaho Power's mobile app in both Apple and Google Play stores.

What is a Kilowatt-hour?

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



Energy Savings 101

MEASURING WATTS

Check out an Energy Efficiency Kit at your local public library and find out how much electricity it takes to keep the appliances and electronics in your home up and running. The kit features a Kill-A-Watt™ meter (a device that measures the energy consumption of appliances in your home), instructions for using the meter and tips for saving energy.

The meter is easy to use! Plug the Kill-A-Watt meter into a standard, three-prong electrical outlet, then plug your appliance into the meter. The meter measures the amount of power used, helping you identify potential savings by either unplugging items when not in use or replacing it with a more energy-efficient model.

If you frequently leave your TV on all day, you can measure how much power it uses in a set period. Using the calculator at you can see how much money you can save by turning it off when it's not being watched.



One kWh of energy is usually enough electricity to:



Vacuum for 1 hour



Cook breakfast for a family of four



Brew 90 cups of coffee



Watch TV for 10 hours



Iron 11 shirts



DID YOU KNOW?

On average, a single-family home in Idaho Power's service area uses about 1,000 kWh per month! Learn how much your home uses each month at idahopower.com/myaccount.

You've decided it's time to save energy, but where do you start? Taking a few easy steps can make a big difference.

- **Start with lighting.** Replace your five most-used light bulbs with LEDs — it's fast and easy. Plus, you won't have to worry about changing those 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%.
- **Next, look at heating and cooling.** Can you adjust the temperature up a few degrees in the summer or down in the winter? Programmable or smart thermostats can make this easy — especially at night or when you're away from home.
- **Use less energy with smaller appliances.** Think about using your pressure cooker, air fryer, slow cooker 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 at the same time.
- **Reduce your hot water use.** Showers generally use less hot water than baths. Most folks like to warm up the shower before stepping in. Keep warming time to a minimum or use a thermostatic shower valve to automatically reduce the water to a trickle between the time it's ready and when you get in.
- **Use the power-save settings and a smart power strip** when setting up a TV, cable box, gaming console or computer system.

Heating vs. Cooling Efficiency: *WHICH SAVES THE MOST?*

HVAC systems continue to get more efficient — however, if you want the latest and greatest, it often comes with a premium price tag.

What should Idaho Power customers look for? Southern Idaho and eastern Oregon are a heating-dominant climate — meaning customers use more energy to heat our homes in the winter than we do to cool our homes in the summer. There are slight differences — heating homes in McCall and Salmon would use a bit more energy than average due to the colder temperatures and longer winters, while homes in Boise may spend a bit more on summer cooling due to warmer temperatures and longer summers.

Knowing more energy is generally used to heat than cool in our climate can help you make better decisions about where to spend extra dollars to get the best return on your investment (ROI). It might make sense to use an entry-level heating system and spend extra for a very efficient central air conditioner (A/C) in Miami. But in Pocatello, an entry-level central A/C coupled with a highly efficient heating system can provide a quicker payback.

Don't let the efficiency ratings (AFUE, SEER, HSPF, COP) confuse you. Our advice is to consider the most efficient system you can afford. When you decide how to allocate dollars, concentrate first on getting the highest HSPF or COP (for heat pumps). Note that a high-efficiency heat pump will usually score well for both heating and cooling.

CITY	HDD	CDD
Boise	5,900	750
Denver	6,000	700
Miami	200	4,200
New Orleans	1,500	2,650
Pocatello	7,200	400
San Diego	1,250	1,000

Heating vs. cooling for a given location is recorded using a technical measurement referred to as heating degree days (HDD) or cooling degree days (CDD). This table shows approximate comparisons.*

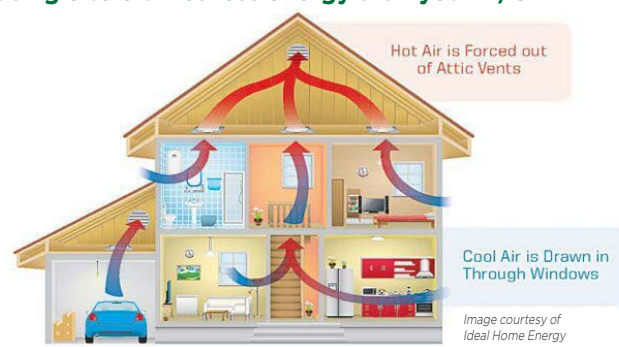
*Climate information for United States — Climate Zone (climate-zone.com)

WHOLE-HOUSE FANS *A Cool Alternative*

Whole-house fans have been around for decades. They may not be flashy, but they can provide effective and efficient cooling — using 3 to 5 times less energy than your A/C.

A high-volume fan with a ceiling louver that opens and closes is mounted in the attic. When the outdoor temperature cools below your desired indoor temperature, you simply open the right number of windows (specified in your fan's guide) and manually turn on the fan. The ceiling louver opens, and the fan draws in cool outdoor air and exhausts the warmer air inside your home into the attic—which cools the attic too! Natural convection makes it slightly easier to flush a two-story house with cool air through the first level windows—but the fan works equally well in one-story homes.

Besides reducing your home's air temperature, night flushing cools the structure of the house. This often delays the need for A/C use the following day.



NEXT STEPS

If a whole-house fan sounds appealing, consider whether you are a DIYer, or whether you'd benefit from using a licensed contractor. For eligibility and information on how to apply for Idaho Power's \$200 cash incentive, visit idahopower.com/heatingcooling.



WILL A WHOLE-HOUSE FAN WORK FOR YOU?

- ✓ Do you live in an area with cool evening/early-morning temperatures?
- ✓ Is it safe to leave your windows open?
- ✓ Will you pay attention to the outdoor temperature and turn the fan on when appropriate?
- ✓ Will you remember to close the windows and turn the fan off before the outside temperature rises again?
- ✓ Do you or your family members have allergies?

Finding the Truth About Energy Savings

There are a lot of energy-saving messages and gadgets in the marketplace today, and it can be hard to tell between fact and fiction. To make good decisions about saving energy in your home, you need trusted sources.

You can rely on websites like energystar.gov or energysavers.gov for sound advice based on research. Many universities and states also research and publish reliable information. When assessing tips or other energy-saving claims by non-governmental sources, look for the original source and assumptions behind any claims.

It's also important to be aware that what is energy-smart in one climate or situation can be counterproductive in another. The International Energy Conservation Code (IECC) uses climate zones to set building code standards. Information from credible sources in similar climate zones will be more reliable.

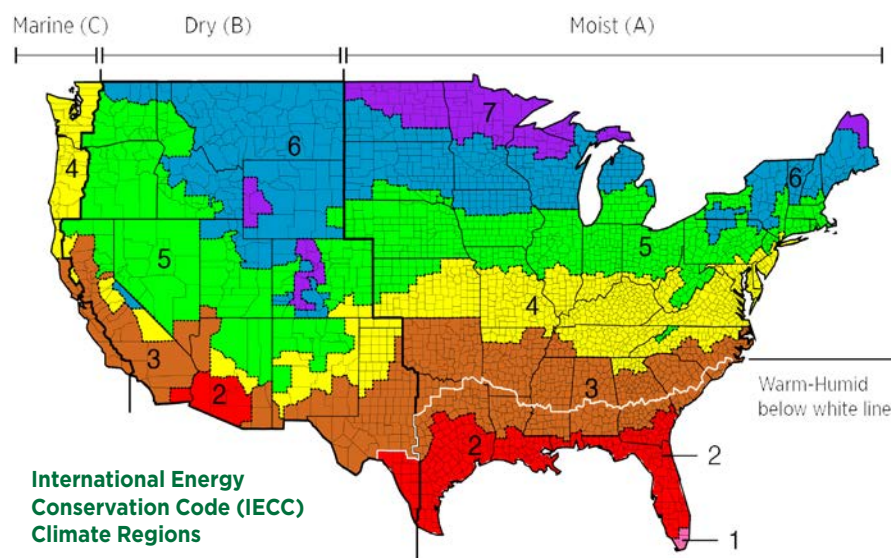
Given the amount of information to sort through, we encourage you to turn to Idaho Power, your trusted energy advisor. **We have 249 engineers and scientists devoted to understanding energy and meeting your energy needs.**

We also partner with utilities in the Northwest to fund research aimed at understanding our climate and the most cost-effective ways to save energy here at home. And when a question stumps us, we have access to a network of researchers to help find the answer.

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The next time you have a question about an energy-saving product or idea, visit idahopower.com/contactus. We'd be happy to provide you with information to help you make the best decision possible.

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TIPS FOR WORKING WITH A CONTRACTOR

Many energy efficiency upgrades are do-it-yourself (DIY) projects, but when you need to hire a contractor for those tougher jobs, here's some advice.

- **Write down what you need the contractor to do.** Be specific.
- **Get referrals** from friends, family, neighbors and co-workers that have recently used a contractor.
- **Check the recommendations.** The Better Business Bureau (bbb.org) can tell you if complaints have been filed against a contractor or company. Also, although having a state license doesn't guarantee reliability, it's a minimum qualification a contractor should have. The contractor should also be willing to provide a list of customer references.
- **Ask for multiple, itemized quotes.** These should detail the materials to be used, labor charges, project start and end dates, and the total cost. It's best to gather at least three quotes from different businesses. Compare cost, energy efficiency and warranties. The lowest price might not be the best deal if it's not the most efficient option, because your energy costs could be higher.
- **Ensure the contractor inspects your current system and assesses your needs.** For example: the size of the heating and cooling system should be based on the size of your house, level of insulation and windows. A good contractor will inspect your duct system (if applicable) for air leaks and measure air flow so your system meets manufacturer specifications.
- **Get a signed written proposal** with the contractor before work begins. The proposal should specify costs, model numbers, job schedule and warranty information. Never let a job begin without one.
- **Don't pay in full upfront or with cash.** Ask if you can set up a payment plan and stagger payments throughout the job. Once the job is complete, ask for an itemized receipt.

For more information and tips on hiring a reliable contractor, visit bbb.org/tips.

Ways to Save for Every Season

With each new season, comes new ways to save energy! Use these checklists to keep an energy efficient home year-round.

WINTER

- ❑ **Turn down your thermostat** at night or when the house is empty. If you have a heat pump, do not turn the thermostat down more than 2 to 3 degrees.
- ❑ **Open your curtains and blinds** during the day to let the sun heat your home.
- ❑ **Keep exterior doors closed** as the outdoor temperatures fall.
- ❑ **Run your ceiling fan** clockwise on low to push warm air up toward the ceiling and down the walls into the room without creating a draft.
- ❑ **Change holiday lighting** to LEDs. LEDs use at least 75% less energy than conventional lights. A timer can reduce energy use even more.
- ❑ **Seal ductwork** using mastic or approved foil-faced tape to keep heated air from leaking into your attic or crawlspace.

SPRING

- ❑ **Plant shade trees** to shield west-facing windows and block sun rays from entering your home.
- ❑ **Clean or replace air filters** to improve efficiency and help your HVAC system last longer (you'll want to do this again in the fall!).
- ❑ **Clean leaves and debris** off your outdoor A/C unit.
- ❑ **Vacuum refrigerator and freezer coils.** Dust, dirt and pet hair can prevent the coils from releasing heat, causing the compressor to run longer. This uses more energy and shortens the refrigerator's life.
- ❑ **Make sure your dryer exhaust vent outside louver moves properly and is clean.** These can become jammed when dirty. Keeping hot air outside where it belongs saves on cooling costs.
- ❑ **Use timers on landscape pumps and outdoor lights** to reduce hours of operation.

SUMMER

- ❑ **Check your thermostat setting** and align it with your comfort and budget. In the warmer months, each degree you raise your thermostat reduces cooling costs by 2-3%.
- ❑ **Reverse ceiling fans** to create a downward draft, allowing you to feel up to 4°F cooler without adjusting your thermostat.
- ❑ **Close windows and blinds** during the day or when you're out of the house, especially on the east and west-facing sides.
- ❑ **Keep exterior doors and windows closed** as the outdoor temperatures rise.
- ❑ **Haul out the grill** and cook outdoors to keep heat out of the kitchen.
- ❑ **Do laundry and run the dishwasher in the early morning or late evening hours** to avoid adding heat to your home during the warmest part of the day.

FALL

- ❑ **Weatherstrip and caulk around doors and windows** to reduce drafts. Fixing air leaks is one of the cheapest and easiest ways to improve comfort and reduce energy use.
- ❑ **Set the temperature on your water heater** so the water at the tap is 120 degrees.
- ❑ **Clean or replace air filters** to improve efficiency and help your HVAC system last longer (you'll want to do this again in the spring).
- ❑ **Clean light fixtures and dust bulbs** to maximize light output during longer days.
- ❑ **Ensure you have adequate attic insulation.** We recommend a minimum insulation level of R-38 or R-49 in Oregon and colder climates.



For more energy-saving tips, visit idahopower.com/save.



Energy Efficiency **SUCCESS STORY**

Longtime Idaho Power customers Don and Betsy Morishita have practiced energy-efficient behaviors for so long, it's become a part of their regular routine. Whether it's using a ceiling fan at night to help stay cool or replacing older light bulbs with LEDs, the retired Twin Falls couple balances their home's comfort with their desire to keep their summer energy bills low.

"We close blinds during the hot part of the day and don't turn on our air conditioning until after 4 p.m. to save energy and money, but also because we believe energy is a precious resource that everybody needs," Don said. "We were both brought up in families who emphasized being mindful of wasting electricity, so I suppose it has always come natural to us."

"I remember that my mom would only do laundry if it was completely full," Betsy added. "We try to be mindful like our parents were, and hopefully we taught it to our kids, too."

The Morishitas use their backyard thermometer to decide whether to open or close the windows. If it's cooler outside than inside, the windows get opened. When it's hotter outside, they close the windows and blinds. And now that they're retired and find themselves spending more time at home during the day, they try to do their baking in the morning and cook outdoors as much as possible, so they don't add heat during the hottest part of the day. The couple also appreciates the large shade trees in their backyard and regularly escape to the cool basement on warm summer evenings.

When shopping for new appliances or looking to replace old windows, they look for the ENERGY STAR® logo, ensuring they're getting the most

efficient products. They also lucked out with the home they bought when they moved to town in the early 1990s.

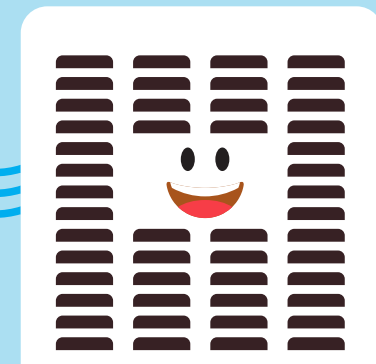
"The folks who owned our home before us really invested in the insulation levels," Don said. "That's helped us stay cool in the summer and warm in the winter."

When cooler weather hits, the Morishitas do what they can to make the most of their heating. They wear warm layers instead of turning up the heat, and they use a programmable thermostat to ensure they only use heat when they need it, rather than have it running all the time.

In addition to energy-efficient behaviors and investments in their home, the Morishitas participate in Idaho Power's summer A/C Cool Credit program and take advantage of convenient tools to help them manage their account, bills and energy use.

"We signed up for A/C Cool Credit because we understand how important it is to conserve energy at peak times. We've done it for over 13 years now, and we hardly even notice when the program is on." ~ Betsy Morishita

Don uses the My Account online account management tool to check on their energy use. He was using it to pay their monthly bills, too, but ever since signing up for paperless billing and Auto Pay a few years ago, the Morishitas don't have to worry about paying their bill every month — it gets paid automatically!



Sign Up! for Idaho Power's **A/C Cool Credit Program**

A/C Cool Credit is a simple, effective way for residential customers to help shift energy demand during times of high-energy use on summer days, when temperatures rise, and thousands of A/C units run at the same time — straining our energy resources.

How it works

Idaho Power will install a cool-switch device on or near your A/C unit.

- When system demands are high, the switch slightly reduces the A/Cs electricity consumption
- The fan continues to circulate cool air, helping homes stay comfortable
- The cool switch is activated only when necessary — a few weekday evenings between June 15 and Sept. 15
- Participating customers get cash-back on their Idaho Power bills — up to \$20 per summer

To learn more about the A/C Cool Credit program or to sign up, visit idahopower.com/accoolcredit.





Considering

Rooftop Solar?

Idaho Power supports solar energy and customer choice. If you're interested in your own rooftop solar, we want you to have accurate information to make the best choice for your energy needs and budget.

Before you commit to investing in solar, get the facts by visiting idahopower.com/solar. Our online tools include FAQs, application materials, a cost payback example, details about connecting your system, tips for choosing an installer and how to spot common solar misinformation.

If you're considering installing solar panels, here are a few things to keep in mind:

- **Start with energy efficiency.** Installing solar panels to run older appliances or heat a home with leaky windows doesn't make sense. You'll get a better return on investment for almost all energy-efficient improvements, so begin by making your home as efficient as possible.
- **Compare online reviews.** Check with the Better Business Bureau for any complaints. For companies that operate in multiple states, focus on local, relevant and recent customer reviews.

- **Check qualifications.** Warranties on solar equipment can last 20 years, so you'll want a company with staying power. Also, clarify the process for getting help if you need it after your installation. Ensure your installer is licensed, bonded and insured. Installers in Idaho are also legally required to provide information from the *Idaho Residential Energy System Disclosure Act*.
- **Plan your system.** A professional installer can help determine the proper system size. Use Idaho Power's online Solar Checklist to help you through the process.
- **Ask for references.** After narrowing your search, ask for references from prior customers.
- **Get multiple quotes.** Shop around like you would with any large purchase to ensure you're getting the best deal to fit your needs.

If rooftop solar isn't right for you, but you're still interested in doing more for the environment, Idaho Power's Green Power Program lets you use renewable energy generated in the Northwest.

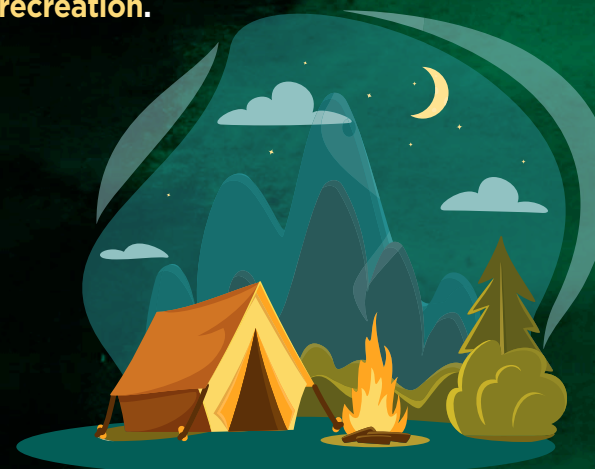
Idaho Power's tariffs are not contracts and are subject to change at any time upon order of the Idaho Public Utilities Commission. Customers installing solar today will not receive legacy treatment and will be subject to future changes to the on-site generation tariffs including, but not limited to, modifications to rates, billing components, billing structure, compensation structure and the value for excess energy produced by the customer's on-site generation system (and thus, the amount a customer would be compensated).



For more information, visit idahopower.com/greenchoices.

IDAHO POWER'S PARKS AND CAMPGROUNDS

Visit one of Idaho Power's many parks and campgrounds along the beautiful Snake River. Spots fill quickly, so reserve yours soon at idahopower.com/recreation.



DID YOU KNOW?

Idaho Power's Copperfield Park in Hells Canyon has an electric vehicle (EV) charging station! Charge up while enjoying this scenic area — whether it's for the day or multiple days at one of the campsites.

IDAHO POWER

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