ENERGY EFFICIENCY GUIDE FALL WINTER

INSIDE:
• Weatherize Your Home
• My Account – 24/7
• Tax Incentives for Home Energy Improvements
• Alphabet Soup – Making Sense of Heating and Cooling Rating Systems

idahopower.com/save
Weatherize Your Home
For Winter Comfort and Maximum Savings

When the weather outside is frightful, your home should be warm and comfy. One way to stay comfortable without raising the thermostat is to find and plug air leaks that let cold air in. Sealing air and duct leaks in your home can save up to 10 percent on winter heating costs, and it’s easy to do. Here are some ideas to get you started:

Find and Eliminate Air Leaks

The most significant leaks are hidden in the attic and basement ductwork. For help finding these, download A Do-It-Yourself Guide to Sealing and Insulating with ENERGY STAR® at www.energystar.gov or call a heating contractor. To find other leaks, try these techniques:

- After dark, turn all the lights on in your home. Go outside and look for places where light is escaping around doors, windows, etc.
- Shut your doors and windows and turn on your exhaust fans on a windy day. Hold a lit incense stick next to your windows, doors, electrical boxes, plumbing fixtures, electrical outlets, ceiling fixtures, fans, attic hatches, etc. If the smoke dances around or travels horizontally, you have a leak or draft.
- Look for strips of dirty carpet beneath closed doors. If you find one, there’s likely air flowing under the door and the carpet is acting as a filter.
- Try to pull a dollar bill through the seal on an exterior door. If you can do it without it dragging, you’re losing energy.
- Listen for doors mysteriously closing inside the house when the exterior windows and doors are closed. If this happens, you may have a leak that’s creating pressure differences between your rooms.

Once the leaks in your home have been identified, seal ducts with approved, foil-faced tape. Other areas can be sealed with caulk, spray foam or weatherstripping materials from your local home-improvement store.

Cold-Weather Comfort

By Theresa Drake, Manager of Customer Relations and Energy Efficiency

Extreme temperatures like we recently experienced can serve as painful reminders that the lion’s share of the energy used in our homes often goes toward heating and cooling. If you were caught off guard with a higher-than-expected power bill this past year, I invite you to pause and consider ways you can prepare to keep your energy use down while maintaining a comfortable home.

Each fall, as I spend nights and weekends at cross-country meets and football games, I get a profound lesson about what it takes to stay warm and comfortable. Here’s what I’ve learned:

A sweater won’t keep me warm on a cold, windy evening. And a windbreaker alone doesn’t do the job well when temperatures drop. If I want to stay comfortable, I really need a good coat that has a layer for warmth and an outer shell to stop the wind.

A house needs basically the same things. A healthy layer of insulation (a sweater) and good air-sealing (an airtight shell) work hand-in-hand to keep our homes warm and cozy when the weather turns cold.

We have prepared this guide to help you save energy. You’ll find tips for effectively weatherizing your home as well as ways to leverage My Account — our online tool for analyzing energy use — to identify savings opportunities. I encourage you to take full advantage of the information and incentive programs Idaho Power offers to help you take control of your energy use.

Here’s wishing you a warm and comfortable winter.
Whether you own or rent your home or are looking to buy or build a new home, understanding your heating, ventilation and air conditioning (HVAC) system is important.

In the HVAC world, efficiency is measured by the amount of heat, measured in BTUs, delivered or removed relative to the amount of energy used. An efficient system is one that has a high BTU output relative to the energy it uses.

Here are the ratings you’ll want to know before shopping or visiting with a contractor about electric heating and cooling options:

**HSPF:** The Heating Seasonal Performance Factor describes an air source heat pump’s heating performance over a complete winter with all its varying outdoor temperatures. It is calculated by taking the total amount of heat (BTUs) the system produced and dividing it by the total energy (kilowatt-hour [kWh]) the system used. Higher numbers are better, with ENERGY STAR® Homes setting the standard at 9.25–9.5 HSPF, depending on climate zone.

**COP:** The Coefficient of Performance describes the efficiency of a ground or water source heat pump’s performance. Because these operate in stable ground and water temperatures, a whole winter season is not needed to describe their performance. The COP is determined by a specific set of conditions at one point in time. Like HSPF ratings, higher numbers are better. Idaho Power pays an incentive on qualifying systems with a COP of 3.5 or higher.

**SEER:** The Seasonal Energy Efficiency Ratio measures an air conditioner or heat pump’s cooling performance over an entire summer. It is calculated by taking heat the system removes from your house (BTUs) and dividing it by the electricity (kWh) used to remove it. Again, higher numbers are better, with ENERGY STAR Homes requiring at least a 14.5 SEER.

**EER:** The Energy Efficiency Ratio is the equivalent of the COP but for cooling systems. It is not as useful as the SEER because it’s a measure taken at one point in time at a set condition. As with the other ratings, higher numbers are better.
Financing energy efficiency improvements is easier than ever with assistance from state and federal tax incentives.

Idaho now allows homeowners to deduct 100 percent of the cost of material and labor for certain energy efficiency upgrades for homes built, or under construction, before January 1, 2002. A deduction reduces how much taxable income you claim. Some of the qualifying energy improvements include:

- Adding to existing insulation
- Replacing windows with more energy-efficient ones
- Adding storm windows
- Installing weather stripping
- Sealing and insulating duct work

Oregon customers can receive state tax credits for purchasing energy-efficient heating ventilation and air conditioning (HVAC) systems and water heaters.

Federal tax credits may also available. A tax credit reduces how much tax you owe, lowering your tax bill dollar for dollar.

Tax rules change regularly and additional issues can affect the tax treatment of your situation. Before making investments, be sure to research up-to-date information and seek advice from a tax advisor for your particular circumstances.

Here are some reliable resources to get you started:

- Database of State Incentives for Renewable Energy (DSIRE) lists state tax incentives for energy efficiency [dsireusa.org](http://dsireusa.org)
- Internal Revenue Service (IRS) [irs.gov](http://irs.gov)

**WHAT YOU CAN DO NOW**

**A Checklist for a Warmer Winter**

- Check for adequate insulation in attics, walls and floors. Contractors will evaluate your home at no charge.
- Weatherstrip and caulk to minimize air leaks.
- Set or program your thermostat to meet your needs.
- Replace incandescent bulbs with energy-efficient lights.
- Repair leaky faucets.
- Set your water heater temperature to 120 degrees Fahrenheit (°F).
- Close crawl-space vents.
- Get warm clothing and electric blankets ready for use.
- Close the fireplace damper when not in use.
- Use efficient cooking habits (i.e., the smallest appliance needed for the job, minimal oven and cook times, allowing warm foods to cool before refrigerating, etc.)
- Minimize opening your refrigerator door and clean the coils.
- Wash full loads of laundry and dishes, and rinse with cold water.
When Convenience Matters

One Customer’s Perspective
Idaho Power customers, Echo and Brandon Noble, lead busy lives. They have four sons and juggle two demanding careers — Brandon is a railroad conductor and Echo owns a dance studio in Meridian, Idaho.

“As you can imagine,” says Echo, “convenience is at a premium at our house. Paying bills is often an after-thought and happens on the fly.” That’s how Echo stumbled onto My Account. Her power bill was due and she needed a quick way to make a payment. She went to Idaho Power’s website and with bill and checkbook in-hand, she was able to register quickly for My Account and get the payment on its way.

“I was surprised by all the information that was available to me through My Account,” says Echo. “On the first visit, I didn’t have time to look at everything, but I loved being able to see how our energy use was stacking up for the current month. It is way helpful for me to know what next month’s bill may look like … and it gives me a chance to cut back if the amount isn’t something we can handle.”

Echo completed the home profile and followed the easy savings tips. “It’s convenience that matters most in our lives right now, but it is still rewarding to see how simple changes can affect our daily and hourly energy use.”

To see how you might benefit from My Account, turn the page.

Weatherizing your home increases comfort and often results in lower energy use and reduced waste. For more information or to learn about incentives, visit idahopower.com/save.
My Account

24/7

A Self-Service Tool with Something for Everyone

Become an online manager of your Idaho Power account. You’ll have 24-hour access to everything you need to make choices about how you want to do business with us, learn about your energy use and consider options for participating in a broad range of programs.

With this resource at your fingertips 24/7, doing business with Idaho Power is easier than ever.

With My Account, you’ll find a one-stop-shop for paying your bill, connecting with Customer Service, developing a home energy plan and monitoring your energy use over time. Once registered, here are just a few of the things you will be able to do:

- Pay your bill via a no-fee electronic check
- Get an estimate of your next bill
- View your billing and payment history
- Start, stop or transfer service
- Track your electricity use by the day, hour and more
- Compare your use over time — month to month, year to year, weekday vs. weekend, etc.
- See how the weather affects your electricity use
- Get personalized advice on actions you can take to make your home more energy efficient

To register, visit idahopower.com and click on the first tab on the left, “My Account,” or “Log In” in the upper right hand of the screen. Click “Register for My Account” and then provide your account number and last payment amount (available on your bill). For your security, we’ll verify your identity and ask you to create a username and password. After that, you are in the driver’s seat — it’s all about your options and choices.

Bill-To-Date Information

Your My Account landing page gives you an opportunity to follow your energy use throughout the current billing period. Actual electricity used displays in dark green as days pass. With the power you’ve used to date, the tool estimates your next month’s bill amount if you continue the same usage patterns (light green). If you want to adjust your energy use, you have the power to make changes and monitor the effects as the month progresses.

Idaho Power respects and protects your privacy. All My Account information, including daily and hourly energy use, is accessible only in a highly secure, password-protected environment.
Your Personal Home Profile

A Do-it-Yourself Home Energy Audit

The Savings Center within My Account helps you develop a personal home profile and customized energy plan. It’s as thorough a self audit as you’ll find without calling a contractor.

To put these tools to work for you, answer a few simple questions describing your home. You’ll get immediate feedback on how your electricity use compares to other homes of similar size and occupancy. You’ll also see a pie chart showing how your electricity dollars may be spread among the various end-uses in your home.

Annual Electricity Energy Use

$3,065
Avg. Home

$2,324
My Home

Annual Electricity Cost

- Heating $1,229
- Hot Water/Laundry $364
- Cooling $231
- Pool/Hot Tub $190
- Lighting $135
- Food Storage $65
- Other $57
- Cooking $53

The better the information you put in, the more accurate the results. If you choose to complete the Appliance Profile and Detailed Analysis, the recommendations and information available to you become even more useful. Rest assured, any information you provide is not shared or used for any purpose other than to provide you with information on how your home uses energy.

The Savings Center provides a do-it-yourself home audit that can give you a clear and accurate picture of where your monthly energy dollars flow. Armed with this information, it becomes easy to pinpoint your highest savings opportunities. Then you can explore the ENERGYsmart library and use the Energy Calculators to see which actions and efforts may work best for your family.

Creating Your Personal Home Profile

From the My Account home screen, click the “Get Started” button on the “How I Use Energy Tab.” Answer the initial set of questions to see the pie chart come to life with information you can use to take control of your energy use.
Save Energy During the Holidays With LEDs

Light up this holiday season with energy-saving light-emitting diodes (LEDs). LEDs are a great way to trim your home and your energy use while maintaining your favorite holiday lighting traditions. LED holiday lights are:

- **Safer:** LEDs are much cooler than incandescent lights, reducing the risk of combustion or burnt fingers.
- **Sturdier:** The bulbs are made with epoxy lenses, not glass, which makes them more durable and resistant to breakage and especially nice for outdoor use.
- **Longer lasting:** The same LED string could still be in use 40 holiday seasons from now.
- **Easier to install:** Up to 25 strings of LEDs can be connected end-to-end without overloading a wall socket.

LED holiday lights are readily available in a wide variety of colors, shapes and strand lengths. Although they might be more expensive than incandescent lights at the time of purchase, the energy savings over their useful life make them a sensible purchase for the long run. The brightness and color of LED lights have also come a long way in the last few years. For visually appealing white lights, you can choose between cool white, which is a bright icy-blue white, or warm white, which has a yellow tint and is the closest to a soft-white incandescent replacement.

For even more energy savings, use a timer to ensure holiday lights get turned off when you want.

**Typical energy costs for using holiday lights, per season**

<table>
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<tr>
<th>LED mini ice</th>
<th>LED C7</th>
<th>incandescent premium mini-lights</th>
<th>incandescent standard mini-lights</th>
<th>incandescent C7</th>
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LEDs are less expensive to operate than incandescent C7 bulbs and mini-lights. The energy savings and long life of LEDs make up for their higher initial price, allowing you to save money during the holidays for years to come.