ENERGY Fall/winter EFFICIENCY

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POWER.

Inside:

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Because Idaho Power cares about your energy needs, we've prepared this guide to help you save energy and money. We hope you'll use these tips for staying comfortable and safe throughout the heating season, and learn ways to take full advantage of Idaho Power incentive programs available to you.



Questions Customers Ask

Theresa Drake, Senior Manager of Customer Relations and Energy Efficiency

Many of you contact Idaho Power with questions about your bills, our services and how you can save energy in your home. Here are answers to some questions you may wonder about.

Q: Why does Idaho Power promote energy efficiency?

A: Energy efficiency is a win-win. It creates energy savings and healthier homes for you and provides Idaho Power with the ability to maximize our resources. When we work together and increase the demand for efficient products, manufacturers respond with innovation and product improvements, making it easier to continue to save. Using electricity wisely makes sense for everyone.

Q: When will Idaho Power have new incentives for the item I need (e.g., clothes dryer, water heater, etc.)?

A: We have a responsibility to ensure money spent on energy efficiency is a good longterm investment for our customers. If we don't currently have the incentive you're looking for, perhaps the technology or the price just isn't where it needs to be yet. We are constantly evaluating energysaving opportunities, and when they become cost-effective, we will add them.

Q: What are energy audits and does Idaho Power do them?

A: An energy audit is a comprehensive look at how you use energy in your home. When conducted by a qualified homeperformance specialist, it involves specialized equipment and tests that provide very specific information about problems with insulation, air sealing and your HVAC system. Idaho Power offers professional in-home audits for a discounted rate complete with a comprehensive report of energy efficiency recommendations and some instant energy-saving items. Learn more at idahopower.com/ HomeEnergyAudit.

I invite you to use this guide and the tools on our website to help you decide where to focus your money and time for the biggest energy savings.

> To learn about our energy efficiency programs, go to idahopower.com/save.

Weatherize Your Home

for All-season Comfort and Maximum Savings

As old man winter blows through the first few months of the New Year, your home may begin to feel drafty and cold. Finding and plugging air leaks in a typical home can save up to 10% on heating bills, fuel consumption and greenhouse gas emissions during the heating season.



Where does cold air come from?

U.S. Department of Energy (DOE) energysavers.gov

The source of the draft dictates the fix. The good news is that low-cost, do-ityourself caulking and/or weather stripping leaky doors, windows and exterior plumbing fixtures will plug many air leaks. Low- and moderate-income families with electrically heated homes may also participate in Idaho Power's Weatherization programs. See if you qualify at **idahopower.com/weatherization**.

Seal duct work

Because heated air often leaks from ducts into crawl spaces or attics, sealing ductwork is the best way to increase comfort and reduce energy waste. Use mastic or approved foil-faced tape to seal all joints and intersections. If your ducts are hard to get to, consider calling a professional. Many home performance specialists and contractors have equipment that quickly repairs these issues. If you live in

an electrically heated manufactured home, you may be eligible for free duct sealing and other measures from Idaho Power.





Eliminate air leaks

If you can see daylight around a door or window frame, you've got an air leak (and an entry point for creepy crawlers). Seal openings with caulk or weather stripping and increase your energy savings and peace of mind. While you're at it, check for holes around pipes and wires that enter or exit your walls. Don't forget entrances like pull-downs and attic stair openings and light fixtures. Home supply stores have many inexpensive sealant options to choose from.



To learn more about paying for your upgrades, visit idahopower.com/save and energy.idaho.gov.



Add insulation to the attic

Because hot air rises, start at the top and work down. An energy audit can determine where insulation is needed. Idaho Power recommends a ceiling R-value of 38 or above. Remember that insulation is not an air barrier, so seal air leaks before adding new insulation. Seal your ductwork before adding insulation too.

Seal off fireplaces

Fireplaces are energy losers. They draw in as much as 300 cubic feet per minute of heated air and



then send it straight up the chimney. It's best to keep the flue damper tightly closed when not in use. When you do want a fire, open the flue for safety, turn your heat down — or off — and open a window near the fireplace. High-efficiency fireplace inserts or woodstoves, properly sized and installed with a flue collar, are safer and can be good sources of supplemental heat.

Other ways to save

Consider using a programmable thermostat to set the temperature as low as comfort and safety allow —



usually between 65 and 70 degrees when you are at home and even lower at night or when you are away for several hours. Using an electric blanket to heat your bed at night can be more cost-effective than heating the whole house.

Check for air drafts

Test your home for air tightness. On a windy day, hold a lit incense stick next to your windows, doors, electrical boxes, plumbing fixtures, electrical outlets, ceiling fixtures, attic hatches and other locations with a possible air path to the outside. If the smoke stream travels horizontally, you have located an air leak. Plug it with caulk, spray foam or weather stripping.

Many upgrades can result in a more comfortable home this winter, but plugging air leaks is one of the cheapest and easiest home fixes that can result in real energy savings.

When you weatherize your home, you increase your comfort, save energy (which can reduce your energy bill), reduce waste and preserve natural resources for the future.

Safety first!

Only use a combustion appliance — such as a space heater, wood stove, kerosene burner or fireplace — when vented to the outside. Never use a gas range, indoor cooker, or charcoal or gas barbeque for heating indoors. And if you have any combustion heating equipment, such as a gas furnace or stove, install a carbon monoxide detector and change the batteries annually. If the alarm goes off, evacuate the building and call 911.



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There are many things people can do to reduce energy use, improve comfort and save money on their monthly bills. However, some actions are more impactful than others. Check out these tips to find actions with the highest potential pay-off. Wash full loads of laundry in warm or cool water and always rinse with cold. Switching from hot water to warm cuts energy use in half.

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Reverse the direction of ceiling fans so they run clockwise. When set on low, they gently pull cool air up toward the ceiling, forcing warm air down into the room.

Upgrade to a ductless heat pump (DHP) to heat and cool your home quietly, evenly and at a lower cost than baseboard or wall heaters. DHPs can be especially useful in rooms with comfort challenges such as attics and bonus rooms.

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Plant a tree. A properly placed shade tree can reduce summer cooling by 15% or more, and a mature tree can provide a windbreak that can lower heating costs by 10–20%.

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Check for air leaks around outside doors. If you can feel a draft, add weather stripping or adjust hardware for a better fit.

When purchasing your next vehicle, consider an efficient electric vehicle (EV). An EV reduces fuel costs and carbon emissions.

Clean or replace your furnace filter at least twice each year.

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Install a high-efficiency showerhead and use as little as 1.5 to 2 gallons per minute (gpm) without compromising water pressure. Some older showerheads use as much as 5.5 gpm. 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% or more of a home's energy use.

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Install a smart thermostat to begin controlling your settings with an app or website. Smart thermostats can result in improved comfort and energy savings. Add attic insulation to make your home more comfortable and save energy year-round. Make sure you use the recommended minimum — R-38 or R-49, depending on the climate where you live.

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Open curtains during the day to increase solar heat gain. Make sure each window is closed and latched. If you can feel air flow around the window frame, caulk to seal gaps.

> When the time comes, replace your aging HVAC system with an efficient heat pump. Installed and sized correctly, it can save energy and keep your home comfortable year-round.

Change a light. ENERGY STAR[®] LED light bulbs come in a variety of shapes, colors and applications including 3-way and dimmable.

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Buy ENERGY STAR! These products meet strict energy efficiency criteria.

Lower the thermostat at night and when you are away during the day even small temperature adjustments can make a difference. Limit heat pump setbacks to 2 to 3 degrees. Operate your energy-efficient dishwasher with full loads and avoid using the heat-dry cycle.

Average Lifespan of Appliances

Knowing the average lifespan of various appliances can help homeowners plan and prepare for unexpected (and expensive) failures. When you take time to compare features, upfront costs and operating expenses, such as energy use before an appliance fails, you will be prepared to make the best decision possible when the time comes.

Remember that ENERGY STAR qualified products always provide the top energy-savings in their class.

HEATING AND COOLING SYSTEMS

- Furnace (gas): 17 years
- Furnace (electric): 18 years
- Heat pump: 15 years
- Central A/C: 14 years
- Water heater: 13 years

KITCHEN

- Dishwasher: 10 years
- Garbage disposal: 9 years
- Refrigerator: 12 years
- Freezer: 12 years
- Microwave: 9 years
- Oven/range: 16 years

LAUNDRY

- Washer: 11 years
- Dryer: 13 years



The Best-Value FOR YOUR Dollar

Many factors influence home improvement decisions, including changing lifestyles, comfort, appearance and cost.

You may be surprised, however, to find some small and modest upgrades to your home can provide more energy savings than other, more costly improvements. Compare your home's features to those identified in the chart below to find out where to invest your dollars and get the biggest bang for your buck.



Elements of an Energy Smart Home

			cost of the upgrade			
	Features are listed in priority order based on expected energy savings	No	Low	Med	Med-hi	High
	Minimum insulation levels: attic R-38 or R-49 depending on climate zone, walls R-19, floors above crawl space R-30*			\$		
ע	HVAC systems that meet current ENERGY STAR standard					\$
	Ducts insulated and sealed with mastic		\$			
מ	Minimal air leakage (openings in walls, floors and ceilings weather stripped and sealed)		\$			
	Water heater temperature at 120 degrees	\$				
	Functional exhaust fans		\$			
5	Low-flow, aerating showerheads		\$			
5	Energy-efficient light bulbs and fixtures throughout		\$			
	ENERGY STAR appliances and electronics with powersave settings enabled				\$	
	Programmable thermostat with ENERGY STAR recommended set points (heat pumps need a heat pump thermostat)		\$			
5	Timers installed on block heaters, stock tank heaters, landscape pumps and lighting		\$			
	Windows with a U-Factor of .30 or less					\$
	Insulated exterior doors			\$		

*Most contractors will assess your insulation levels for free. We recommend getting three bids if work needs to be done.

INVESTING IN ENERGY EFFICIENCY How Do I Know What My House Needs?

Many of the biggest energy-saving opportunities are related to HVAC systems and the parts of the home that separate the heated and cooled space from the outdoors (building envelope). Although these improvements cost money, many will pay you back in energy savings, while increasing your comfort and property value.

When you're living in a house someone else built, it can be hard to know where to start. Viewing your home through the correct historical lens may give you some clues about which energy efficiency improvements to plan for. Your county assessor can tell you when your home was built.

We asked weatherization contractors and other local energy efficiency experts to give us their prioritized recommendations for homes of various ages. Here's what they told us.

Before 1970, there were no building codes, so builders were left to their own devices. The "use what you had" approach to build, insulate and heat homes was prevalent. During the 70s and 80s, building codes and officials began to regulate materials and practices. This led to more solid homes, but there still wasn't a lot of emphasis on energy efficiency or how the different components of a home worked together. Information and materials have improved significantly over the last 20 years. However, during the building boom years, there tended to be a premium on cheap materials and speed.

PRE-1970 HOMES

- ✓ Add insulation in this order: attic, walls, floors
- ✓ Seal and insulate ductwork
- ✓ Seal air leaks and duct chases as you insulate
- ✓ Upgrade to an efficient heat source
- Replace single-pane windows and uninsulated exterior doors

70s AND 80s HOMES

- ✓ Seal and insulate ductwork
- ✓ Add insulation in this order: attic, floors
- ✓ Seal air leaks and duct chases as you insulate
- Consider upgrading the heat source to a high-efficiency system
- ✓ Replace aging appliances
- ✓ Ensure exhaust fans work
- Consider replacing single pane or metal frame windows

90s AND BEYOND

- ✓ Seal ducts, boots and plenums
- ✓ Seal air leaks and duct chases
- ✓ Check quality of insulation installation
- ✓ Add floor insulation
- Check HVAC equipment for correct sizing



When you take proper care of your home's HVAC system, you can improve its efficiency and effectively prolong its life. This is important because replacing an HVAC system can cost upwards of \$6,000. Additionally, heating and cooling your home accounts for up to half of your total annual energy use.

A simple and very important step is to change the filter. Clogged, dirty filters block system airflow and significantly reduce a system's efficiency. With airflow obstructed, air squeezes through the filter and carries dirt directly into the indoor coil, impairing the coil's capacity.

Change the filter whenever it gets dirty. Depending on use, that could range from monthly to every six months. Filters generally need more attention if systems are in constant use, they are subjected to dusty conditions, or there are furry pets in the house. Here's how to change the filter:

- **1.** Locate the electrical breaker panel or power switch for the HVAC system and shut the power off.
- **2.** Open the filter panel (typically on the lower or upper front of the air handler).
- Slide out and replace the filter(s). Note the filter size and purchase exact replacements. We recommend buying extra filters so you're prepared for the next filter change.

If you can't remember the last time you changed your filter or don't know the home's history, have the outdoor and indoor coils professionally cleaned. Then begin changing your filter at least twice a year.



We're Prepared for Winter Weather Are You?

Northwest winters bring cozy nights around the kitchen table and frolicking days playing in the snow. But severe weather can also bring dangerous storms.

Providing safe and reliable power is our top priority. In fact, we keep the lights on 99.975% of the time. But winter weather's ability to knock out power, heat and communications is a big concern for many. Despite all efforts to properly maintain the electrical grid, storms can leave communities temporarily in the dark. The best way to ensure safety and comfort on these rare occasions is to plan and prepare in advance.

Early in the season

Assemble or restock your outage kit and talk to your family about an outage emergency plan. You can find information about both at **ready.gov/kit**.

- Sign up for Idaho Power outage alerts at idahopower.com/myaccount.
- Winterize (insulate, repair and maintain) your home to extend the life of your fuel supply.
- House fires pose an additional risk, as more people turn to alternate heating sources without taking the necessary safety precautions. Keep fire extinguishers handy and ensure everyone in your house knows how to use them.
- Know where your home's circuit panel is and how to turn off your breakers and main switch.



When you know a storm is coming

- Keep track of storms as they develop. The National Oceanic and Atmospheric Administration (**NOAA.gov**) website is a great place to start.
- Keep cell phones fully charged.
- Unplug sensitive electronic equipment, such as computers.

If there is an outage

- If you're not already enrolled in outage alerts, check our outage map for an estimated restoration time at idahopower.com/outage.
- Dress warmly and stay indoors if possible.
- Use flashlights instead of candles.
- Turn off lights and appliances, leaving one light switch on to know when your power is back on. Reducing the electricity load makes it easier for Idaho Power to re-energize lines.
- Keep your fridge and freezer doors closed.
- If the inside temperature drops below 55 degrees, turn on your faucets so there is a constant drip to prevent pipes from freezing.
- If your home loses power or heat and you become uncomfortable, call for help and get to a warm, safe place.
- If you plan to use a generator, follow the manufacturer's instructions and practice using it correctly before it's needed. Never connect it to your home's wiring, as this could feed electricity back into Idaho Power's utility lines and seriously injure, or even kill, Idaho Power crews working to restore your power.

When Should You Report an Outage?

If your power goes out and everything at your breaker box looks normal, check our online outage map at **idahopower.com/ outagemap**. If you don't see your outage on the map, please call your Customer Care team at 208-388-2323 or 1-800-488-6151 (toll free). Just say "outage" at the voice prompt to get updated information. If we are unaware of the outage in your area, please report it. One of our energy advisors will ask you a few short questions to help us respond quickly and appropriately.



Is Your Emergency Kit Ready?

An emergency kit is a collection of basic items your household may need in the event of a prolonged outage. Here are a few items you'll want to consider:

- 72-hours worth of basic, non-perishable foods and a manual can opener
- Bottled water
- First-aid kit
- Warm clothing and blankets
- Flashlight and extra batteries
- A battery-powered radio and a NOAA Weather Radio with tone alert and extra batteries for both
- Whistle to signal for help
- Cell phone with chargers or solar charger

To learn more about preparing an emergency kit, visit **idahopower.com/outage**.