

# ENERGY EFFICIENCY

## Summer Guide

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- Keeping Cool this Summer
- Open the Door to Energy Savings
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- Bring the Smart Home





**Theresa Drake,**  
**Senior Manager of**  
**Customer Relations**  
**and Energy Efficiency**

This year, we've likely become more familiar with our homes and how we exist inside of them — I know I have. We've adjusted thermostat settings, made room for exercise equipment and shared space with any number of new "co-workers." And as we've heard from many of you, saving energy at home has been top of mind, too.

I've noticed many on social media who have tackled at-home renovations, made lighting upgrades or started cooking with a pressure cooker to save time and energy. I've made a few small changes myself, like ensuring I've set my computer to "sleep" mode when I step away and wearing more or fewer layers so I'm not tempted to bump up the heat on cooler days or turn up the AC on warmer days.

In spending more time at home, you may have noticed your energy bill has increased a little. And while there are many easy behavior changes we can make for small savings, some energy-saving tactics may not seem possible when spending lots of time at home, or when they require more effort and money. We get it!

When we've heard from you, our customers, over the past year, we've been encouraged and excited about your enthusiasm for improving your home's efficiency and reducing your energy footprint. You've asked about upgrading your windows, if you should install a ductless heat pump in your shed-turned-home-office, and if smart thermostats can help you make the most of your heating and cooling. And here, in this energy efficiency guide, we've collected answers we hope will help you on your journey to increased comfort and energy savings — no matter your budget.

Idaho Power is working toward our goal of providing 100% clean energy by 2045, and energy efficiency is a big part of how we'll do it. We hope you'll join us in the journey and use this guide to make a few small changes and help us get there.

Enjoy!

*- Theresa*



## Working Together for a Clean Today, Cleaner Tomorrow.®

At Idaho Power, our commitment to serving customers and communities with reliable, affordable energy has been the hallmark of our 100-year history. Looking forward, we are building on that foundation with an exciting mission:

**100% clean energy by 2045.**

To complement our hydropower base, we're focusing on energy efficiency, wind, solar and other clean technologies, as well as working on transmission projects that will serve as clean-energy pipelines to move energy throughout our region. We'll do all of this while keeping prices low and reliability high.

**But we can't do it  
on our own.**

Part of working toward this goal includes sharing a commitment with our customers to use energy wisely. Every kilowatt-hour (kWh) of energy our customers save is a kWh we don't need to produce — which saves money, resources and valuable load on our system.

When we all work together, we have the best chance at success. For our part, we will continue to provide up-to-date information about how to save energy. We'll also offer cost-effective energy efficiency programs with financial incentives to encourage energy-smart behavior and choices.

We want you to use electricity for everything you need, and we're committed to providing you with the tools to use it wisely. We invite you to join us as we work toward 100% clean energy by looking for ways you and your family can save energy and money.

**Did you  
know?**

In 2020, Idaho Power customers saved 196,809 megawatt hours (MWh) of energy by participating in energy efficiency activities. That's enough energy to power almost 17,000 average homes in our service area for a year.

# Simple Ways to Shrink Your Footprint



If you're interested in lowering your carbon dioxide (CO<sub>2</sub>) — and energy — impact, here are some of our favorite tips.

## Everyday

- Turn on power-save settings for computers, televisions and gaming systems, and when you're away for longer periods, turn them off completely. Electronics in standby mode still use energy.
- Use a power strip — or better yet a smart power strip — to control groups of electronics like computer or video equipment.
- Turn off lights whenever you leave the room or use smart bulbs to ensure your lights are only on when you need them.

## Regularly

- Try out a “no electronics night” for the whole family.
- Run full loads of laundry and dishes.
- Use the smallest kitchen appliance to get the job done — think microwave, slow cooker, air fryer, and pressure cooker! When the weather is nice, take your cooking outdoors with a grill or smoker.
- Hang dry laundry when possible (even in the winter!). Hang drying indoors can add some much needed moisture to the air!
- Fix leaky faucets and toilets to prevent water waste and energy drain.

## One and Done

- Check your thermostat settings — programmable or smart thermostats make adjustments easy when you're away from home and at night.
- Plant a shade tree or fast-growing vines to shield west-facing windows. You'll improve air and water quality, too!
- Install timers on outdoor lights and water features.

## Other Things to Think About:

- Paperless billing saves you a trip to the mailbox, reduces paper waste and postage costs, and provides an easy way to pay your bill. Go to [idahopower.com/myaccount](http://idahopower.com/myaccount) to sign up.
- Support the growth of clean energy by matching your home's or business's energy use with wind and solar power purchased from the beautiful northwest. With our Green Power Program, going green is only an extra penny per kWh. Learn more and sign up at [idahopower.com/greenpower](http://idahopower.com/greenpower).
- Whether you're interested in electric bikes, scooters, lawn mowers or cars and trucks — there's a way for you to participate in the benefits of electrification. Learn more about electric vehicles (EV) at [idahopower.com/EV](http://idahopower.com/EV).



## Keeping Cool this Summer

Warm weather is here! These are our best tips for staying comfortable while keeping your cooling costs low:

- Check your thermostat setting to ensure it aligns with your comfort and budget. In summer, each degree you raise your thermostat reduces cooling costs by 2–3%.
- Use ceiling fans, floor fans and box fans instead of reducing the AC temperature. Fans can make you feel 4 degrees cooler and help maintain comfort in occupied rooms.
- Replace your furnace filter at the beginning of each cooling and heating season.
- Use your kitchen, bath and other exhaust fans to get rid of excess moisture and heat — but turn them off within 20 minutes.
- Close blinds, especially on the east and west sides of your home, to block out the sun's warming rays.
- When temperatures drop (and it's safe), open windows to cool your home naturally.
- Do your best to keep doors closed — and seal air leaks with spray foam, caulk or weatherstripping.
- Drink plenty of water and choose loose-fitting clothing made with natural fibers.







# Open the Door to Energy Savings!

When looking to spruce up your home's exterior, replacing your front door with an ENERGY STAR® certified door will up your curb appeal and may save energy.

Some exterior doors waste energy because of air leaks and conduction — especially if they're old, uninsulated or improperly installed and sealed. Whether you are buying a new door or just replacing the weatherstripping on your current door, these tips can help with energy savings.

## How to Replace Weatherstripping on an Exterior Door

New door seals are relatively inexpensive, easy to install and save money in the long run. There are three main types of seals:

1. Adhesive-backed foam
2. Flanged vinyl
3. Metal nail-on flange

For all three, the first step is to remove the old weatherstripping. Scrape foam off with a putty knife and use an adhesive remover to clean off the residue. Grasp flanged vinyl firmly and pull it from the groove cut into your door jamb. For the nail-on type, you may need a pry bar or a screwdriver.

Once the old weatherstripping is removed, measure the horizontal jamb width and use a utility knife to cut it — then attach. Then measure, cut and install the vertical pieces — ensuring to butt the ends tight against the horizontal piece at the top and door sill at the bottom.

Close and open your door a few times to ensure everything is where it should be.

## Storm/Screen Doors

If your existing door is uninsulated but still in good condition, adding a storm door may help. Look for metal-framed doors with foam insulation inside their frames and low-emissivity (low-e) glass or glazing.

## Buying a New Door

All ENERGY STAR certified doors have a National Fenestration Rating Council (NFRC) label showing the solar heat gain coefficient (SHGC) and U-factor for the door. In our region, we spend more on heating than cooling, so a higher SHGC — closer to 1.0 — will be better. U-factors range from 0.00 to 2.00. The lower the U-factor, the better the door keeps heat where it belongs.

Insulated doors with a steel skin and foam core interior often have a magnetic strip (like a refrigerator door seal) as weatherstripping. When installed correctly and not bent, these doors don't need additional weatherstripping and can offer five times more insulating value than a same-sized solid-wood door.

## Installing a New Door

When you buy a door, it will probably be pre-hung. Remove the existing door frame and install the new one — taking care to keep it as square as possible.

Before adding the interior trim, apply expanding foam caulking to seal the new door frame to the rough opening and threshold. This helps prevent air from getting around the door seals and into the house. Apply carefully, especially if the frame is wood, to avoid having the foam force the frame out of square.

New, pre-hung exterior doors should have weatherstripping already installed.

**Quick Tip!**

Check the weatherstripping on your exterior doors annually to see if it needs to be replaced.





# Windows of Opportunity!

## The World of High-performance Windows

We've come a long way from the days when windows were just a hole cut in the wall to let in air and light. Windows now add beauty, light, comfort and character to a home. Despite all their benefits, windows and doors also account for about 30% of a typical home's heating and cooling loss.

Much research has gone into improving the performance of windows, and they have become increasingly sophisticated in recent years. Although it can be expensive to replace windows, there are a few situations where expected energy savings and other safety considerations may make window replacement a good choice. When replacing windows isn't cost effective, less expensive alternatives can improve comfort and provide some energy savings.



### Ways to Improve Window Efficiency

You can improve the efficiency of your existing windows in many ways.

#### To reduce heat gain in the summer:

- Install white window shades, drapes or blinds on your east and west windows and close them during the day to reflect heat away from the house. Tilting blinds upward, as seen from the inside, can maximize sunlight while keeping heat out.
- Apply a low-cost window film on the interior surface of unshaded east- and west-facing windows. Gray-tinted and spectrally selective films may allow more light to filter through than reflective films.
- Provide exterior shading through overhangs, awnings, shade screens and trees.

#### To get the best energy efficiency results in winter:

- Keep windows on the south side of your house clean so your home benefits from winter sun.
- If you have single-pane windows, install exterior storm windows to get close to the same benefit as a new, double-pane, low-e window for a fraction of the cost.
- Caulk your windows and install weatherstripping.

#### Window replacement may be a good option if you answer "yes" to any of these questions:

- Do you have visible moisture in or near a window?
- Do you have single-pane or metal-framed windows?
- Were your windows manufactured or installed before 1978?

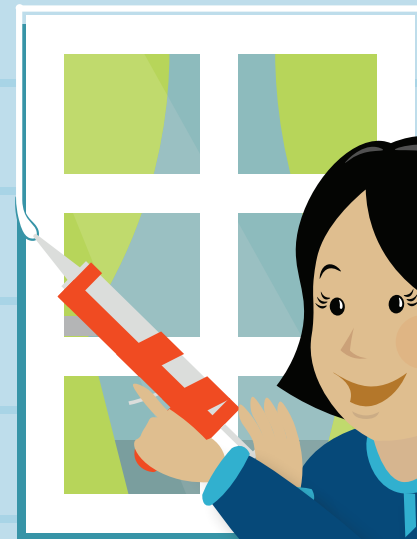
It's not always cost-effective to replace pre-1978 windows just for energy savings; however, that's the year lead-based paint was phased out and the threat of lead poisoning may strengthen your case for going ahead with replacements. Additionally, windows that are several decades old are unlikely to be sealed well or provide good insulation or comfort.

### Window Shopping: Understand What You're Buying

Every new window has a standard NFRC label attached. Similar to shopping for a new door, you'll want to pay attention to the U-factor and the SHGC.

The U-factor is a measure of the window's ability to resist heat flow. Lower numbers are better, and the most efficient windows today hover in the 0.22 to 0.30 range. Low-e coatings can help decrease the U-factor. The SHGC tells you how much heat from direct sunlight will pass through a window (not good in the summer but desirable in the winter). Lower numbers indicate less heat gain.

Because of the angle of the summer sun, the SHGC matters most on east and west windows. Low-e coatings used to lower window U-factors may also reduce a window's SHGC. Tinting can help lower the SHGC but may make it harder to see through them.



# Renovating for Energy Efficiency

With the price of homes and rent skyrocketing in Idaho Power's service area, many homeowners are looking to remodel rather than move. While renovations may make better use of space, change up the design and add value, they're also an opportunity to make our homes more energy efficient.

Tasks like air sealing, adding insulation and upgrading fixtures can increase energy-savings at little cost without adding to your timeline when you plan ahead. Here are some energy efficient upgrades to think about.

## Walls

Add insulation, choose light paint colors (helps reduce the need for lighting) and seal gaps around wall penetrations. Check that outlets are in the right place for your needs.

## Ceilings

Adjust lighting placement, if needed, and upgrade fixtures/bulbs to LEDs. If this requires work in the attic, re-fluff insulation when the job's complete — maybe even have the attic insulation evaluated and, if needed, add more to bring it up to R-49.

## Floors

Check insulation levels and upgrade to R-30, if possible. Seal any gaps.

## Attic/Crawlspaces

If your job requires you to be in either of these spaces, seal ductwork and make certain it's unkinked, connected and properly secured.

## Appliances

Kitchen and laundry room remodels are a great opportunity to trade older, less-efficient appliances for newer, ENERGY STAR certified models that save energy and reduce your energy bills.



We know many of you spent the past year carving out a workspace at home. Some made do with the kitchen table, some moved to the garage and a lucky few had existing home offices. We recently caught up with Jane Gordon, a Boise-area mom and lawyer, and asked her to tell us about her experience.

"Before ordering and upgrading the shed, I was working in our living room, which was not good for my productivity or my home life," Jane said, while talking about her new "Law Lair," a pre-fabricated, renovated shed 30 feet from her backdoor. "I felt like I couldn't focus on my work when I could see house things that needed to be taken care of, and I couldn't disconnect from work and focus on my kids while my workstation was constantly in view."

Knowing she needed a real space for herself and her work, Jane took to the internet to find a solution. She got quotes from two shed companies and advice from her dad, who "has a lifetime of building and engineering experience."

With an eye toward energy efficiency, Jane decided on a fully insulated shed with lots of pre-installed, double-pane windows to make the most of natural light. After it was delivered and placed in her yard, Jane, her dad and her husband worked on the finishing touches, including installing flooring and LED lights, as well as a vibrant coat of paint.

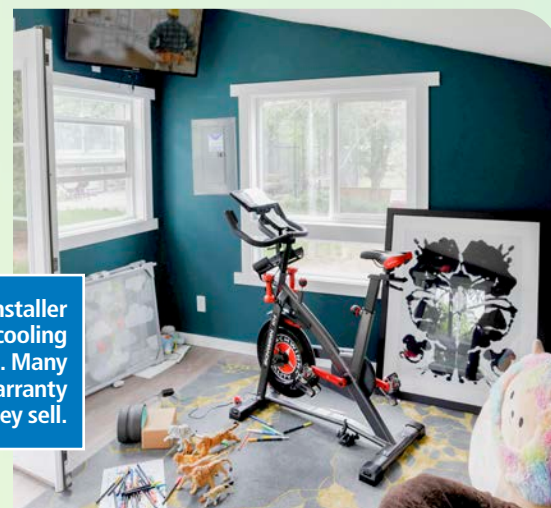
One barrier? Finding an available electrician to run electricity from the house to the new office. The market is very competitive in Boise right now, with everyone doing home renovations or building new. But Jane found someone who could get the job done and was able to officially move her workspace out of the living room and into her new, dream home office.

"I need to start thinking about heating and cooling, because for heating I was using a space heater, which isn't ideal, and my cooling is only through the windows," Jane said.

As spring has turned into summer, Jane's new home office remains a fantastic addition to her quality of life and home's value.

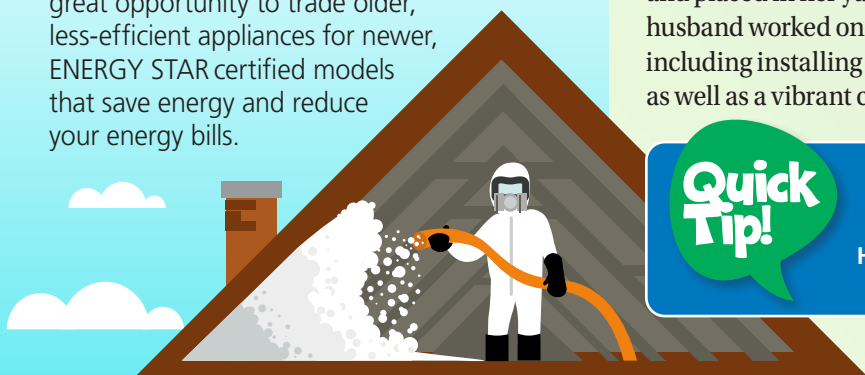
"I love having my own space," Jane shared. "I have weights out there. I have my exercise bike. I have a TV. And sometimes, my three-year-old joins me to have some space away from his baby brother."

Visit [idahopower.com/save](https://idahopower.com/save) to learn more about ways to save during your own home renovation projects.



**Quick  
Tip!**

Remember to check with your installer before purchasing heating and cooling equipment online or in a local store. Many HVAC contractors only install and warranty products they sell.





# Tech Corner

## Induction Cooking is Picking up Steam

Popular among chefs but largely unfamiliar to American home-cooks, induction cooking has many benefits — including reducing energy use by as much as 20–65% compared to traditional cooktops and gas stoves. To increase consumer awareness and adoption of this energy-saving technology, ENERGY STAR has selected induction cooktops for its 2021 Emerging Technology Award!

**How induction works:** Induction cooktops use an electromagnetic field to heat the pan directly. This improves both energy efficiency and cooking performance and allows them to outperform gas and electric burners in both heating power and temperature control.

**Better cooking performance:** Induction offers a wide range of settings, from a low power that's gentle enough to melt chocolate without a double boiler, to high power that can boil water faster than conventional cooktops. Unlike traditional electric stoves, induction offers accurate and nearly instantaneous temperature control — even faster than gas burners. Additionally, for any one pan, a specific temperature setting will always produce the same amount of heat, making it more precise and predictable.

**Increased safety:** With induction cooking, only the pots and pans heat up, reducing the risk of accidental fires or burns on your fingers, wooden spoons and oven mitts.



**Easy cleanup:** Induction cooktops have a smooth ceramic surface. And unlike radiant tops, they're easy to clean because only the pan heats up, preventing food spills or splatters from burning onto the surface. A side benefit is improved indoor air quality due to fewer burnt-food related particulates.

**Special cookware:** For pots and pans to work on induction cooktops, a magnet needs to be able to stick to the bottom. Many stainless-steel, cast-iron and carbon-steel pans will work, but an induction-ready disk is an inexpensive, quick-fix to ensure compatibility for all your favorite pans.

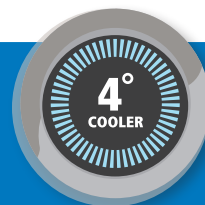


## Bring the Smart Home

Today's smart home, where appliances and devices can be controlled by an app on your phone or from your computer, is all about convenience. Door locks, televisions, thermostats, home monitors, cameras, lights, and yes, even appliances like refrigerators, can be controlled remotely from wherever you are.

Many smart devices come with the ability to automatically adjust to your family's schedules and behaviors. Many also notify you about issues in or around your home. For instance, smart doorbells allow homeowners to see and communicate with people who come to their doors, even when they're not home. Users can set and control their home's temperature, lighting and even appliances from a phone — whether just turning off the lights at night or checking in from vacation to make sure you turned off the stove.

You may qualify for a \$75 incentive when you install a smart thermostat in an electrically heated home. Visit [idahopower.com/heatingcooling](http://idahopower.com/heatingcooling) to learn more.



Although smart technologies can be more expensive, homeowners who invest in certain products hope to save energy and reduce other costs. Idaho Power is currently supporting research to evaluate energy savings associated with smart thermostats. One thing is clear — to maximize the potential for energy savings, homeowners must also be willing to change behaviors and make wise choices about how the products are used.

Smart-home technology is relatively new, but the future is promising — with lofty goals, including increased convenience and security, lower energy bills and the ability for utilities to provide better digital connections between the energy grid and the homes and businesses we serve.



# Cutting the Grass

## and Your Carbon Emissions

If you've shopped at a home improvement store lately, you've likely seen more electric lawn and garden tools than ever before — trimmers, power washers and mowers top the list. Electric tools can lower greenhouse gas emissions, save energy and are generally lighter and quieter than their gas-powered counterparts.

### Energy-efficient, Eco-friendly Lawn Mowers

Of the three common mowers — gas, electric and reel — the cleanest, with no motor at all, is the hand-powered reel mower. If you aren't inclined to go this manual route, but are conscientious of your carbon footprint, you may want to consider an electric mower.



### When purchasing an electric lawnmower, here are some things to think about:

- Electric mowers are best suited to small- and medium-sized yards of less than 14,000 square feet (about 1/3 acre).
- Electric mowers come with or without a cord.
- Brushless motors used on rechargeable mowers are more efficient than brush-type motors found on corded mowers.
- Corded mowers don't have batteries to charge but require you to be mindful as you mow. Start near the house (or wherever the extension cord is plugged in) and work your way out to avoid running over the cord.
- Batteries for cordless mowers power your mower for about 30 to 60 minutes, depending on the height and thickness of the lawn.
- Batteries can take 2-3 hours to recharge. Having two batteries ensures you can finish the job in one swoop.
- The best time to charge batteries is late at night or early in the morning, when there's less demand for energy to power air conditioners. This makes better use of the power grid and helps keep electricity prices low.

#### Quick Tip!

To make your lawn mowing more earth-friendly, compost grass clippings. If you don't want to compost, consider a mulching blade.

### Lawn Mower Operating Costs

Gas.....	\$20–35 per year
Corded Electric.....	\$15–22 per year
Battery Operated .....	\$11–18 per year

## Wildfires Affect Us All



### You can help prevent them.

Whether you're camping or enjoying a fire in your own backyard, always put out your fire.

#### When using fireworks:

- Obey local laws
- Stand back after lighting
- Have water handy
- Leave pets indoors
- Keep children a safe distance away

Together, we can all stay safe!



### My Account

Your 24-hour access to helpful energy-saving information, such as:

- Your home's energy use down to the month, day and hour
- How the weather impacts your energy use (especially on hot summer days or cold winter nights)
- Energy-saving tips and recommendations specific for your home

While you're there, you can pay your bill, start/stop/move service, and sign up for convenient programs like paperless billing, Auto Pay and alerts.



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