

Winterizing for comfort and footprint reduction: easy, low budget actions anyone can take from Columbia Gorge Climate Action Network Footprint Working Group

Heat yourself

- Add another layer, such as a long-sleeve layer or long-johns
- Wear a sweater or fuzzy, warm hat, thicker socks, or warmer shoes
- Sit with a blanket over your legs
- Use a down comforter over the bed
- Eat soups to help keep your body temperature up.

Heat only the space you're using

- Turn down the thermostat to save energy, especially when you're gone. It's easy to forget to turn down the heat when you leave the building, but doing so is one of the surest ways to save money. Most households shell out 50 to 70% of their energy budgets on heating and cooling, so why pay for what no one uses? For every degree you lower the thermostat during heating season, you'll save between 1 and 3% of your heating bill.
- Use an electric heater to heat the room (but only if it's less than 1/3 of the house) http://grist.org/living/is-it-better-to-crank-up-the-thermostat-or-buy-a-space-heater/?utm_source=newsletter&utm_medium=email&utm_term=Daily%2520Oct%252027&utm_campaign=daily
- If some rooms are colder than others, use the warmest room in the house (usually upstairs).
- Shut the door on rooms you don't use, if there are any, and close any vents supplying heat to those rooms.

Easy winterizing

- Turn down the thermostat to 65-68 degrees during the day and 58-60 degrees at night during cooler months. If you have a heat pump, turn the thermostat down no more than three degrees at night. In warm weather, set your heat pump or air conditioning thermostat to 72-75 degrees.
- Use a draft snake on any drafty door. According to the U.S. Department of Energy, drafts can waste 5% to 30% of your energy use. You can easily make draft snakes yourself. Just place a rolled bath towel under a drafty door--or make a more attractive DIY draft snake with googly eyes, felt tongues and the like. You can use any scraps of fabric -- even neckties -- and fill with sand or kitty litter for heft.
- Cover each drafty window with a plastic sheet. Tape it to seal all around the edges. For more insulation, use bubble wrap.
- Clean or replace filters regularly to help your furnace, heat pump and air conditioner work at peak efficiency.
- Run ceiling fans in reverse. Most people think of fans only when they want to be cool, but many ceiling units come with a handy switch that reverses the direction of the blades. Counterclockwise rotation produces cooling breezes while switching to clockwise makes it warmer: air pooled near the ceiling is circulated back into the living space - cutting your heating costs as much as 10%!
- Open the curtains on the south or west side of the house during the day to get the most of the sun's warmth. Close up at night to keep out the cold.
- Move furniture off your vents.
- Close fireplace and wood stove dampers when not in use, but wait until several hours after the fire is out and the ashes are cold. If you have a fireplace, it can lose more heat than it adds unless it has an air intake for outside air or is a stove with adjustable air vents.

More winterizing

- Install an ENERGY STAR® programmable thermostat; they are widely available for as little as \$50, and the average family will save \$180 a year with one.
- Install weather stripping in drafty doors. Add a door sweep to each exterior door.
- Caulk small holes and cracks around ducts, pipes, exhaust fans, vents, sink and bathtub drains, fireplace and under countertops.
- Check the ductwork for leaks in the attic or under the house. Raccoons or other critters can disrupt the ducts. Tape up any leaks with duct tape and add insulation around the duct if possible.
- Use non-vinyl blackout curtains to trap the heat in and keep the cold out.
- Have your furnace serviced to make sure that it is running properly and safely.
- Place straw bales to insulate around the foundation of your home. This help keep the floors warmer.
- Install foam insulation gaskets around your electrical outlets and switches, to minimize drafts.
- Installing storm doors and windows can save you up to 45% on your energy bill.
- Cover your water heater with an insulating blanket. This [video by Sierra Club](#) shows you how.
- Turn down your water heater. While many conventional water heaters are set to 140 degrees F by installers, most households don't need that much heat. Lowering the temperature to 120 degrees F (or lower) would reduce your water heating costs by 6% to 10%.
- Insulate your pipes to pay less for hot water and decrease the chance of pipes freezing. If your pipes are warm to the touch, they are good candidates for insulation. You can get pre-slit pipe foam at most hardware stores. Cut it to size and fasten in place with duct tape. Ideally, choose the insulation with the highest R-value practical, which is a measure of its heat-blocking power. Pipe insulation is often R-3 or, for batt styles that you wrap around, a stronger R-7.

Serious (expensive) winterizing

Start with an energy audit. Oregon residents and NW Natural customers can get a free audit from a contractor qualified by the Energy Trust of Oregon (ETO) <http://energytrust.org/residential/>. The audit will identify major opportunities for efficiency improvements, better heating systems and appliances, and a variety of potential actions. These may include:

- Insulate and seal up air leaks. It may not seem sexy, but insulation is one of the best ways to save energy and money at home. It can make a big difference to add more insulation between walls, and make sure your attic floor and basement ceiling are well covered. In most cases air infiltration loses more heat than inadequate insulation, so make sure your contractor seals up air leaks wherever possible. Ask about tax credits for insulating your house, including low-income programs.
- Install Indows for an extra layer of window insulation.
- Upgrade to a more efficient furnace or heat pump. If your furnace is old you could save a lot of money in the long run (and improve your home's value) by upgrading to a new unit. An Energy Star-certified furnace will save you 15% to 20% versus standard new models. You could save 50% or more compared with many old furnaces still in operation. The latest air-source heat pumps don't need any gas, and can provide up to 3.5 watts of heating or cooling for every watt of power used. Be sure to take advantage of tax credits.
- Consider various alternative energy technologies, like solar panels, geothermal heating and cooling, biomass stoves, small wind turbines and even fuel cells -- all of which require a front-end investment that typically pays itself off in energy savings over a number of years. Check out the significant incentives for installing energy efficiencies or renewables!

- Whereas most incentives for energy efficiency improvements are capped at about \$1,500, federal incentives for most household alternative energies cover fully 30% of the cost of, with no cap. Nowadays multiple companies offer solar system installation deals with no money down and lower energy bills. If your house is efficient enough, a reasonable-size solar array can generate more energy than you use over a year's time.