



Perform a Home Energy Audit

It's easy to find ways to increase your home's energy efficiency and comfort

A do-it-yourself home audit may reveal easily correctable issues. One way to increase energy savings is ensuring window frames are leak-free.

A simple but diligent walk-through of your home can help you determine how efficient your home is and what upgrades are needed to improve its energy performance.

When assessing your home, keep a checklist of areas you have inspected to help you prioritize your energy-efficiency upgrades.

Air Leaks

The potential energy savings from reducing drafts in a home ranges from 5% to 30% per year.

Check for indoor air leaks, such as gaps along the baseboard or edge of the flooring and at junctures of the walls and ceiling. Make a list of the leaks you find.

Check to see if air can flow through these places:

- Electrical outlets
- Switch plates

- Window frames
- Baseboards
- Weatherstripping around doors
- Fireplace dampers
- Attic hatches
- Wall- or window-mounted air conditioners

Look for gaps around pipes and wires, electrical outlets, foundation seals and mail slots. See if the caulking and weatherstripping are in good condition and applied properly, leaving no gaps or cracks.

Plug and caulk holes or penetrations around faucets, pipes, electric outlets and wiring. Look for cracks and holes in the mortar, foundation and siding, and seal them with the appropriate material.

Inspect windows and doors for air leaks. Try to rattle the



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windows. Movement means possible air leaks. If you can see daylight around a door or window frame, there is a leak. You usually can seal these leaks by caulking or weather-stripping them or by covering the windows with low-cost plastic sheets.

Check the storm windows to make sure they fit and are not broken. Check the exterior caulking around doors and windows, and see if exterior storm doors and primary doors seal tightly.

Consider replacing your old windows and doors with newer, high-performance ones. Klickitat PUD has rebates for installing new energy-efficient windows and patio/French doors.

Insulation

Heat loss through the ceiling and walls in your home can be significant if the insulation levels are less than the recommended R-value minimum for your area.

Check your attic hatch to see if it is at least as heavily insulated as the attic, is weatherstripped and it closes tightly. In the attic,

seal any gaps around pipes, ductwork and chimneys with an expanding foam caulk or another permanent sealant. Make sure attic vents are not blocked by insulation.

Seal electrical boxes in the ceiling with flexible caulk (from the living room side or attic side) and cover the entire attic floor with at least the current recommended amount of insulation.

Any heat-producing items such as can lighting and fans should be baffled at a minimum of 3 inches so you can insulate up to the barrier, unless the can lights are insulated ceiling-rated.

It can be difficult to determine the amount of insulation in your wall. If you are doing a renovation project and already opening a wall, make sure to check the insulation levels in the walls.

Without opening a wall it is difficult to determine if the entire wall is insulated, or if the insulation has settled. You need a thermographic inspection to determine this.

If your basement is unheated, determine if there is insulation under the living-area flooring. The amount of insulation should be the entire depth of the joists and should be supported adequately.

Klickitat PUD offers rebates for installing insulation. These rebates are determined by square footage, and vary depending on the type of home and current insulation levels.

Heating/Cooling Equipment

Inspect heating and cooling equipment annually, or as often as recommended by the manufacturer. If you have a forced-air furnace, check your filters and replace them as needed, which is generally about once every month.

Have a professional check and clean your equipment once a year.

If the unit is more than 15 years old, consider replacing your system with a newer energy-efficient unit. A new unit can greatly reduce your energy consumption.

Check your ductwork for dirt streaks, especially near seams, which indicate air leaks. Leaks should be sealed with a duct mastic by a performance tested comfort systems technician. Insulate any ducts or pipes that travel through unheated spaces with a recommended R-value of 6.

Klickitat PUD offers rebates on air-source, ground source, water source and ductless heat pumps, as well as duct sealing.

Lighting

Energy for lighting accounts for about 10% of your electric bill. Examine the wattage size of the lightbulbs in your house because you may have 100-watt—or larger—bulbs in spots where 60 or 75 watts would suffice.

Consider replacing your incandescent and compact fluorescent lighting with LED bulbs for a more efficient and safer way to light your home. ■

Contact Klickitat PUD's Energy Services for more information and to see if your home qualifies for energy efficient rebates: 800-548-8357, ext. 622 or 509-773-7622.