



Home Conservation

WASHINGTON STATE
ENERGY OFFICE

Washington Energy
Extension Service

Wise Use of Resources Through Education

A Priority List of Energy Conservation Steps

Are you getting ready to make energy improvements to your home? If so, consider which ones to make first. By taking conservation steps in order of their cost and energy savings, you can improve the comfort of your home and cut your energy bill at a faster rate. This energy update is designed to help you do that by providing a list of energy conservation measures and an index to publications for information on each of these measures.

The list of energy conservation improvements is arranged in order of their payback. Payback is an estimate of how long it will take for energy savings to offset the initial cost of a conservation measure. It is based on the cost of the improvement and the energy it saves. Generally speaking, improvements with a quick payback cost the least to make yet save a substantial amount of energy.

If you haven't taken any conservation steps on your home, it makes sense to start at the beginning of this list with several no-cost actions and work your way through to the more expensive, longer payback items. Although many people do, it makes little economic sense to install commercial storm windows before making other improvements like caulking, weatherstripping and attic insulation.

Energy Conservation Investment Priorities

Immediate Payback: No Cost Actions

- Lower space heating thermostat (at night and whenever house unoccupied)
- Lower water heater thermostat to 120°F
- Install shower flow restrictor (often free or low-cost from utilities)
- Install gaskets behind electric outlet and switch plate covers (often free or low-cost from utilities)

Less Than Two Years Payback

- Automatic setback thermostat (minimum 8 hour setback of 10F)
- Do-it-yourself weatherstripping
- Do-it-yourself caulking
- Do-it-yourself storm windows (less than \$1.00 per square foot, e.g., flexible vinyl glazing)

- Sheetmetal fireplace cover
- Oil furnace annual tune-up
- Hotwater tank and hot water pipe insulation

Two Five Years Payback

- Attic insulation to R-38
- Underfloor insulation to R-19 (over unheated spaces)
- Furnace duct or boiler pipe insulation in unheated spaces
- Do-it-yourself storm windows (less than \$3.00 per square foot, e.g., rigid acrylic glazing)
- Do-it-yourself insulated window covers (minimum R-3) and less than \$5.00 per square foot)
- Low cost fireplace modifications (e.g., flue top damper, inexpensive glass doors)
- Passive solar design in new construction
- Solar heating of pools

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Greater Than Five Years Payback

- **Insulated window covers (minimum R-3 and greater than \$5.00 per square foot)**
- **Commercially installed storm windows or insulated glass**
- **Wall insulation**
- **Replace conventional oil burner with flame retention burner**
- **Fireplace inserts and woodstoves**
- **Solar or wood domestic water heating**
- **Energy-efficient appliances (especially refrigerators, freezers, and air conditioners)**

Written by WEES Staff

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