

ENERGY CONSERVATION TIPS BY

Mitchell

Norbert E. Mitchell Co., Inc.

Here are some tips that can help you conserve energy. Some of these things are basic and do not cost a dime! Others may require some expert assistance. We suggest you read this information carefully and plan to spend a day or two to go through your home taking a look at each of the areas identified below.

Insulation

Insulating ceilings, attics and walls will save a bundle. It is an inexpensive way to save money. Blown-in insulation can be used in hard to reach areas. Be sure your existing insulation covers all exposed areas.

New Roofing & Siding

New siding by itself is not a big energy saver. It's what is underneath that really counts. New siding is often installed over a wind-barrier (Tyvek®) and often with a layer of dense foam insulation.

New Windows and Doors

Old windows and doors are common causes of significant heat loss. Non-thermal pane windows can rob you of 20% of your heat. Poor weather stripping is also a cause of high infiltration losses. Heat loss caused by cold drafts that blow through cracks in your home can rob you of 15% or more!

Ceiling Fans

A paddle-type ceiling fan is a wonderful year-round energy saver. In the winter it re-circulates warm air that accumulates at the ceiling. In the summer it is a very simple, effective evaporative cooling system.

Additional Steps

- Feel for air leaks around windows, doors and electrical outlets. Repair weather-stripping and caulk leaks. (Do not caulk around storm windows because that can hold in moisture and cause damage to the wood frame).
- Seal cracks in your home's foundation.
- Replace cracked glass.
- Seal off your attic circulating fan with polyethylene and tape.
- Make sure you have at least 6" of good thermal insulation in your ceiling.
- Keep your kitchen vents closed when not in use.
- Keep closet doors closed.
- Remove air conditioning window units or cover them well.
- Use storm windows and doors and make sure they fit tightly.
- If you don't have storm windows, cover the outside glass with polyethylene sheets.

Common Sense & Life-style Items

You will save about 3% on your heating bill for every degree you set back your thermostat full time. Turn it back 10 degrees when you go to work and to bed, and you can save about 14% on your heating bill. The best way to do this is with a programmable thermostat.

Take Advantage Of "Cheap Solar Heat"

On the side of your home that is exposed to the sun during the day, keep the window treatments open to let as much sun shine in as possible. This is referred to as passive solar heat. Conversely, all window coverings should be closed at night or when the sun is not shining.

Heating System Modifications & Maintenance

Insulate your hot water pipes and you will save an amazing 10-15% annually. To insulate, simply stop at any hardware or home improvement store and purchase insulated pipe wrapping. It can be easily cut to fit and secured with a combination of duct tape and plastic tie-wraps.

If Your Boiler Has A Tank-less Coil

Consider installing an indirect water heater. These save energy by storing hot water in an encapsulated vessel very efficiently and give a nearly limitless supply of hot water. Boilers with tank-less coils run excessively year round due to potential demand, with most of the heat going up the chimney.

Do Not Forget To Have An Annual Tune-Up

During an annual tune-up, your system will be cleaned of energy-robbing carbon build-up and optimized with a combustion flue gas analyzer. Ask your licensed **Mitchell** technician how to operate your system at peak efficiency to help reduce your energy costs.

Warm Air Furnace And Hydro-Air System Filter Changing

This is responsible for an enormous amount of wasted fuel. In times of constant heating (or cooling), FILTERS SHOULD BE CHANGED EVERY MONTH! Go to your local hardware or home improvement center and pick-up a years supply of filters. **Mitchell** can provide your air filters also.

Insulated Water Heater Wrapping

Depending on your type of water heater, a water heater insulation blanket may be able to save you a significant amount of energy. These blankets are available from most home improvement stores.

Heat Duct Sealing

Look for gaps or cracks in your duct work and seal them with duct tape.

Clean Baseboard Fins

Air must be able to freely flow through the baseboard from the bottom and out through the top. Make sure the fins are not plugged with dirt, lint or pet hair. The louver at the top of the baseboard should be open enough to allow for free air flow. Never block baseboards with furniture or long draperies.

Common Energy Saving Options - Always A Smart Investment

Option	Energy Savings	Payback in years
Flame Retention Burner	Up to 15%	1-3
Efficiency Tune-Up	Up to 10%	0-1
New Boiler or Furnace	20-40%	4-8

Energy Escape Routes

Heat Escape Route

Air conditioning units

Attic circulating fans

Kitchen vent

Fireplace flue

Attached garage

Windows without storm windows

Window panels

Cracked or missing caulking

Solution

Cover or remove from window

Seal off with polyethylene and tape

Close when not in use

Close when not in use

Close door when not in use

Cover with polyethylene sheets

Replace cracked glass

Re-caulk, re-seal all weather stripping and caulking