



# BUILD IT BACK GREEN

## 10 Tips for Energy Savings & Healthy Living



### 1. Use Compact Fluorescent Lights Indoors and Outside

The easiest way to cut your energy costs is to swap regular light bulbs for compact fluorescent ones, called "CFLs." Compared to regular bulbs, CFLs:

- **Use ¼ of the energy of incandescent bulbs** and last 10 times longer.
- **Save you \$25 to \$45 for each bulb** over its life span.
- Give off 90% less heat, **lowering utility bills.**



While regular light bulbs cost less to buy up front, they cost you a lot more money in the long run.

### 2. Choose Energy Star Appliances and Electronics

Home appliances and electronics account for about 20% of the energy bill. Lower your monthly utility costs by purchasing models with the Department of Energy's blue ENERGY STAR label.



- **Energy Star appliances use 10%-50% less energy** and water than standard models and can **save up to \$400** per year on utility bills.
- Energy Star refrigerators and freezers use at least **15% less than conventional models.**
- **Energy Star clothes washers** use at least **50% less**, dishwashers use 40% less.
- **Energy Star room air conditioners** at least 10% less, and **televisions, DVD players and VCRs** at least **30% less.**

The purchase cost may be higher, but you will get that money back in energy bill savings in two to five years.

### 3. Install a Radiant Barrier in Your Attic

A radiant barrier is an aluminum foil-coated material that can:

- **Reduce your summer-energy bills by more than 15%.**
- **Block as much as 50%** of the heat radiated through the roof and into your house.
- **Lower attic temperature 20-40 degrees.**



Radiant barrier can be stapled to the underside of the roof rafters in existing buildings.

In new construction, roof decking can be installed that has radiant barrier factory-applied to one side.

### 4. Install High Quality Insulation

High quality insulation in walls and attic reduces AC and heater usage.

- **Reduce your energy bills by more than 15% through installing quality insulation.**
- **Roughly 50% of your energy bill is to cool and heat your home.**

Fiberglass batts are the least expensive (\$1.45/sf) and easy to install yourself.

Choose formaldehyde-free batts. Wall insulation should be a minimum of R-13. Install insulation with an R-value of at least 30 in your attic but install R-38 if affordable. Blow in insulation, like cellulose, is more effective but more expensive (\$1.90/sf). Open cell foam is the most efficient, but costs the most to install (\$3.75/sf).



## 5. Shade Your Windows

Windows on the east, west and south side of a structure greatly increase the temperature in your house. Plant trees, install overhangs or Venetian blinds, and use solar film or screens on your windows to block sunlight.

- **50% of the increased temperatures** during summer months enter through windows.
- Install shutters or **ENERGY STAR low-E high impact windows** if affordable. They also provide a defense against hurricane winds.

Shading windows reduces summer overheating, decreasing summer cooling bills.



## 6. Seal Air Leaks with Weather-Stripping and Caulk

More than 30% of the cooled and heated air escapes a house through leaky windows, doors, fireplaces, recessed lights, drain lines, vents and electrical outlets.

- **Seal caulk, install foam and weatherstrip.**
- It **cuts down** on pollutants, noise, pests and moisture.
- **Up to 20% percent saving in energy bill.**

Purchasing cost is offset through energy bill savings within one year.



## 7. Seal the Leaks in Your Ductwork

**Leaky ductwork may account for up to 30% to 50% of cooled and heated indoor air loss.** Seal all joints and connections with mastic, available at most hardware stores. **NEVER use duct tape.** Sealing your ducts can:

- **Save you money on yearly utility bills** since more conditioned air is directed into your living area.
- Greatly reduce dust, mold and humidity in your home.

If installing new ductwork, put it in an air-conditioned space, instead of in the attic or under the house.



## 8. Choose Healthy Paint, Carpet and Cabinets

Paints, carpets and cabinet can contain harmful chemicals called volatile organic compounds (VOC) that can cause skin rashes, headaches, nosebleeds, nausea and eye, nose and throat irritation. Some of these toxins may be linked to cancer.

- **Indoor-air pollutant level may be two to five times higher** than the level outdoors.
- Most people spend up to 90% of their time indoors so we should be concerned for indoor air quality.

Check for logos, like this one on wood finishes and carpets to indicate a low or no VOC level.



## 9. Install Water-Efficient Toilets and Fixtures

The average household spends about \$500 each year on water and sewerage bills. Water-efficient toilets use 1.6 gallons per flush, compared with standard toilets that require 5-7 gallons.

- Purchasing a water-efficient toilet could save a family of four up to 22,000 gallons per year.
- **Save up to \$200 a year** by switching to low-flow toilets, faucets and showerheads.
- **Flow reducers** that fit onto the tip of existing faucets and showerheads cut the water-flow rate and can **save you as much as 40%** on your water bill.



Water-efficient fixtures rarely cost more, and they **pay for themselves** in a short period of time.

## 10. Select a Light-Colored Roof

Choose a light colored roof for new construction and existing structures.

- **Reduce summer energy bills** by at least **20%** by choosing a roof that reflects heat.
- **Roofs last longer** due to decrease in surface temperature.

Light colored-metal roofs have the greatest impact.





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