

Be Green, Save Green

It cannot be denied. Energy prices are rising, and the trend is likely to continue. One sure way to save money is to conserve energy, and the best place to start is in your own home. There are a great many new technologies and techniques available for making a more energy efficient home, and many can be retrofitted to make *any* house more efficient. There are also simple design choices you can make that will significantly decrease your home’s energy cost.

**Seal in Savings**

After the purchase of a house, the largest expense of ownership is in heating and cooling it. According to the US Department of Energy, 48% of home energy use is for climate control. As the trend toward ever-larger interior spaces continues, the cost of climate control grows with it. Some energy saving ideas include:

• Windows: Replacing old, single-paned windows and doors with newer argon or krypton gas-filled double-paned units. This reduces heat transfer between your home and the outdoors.

• Spray foam insulation: Traditional fiberglass batt insulation often leaves gaps around vents and recessed light fixtures. Up-fitting your walls and roof with spray foam insulation can help to decrease heat conductivity caused by air leakage, saving you 50% or more on heating and cooling costs. As an added advantage, by preventing air infiltration, spray foam insulations reduce indoor humidity, and thus retard the growth of hazardous mold.

• Radiant heat barrier: A properly installed radiant heat barrier can reflect up to 90% of the solar energy absorbed by the roof away from your air-conditioned spaces, helping your house stay cool.

Even if you can’t afford upgrades to your doors and windows or insulation, it’s worth investigating your house for drafts, and sealing them with weather stripping or caulk. If you can slip a dollar bill through the bottom of your doorframe or around your window sash, you may as well burn it, because you’re paying for the energy that’s leaking away.

**Solar Solutions**

One thing that we have in abundance here in North Carolina is sunshine. Put the sun to work for you.

**•** Install a solar water heater: According to the US DOE, the second highest single energy use in the home (12%) is for heating water. Solar water heaters absorb the sun’s energy to heat water. A typical solar thermal water-heating system retrofitted for a single-family home can cost $4,000 to $5,000. An NC tax credit can shave up to $1,400. A federal tax credit can knock off $2,000 more. Total out-of-pocket for the system: between $600 and $1,600. For a typical homeowner, the system can pay for itself in less than five years. But act quickly! The federal credit sunsets in 2008.

**•** Install photovoltaic (solar panel) systems to turn the sun’s energy directly into electricity for your home’s needs: Today’s systems can often generate more electricity in summer months than their owners can use. By NC state law, the surplus is sold back to electric utilities. Be your own power company!

**More Efficient by Design**

When considering home renovations, there are many design ideas that can increase the efficiency of your home.

• Use passive solar elements: A passive solar room uses brick, stone or tile walls and floor to absorb heat during the day, and radiate the stored thermal energy at night.

• Use long overhangs/eaves: Deep eaves keep the sun off of masonry, keeping it cool. Deep porches are also a wonderful outdoor gathering space for the whole family.

• Use casement windows: A casement window can be adjusted like a sail, to catch and direct the wind through your house on breezy days.

• Use airlock rooms: If your family is in and out of the house often, consider an unheated vestibule or mudroom. They act as an “airlock” to keep your conditioned air in.

• Use landscaping: Deciduous trees on the South side of a house give shade in the summer months, but allow sunlight to warm your house in the winter. Tall shrubs close to the house on the north side block the winter wind and trap the air to reduce heat conductivity.

As with any of your home-related needs, the team at Distinctive Remodeling is ready, willing and able to help you with your energy saving ideas. Contact us today if you would like to discuss how some of these green ideas, or others, can be incorporated into your home.