



## Remodeling your home for energy efficiency

Your home is your haven. You want it to be attractive, safe, comfortable, and easy to maintain. If you own an older home, remodeling is one way to achieve this. The process can be very rewarding—and it can help you save energy and money, too. Read on to learn how making energy-efficiency improvements can turn any remodeling project into a whole-house success.

### INSULATE AND SEAL

#### Insulate your walls and attic

Proper insulation is the most effective way to save energy. The leakier your house, the greater the benefits of insulating and air sealing. Many Wisconsin homes lack adequate insulation. While you're remodeling, take advantage of open walls and ceilings to add insulation. Focus on Energy recommends insulating attic areas to an "R-value" of at least R-44.

R-value is a numerical indicator of an insulation's efficiency at retarding the flow of heat. The higher the R-value, the greater the insulating power.

#### Seal attic bypasses

Ice dams—the ridges of ice that build up on roof eaves—may cause costly structural damage to your home. You can reduce this problem by sealing attic bypasses—the hidden pathways that allow warm air to penetrate the attic and melt snow on the roof—to help prevent ice melt.

When replacing your roof or siding, take advantage of the increased access to these areas to seal leaky pathways. As you remove old siding, seal all penetrations into the wall from the outside and add a layer of foam insulation beneath the new siding. Insulate wall cavities as well.

### REPLACE APPLIANCES

Look for the ENERGY STAR® label when shopping for new

appliances. The ENERGY STAR distinction is awarded to products that meet or exceed nationally established criteria for energy efficiency and use 10 to 50 percent less energy than their conventional counterparts.

#### Refrigerators

Thinking about buying a new refrigerator or freezer and keeping your older appliance for extra storage? Think again. Though it may seem convenient, keeping an inefficient appliance can add at least \$100 to your annual energy costs. ENERGY STAR qualified refrigerators require about half as much energy as models manufactured before 1993. ENERGY STAR qualified refrigerators provide energy savings without sacrificing the features you want.

#### Dishwashers

ENERGY STAR qualified dishwashers use at least 41 percent less energy than the federal minimum standard for energy consumption. Compared to washing dishes by hand, an ENERGY STAR qualified dishwasher:

- Can cut utility bills by \$35 per year.
- Uses half as much energy.
- Saves nearly 5,000 gallons of water per year.

#### Gas ranges

Save energy with a modern gas range equipped with an electronic or thermal ignitor rather than a standing pilot light. Self-cleaning ovens reduce the need for caustic oven cleaners and are built with more energy-saving insulation. And remember to keep burners clean to improve efficiency.

#### Clothes washers

An ENERGY STAR qualified clothes washer:

- Can save up to \$135 per year on utility bills compared to a model manufactured before 2001.
- Uses over 30 percent less energy and 50 percent less water compared to standard models.

**For more information,**  
call 800.762.7077 or visit [focusonenergy.com](http://focusonenergy.com).

## Remodeling your home for energy efficiency

- Spins your clothes drier, making your dryer cheaper to run.
- Saves you money on clothes because the tumbling action (vs. agitation) is gentler on clothes.
- Is quieter than a conventional washer operating on a normal cycle.

### Clothes dryers

Choose a natural gas dryer because they cost less to operate than electric ones. The cost of drying a typical load of laundry in a gas dryer is 15 to 20 cents compared to 30 to 40 cents for an electric dryer. No matter what kind of dryer you have, always remember to clean the lint trap after every load and don't over-dry your clothes.

## IMPROVE WINDOWS AND DOORS

### Windows

ENERGY STAR qualified windows provide suitable solar control and ventilation and save energy to help reduce heating and cooling costs. Additional measures such as insulation and air sealing work with efficient windows to dramatically reduce energy costs.

### Doors

Install doors with a high insulation value. Add weatherstripping around doors to reduce drafts and ensure they are properly sealed to avoid moisture damage.

## UPGRADE HEATING AND COOLING SYSTEMS

Efficient heating and cooling systems can increase comfort and help you reduce energy costs. Choose a furnace with an annual fuel utilization efficiency (AFUE) rating of at least 90 percent and an ECM (electronically commutated motor) fan motor.

ENERGY STAR qualified air conditioning units offer comfort, reliability, and low operating and maintenance costs.

ENERGY STAR qualified models have a higher seasonal energy-efficiency ratio (SEER) than standard ones, making them about 14 percent more efficient. Focus recommends units with a rating of 15 SEER or higher.

## INSTALL A NEW WATER HEATER

Replace your water heater if it is old, inefficient, or no

longer meets your water-heating needs. Choose a high efficiency, natural gas model that is power vented for combustion safety. To increase energy efficiency and prevent scalding, set the water heater's thermostat to 120 degrees Fahrenheit.

### YOUR HOUSE AS A SYSTEM

Remodeling can impact areas of your house in ways you may not realize. For example, a new range hood in the kitchen may cause a water heater to backdraft, spilling potentially deadly combustion gases into the home. Seek the help of a consultant partnering with Home Performance with ENERGY STAR before you begin work. Visit [focusonenergy.com](http://focusonenergy.com) to find a consultant and to learn more about the Home Performance with ENERGY STAR Program.

### TAKE ACTION TODAY. SEE RESULTS TOMORROW.

Reduce energy costs and improve the comfort, safety, and durability of your home. Call Focus on Energy at **800.762.7077** or visit [focusonenergy.com](http://focusonenergy.com) to download fact sheets on all of the topics covered here, plus much more.

### STAY CURRENT AND CONNECTED!

Join our online conversation at [focusonenergy.com/socialnetworks](http://focusonenergy.com/socialnetworks) to connect with people who share your interest in saving energy and money at home and work. Also, visit [focusonenergy.com/incentives](http://focusonenergy.com/incentives) for the latest incentives and requirements as Focus offers are subject to change.

### MORE INFORMATION

#### The official ENERGY STAR website

A joint effort of the U.S. Environmental Protection Agency and U.S. Department of Energy, this site offers valuable information about energy-efficient products and practices. [energystar.gov](http://energystar.gov)

#### Home Energy Magazine Online

Visit this site for practical information on energy efficiency, performance, comfort, and affordability. [homeenergy.org](http://homeenergy.org)

Focus on Energy works with eligible Wisconsin residents and businesses to install cost-effective energy efficiency and renewable energy projects. Focus information, resources, and financial incentives help to implement projects that otherwise would not be completed, or to complete projects sooner than scheduled. Its efforts help Wisconsin residents and businesses manage rising energy costs, promote in-state economic development, protect our environment, and control the state's growing demand for electricity and natural gas. For more information, call **800.762.7077** or visit [focusonenergy.com](http://focusonenergy.com).



**focus on energy**<sup>™</sup>

Partnering with Wisconsin utilities