There's a reason so many builders are leaning green these days. After all, who doesn't want a home that's healthier, keeps energy costs and greenhouse gas emissions in check, and doesn't squander water and other natural resources? But you don't have to build from scratch to turn your not-so-new house into a dwelling that's eco-friendly and more economical to run.

Whether you own or rent, the U.S. Green Building Council's new website, **greenhomeguide.org**, is a good place to start.

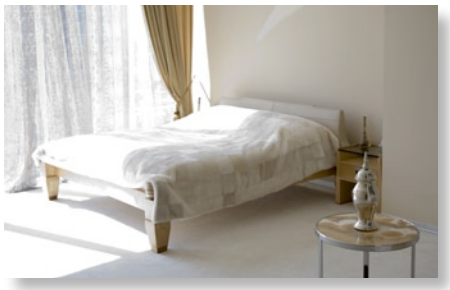
Meantime, check out the following pages filled with simple ideas that can help you save money (and the planet) today.

45 Ways to Green the Not-So-New House

1. Lint hint. Saving energy doesn't get any easier than this: Lower your energy bill by cleaning your clothes dryer's lint trap before every load to improve air circulation, therefore cutting down on energy-wasting drying time. $

2. Power to the people. Reduce your carbon footprint (and maybe even your waistline) by using human-powered appliances and equipment. Think reel mowers, good old-fashioned manual can openers, carpet sweepers, whisks and wooden spoons instead of electric mixers. $

3. Good day sunshine. On cold sunny days, open window coverings to let the sun warm your home. On hot days, close window coverings on the south and west sides to keep your home cooler. $



KEY

COST: $ No or low upfront cost (less than $50) $$ Moderate upfront cost ($50–$500) $$$ High upfront cost (greater than $500)

RELATIVE BENEFITS: Modest benefits Moderate benefits High benefits

(improved indoor air quality; energy or water savings; reduced greenhouse gas emissions; less waste or pollution; greater durability)

4. Washing day. Save $30 to $40 per year in water heating costs by washing and rinsing clothes in cold water. You can also save more than 3,400 gallons of water per year, according to Energy Star, by washing full loads instead of partial loads. $

5. Refrigerators blasted by the sun's rays or subjected to heat from an adjacent oven or heating vent have to work harder to chill your food. If possible, relocate the fridge to a cooler spot, or close window coverings to keep the sun off. $

6. Rock-a-bye computer. Enabling your computer and monitor's power management features so they go into sleep mode when idle can save from $25 to $75 each year in energy costs, according to Energy Star. Also, turn off computers and peripherals at night. $

7. Wrap it up. In the winter, room air conditioners installed in windows can be a source of cold drafts. Remove window units during cold months or insulate them with tight-fitting A/C covers, available from most local home-improvement stores. $

8. Battery recycling. Recycle your old cell phones and used portable rechargeable batteries from cordless power tools, laptop computers, digital cameras and other devices. For drop-off sites, visit, rbrc.org/call2recycle/dropoff. $

call 2 recycle™

A Rechargeable Battery Recycling Corporation program

9. Run the numbers. Use the U.S. EPA's online emissions calculator to find out how many greenhouse gas emissions your household is responsible for. Spend 10 minutes entering your data, and you'll get a rough estimate of your total CO_2 emissions, plus action steps to go on a carbon diet. epa.gov/climatechange/wycd/calculator/ind_calculator.html $

10. Think globally, buy locally. Choosing a product that's harvested or made locally reduces transportation energy use and helps sustain your community's economy. $

11. Nix the night lights. Install motion sensors, photocell controls or timers so outdoor lights are only on when needed. Reduce light pollution and keep the night sky darker by using light fixtures that direct light downward instead of toward the sky. $

12. If you have incandescent light fixtures where you can't or don't want to use compact fluorescent bulbs, install dimmer switches. Dimming shaves a bit off an incandescent bulb's energy use and makes the bulb last longer (Note: Most compact fluorescent bulbs can't be used with dimmer switches). $

13. Hung out to dry. Many newer clothes dryers have moisture sensors that shut off the heat when they detect that the clothes are dry. If your dryer lacks this feature, try not to overdry your clothes. Operating the dryer for an extra 15 minutes per load can cost as much as $34 per year, according to Energy Star. $

14. Worried about toxins in the home? The Washington Toxics Coalition reports that using entryway mats can reduce the amount of pesticide residue on carpets by 25% and the amount of dust on carpets by 33%. And homes where shoes are removed at the door, according to the WTC, have 10 times less dust than homes where shoes are worn. $

15. Paint your home green. The air in our homes can be two to five times more polluted than outdoor air. One of the major culprits? Volatile organic compounds, or VOCs, that are released from paint, particleboard and other home-improvement products. Most major paint manufacturers now make low-VOC paints, and some offer zero-VOC paints. $

16. Compost happens. Food waste that winds up in landfills generates methane, a greenhouse gas that's 23 times more potent than carbon dioxide. Take charge of your greenhouse gas emissions by composting food scraps (except meat) in a backyard composting bin or even a worm bin. A bonus: Your plants will love the nutrient-laden finished compost. $

17. Prevent energy-wasting air leaks. To stop drafts, install weather-stripping around doors and caulk cracks around windows. Check the heating and cooling systems' ducts to make sure all joints are connected and well sealed. Use a mastic sealant or foil-backed tape to seal ducts. $

18. If your garage is attached to the house, fumes from car exhaust and stored chemicals can enter living spaces through gaps around doors or cracks in the ceilings and wall. Make sure the door between the garage and house seals tightly, and caulk or seal any cracks or openings between the garage and house. $

19. Breathe easy. Carbon monoxide is called the silent killer because it's colorless and odorless. If you have a fuel-burning appliance inside the home, such as a gas stove, furnace, water heater, fireplace or clothes dryer, be safe and install a UL-listed carbon monoxide detector on each floor. $

20. One man's trash is another's treasure. When you're through with an item, sell or freecycle it rather than throwing it away. To look for more ways to donate items, check out www.freecycle.org. $–$$

freecycle™
changing the world one gift at a time

21. The M word. To keep mold at bay, use your bathroom and kitchen ventilation fans. To be effective, fans need to vent to the outdoors and Energy Star products are more efficient, quieter and last longer. $–$$

22. Automate it. Reduce energy bills by as much as $150 a year with a programmable thermostat that adjusts the temperature when you leave the house or go to sleep. $–$$

23. Audit it. A home energy audit helps you assess how your home uses energy and prioritize actions you can take to make it more efficient and comfortable. To get started, try Energy Star's Home Energy Yardstick (energystar.gov). $–$$$

24. Water is the new oil. Consider repurposing water for irrigation. Graywater systems typically recycle wash water from sinks, tubs, showers and clothes washers. Rainwater harvesting systems direct rainwater from the roof into barrels or above- or underground tanks. $–$$$

25. An old refrigerator or freezer in the basement that's just cooling its heels and a few cases of soda may be costing you as much as $100 each year. If it's more than 10 years old, recycle it and replace it with a new, high-efficiency model. $–$$$

26. Once is not enough. Choosing salvaged, secondhand or antique furnishings, doors, trim, fixtures and other items that have been around the block a few times is often a smarter use of natural resources than buying new products. One caveat: Steer clear of single-pane windows, old toilets and used appliances that waste energy or water compared with their newly manufactured counterparts. $–$$$

Consider the true costs

Often we're won over by low upfront costs rather than taking into account long-term value, but when it comes to home improvements, that strategy can cost a bundle. Whether you're replacing a refrigerator or a roof, consider value over cost, and how much you can save in terms of energy, maintenance and time over the long haul.

27. Radon in indoor air is responsible for 21,000 lung cancer deaths in the United States each year, according to the U.S. EPA. To check for it, DIY tests are available from home improvement stores or from the National Safety Council (nsc.org) for $20 or less. If unsafe levels are detected, the cost for reducing radon ranges from $800 to $2,500. **$–$$$**

Get paid to go Green

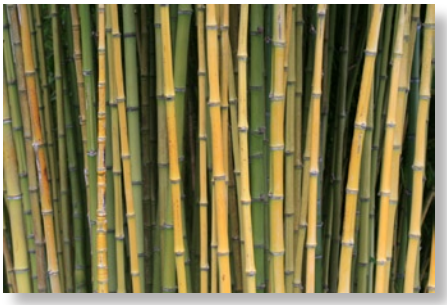
If you made certain energy efficiency improvements to your home between January 1, 2006 and December 31, 2007, you have until April 15, 2008 to claim a credit of up to $500 on your 2007 taxes. Eligible improvements include insulation, replacement windows, water heaters, heating and cooling equipment, and more. Although most of these credits expired as of December 31, 2007, Congress may introduce new legislation in 2008. Check the Energy Star website (energystar.gov) for information and updates.

A federal tax credit is still available for qualified solar water heating and solar electric systems. The credit is for 30% of the system's cost, up to $2,000. And a number of states and some cities offer rebates and other incentives to encourage installation of renewable-energy systems. For a directory of incentives by state, go to dsireusa.org.

When filing your tax return, don't overlook possible tax credits for donations of salvaged building materials to charities such as Habitat for Humanity.

Also check with your local utility company and municipal water agency. Many offer cash rebates when you purchase energy- and water-efficient appliances and make energy-efficiency improvements.

28. Light at the end of the tunnel. Brighten up dark hallways, bathrooms and other spaces with tubular skylights. They let in daylight without the excess heat and are relatively easy and affordable to install. **$$**



29. Plant it again, Sam. Plants like bamboo that can be harvested and grown again within a short time ease demand for slower-growing trees and nonrenewable resources like petroleum. Check out great bamboo alternatives for floors, cabinets, built-ins and furniture. **$$**

30. Be an Energy Star. Sometimes to save a lot, you have to spend a little. Energy Star–qualified appliances may cost a bit more than standard models, but they incorporate features like high-efficiency compressors and motors and better insulation. And they use 10% to 50% less energy and water, which means more money in your pocket year after year. **$$**

31. Waterwise, landscaping doesn't have to resemble a desert scene, thanks to today's high-efficiency irrigation products. Drip and bubbler irrigators and smart controllers determine when and how much to water based on moisture sensors, historic local weather data or a signal from a weather station. **$$**

32. Made in the shade. Summer sun striking west- or south-facing windows and walls can make your home unbearably hot and drive air conditioning costs through the roof. Plant deciduous trees along them and get relief. **$$**

33. Solar-powered attic fans exhaust hot air and help keep your home comfortable while reducing cooling costs. An added benefit: No need for electrical wiring, so installation is straightforward. **$$**

34. Got WaterSense? If a family of four replaces their 3.5-gallon-per-flush toilets made before 1994 with a WaterSense-labeled toilet, they could save $90 a year and as much as $2,000 over the toilet's life. Find out more at epa.gov/watersense. **$$**

35. Deconstruct, don't demolish. When remodeling, reuse as much as you can of the existing structure, trim, finishes and fixtures. If you hire a deconstruction outfit, ask if they're a charitable organization—if so, you may be eligible for a sizable tax deduction for the value of the salvaged goods. **$$–$$$**

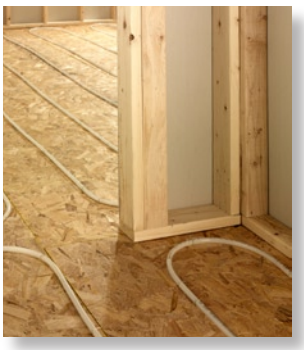
36. Button up. Save energy and feel more comfortable by beefing up insulation in perimeter walls and ceilings. Check out eco-friendly options like recycled cotton or cellulose and fiberglass batts with no added formaldehyde. **$–$$$**

37. Foiled again. In hot summer climates, attic radiant barriers can help keep homes comfortable and reduce cooling bills. Made of a reflective foil, radiant barriers block the transfer of radiant heat from a hot roof into the attic. In the Southeast, radiant barriers can reduce cooling costs by 8% to 12%, according to the Florida Solar Energy Center. **$$–$$$**

38. When choosing appliances and equipment, remember that not all energy sources are created equal. If you're in the market for a backup generator, natural gas and liquid propane (LP) engines burn cleaner than gasoline engines, which reduces air pollution and extends the engine's life. **$$–$$$**

39. Double up. To keep heat inside during winter and outside in the summer, choose double-pane windows with an appropriate low-e coating. For help choosing the right window for your climate, go to efficientwindows.org. **$–$$$**

40. Be radiant. Radiant floor heating systems are a boon to indoor air quality because unlike forced-air systems, they don't blow dust and other allergens around. Thanks to warm water circulating in flexible tubing installed under the floor, heat radiates evenly up through the floor, providing quiet, even warmth while using less energy. **$$$**



41. Grow a green roof. Also called living roofs or vegetated roofs, green roofs are specially engineered with a waterproof membrane topped by a lightweight planting medium. Typically planted with native grasses, wildflowers or other climate-appropriate groundcovers, they slow the flow of stormwater off the roof, keep surrounding outside air temperatures cooler, insulate the home from noise, heat and cold, and may even extend the roof's life. **$–$$$**

42. Don't get burned. Wood-burning fireplaces are notorious polluters and energy wasters. Think about retro-fitting yours with an energy-efficient, clean-burning, EPA-certified fireplace insert. The inserts include glass or metal doors, vents to provide outside air for combustion, and blowers to circulate heated air into the room. Learn more at epa.gov/woodstoves. **$$$**

43. Reroofing? Cool roof products come in a variety of colors and materials (including ceramic or concrete tiles, metal and synthetic membranes) and reflect more of the sun's heat, lowering the roof's temperature by up to 100 degrees F. **$$$**

44. Harvest the sun. In regions with abundant sunshine and high energy costs, solar systems are gaining ground. Solar electric systems can offset some or all of your home's electricity use, while solar water heating systems can heat water for sinks, showers, laundry, home heating, pools and spas. A variety of federal, state and local incentives are making renewable-energy systems more affordable. For a directory of incentives by state, go to dsireusa.org. **$$$**

45. Salvage style. Spare the precious forests by choosing salvaged wood harvested from dismantled buildings, old barrels, urban trees that would otherwise have been chipped for mulch or firewood, sinker logs from lake and river bottoms, and many other sources. **$–$$$**

Want more ideas on how to green your home or where to find a brand-new green home? Check out the U.S. Green Building Council's Green Home Guide (greenhomeguide.org). And later this year, look for REGREEN, a set of residential remodeling guidelines being developed by the USGBC and the American Society of Interior Designers (ASID).