



45 Ways to Green the Not-So-New House

GREEN DESIGN STUDIO

191 E. Newman Springs Rd. Shrewsbury, NJ 07702

732-741-6700

KEY:

UPFRONT COST: \$ Low or none | \$\$ Moderate (\$50-\$500) | \$\$\$ High (\$500-plus)

RELATIVE BENEFITS: 🌱 Modest benefits | 🌱🌱 Moderate benefits | 🌱🌱🌱 High benefits

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. \$ 🌱

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. Fridge shui

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. [Find a drop-off site.](#) \$ 🌱

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 CO2 emissions, plus action steps to go on a carbon diet. \$ 🌱

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. Be a dim bulb

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. Wipe your paws

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 weatherstripping 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. Keep it in the garage

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. 💰—💰🏠 🏠

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](#). \$—\$\$\$ 🏠🏠

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. Cool-down upgrade

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. One caveat: Steer clear of single-pane windows, old toilets and used appliances that waste energy or water compared with their newly manufactured counterparts. \$—\$\$\$ 🏠🏠

27. Be rid of radon

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](#) for \$20 or less. If unsafe levels are detected, the cost for reducing radon ranges from \$800 to \$2,500. \$—\$\$\$ 🏠🏠🏠

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. A truly green landscape

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. Blow off some heat

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. \$\$ 🏠🏠

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. Consider the source

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 retrofitting 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. \$\$\$ 🏠

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. \$—\$\$\$ 🏠🏠