

Greening Your Kitchen

Smart choices can save you money while helping to save the planet.

Okay, so you buy organic food, shop at farmers' markets, and fill the recycling bin every week. It also makes sense to go green when it's time to remodel your kitchen, especially when the choices you make can save you some green by slicing your home's energy use. Besides reducing your carbon footprint, some greener choices work far better than conventional products while improving indoor air quality in the bargain.

But knowing what is and isn't green can be more complicated than it seems. "There is no perfect green product," says Jennifer Senick, executive director of the Rutgers Center for Green Building. Even solar cells have to be manufactured and that involves pollution and waste, she says. So, going green often includes considering a product's environmental impact over its entire life cycle.

That can also mean looking past what manufacturers and salesmen say about their products. "Companies have tacked the word 'green' onto just about everything they sell," says Tony Brown, director of the Ecosa Institute, a sustainable-design school in Prescott, Ariz. "But really they're just doing what they've always done, with a minor tweak here or there. It's lip service, not a green revolution."

Here's our guide to bona-fide environmentally friendly kitchen remodeling, from what products to look for and which green certifications you can trust to some simple design principles that yield the greenest results.

Right: At first glance, this Minneapolis kitchen might not look green, but it exemplifies many of the best (and most accessible) aspects of eco-friendly remodeling. The homeowner, who acted as her own contractor, opted to keep the existing layout, thus minimizing materials, waste, and expense. She expanded the doors

and added a ceiling fan to improve natural ventilation. She chose new elements—locally sourced and crafted cabinetry, stone countertops—with an eye to durability and longevity, reused existing materials whenever possible (patching the wood floor, repairing and reinstalling the windows), and used low-VOC paint.



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611 PRODUCTS RATED

Exclusive Tests Reveal
Best & Worst

- Fridges, Ranges, Dishwashers
- Countertops, Cabinets, Flooring
- Sinks, Faucets and more!

PLUS

- Top Appliance Stores
- 10 thrifty and easy updates
- 4 most efficient kitchen layouts
- 5 design goals to avoid
- Smart guide to doing it yourself — or not

Buying Green

Appliances. Any green kitchen project should start with energy use and its long-term payback of lower energy bills. For dishwashers and refrigerators start by checking the energy use or efficiency scores in the Ratings in this issue. And look for the Energy Star label, although Consumers Union, the publisher of Consumer Reports, has found that some products use more energy than their labels promise. And be sure to compare the "Estimated Yearly Energy Use" listed on the labels. For example, some non-Energy Star refrigerators may actually use less energy than similarly sized Energy Star models, with actual usage depending on configuration and features.

Cabinets. Look for certification labels indicating that the wood was sustainably harvested and constructed with adhesives and finishes that are low-VOC (volatile organic compounds are unhealthy chemicals that off-gas from many manufactured products, especially flooring, fiberboard, and finishes). You also want products with no added urea formaldehyde (a common construction adhesive that off-gasses into the home and is a likely carcinogen).

Countertops. Among the earth-friendly alternatives recommended by Jennifer Schwab, the Sierra Club Green Home's Director of Sustainability, are concrete, engineered stone (quartz), recycled-glass tiles, paper composite, and reclaimed wood. Of these materials, quartz did far better overall in our countertop tests and looks more like real granite or marble. Look for products certified for low VOCs and no urea formaldehyde.

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New Energy
Star-rated
appliances reduce
energy costs.



Simple and Eco-Savvy

You don't have to buy cutting-edge appliances or recycled-paper countertops to build a green kitchen. Here are some simple (and affordable) ways to start:

Reface your cabinets. Rather than swapping them out entirely, consider replacing the doors and drawer fronts and installing new veneers over the boxes to make them look new while using far less wood and energy. Of course, painting cabinets is even easier and cheaper. And both can easily save you thousands of dollars over buying and installing new cabinets.

Choose timeless over trendy. "The greenest kitchen is the one that lasts the longest before it gets remodeled again," says The Ecosa Institute's Tony Brown. And that's why even a non-green product choice can be better than a green one that you become unhappy with and are likely to replace before its life is over.

Reduce, reuse, recycle. Talk to your contractor about having Habitat for Humanity (www.habitat.org) bid on the demolition of your old kitchen. "They'll recycle every part that they can, they do a terrific job, and their prices are often lower than the competition because they see value where others see trash," says Austin, Texas, home builder/remodeler, Ray Tonjes, past chairman of the National Association of Home Builders' Green Building Subcommittee.

Stay in the neighborhood. Buy from a local craftsman, such as a cabinetmaker, a concrete-countertop fabricator, or a small tile factory. Besides reducing the transportation costs, local independents more often use local suppliers and may also use more sustainable manufacturing methods than larger manufacturers, says Nate Kredich, vice president of Residential Market Development at the U.S. Green Building Council, which certifies buildings through its LEED program.

Design a built-in recycling center. By making it quick and easy to sort out recyclables, you'll increase the amount of waste you actually get into the recycling bins.



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Flooring. One way to go green is to reuse flooring from another building, known as reclaimed wood, or use flooring made from logs recovered from the bottom of waterways, called "sinker wood." Pluses include the fact that you can often get "old growth" wood with striking patterns and even distress marks for a vintage feel. But neither of the reclaimed products we tested fared well. You can also use new flooring that's been harvested sustainably. Cork and bamboo are renewable resources, and while they're harvested overseas, they are relatively lightweight to ship. The best bamboo also beat oak and other hardwoods in our tests. Also consider tiles made from recycled glass. And as an alternative to vinyl flooring, consider linoleum, which is made entirely from natural materials (cork, jute, and linseed oil), though it must be shipped from England, where it's manufactured. Look for products certified for low VOCs and no added urea formaldehyde.

Backsplash. Use tiles made from recycled porcelain or glass, suggests Jennifer Senick. But keep in mind that some recycled products—like terrazzo tiles—can contain binders, such as epoxy, that can emit harmful chemicals. So, again, choose products certified for low VOCs and other emissions.

Windows. If you're installing new windows, look for Energy Star products, which means they're more efficient than at least 80 percent of the windows sold today.

Vent hood. A vent hood that exhausts outside can reduce indoor air pollution by clearing your kitchen of fumes, moisture, and grease. But pass on that showpiece hood if its fan is rated for a larger space than your kitchen; you lose huge amounts of heated and cooled air along with the smoke. And note that exhaust fans built into over-the-range microwaves haven't performed well in our tests.

Paint. Look for paints certified as low VOC, but don't stop there. Also consider paints tinted with low- or no-VOC pigments. The best of today's low-VOC interior paints also topped the charts in our performance tests. The Benjamin Moore Natura brand performed well in our tests, it's low VOCs and is tinted with no-VOC pigments.

Light and Easy

Switching from incandescent bulbs to CFLs is one of the simplest steps you can take to save energy and money—about \$56 over the life of each bulb. Choose "soft" or "warm" white CFLs for light that's comparable to an incandescent's or "bright white," "natural," or "daylight" for whiter light. Use a 13- to 15-watt CFL to replace a 60-watt incandescent. If that's not bright enough, try a 20- to 23-watt CFL instead.



Brand & model	Price	Overall score
SPIRALS		
EcoSmart (Home Depot) 14W-60 Watt 423-599 EDX0-14	\$ 6/4 bulbs	85
Philips Energy Saver 60W Soft White Mini Twister 13W=60W	8/4 bulbs	79
Felt EcoBulb Plus 60W Replacement ESL13T/3/ECO	8/3 bulbs	69
INDOOR FLOOD		
EcoSmart (Home Depot) BR40 Soft White EDXR 40-23 780-758 05623 (120W replacement)	13/2 bulbs	76
EcoSmart (Home Depot) BR30 65 Watt Soft White Indoor Reflector Flood 2R3014	10/2 bulbs	71
GE Energy Smart Floodlight 90W R40 47479 FLE/26	10/2 bulbs	71
OUTDOOR FLOOD		
Philips Energy Saver EL/A PAR38 23W 15285 (75W replacement)	7/1 bulb	79
GE Energy Smart Soft White Floodlight FLE26/2/PAR38/ XL 47483	7/1 bulb	77