

TRENDS

The Price of a Greener Space

Manufacturers debut kitchens and bath products that promote a healthier Earth

Between appliances and running water, the kitchen and bathroom use more energy and resources than any other rooms in the house. Nearly every element, from the tile to the oven, is now offered in styles that reduce the cost to the environment.

"If a product is priced well and gives the added value of sustainability and will reduce energy costs, consumers will definitely go for it," said Patricia Gaylor of Patricia Gaylor Design, who added that she sees consumers choose price over sustainability more often than not.

Even still, an Eco Pulse study by the Shelton Group determined that 70 percent of Americans are searching for greener products, and corporate commitments to sustainability are becoming a baseline criterion for product consideration. Companies that are known for environmentally responsible practices are steadily becoming more appealing to more consumers.

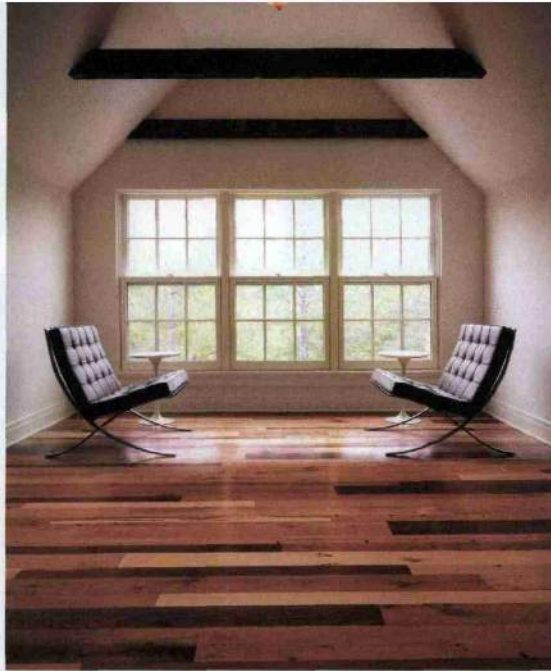
"The engineering and scientific communities drive manufacturing and sit on the leading edge of identifying and solving environmental problems," said designer and architect Jim Winer, founder of Make3. "I believe there are many environmentally concerned members of the manufacturing community helping develop policies and standards and leading the consumer toward greater sustainability."

Smart Surfaces

Across the board in surfaces, digitally printed tile has started pushing the more expensive natural stone tiles aside. These difficult-to-extract stones, imported granite materials and stone tops can have adverse effects on the environment because of deep mining issues and long-distance shipping. In addition, manufacturers like TheSize are making ultra-thin, extremely strong tiles, which simplifies installation and shipping.

"Engineered products made from natural clays and minerals are produced in a way that meets both design and moral concerns easily, and some are more durable than their authentic stone counterparts," said Daniel Sanchez, sales director of TheSize. "Certain keywords - natural, recycled, nontoxic - are guiding consumer choices."

Neolith, a sintered compact surface from TheSize, is 100 percent natural with a composition of clay, feldspar, silica and mineral oxides and is made of 52 percent recycled material. The company has a system for clay recovery during production, which reduces waste by 14 percent. Any additional waste or faulted slabs are recycled or turned into new slabs.

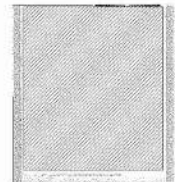


Clockwise from Top: Inspired by California's wine coast, Coastal Col- lage from **Elmwood Reclaimed Timber** is light in color and has a rustic surface. The wood surface is made of reclaimed antique hard- woods and evokes the look of French fruitwoods. **Circle No. 230** or visit kbbonline.com/freeinfo

Wilsonart's Woodgrain Laminates authentically replicate wood with their variations, textures and tones. Now available in 16 additional designs, the laminates offer eco-friendly alternatives to harvested wood for walls, countertops, partitions and casework.

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From **TheSize**, Neolith's thin, lightweight slabs imitate the natural look of stone, are made of natural materials and emit less carbon dioxide. The surface material can also be applied directly onto existing, stable surfacing, reducing landfill waste and the time and energy required during installation. Neolith is Greenguard certified - meeting compre- hensive standards for low emission of VOCs - and has earned LEED points. **Circle No. 232** or visit kbbonline.com/freeinfo



Wilsonart imitates natural wood with Woodgrain Laminates, which contain 70 percent FSC certified wood fibers - 34 percent of which is from recycled sources. These materials mimic natural wood in tone, texture and variation.

"The use of natural materials in the home, including materials that mimic nature, are on trend," said Tammy Weadock, marketing communications manager for Wilsonart. "The warmth and depth of wood is unparalleled."

Reclaimed wood, the result of a trend for rustic, aged aesthetics, is on par with sustainable goals as well. According to Ryan McNary, a sales consultant at Elmwood Reclaimed Timber, the demand has increased for reclaimed wood for wall and ceiling applications, as well as open wood shelving in the kitchen.

"When we reclaim wood for new purposes, we reduce deforestation," said McNary, adding that the company's waste is also put to use, often as bedding for a local organic dairy. In the past, the wood from old barns and industrial building would have ended in a landfill, burnt or left to rot.

Appliances for Another Future

Most of the major appliances in the kitchen recently became significantly more efficient because of a new round of federal energy-efficiency standards, coupled with Energy Star revisions to help consumers save. The new standards went into effect in 2014, and washers, dryers, dishwashers and water heaters are on the horizon for 2015.

For the past century, the way refrigerators have preserved food has scarcely varied from harmful, carbon dioxide-emitting refrigerants. Companies like GE are now making leaps to change this. With magnetocaloric refrigeration, GE's system instead uses a water-based fluid rather than a chemical refrigerant and magnets instead of a compressor to cool the fridge - an innovation expected to hit the market in the next few years.

"Many of the technologies today have reached their limits of efficiency," said Kelley Kline, counsel, regulatory compliance and product stewardship manager for GE Appliances. "To further improve efficiencies, GE is also investing in research and development for new technologies that will create more sustainable products and operations."

Plumbing Solutions

Water-conserving products are among the top trends in eco-friendly design, including the use of flow restrictors that regulate to the standard flow rate of 2.5 gallons per minute. Electronic faucets in particular have dominated the trend, especially those that contain thermostatic valves, because they increase water savings by at least 30 percent.

"Manufacturers are responding to the need in having more eco-friendly products, however, the challenge is designing products that meet the consumers' needs without sacrificing performance," said Darryl Jones, western regional sales manager for KWC America.

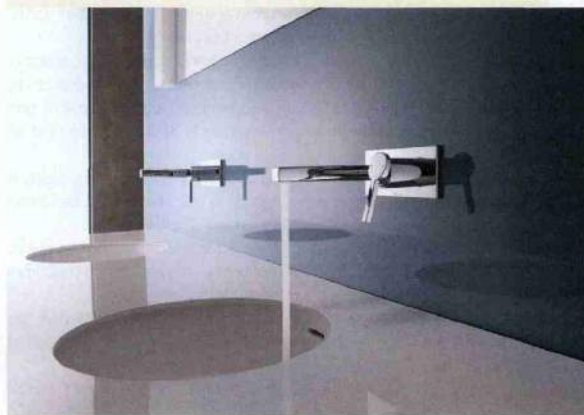
KWC kitchen faucets are CALGreen certified, which means they are set at a 1.8-gallon-per-minute (gpm) flow rate. Other states are still using anywhere from 2.2 gpm to 2.5 gpm. The KWC AVA single-lever basin faucet with COOLFIX technology has a central lever position to eliminate the need to waste water finding the right temperature.



Top Left: GE's 80-Gallon GeoSpring Hybrid Electric Water Heater is 69 percent more efficient than its standard counterparts, exceeding the U.S. Department of Energy's new energy-efficiency standards for all heaters larger than 55 gallons. The GeoSpring saves the average household \$388 every year compared to the standard water heater and helps improve the Home Energy Rating System index score by four to seven valuable points. **Circle No. 233 or visit kbbonline.com/freeinfo**

Top right: The HybridCare Duet Dryer with Heat Pump Technology from Whirlpool uses moisture sensing to monitor heat and moisture levels, ending the cycle when clothes are perfectly dry rather than running longer than needed. Four baffles tumble clothes in a randomized pattern, allowing items to open up more freely and increase the effectiveness of the dryer. **Circle No. 234 or visit kbbonline.com/freeinfo**

Below: The AVA single-lever basin faucet from KWC America features a ceramic disc cartridge for more precise control of flow and temperature. The faucet also meets the CALGreen certification of 1.8 gallons per minute. **Circle No. 235 or visit kbbonline.com/freeinfo**



Technology for Change

New industry standards increasingly being adopted by states and code programs require 24-hour continuous ventilation for today's homes, which make energy efficiency even more important.

"Not only are fans using fewer watts when they are running, but with better controls such as with Broan-NuTone's humidity sensing fans, they are smarter and able to only run when necessary so as not to over-ventilate," said Patrick Nielsen, marketing manager, household ventilation, for Broan-NuTone.

Using only 5.8 watts, the ULTRA Green Ventilation Fan is almost 10 times more efficient than the ENERGY STAR standard. The smart controls are able to recognize higher static pressures from a less-than-ideal ducting installation and overcome them by telling the motor to compensate and maintain rated power.

GROHE similarly uses sensor technology with the Grotherm 2000, which reacts to changes in water temperature and remains constant for the duration of the shower so less water is wasted. The thermostat's CoolTouch technology also ensures that the chrome surface is never too hot to handle.

"GROHE believes that water and energy consumption go hand in hand with convenience and attractive design," said Cheryl Dixon, head of brand trade and marketing for GROHE.

In addition, GROHE uses brass from its own foundry, allowing the company to use recycled material internally. In these factories, up to 99 percent of waste material is recycled, while energy consumption is minimized and excess heat reused.

Green Light

At first glance, LEDs may be more expensive than traditional light sources, but they last longer, saving money on energy and replacement costs in the long run. LEDs have also been dropping in price recently as a result of increased competition among manufacturers and greater consumer demand.

"Color-tunable LED lighting is another growing trend - giving homeowners the ability to change the warmth and brightness of their lights," said Bonnie Littman, CEO and president of USAI Lighting.

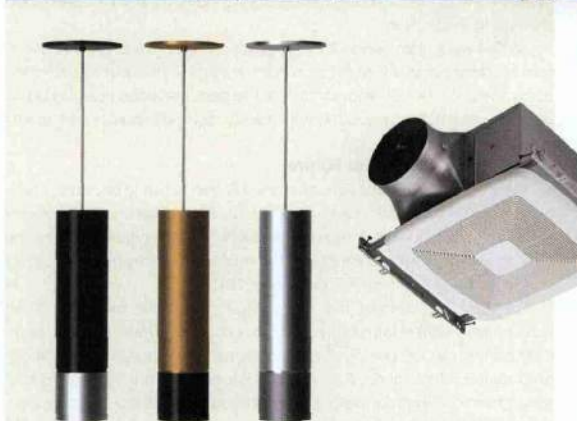
The NanoLED NXT Cylinder from USAI Lighting can serve as a stand-alone light source and also fulfill accent and task lighting needs. By integrating the qualities of LEDs with features like mounting options and color rendering, the fixture has both the quality of LED lighting and an individualized touch.

In the bathroom, occupant-sensing accent lights can automatically illuminate the space once someone walks in. LED lights can also be turned on and off and dimmed using app-controlled systems.

"And what most designers and now consumers are becoming aware of is that LEDs can be controlled and calibrated, adjusted and tuned from cool to warm, dim to bright light," added Littman.

"It's becoming easier to go green," according to Gaylor. "And it has always been my hope that someday 'green design' will just be called 'design.'" ■

— By *Erinn Waldo*



Clockwise from top: Thanks to **GROHE** TurboStat Technology, the Grotherm 2000 shower thermostat reacts to changes in water within a fraction of a second and remains constant so less water is wasted while adjusting the temperature. Additional technology ensures that the chrome surface is never too hot to handle. **Circle No. 236** or visit kbbonline.com/freeinfo

The NanoLED NXT Cylinder from **USAI Lighting** integrates the durable, energy-efficient qualities of LEDs with features not found in most LED pendants or sconces, such as various mounting and color rendering options. It is available with a precise 10-degree beam spread or with interchangeable, wider beams up to 50 degrees. **Circle No. 237** or visit kbbonline.com/freeinfo

Broan-NuTone introduces the ULTRA Pro Ventilation Fan, which includes airflow-smoothing baffles to reduce turbulence and eliminate airflow loss. The model uses only 5.8 watts, making the fan almost 10 times more efficient than the requirements of the ENERGY STAR standard. **Circle No. 238** or visit kbbonline.com/freeinfo