

# Cooking up Sustainability

Manufacturers introduce kitchen products that combine performance, aesthetics and green design elements

The kitchen is the hardest-working room in the house. It also uses the most resources: electricity from appliances, water for cooking and cleaning, plus all of the materials sourced for flooring, cabinetry and countertops, along with the waste produced.

"While the desire for sustainability may not actively drive consumer decisions about their kitchens, if given the choice to be a little more sustainable without having to compromise quality, consumers will take it," said Joshua Aurigemma, LED product designer at Barn Light Electric.

Manufacturers continue to invest heavily in products that integrate performance, appearance and sustainability to ensure that going green in the kitchen isn't an either/or proposition for their customers.

"You can now find cabinetry makers, tile and countertop manufacturers, lighting companies and others who have made a commitment to be stewards of our planet," said Rose Dostal, ASID, an interior designer in Hudson, Ohio.

*Top:* For its latest energy-saving induction cooktop program, Viking worked alongside **Schott** to incorporate CERAN CLEARTRANS for induction, a transparent glass ceramic that allows for unique lighting solutions and color displays. Combinations of decorative paint on the top and bottom of the cooking panel help create 3D effects as well as add texture to the cooking surface. **Circle No. 212 or visit [kbbonline.com/freinfo](http://kbbonline.com/freinfo)**

*Middle:* The LED Guard & Glass collection of rustic jelly jar-style fixtures from **Barn Light Electric** uses an LED light source that offers 50,000 hours of service. The bulb, which is pre-installed and tightly integrated into the fixture, also has an output of 1,600 lumens, comparable to a 100-watt incandescent bulb. **Circle No. 213 or visit [kbbonline.com/freinfo](http://kbbonline.com/freinfo)**

*Bottom:* The Amethystos selection from **Vetrazzo's** limited-edition Coastal collection features purple-hued cranberry glass that was diverted from a landfill. Additional materials that compose the countertop include oyster shells from the South Carolina coast and bits of marble that are byproducts of the manufacturing process from Vetrazzo's sister company Georgia Marble. **Circle No. 214 or visit [kbbonline.com/freinfo](http://kbbonline.com/freinfo)**



## Appliance Smarts

Dostal noted that appliance makers were early adopters of sustainability, largely because of the criteria set forth by the EPA when it established Energy Star certification. The label ensures that appliances are 20 percent more efficient than the federal minimum energy standard. Beyond these guidelines, appliance manufacturers continue to improve upon energy output and green manufacturing processes.

"Sustainable and eco-friendly appliances are becoming a substantial industry trend as consumers seek to save money and energy and address climate change," said John Taylor, vice president of public affairs and communications for LG Electronics USA. "Our research shows consumers today are interested in appliances that are not only stylish and convenient but provide the benefit of energy savings as well."

For its refrigerators, LG has developed energy-saving technologies such as the linear compressor, which helps ensure a more consistent temperature, and Door-in-Door, a magnetically sealed outer door that offers consumers access to frequently used items without opening the entire refrigerator, reducing cold air loss by up to 47 percent.

Taylor added that most LG home appliances are Energy Star certified, including the Super-Capacity French-Door Refrigerator. Its thin-foam insulation contributes to overall energy efficiency, enhanced by other eco-friendly features such as a reduction of water, waste and energy during production processes. The refrigerator also is equipped with a streamlined ice-making system inside the door known as SlimSpace Plus and LG's Smart Cooling Plus system, which helps keep food fresher longer.

Additionally, LG smart appliances are ready for the smart grid, "further advancing their environmental sustainability by ultimately allowing energy monitoring and adjusting appliance usage to off-peak energy-rate time periods," said Taylor.

Dishwashing technology over the last decade has enabled a reduction in both water and energy use while addressing consumer pain points such as cleaning and drying, according to Dave Coll, product line manager, dish care, at Electrolux Appliances. Other upgrades include quieter operation, smooth-touch controls, orbit spray arms and multiple wash zones.

## Sustainable Surfaces

Manufacturers of countertops, cabinets and flooring are finding new ways to produce surfaces that respect the environment while meeting consumers' demands. Design remains at the top of that list as homeowners seek high-end aesthetics on a budget, said Gerri Chmiel, senior design manager for Formica Corporation. They also want their countertops to stay looking new in the long haul with little maintenance required.

Some consumers may not explicitly ask for eco-friendly materials in their kitchens, but they still reap the benefits. "Sustainable products give our customers peace of mind knowing that they are being environmentally responsible with the materials they include in their homes," noted Chmiel.

As homeowners' needs for sustainable purchases evolve, Formica "has been making great progress in recent years to ensure we are a mainstay supplier of environmentally friendly servicing materials that appeal to homeowners and commercial architects, designers and builders," said Kate Fortlage, residential senior marketing manager at Formica.

To that end, Formica recently introduced e Series Solid Surfacing, which the company touts as the first major-branded, solid-surfacing material to



Made from environmentally friendly recycled aluminum, **Du Verre Hardware's** knobs and pulls are crafted by renowned designers and are compatible with LEED objectives. Shown here are Scot Laughton Series 3 and Forged 2 by Heinz Pfleger in oil-rubbed bronze. **Circle No. 215 or visit [kbbonline.com/freeinfo](http://kbbonline.com/freeinfo)**

**Formica's** e Series Solid Surfacing contains 15 percent total recycled content from sources such as reclaimed solid surfacing and Styro-foam cups and packaging. The heat- and stain-resistant material features color that goes through the surface for a renewable finish. Five available patterns include e Natural, a warm neutral with brown particulates that partners well with golden-tone woods. **Circle No. 216 or visit [kbbonline.com/freeinfo](http://kbbonline.com/freeinfo)**



**1.** The Energy Star-certified Super-Capacity French-Door Refrigerator (model LFX31925) from **LG** employs technology such as thin foam insulation to help operate 20 percent more efficiently than the federal minimum energy standard. As the first major appliance to receive the Green Good Housekeeping seal, the refrigerator uses 100 percent recyclable and sustainably sourced packaging. It also is recognized for its reduction of water, waste and energy during production processes. **Circle No. 217 or visit [kbbonline.com/freeinfo](http://kbbonline.com/freeinfo)**

**2.** Offering 15 years of standard operation, **Kichler's** energy-efficient LED Mini-Pendants produce a pure white light, controlled beam spread and a high CRI. The slim, elongated design comes in three finishes: polished chrome, brushed nickel and olde bronze (pictured). **Circle No. 218 or visit [kbbonline.com/freeinfo](http://kbbonline.com/freeinfo)**

**3.** **Electrolux** launched its 24-in. Built-in Dishwasher with IQ-Touch Controls (model number EI24ID50QS) to address the need for cleaning performance; a shorter time to clean with a 30-minute cycle; and better organization with a third-level rack, soft spikes and stemware holders. Water consumption has dropped 15 percent, and energy use has been reduced by five percent versus previous models. **Circle No. 219 or visit [kbbonline.com/freeinfo](http://kbbonline.com/freeinfo)**

**4.** **Granada Tile's** Mauresque collection of Moroccan- and French-inspired decorative cement tiles were created specifically for wall applications such as kitchen backsplashes. The tiles are air dried rather than cured in an energy-intensive kiln. Granada also recycles all water and uses it again in the manufacturing process, as well as salvages and recycles metal molds. **Circle No. 220 or visit [kbbonline.com/freeinfo](http://kbbonline.com/freeinfo)**



contain post-consumer recycled content. Each sheet contains 15 percent total recycled content. Preconsumer recycled content, which consists of reclaimed solid surfacing, accounts for 10 percent, while the five percent from post-consumer use derives from Styrofoam cups (approximately 1,000 per sheet) and packaging. The material, designed for longevity, is resistant to stain, water, impact, fire and chemicals.

Recycled materials also are at the core of Vetrazzo, which offers countertops comprised of 85 percent glass bottles and jars that otherwise might have been thrown in the trash. In fact, the brand is diverting at least 5.3 million bottles from the landfill each year. Cement binds the countertop together, leaving less of an environmental impact than traditional petroleum-based binders, said Chad Rosen, vice president of sales at Vetrazzo.

"As the technology of bio-based resins improves, we would like to see more of the big countertop manufacturers taking advantage of those advances," he added.

Its limited-edition Coastal collection was introduced earlier this year. In addition to oyster shells from a South Carolina canning factory and recycled pieces of marble, reclaimed purple-toned cranberry glass forms the Amethystos selection from this line.

"We contacted a man who manufactured hundreds of thousands of these plates, bowls and glasses, a lot of which were damaged and didn't ship," said Rosen. "We were able to intercept all of the glass before he sent it to the landfill. We sat on it for two years before we knew what we wanted to do with it."

Like Vetrazzo's other glass countertops, Coastal withstands temperatures up to 600 degrees, is stain and scratch resistant and requires periodic resealing.

### Illuminating Ideas

As incandescent light bulbs began disappearing from store shelves because of their high energy consumption, compact fluorescent lighting (CFL) became a favorite because the lamps were four times more efficient and lasted 10 times longer. Then, LED lighting emerged as another alternative because the bulbs lasted up to 10 times as long as their CFL counterparts. Their selection for kitchen lighting, however, was not a slam dunk at first.

"In the past, LEDs were known for their harsh-colored light," said Barn Light Electric's Aurigemma, whose company partners with LED manufacturer Cree. "It took many years for the industry to be able to create a warm white light, but now this is easily achievable. Also, LEDs are now readily offered with high CRI (color rendering index) values. This means that colors really pop in the light."

Barn Light Electric promotes to customers the full lifecycle of its LED-based fixtures to help paint the complete sustainability picture. It takes six times as much electricity to power an incandescent light to match the brightness of the company's LED light, guaranteed to provide 50,000 hours of illumination, said Aurigemma.

"Because LED lights last so much longer than other lighting technologies, the overall material consumption and shipping costs are less," he added. "If an LED lasts 25 times longer than a traditional incandescent light bulb, think of all the fuel, packaging material and amount of glass and metal that make up those 25 bulbs."

Aurigemma also pointed out that no matter how long a product lasts, it will stop working one day. "Instead of glues and adhesives, we use screws and mechanical wire connectors to install our LEDs. This means that at the end of the product's life, the parts can be easily separated for proper disposal and recycling," he added. ■

— By Holly O'Dell