



Tyson Ellis

Creating the Eco-Friendly Kitchen

BY DENNIS ALLEN

The framework for an environmentally friendly home and kitchen is being all electric. Electricity is increasingly being generated by renewables, either on or off site, thus avoiding the pollution and climate issues linked to using fossil fuels. Clean electricity has none of the harmful health issues tied to home gas appliances. A federal EPA report asserts that a gas stove adds between 25 and 39 percent more nitrogen oxide and carbon monoxide to the air in a home.

Fortunately, a great alternative to gas stoves exists in the electric magnetic induction cooktop. Because it directly heats a pan using magnetic fields, an induction unit can provide great power, instant adjustability, excellent thermal efficiency and precise control — better than with gas cookers and without the negative impact on indoor air quality. The energy efficiency of induction coils is approximately double that of gas burners.

To create an eco-kitchen, all appliances need to be minimally Energy Star rated. The Energy Star label, a Federal program that evaluates energy efficiency of household appliances, enables shoppers to knowingly purchase appliances that use the least energy and water to operate. Created in 1992, the program now covers 40,000 products and saves more than \$30 billion (2013)

in energy costs annually.

Choose cookware and utensils that stand the test of time and won't have to be thrown away and replaced. Stainless steel and cast iron are good choices for pots and pans. (Metallic cookware is required for magnetic induction cookers.) Similarly, choose high-quality knives. One only needs a few good ones, plus they stay sharp longer.

Good natural lighting and ventilation can reduce the need for artificial lighting and mechanical ventilation. Carefully locating windows and skylights can improve ambiance and enhance air quality in a kitchen. When needed, electric lighting is best provided by LEDs (light emitting diodes). They are super-efficient — requiring fewer photovoltaic solar panels — and provide excellent task lighting.

Equipment, lighting and ventilation are important, but one's devotion, passion, common sense, and experience focused on efficient food prep and cleaning habits are as key, if not more so, in creating an eco-friendly kitchen. Examples:

- Use cloth towels rather than paper towels.
- Avoid bottled water.
- Buy cleaning products from companies that make non-toxic, biodegradable, plant-based products

- Shop at the farmers' markets for local, fresh, organic, highly nutritious food without packaging.

- The difference between ordering takeout and tossing together a salad with farmers' market ingredients shifts from big to small the impact on our agricultural system and the larger ecosystems. Food accounts for a greater portion of our ecological impact than home energy.

- Minimize gadgets.

- Don't install a garbage disposal. Learn how to compost. Set up for easy recycling.

- Design an open pantry for maximum convenience.

- Have only drawers below counters. Avoid cabinets with doors and pull-out shelves. They require two operations every time one accesses a cabinet.

Dennis Allen—sustainable builder, gourmet chef and author of this column—enjoys cooking in his environmentally friendly kitchen that features abundant natural light and ventilation, an open pantry, a magnetic induction cooktop, water efficient fixtures, and LED lighting. Dennis is a regular at the local Farmers' Market and uses only cloth dishtowels and non-toxic cleaning products in his kitchen. He is also the founder of Allen Construction. www.buildallen.com