by James E. Houck

Amid all the hoopla and falsehoods, what's needed here is some straight talk (Where's John McCain when we need him?)

GREEN Products
GREEN Consumers
GREEN Earth
GREEN Bucks

Almost like politics and religion, there seems to be a lot of strong opinions about what "Green" is all about. Let's cut through the hype and emotion, and with a cold, calculating eye look at the facts in terms of business and ethics, especially for the hearth, patio and barbecue industries.

What's Needed Is Some Straight Talk!

Green has become the symbolic color of environmentalism, chosen for its association with nature, health and growth. All sectors of the society are jumping on the Green bandwagon. Because its cause, saving the planet, is noble, Green has much popular appeal and support among the media, NGO's, and politicians. Nearly everyone will agree that good things have come out of environmental awareness – notably energy conservation and materials recycling. Further, the growing demand for more environmentally preferable goods has led many manufacturers to find cost-effective ways of improving environ-

On the grounds of the Swarovski crystal headquarters in Innsbruck, Austria.

mental performance of their products and to develop environmentally responsible manufacturing processes. It also has spawned confusion as to what Green means, along with a bewildering array of marketing activities and claims.

What does Green really mean for the hearth, patio and barbecue industries? What business opportunities does it present? What can the hearth, patio and barbecue industries reasonably contribute to environmental stewardship?

> **"It appears to be a law that you cannot have a deep sympathy with both man and nature."**
>
> *— Henry David Thoreau, "Walden," 1854*

Fad or Here to Stay?

The first step in assessing the business opportunity that Green represents is to do a reality check on its likely future. Will the demand for Green products be around for a while, or is it a flash in the pan? Members of the hearth industry know all too well the volatility of the public's demand for certain products in response to changes in energy costs, or to short-term weather conditions, and the financial havoc that wrecks.

Will the Green Response Be Similar?

Let's not forget the passionate interest in alternative energy after the 1970 energy crisis, which fell by the wayside when oil prices went back down. Let's not forget that Sen. Gaylord Nelson's first Earth Day was over 37 years ago on April 22, 1970. And let's not forget that Rachel Carson's "Silent Spring" was on the *The New York Times* Best Seller list an amazing 45 years ago. Environmental fervor seems to come and go.

It appears to be conventional wisdom that, while the current level of environmental awareness and energy conservation may fade, it may be somewhat more enduring this time around. According to a recent analysis conducted by *The Wall Street Journal*, the projected greater longevity this time is due to two factors.

First, unlike the 1970s oil-price spike, which was due to a temporary Arab oil embargo, the current increase in energy cost is due to increased global demand in large part from developing countries, which is projected to continue to grow.

Second, the pressure to confront the environmental issue of global warming is not likely to go away anytime soon; a generation ago it was virtually unheard of.

A survey of opinions by leading experts generally confirms that Green awareness is likely to be around for a while, but like all causes probably will attenuate with time. For example, Marshal Cohen, the chief industry analyst for the marketing research firm NPD Group, told ABCNEWS.com in July of 2007, that he believes the Green movement will continue, but not with the current level of excitement.

"As we know it, it's not going to sustain itself," he said. "It will truly become a lifestyle of businesses and consumers, but it's not going to be done with the glamour and gusto that it's done with today." Somewhat less optimistic was Robert Thompson, founding director of the Bleier Center for Television and Popular Culture at Syracuse University, who stated, "Causes that have long-term staying power tend to be those that are affecting our everyday life in ways that we actually recognize. Typically, the environment has not been one of those causes."

Professor Anthony Downs, now of the Brookings Institute, summed it up well in his 1972 seminal article on the public's issue attention cycle, "American public attention rarely remains sharply focused upon any one domestic issue for very long – even if it involves a continuing problem of crucial importance to society . . . Each of these problems suddenly leaps into prominence, remains there for a short time, and then – though still largely unresolved – gradually fades from the center of public attention."

The straight talk here is that the opinions of most experts, when taken together, suggest that Green awareness will be around for a while, longer than perhaps many fad issues, but Green fatigue will set in eventually and Green awareness invariably will fade. The bottom line is that providing a Green product option over the next several years seems to be a safe bet – beyond that it is less clear.

There is no central agency certifying Greenness.

Trademarks and symbols for Green product certifications and labels are everywhere – on product packaging, manufacturers' Web sites, print advertising and trade show booths. There has been an attempt to standardize Green claims and labeling by the International Standards Organization with its ISO 14000 series of environmental standards, but even these ISO standards are voluntary and a confusing array of labels, logos and certifications have proliferated. For example, some that have been used with hearth, patio and barbecue products include:

- **Green Seal**
- **Greenguard**
- **Energy Star**
- **Environmentally Preferable Products**
- **SmartWood**
- **Green Label Plus**
- **EcoLogo**
- **National Association of Home Builders (NAHB) Green Building Standard**
- **U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED)**
- **European Ecolabel**
- **Nordic Swan (Scandinavia)**
- **Blue Angel (Germany)**
- **European Energy Label**
- **Energy Saving Recommended (UK)**
- **Mobius Loop (for recycling)**
- **Green Dot**

Will Consumers Pay a Premium for Green Products?

The answer is simple; almost all studies agree that most consumers will not pay a premium for Green products, regardless of what they say, notably in surveys. Of course a fraction of consumers will pay more and they do represent a target market for higher-priced products made so by environmental factors in their manufacture or use. While exact statistics vary with the particulars, and in the case of power utilities that have Green power programs, varies with the aggressiveness of their respective public relation firms, when you peel away the hype and get down to the facts most stories are pretty much the same.

For example, according to the marketing research firm NPD Group quoted by ABCNEWS.com, "While 57 percent of people are interested in eco-friendly products, only 19 percent believe that they are worth paying extra money for or that they actually make a difference." And according to Bart Becht, chief executive of the consumer products company Reckitt Benckiser, as quoted by *The New York Times* in September 2007, "…when shoppers walk through the aisles, choosing the brands that end up in their shopping carts, they are still far more interested in factors like price, functionality and even packaging than they are in the producer's environmental record. It doesn't drive purchasing intent."

"Amid all the uncertainties about global warming – how fast it's happening, where it will have the most impact, how best to slow it down – one thing seems pretty clear: There's going to be a lot of money in it. The question is: Who will get it?"

— Lawrence Rout
Editor
The Wall Street Journal,
October 29, 2007

Reduced Greenhouse Gas Emissions

"Green" and reduced greenhouse gas emissions are often confused but they are not necessarily the same thing. If a product has reduced greenhouse gas emissions, that is a "Green" attribute to be sure. However, for example, to be a Green product that burns fossil fuel, reducing the emissions of the products of incomplete combustion (PIC), many of which are toxic, (e.g., carbon monoxide, formaldehyde and fine carbonaceous particles) is the name of the game. To reduce the emissions of PIC, the near complete combustion of the fuel is needed, but the near complete combustion of the fuel also maximizes the formation of carbon dioxide. Carbon dioxide is the end product of carbon-based fuel combustion, and carbon dioxide is *the* greenhouse gas.

Another way to look at it is that the term "Green" refers to nature or the environment and commensurately the reduction in the release of toxic and environmentally injurious pollutants into the environment. In contrast, "greenhouse," while it has "green" in the word, is derived from the warming effect of gases emitted primarily by man's activities trapping infrared radiation in an analogous way as the glazing in a greenhouse causes warming.

Ideally, but not necessarily, a product is both Green by emitting low levels of pollutants (PIC) and is also Green because due to its design it uses less fuel, producing less carbon dioxide, i.e., it produces less greenhouse gas. Carbon dioxide is not a pollutant in the truest sense of the word but rather carbon dioxide (and water) are what complete and good combustion of fuel produce.

Biomass Fuels

Biomass fuels do offer a healthy greenhouse gas benefit, but they are not greenhouse gas neutral. Biomass fuels such as pellets and cordwood offer a global warming benefit due to the carbon dioxide that they emit being recaptured by the photosynthesis provided by replacement trees. That is pretty much dogma, although the veracity of the argument is still from time-to-time disputed.

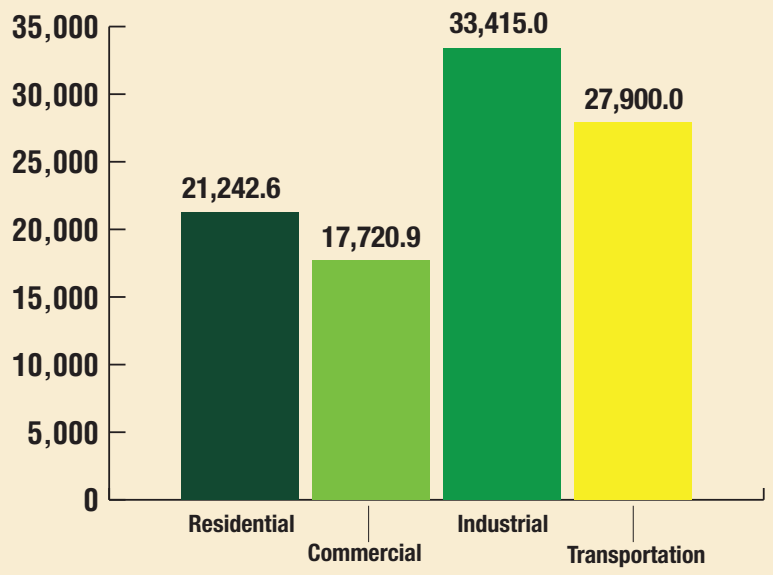
However, the burning of pellets and cordwood is still not "greenhouse gas neutral" as it is often and erroneously claimed. There are two reasons why cordwood and pellet-burning are not greenhouse gas neutral:

1. There is measurable methane produced by the incomplete combustion of pellets and cordwood. While there is much less methane produced than carbon dioxide, the methane is 21 times more potent than carbon dioxide in its global warming impact. Methane is not recaptured by photosynthesis.
2. There is energy invested in the collection, preparation and transportation of the fuel, and in the case of pellets, very importantly their manufacture. Most of this energy is from fossil fuels.

Energy Consumption Estimates by Source and End-Use Sector, 2004

Trillion Btu

Total United States 100,278.6

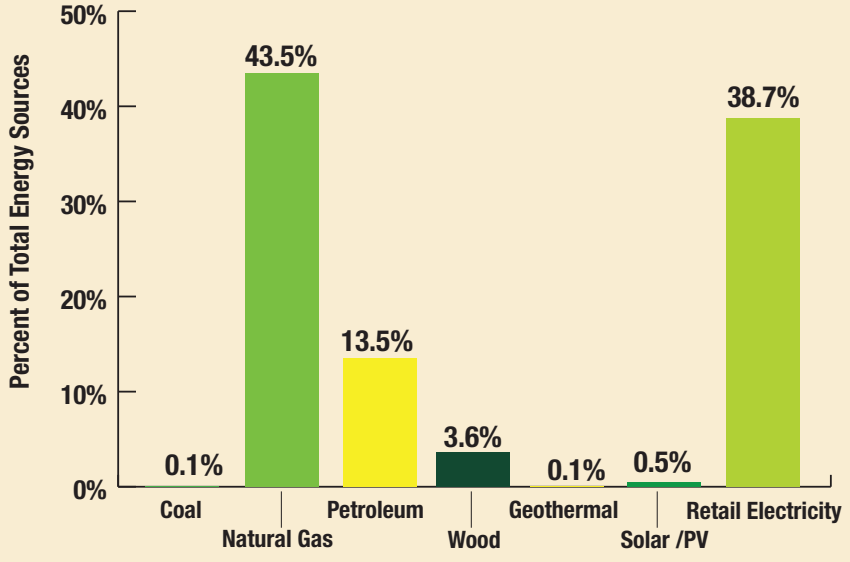


Energy Information Administration State Energy Date 2004: Consuption

Total U.S. energy consumption in 2004 was estimated to be 100,278.6 Btu, thus residential consumption was slightly over 20 percent.

Residential Energy Sources

Percentages



While wood has the highest percentage of use among alternative energy sources, that category represents only 4.2 percent of total residential energy.

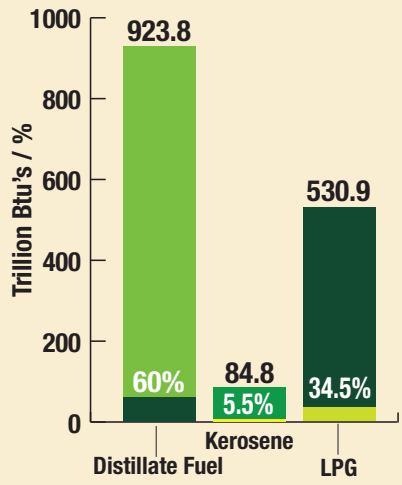
Residential Energy Sources

Trillion Btu

Natural Gas	4,970.3
Retail Electricity	4,413.7
Petroleum	1,539.5
Wood	410.0
Solar/PV	58.7
Geothermal	14.0
Coal	12.6

The Big Three in residential energy are natural gas, retail electricity and petroleum.

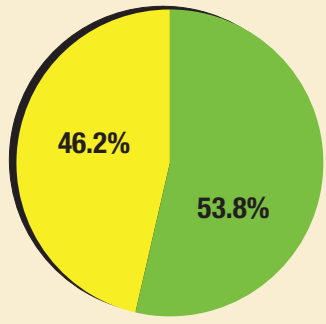
Petroleum



LPG represents 34.5 percent of petroleum use, while distillate fuel accounts for 60 percent.

Trillion Btu

Net Energy	11,418.7
Electrical Systems Energy Losses	9,823.9
Total	21,242.6



Energy lost through the electrical system represents a whopping 46.2 percent of total residential energy consumed.

UNEQUIVOCALLY GREEN?

Hardly. There are drawbacks to every fuel we use.

Wood and pellets made from biomass are Green compared to fossil fuels in terms of greenhouse gas emissions and acid precipitation.

Pellets may be considered Greener than cordwood since pellets are usually made from waste or byproduct materials, i.e., no new trees are cut and they have lower particulate, carbon monoxide and air toxic emissions than cordwood, but still not as low as natural gas or propane. Further, considerable energy, usually fossil fuel-derived energy, is invested in the manufacture and transportation of pellets.

Natural gas and propane are Green compared to wood and even pellets in terms of particulate, carbon monoxide and other air toxic emissions.

Oil is greener than wood and pellets in terms of particulate, carbon monoxide and other air toxic emissions, but less Green than wood or pellets in terms of greenhouse gas emissions and acid precipitation.

Coal is not Green in any way. It has high emissions of particles, greenhouse gas and acid precipitation precursors. Anthracite coal does have lower air emissions than the far more common bituminous coal, but they are still high. Even coal that has been de-sulfurized or otherwise beneficiated to burn cleaner can't be considered Green because its combustion still produces significant air emissions and considerable energy, usually fossil fuel energy, is expended to process it.

Electricity can't be considered Green as most of North America's electricity comes from fossil fuel combustion, namely coal. On top of the direct emissions from burning coal, most power plants are only 33 percent efficient and typical transmission line loss of energy is generally cited at around another 12 percent.

Electricity from wind or hydro may be considered Green unless you are an endangered raptor or salmon.

Arguably the only true "Green" thing in the home heating arena is increased efficiency, allowing less energy to be consumed.

The straight talk here is that most consumers won't pay more for Green products. However, a small percent will. If appropriate, having both a less costly, less Green product, as well as, a greener, and usually more costly option, would make sense.

Madison Avenue Green

A Green marketing strategy understandably seems to be in vogue for most companies today. Worldwide, the sharpest advertising minds are literally spending billions of corporate dollars promoting being Green. Unfortunately, not all manufacturers have made the investments necessary to provide more environmentally preferable products. In order to compete in a market that demands Green products, some manufacturers have resorted to creative advertising instead.

When environmental marketing claims have an element of fraud or deception they are sometimes referred to as greenwashing, greenscamming or greenspeak. The "Oxford English Dictionary" defines "greenwash" as "disinformation disseminated by an organization so as to present an environmentally responsible public image."

Greenwashing generally has one or more of three elements:

1. An overstatement of environmental attributes.
2. Emphasis on a single environmental attribute with other potentially important human health and environmental issues ignored.
3. Irrelevant environmental claims.

There are environmental marketing guidelines and there is a policeman. The Federal Trade Commission (FTC) seeks to prevent deception and unfairness in the marketplace. The FTC Act gives the Commission the power to bring law enforcement actions against false or misleading marketing claims, including environmental or "Green" marketing claims. The FTC issued its Environmental Guides, often referred to as the "Green Guides," in 1992, and revised them most recently in 1998. The Guides indicate how the Commission will apply Section 5 of the FTC Act, which prohibits unfair or deceptive acts or practices, to environmental marketing claims.

Specifically, FTC Part 260.5 Interpretation and Substantiation of Environmental Marketing Claims states: "…any party making an expressed or implied claim that presents an objective assertion about the environmental attribute of a product, package or service must, at

Natural Gas

Natural gas-burning appliances have a hidden greenhouse gas impact. Natural gas is composed of about 90 percent methane. Methane is a potent greenhouse gas. Due to the complexity of the natural gas supply infrastructure, for every 100 molecules of methane that is actually burned in a residence, roughly two are lost from fugitive leaks in the extensive North American delivery system and hence contribute to the global warming crisis.

the time the claim is made, possess and rely upon a reasonable basis substantiating the claim. A reasonable basis consists of competent and reliable evidence. In the context of environmental marketing claims, such substantiation will often require competent and reliable scientific evidence, defined as tests, analyses, research, studies or other evidence based on the expertise of professionals in the relevant area, conducted and evaluated in an objective manner by persons qualified to do so, using procedures generally accepted in the profession to yield accurate and reliable results."

The straight talk here is: 1. Do be part of the Green marketing wave; 2. Practice honesty and integrity for all the reasons that are important; 3. Be sure of environmental claims; and 4. Have appropriate documentation for those claims.

What Green Means for the Hearth, Patio and Barbecue Industries

The hearth, patio and barbecue industries are, in the broadest sense, little different than most areas of commerce, in that there are Green opportunities in both the manufacture and use of products, plus the products need to be user-friendly and cost-competitive to make it into the marketplace to do any environmental good. And like any other industry when it comes to "Green," both profits and corporate responsibility come into play. However, unlike some product types, many hearth, patio and barbecue products by their very nature consume considerable energy as part of their intended use.

Heaters, fireplaces, barbecues and gas lamps all use energy in the home. So not only are there the opportunities common to most products, which is to be Green and show environmental stewardship in product manufacturing and with recycling, but Green opportunities for many hearth, patio and barbecue products also significantly extend into the home for years after the time of sale.

According to the U.S. Census Bureau's American Housing survey there were 124,377,000 housing units in the U.S. in 2005. Of these, 123,257,000 used heating fuel, 104,134,000 reported having a porch, deck, balcony or patio, and 40,826,000 had fireplaces (17% had more than one fireplace). According to the HPBA, 81 percent of households in the U.S. in 2005 had a barbecue grill.

The straight talk here is that the hearth, patio and barbecue industries have a huge Green opportunity due to the sheer number of products in use, and because many of the key products consume energy in the home.

Green Questions to Ask

In summary, there are a number of questions that need to be asked by hearth, patio and barbecue industry members when developing a Green product and making environmental marketing claims supporting it. At a minimum they include:

Energy Conservation During Manufacturing.

Do the manufacturing processes for components and the final product, as well as the transportation of raw materials and components, use energy wisely? Are there innovations in place to minimize energy consumption?

Renewable Energy Used in Manufacturing.

Is the use of renewable energy maximized throughout the manufacturing and transporting processes?

Environmental Impacts Minimized During Manufacturing.

Is there documentation that traditional air, water and solid waste pollutants are minimized? What are the effects on climate change? Has energy consumption during each step in the manufacturing process, and the transportation steps needed, been considered?

Raw Material Conservation in Manufacturing.

Is the use of raw materials minimized? Are raw materials that would be otherwise wasted utilized? Are byproduct materials utilized? Are renewable raw materials utilized?

Energy Conservation in the Home.

Does the use of the product in the home reduce the amount of energy that is consumed over previous practices? If applicable, would the product be considered more efficient than previous similar products?

Energy Return on Energy Investment.

How much energy is invested to deliver a unit of energy to a home to use the product? Is it advantageous as compared to alternatives?

Renewable Energy.

If applicable, is renewable energy used in the home in lieu of traditional fossil fuels?

Environmental Impacts Minimized from In-Home Use.

How does the use of the product stand in terms of air, water and solid waste emissions? How does it perform in light of climate change? If it is an expendable product are there recycling or sound disposal options?

Practicality.

To be effectively Green, the product needs to be used. In that light, is it safe? Is it cost-competitive? Is it user friendly? Is it marketable?

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