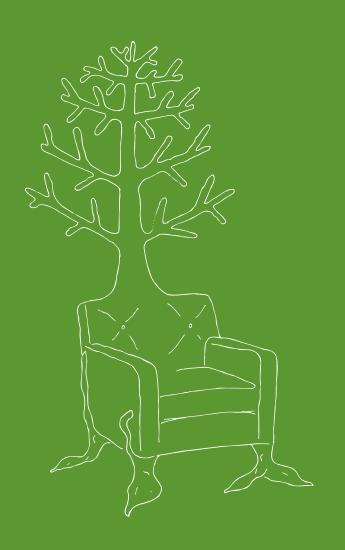
ALL I NEED IS THE AIR THAT I BREATHE - AND A PAPER BAG



Green, green, and green. It seems that everywhere you go somebody is talking about "green." And in this discussion, green doesn't refer to the color of money. Today green refers to the environment, and it is very "cool." Also, today's green movement isn't made up of environmental extremists similar to several decades ago. Now green is much more mainstream and refers to the desire to protect the environment for future generations while at the same time generating sustainable social and economic growth. Regardless of the cause—fear of global warming, increased social awareness, China, unstable energy supplies, contaminated water, deadly pet foods, poisonous toothpaste, toxic Thomas the Train toys—today there's plenty of discussion about green. Paper bags or plastic? Bike or car? Turn up the thermostat in January or put on a heavier sweater? Whether it's about hybrid cars or reusable shopping bags, more and more people are weighing the impact of their lifestyle choices on the environment. After all, we're talking about issues that affect our quality of life and perhaps even our very existence: the water we drink, our forests, our wildlife and fisheries, the use of our land, our energy and the very air that we breathe

In the pages that follow we'll provide an overview of the green movement, talk about how businesses are responding to it (hint: green can be very profitable), and offer a few suggestions about how your company can participate in this socially beneficial and potentially profitable movement.

Contributing authors:

Debbie Miller, Franklin Furniture Institute Amy Garrard, Franklin Furniture Institute Steve Grado, Forest and Wildlife Research Center Steve Taylor, College of Business and Industry

September 2007. Revised September 2008.

References available on line at wwww.ffi.msstate.edu.

Is Green really gold?

Let's look at some figures: According to Furniture Today's Green magazine, in 2006 U.S. consumers spent between \$300 billion and \$500 billion on green products (depending on the source). LOHAS (Lifestyles of Health and Sustainability) estimates that the market for ecological lifestyle products (eco-friendly home and office products. organic/recycled fiber products, appliances, eco-tourism, and travel) is roughly \$84 billion. Moreover, this market is expected to grow for the foreseeable future. According to Mintel, a consumer research organization, there are 35 million Americans, or 12% of the population, who are "True Greens." These individuals regularly recycle materials, abstain from purchasing products with harmful chemicals, buy organic food, reduce energy and water usage, buy forest products from sustainable woodlands, and purchase products that create less waste or pollution. There are an additional 201 million Americans, or 68% of the population, classified as "Light Greens." Individuals in this group occasionally buy green products. The remaining U.S. residents are "Non-Greens." These 59 million Americans (20% of the population) currently show no real interest in green products. To put things in perspective, Furniture Today estimates that both the number of home furnishings stores and sales of related products that are exclusively green is 1% or less in the U.S.

These numbers mean that green can (sometimes, but not always) lead to "profits." In fact, a number of companies that act green (eco-sensitive operating practices and policies) and sell green have reported an increase in sales as well as savings in their production costs. For example, Herman Miller Inc., an industry leader in environmentally responsible practices and product designs was listed in Industry Week's 50 Best Manufacturing Companies. The company had a 46% increase in profits and a 15.1% improvement in sales orders during 2006, attributable at least in part to their "sustainable" strategies. Retailers such as Lowe's, Target, Wal-Mart and IKEA are offering both a more eco-friendly shopping environment and a greater array of items. Lowe's stocks a variety of green items ranging from organic gardening supplies (fertilizer, soil, and insecticides) to bamboo flooring and blinds. Target is using solar energy to power some of its stores and also offers eco-friendly bookcases, desks and coffee tables. Wal-Mart—a popular target for environmentalists who accuse the retailer of gobbling up green space with its massive stores—has been installing energy efficient light bulbs and sky lights in its new stores. The company has vowed to use only renewable energy and create zero waste. The Bentonville, Arkansas company also is involving its employees and suppliers. The retailer has established an employee-greening program in which employees commit to use environmentally friendly products in

their homes. In addition, the company is urging suppliers to become more eco-friendly, especially in regards to reducing the materials used for packaging.

And let's not forget the socially and environmentally responsible IKEA, which

is known to minimize costs of energy and resources and to offer a range of furniture made from

The company has vowed to use only renewable energy and create zero waste.

renewable, biodegradable, recyclable wood. IKEA is particularly selective in its choice of woods. The company's corporate Web site states that "IKEA does not accept timber, veneer, plywood, or layer/glued wood from intact natural forests or from forests with a clearly defined high conservation value."

It's not just retailers who are hopping on the green bandwagon. Manufacturers such as Procter & Gamble and Whirlpool are paring back packaging, researching greater use of sustainable materials, and making their products and operations more energy efficient. General Electric Co. and Caterpillar Inc. joined environmental groups last year to press for a nationwide limit on carbon dioxide emissions. Apple has phased out iMacs with cathode-ray tube displays containing 484 grams of lead and replaced them with LCD-based units containing less than one gram of lead. Steve Jobs, Apple's CEO, said the company would phase out brominated fire retardants and polyvinyl chloride by 2008. Dell and

Hewlett Packard are also discontinuing the use of toxic fire-retardant chemicals and launching comprehensive recycling services. Honda, Toyota, and almost every other auto maker, are scrambling to meet the demand for hybrid, fuel-efficient,

> environmentally friendly cars. British Petroleum is spending \$140 million to support its \$500 million solar division to

help re-brand the company.

Public entities as well as those in the private sector are going green. In March of 2007, San Francisco banned the use of plastic bags within the city limits. This is not a "west coast phenomenon." In New York City, one of the hottest items was the super-hyped "I'm NOT a Plastic Bag," the fashionable, reusable canvas shopping bag with a social message and a cost of \$15 per bag.

Two of life's most momentous events—weddings and funerals—are becoming green. The traditional white wedding can now have a green color scheme. Ecofriendly items such as wedding attire, gifts and decorations can be found on the Internet. And would you believe that when the time comes, you can be laid to rest "green"? Just ask for an ecofriendly grave site with a biodegradable cardboard casket or a coffin made from locally-harvested pines. It seems that every other aspect of our daily lifestyles

is also coming up green. Eco-fashion is on the rise with clothing styles that use environmentally-sensitive fabrics and responsible production techniques. There are dozens of non-toxic, highly effective and safe household and commercial cleaners, skin products, clothing items and accessories, and household goods, designed or manufactured with the planet in mind. Beauty and skin products with the USDA Organic Seal are sold now that eco-friendly items are all the rage.

Even the electricity used to light, heat, and cool our homes can be green because of the rapid growth of "green power marketing." This practice allows utilities to add more renewable resources. to their traditional mix of feedstocks. such as coal, nuclear, natural gas, and hydroelectric power. According to the U.S. Department of Energy, about half of U.S. retail customers can purchase a green power product directly from their electric supplier. Mississippi has one supplier located in Oxford. Corporations also are buying green power. The EPA recently announced that the top 25 green power purchasers—including the U.S. Air Force, FedEx, and BMW—buy 1.6 million megawatt hours of green power annually. This is enough energy from renewable sources to run more than 150,000 homes for an entire year.

One other key economic benefit is that selling green, certified products has opened up foreign markets for American businesses. Certain purchasers of wood and wood products overseas will not buy if it is not certified. If added profits are not always there, an opportunity still exists to capture additional market share for products.

What is "green" furniture?

Unlike in Europe, there are no U.S. standards to determine whether furniture is "green." Neither the federal government nor any accrediting body has developed criteria for use in measuring "greenness." But this is likely to change in the near future. The Business and Institutional Furniture Manufacturers Association (BIFMA) recently hired Grand Rapids-based Sustainable Research Group to spearhead development of a national Sustainable Assessment Standard for the manufacture of environmentally friendly, or "green," furniture. Similarly, the Sustainable Furniture Council is working to determine what constitutes sustainable furniture and hopes to have its standards in place soon. If these standards are enacted, then it is likely they will eventually move into the global furniture market and encourage the development of international standards.

Although "green" is a subjective term, there are certain characteristics associated with its use. Green furniture is made of materials such as reclaimed wood/fiber, non-industrial salvaged wood, wood derived co-products, recycled materials, urban harvested wood, and wood by-products, just to name a few. It

is designed in such a way as to reduce energy use and material waste in its production. In addition, the manufacturing process emphasizes improved productivity, and the use of water-based and low volatile organic compound (VOC) emitting products to replace adhesives and finishing products such as glues, solvents, and wood stains. While there is no accrediting body to determine the greenness of furniture, there is one for the manufacturing process. The Greenguard Environmental Institute was created to improve public and environmental health as a true third party certification program based on proven emissions standards. The institute also serves as a resource to identify manufacturers and products that meet general product standards established by the U.S. Environmental Protection Agency. Greenguard certification ensures that a product is lowtoxic, meaning that it is either completely untreated (i.e., natural wood finishes, naturally tanned leather, or made from organic materials like cotton) or that it has been treated with VOC substances that will release no, or very little, toxic chemicals or gases into the air.

Green products are shipped in such a way as to minimize the use of paper products such as cardboard boxing, various types of foam products (polystyrene foam, Styrofoam), wood crating, and plastic/metal strapping. Ideally, eco-friendly products originate close to the customer, thereby further reducing shipping impacts. Finally, quality is a key green characteristic. The lifespan

of green furniture should be longer than that of its owner, and should be useful for many generations.

There are two terms associated with the environmentalism movement that seem to have great relevance for the furniture industry: sustainable/sustainability and carbon neutral/offsetting. "Sustainable" and "sustainability" refer to acting in a socially responsible manner by developing strategies to meet present needs but at the same time not compromising the ability of future generations to satisfy their own needs. In the furniture industry, sustainability can refer to at least three different things. One, it can be a characteristic of manufacturing practices with the use of non-polluting technologies. Two, the product itself can meet the requirements of sustainability. such as an item made from natural materials, which contains no harmful adhesives. Three, this term can also refer to the materials used.

"Carbon neutral", or carbon offsetting, refers to reducing an equal amount of carbon to counterbalance carbon emissions from energy-using activities. Carbon neutrality is achieved when these two amounts are exactly equal. There are several ways to accomplish this. For instance, a carbon neutral act is replanting a tree for every one that is cut. Using renewable forms of energy (solar and wind) instead of fossil fuel and increasing energy efficiency are also ways to offset carbon use. Another step is to

replace traditional metal halide lighting with fluorescent lighting, which uses 30% less energy.

In taking steps to minimize carbon emissions, as well as waste stream pollutants, the Sustainable Furniture Council (SFC) works with manufacturers and other natural green organizations to establish sustainable practices throughout the home furnishings industry. The SFC is an independent, non-profit coalition of furniture industry leaders that is recognized for promoting sustainable practices that will maintain a healthy balance between the environment, local economies and social equity. Goals of this organization include establishing credible standards and best practices and eliminating unsustainable sources from supply chains throughout the industry. To learn more about the SFC, visit their Web site at www. sustainablefurniturecouncil. org.

Having said all of

this, it should be noted
that regardless of how
environmentally safe your
furniture may be, it still has to look
good, be comfortable, and be reasonably
priced. Green alone does not ensure
profitability. U.S. consumers are willing
to pay somewhat higher prices for ecofriendly products, however, they will not
accept performance trade-offs in return
for eco-friendliness.

Eco-friendly furniture materials

The types of materials that can be used to produce green furniture are varied and somewhat non-traditional. However, the good news is that you do not have to scrap good designs to go green. Furniture can look good and be environmentally friendly.

Sustainable Harvested Woods

In theory, wood is a renewable resource—it grows back within a relatively short period of time. In reality, "the ability of a forest to sustain itself is dependent upon the level of responsibility with which it is cultivated." There are a number of bodies that seek to certify forest management sustainability and wood product chain-of-custody, the latter which ensures consumers will be purchasing a certified product

in the marketplace. Two
such organizations are
the Sustainable Forestry
Initiative (SFI) and the
Forest Stewardship
Council (FSC). FSC is
a globally recognized
entity engaged in the
process of certification

for wood and wood products.
FSC certified wood indicates that the product's suppliers are committed to preserving the environment and that the wood is from a forest that is managed in a manner that will allow it to continuously produce timber indefinitely. In other words, the forest remains a forest. For example, when the forest is

clear cut, it is subject to size limitations and retention requirements. Also, there are green-up requirements that put restrictions on cutting adjacent stands until regeneration has taken hold on previously cut areas. The FSC Web site indicates that over 230 million acres in 77 countries are FSC certified.

Despite environmental management of forests, at times it is necessary to find new materials to replace those in jeopardy. For example, Nucraft Furniture Company uses American black walnut, black cherry, red oak, white oak, and hard maple woods grown in U.S. sustainably-managed forests in lieu of the limited mahogany wood. Teak, which is grown on plantations, is another popular replacement for certain woods. One good characteristic of teak is that it does not come from rainforests. Also. teak is a hardwood with high natural oil and rubber content and is one of the most durable of all timbers, highly resistant to rotting and the negative effects of heat and moisture. Eucalyptus is another very inexpensive hardwood that grows guickly and is comparable to teak in its strength and durability.

Spent rubber wood, another plantation crop, is gaining acceptance as a replacement for certain other woods. Although used mainly for latex production, the economic life of these trees is generally 30 years. Now these spent trees are being milled and replanted. Rubber wood is resistant to

most fungal, bacterial, and mold attacks; is compatible with most industrial adhesives; and is easy to machine.

Green products made from rubber wood now include sofa and chair frames.

At other times it is better to try different types of material, such as bamboo. Because of its sustainability, bamboo has become popular as a choice for a variety of eco-products, ranging from flooring to furniture frames to window blinds. Bamboo is a durable alternative to hardwoods, and because it is a grass. not timber, it is as flexible as it is strong. Bamboo also grows much faster than hardwoods, requiring only 3-7 years to reach maturity (while wood takes approximately 15-50 years). It can also be cut without killing the plant and it is low maintenance. In addition, bamboo is less likely to be subject to termite attacks than many woods and it produces 30% more oxygen than hardwoods.

Recycled Materials

Most wood can be recycled. Reclaiming antique lumber and reusing old wood and furniture are just some of the ways wood is being recycled. Similarly, wood products such as cardboard used in packaging and shipping furniture, can be reused. Bio-glass slabs that are made from 100% recycled materials can be used for counter/work tops and interior flooring. Yard and patio furniture made of recycled plastics are advertised across the Web. Recycled leather is also being used for tile backs and sofas, in addition

to honey-combed cardboard and cork, which can be found in green seating designs.

Organic Sources

Organic materials give the manufacturer a double bang for their buck. Not only are they environmentally friendly, their use requires less energy consumption and results in less air pollution. Organic, 100% cotton is the most commonly used eco-friendly material in mattresses, mattress pads, couch cushions and bedroom furniture. Organic cotton and wool are both chemical-free and hypoallergenic. Corn is another organic source that is being used for home furnishings, especially in the form of polymer ecofriendly materials for fiberfill, batting and pillow forms. Soybeans also are being used in foam, as illustrated by the competitively priced sofa stuffed with sovbean-derived foam that appears in Crate & Barrel's catalogues. Although hemp can't be commercially grown in the United States, it is harvested for its fibers and its seeds are used for oil. Green upholstered couches, chairs (including bean bag chairs), curtains, mattresses. pillows, and hammocks may be made using organic hemp canvases.

Clearly there is a strong demand for organic materials. By 2004, the organic industry had grown at a rate of 23% per annum for 7 consecutive years, with over \$10 billion in sales in the U.S. alone. It also appears this strong demand will continue for some time. Experts project

that 58% of consumers prefer to use organic products.

Paints, Glues and Adhesives

Eco-paint? Yes, eco-paint has been used for over a century. Perhaps the most environmentally-friendly paint is milk paint, which, by the way, was found in King Tut's tomb. Milk paint is a traditional, long-lasting paint made from milk casein, clay, earth pigments, and lime. It is a natural, non-toxic product that bonds with hard porous surfaces, such as sanded wood, by way of a naturally forming resin. called calcium caseinate. The result is a hard matt surface which can be sanded, distressed, oiled, waxed, polished to a velvety sheen, or simply varnished. Milk paint dries within two hours and can be applied directly to sanded wood without the need for a primer/sealer.

Eco-glues contain no solvents but are instead water-based. Krueger International, for example, uses only water-based glues. Similarly, formaldehyde, a classified human carcinogen, is being replaced with soy flour. Soy-based adhesives are environmentally friendly, cost-competitive, and superior to traditional adhesives in strength and water resistance. The U.S. Department of Agriculture has found that a by-product from the production of ethanol can be used to produce all-natural wood glue. Preliminary investigations have shown this bioadhesive to be tough enough to replace up to 70% of the petroleum-based

phenol-formaldehyde that's used to manufacture plywood and other pressed-wood products. Additionally, Mississippi State University scientists have a patent pending on a resin that produces 80% less formaldehyde emissions and has similar cost, strength, and durability compared to traditional resins.

Getting Your Green Message to the Consumer

Assuming you decide to go green, you can't simply just announce this to your customers. In all likelihood they may be skeptical and you'll have to convince them of it. Because there are no standards to determine what is "green," too many organizations have done little more than attach this term to existing products. Consumers are wary and suspicious of green claims—as they well

Here are some rules that "marketing experts" say will help you convey the desired message to your customers and potential customers:

should be.

Be authentic. A green consumer is one who is willing to educate him or herself. In other words, consumers aren't simply going to take you at your word when you proclaim "greenness." They can and will sniff out green washing. And when they do, they will tell their friends, neighbors, relatives, and anyone else who'll listen. The group you have to be most concerned with are the True Greens. They are the trend setters. If they don't think you and

your products are authentic, then neither will the mainstream.

²Just because you say so doesn't make it true. Use numbers—simple. easy-to-digest numbers. If you claim your product requires less energy to produce than a competing product, then provide facts to support your argument. Similarly, if the wood in your furniture comes from eco-managed forests or your product has low-toxicity, then prove it. FSC-certified wood will have an FSC label and Greenquard certification ensures the furniture has been treated with low toxic substances. Remember, you are making promises to your customers. Fail to deliver, and they will leave you in droves.

The world is green. Or so it seems. Green clearly is the bandwagon of choice, and it seems that every company in the world produces green products. If you say you're green, then be a True Green.

4"Green" is a politically charged word. This word has many connotations, and it stirs many different emotions in a number of people. For some, green is synonymous with "environmental extremism." Keep this in mind when you plan your next advertising campaign.

5"Green" and "tree-hugger" are not the same things. Most green shoppers aren't zealots, and believe it or not, they look pretty much like normal people. They come from all age groups, both genders, all ethnic backgrounds, and from a multitude of income levels. Make sure

your message isn't so green that you come across as the zealot and drive them away.

Watch your language. Like the "Latino agency," "the active and over 60 agency," or the "urban youth agency," you have to understand the language of the subculture you are targeting. Green has a language all its own, and it's changing faster than you can say "ecomagination."

In addition to these general guidelines, you should keep in mind the first rule of marketing (which just happens to also be the first rule of green marketing): focus on customer benefits. After all, while the environment is important to them, the main reason consumers buy certain products is because they benefit from them personally. Consumers (with the possible exception of the True Greens) do not buy products solely because they help the environment. Focus on what your product can do for your customer. Treat the environmental benefits as good, value-added secondary benefits.

Next, keep in mind that for green marketing to work, it is important that customers...

...be aware of and concerned about the environmental issues that your product addresses. Research suggests that consumers are segmented around issues of personal health and wellness, resource conservation, and wildlife protection. Your message shouldn't be a generic "it's good for you and the environment" message. Instead, make it pointed and precise. State unequivocally how your product helps the environment (keeping in mind, once again, that this is a secondary benefit).

...feel that by using your product they will make a difference, as one consumer or in concert with all other consumers. This is called "empowerment."

...believe your claims. Granted, this recommendation applies to every communication between you and your customer. It's especially true for green businesses. As we stated earlier, there are no standards for determining what is "green." So many claims are often intangible, misleading and untrue. This has left a negative legacy for legitimate companies.

...feel your product will work as well as non-green alternatives. This reflects lingering misconceptions from the days when natural laundry detergents left clothes dingy and fluorescent light bulbs sputtered. Remember, once again, that the majority of consumers buy products for the personal benefits they will receive.

...are willing to pay more for the product. Some can't afford premium prices for any kind of product, green or not. Of course, the more beneficial the product to the consumer, the more they may be willing to pay.

References

http://www.lohas.com/about.htm

WasteWise 2006 Annual Report, Environmental Protection Agency. Measuring Business Success From Sustainability Certification, Rainforest Alliance, May 2007

IW 50 Best Manufacturing Company profile, Industry Week, June 2007

http://www.msnbc.msn.com/id/16859860/

http://www.planetark.com/dailynewsstory.cfm/newsid/42749/story.htm

http://www.ikea-group.ikea.com/corporate/responsible/resources.html

http://www.planetark.com/dailynewsstory.cfm/newsid/42749/story.htm

http://www.msnbc.msn.com/id/16859860/

http://www.informationweek.com/story/showArticle.jhtml?articleID=199203597

http://www.cleanedge.com/story.php?nID=3581

http://usinfo.state.gov/xarchives/display.html?p=washfilenglish&y=2005&m=April&x=20050425095433lcnirellep0.2197687

http://www.rapidgrowthmedia.com/timnews/Default.aspx

http://www.furnituretoday.com/article/CA6464525.html

About Greenguard Environmental Institute, http://www.greenguard.org

http://www.fixingtheplanet.com/what-does-green-furniture-mean

http://en.wikipedia.org/wiki/Sustainability

http://blackbearspeaks.blogspot.com/2007/04/industrial-woodworking-corporation-goes.html

Green Home Environmental Store — About Chairs. http://www.greenhome.com

How To Green Your Furniture, Jacob Gordon, January 2007. http://www.treehugger.com

Nucraft Furniture Company, Surface Materials, http://www.nucraft.com

Bamboo, The Miracle Grass, June 20, 2007. http://www.sustainableday.com

Crafting A Better Planet. Leggett & Platt, Inc.. http://www.mountainmistlp.com

Organic and Natural Enterprise Group — Market for Organic Products, 2004.

http://www.milkpaint.co.za/

http://www.p2pays.org/ref/04/03133.htm

http://www.epa.gov/greenchemistry/pubs/pgcc/winners/gspa07.html

http://www.ars.usda.gov/is/pr/2007/070412.htm

http://www.marketingprofs.com/print.asp?source=/7/green-market-niche-going-mainstream-rooks.asp

http://www.marketingprofs.com/6/ottman1.asp

Dr. Seuss, The Lorax.

If you would like more information on the Franklin Furniture Institute, check out our web site at ffi.msstate.edu or contact:

Bill Martin Director 662.325.3348 wmartin@cfr.msstate.edu Or

Amy Garrard
Outreach Coordinator
662.325.8453
Amv.garrard@msstate.edu

Green from the inside and out

The green movement is alive, well, and growing rapidly. As stated earlier, today's environmentalist seeks to protect our natural habitat while simultaneously enhancing our economic realm. Companies who understand this can not only do the socially responsible thing, but at the same time they can, in many instances, improve the bottom line. It is difficult finding and maintaining a competitive advantage in today's world. A green, socially responsible approach just might be a better way to compete, one that many competitors will have difficulty matching.



