



# The Greening of the Industry

As American businesses go Greener by the minute, the exhibition industry is poised for an emerald-hued evolution. See how eight exhibitors overcame their own eco obstacles in the search for Greener exhibit pastures, and learn how you can follow their environmentally friendly lead. *By Charles Pappas*

**B**usinesses are going Green faster than the Incredible Hulk. According to the State of Green Business 2008 report from Oakland, CA-based eco-news source [www.GreenBiz.com](http://www.GreenBiz.com), Wal-Mart Stores Inc., which owns the second-largest private shipping fleet in the United States, plans to double its 7,000-truck fleet's fuel efficiency by 2015. The British super-market chain Tesco PLC now powers its trucks with biodiesel fuel and some of its stores with wind energy. And Hewlett Packard Development Co. exceeded its 2007 recycling goal of 1 billion pounds of electronic waste — then promptly declared it would recycle another billion pounds by 2010.

Green practices have become as much a priority for businesses as a black bottom line. According to Oakland-based nonprofit research and consulting service Business for Social Responsibility, almost 30 companies the world over have committed to going carbon-neutral, including

## ECO INDEX

In addition to profiles of eight exhibitors that have taken significant Green steps, the following pages are peppered with information to help you take your exhibit-marketing program in an equally eco-friendly direction. The topic index below will help you find the tips and techniques you need on everything from essential terminology to energy-efficient lighting options.

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a who's-who of business movers and shakers that includes Barclays PLC, Nike Inc., and Yahoo Inc.

Anytime a business goes Green, it's likely for a wide variety of reasons. The most common seems to be upper management's personal values, such as Patagonia Inc.'s founder Yvon Chouinard, whose earth-friendly beliefs have shaped the sports-apparel maker from its inception. Other companies reduce their carbon footprint to reduce their internal costs, like Bellisio Foods Inc. did with its two 5.25-million-gallon "digesters" for food waste that will reportedly save the company nearly

\$1.3 million a year in energy, transportation, and landfill costs. Still others become eco conscious to set their products apart from look-alike competitors, such as Adnams PLC, which brewed up a carbon-neutral beer (bottled at energy-saving plants) whose ingredients are grown with comparably low levels of pesticides.

But as business goes, so goes the exhibition industry. According to EXHIBITOR magazine's study, "An Inconvenient Booth," 62 percent of exhibitors surveyed reported "high" or "very high" personal interest in Greening their programs, and 86 percent expected to allocate some

portion of their 2008 budget to Green exhibiting options.

Just like Wal-Mart and Nike, exhibit managers are going Green to fulfill business strategies and objectives, from appealing to younger consumers and reducing costs to reinforcing a particular brand image.

To help you go Green without going gaga in the process, we've devoted the bulk of this issue to examples of exhibitors who have gone Greener, information on how you can follow their lead, and eco-friendly products and services to help you minimize your program's carbon footprint.

If you're left wanting even more eco info, visit [www.GreenExhibiting.com](http://www.GreenExhibiting.com) to peruse past articles, download a copy of "An Inconvenient Booth," check out the new online-only Ask Mr. Green column, and do a little shopping in the Green Marketplace.

While Greening your exhibit-marketing program might be far from easy, it's also far from impossible. And as you'll discover inside this issue, it's getting easier every day. **E**

# Going Silo

Fox River Mills Inc. promotes its eco-friendliness at its most important show by raising a barn-like booth made from sustainable materials.

Fox River Mills Inc. puts its best foot forward on its Web site, promising visitors that "If you are looking for a sock that fits your foot and your lifestyle, is good for the environment, is made in the USA, and is a darn good sock, you have come to the right place." The Osage, IA-based apparel manufacturer has a verdant history of Green practices that stretches back to the 1970s when it began working with municipal authorities in Osage to reduce its power use.

Now, it recycles more than 450,000 pounds of materials, reducing its annual energy costs by more than 30 percent through water-reclamation and heat-recovery systems. The company even boasts it's an "international model for Green companies." Yet exhibiting in its booth — a patchwork of laminates glued together with toxic adhesives; nonrecycled carpets; fabrics such as nylon made from nonrenewable petrochemicals that don't biodegrade; paint emitting volatile organic compounds (VOCs) associated with liver, kidney,



and central-nervous system damage; and hundreds of pieces of foam-core panels it tossed out every year — was a little like a hybrid-car salesman driving a rusty pickup that still runs on leaded gasoline.

Heading into the 2007 Outdoor Retailer Show Summer Market, Fox River Mills was concerned its eco-unfriendly booth might create a credibility gap. Held twice each year, the Outdoor Retailer Market (ORM)

represents the company's most important shows of the year. In fact, Fox River Mills attends both shows annually, making key contact with approximately 35 percent of its retailers and 70 percent of its regional representatives, while directly generating an estimated 65 percent of its annual revenue from the winter and summer shows.

## Green Acres

Fox River Mills knows that ORM is among the most eco-conscious of expositions. Its exhibitors are known for their Green booths, while the show's Green Steps Program highlights the companies that have made the greatest efforts adopting Green practices in their product and business tactics. Not going Green at the ORM is like ordering veal at a PETA banquet. "The outdoor retail community and Fox River are very aware of Green policies and practices," says Joel

Anderson, Fox River Mills' branded-division president. "We needed to very clearly communicate that understanding and value system in our presence."

With close to 40 years of earth-friendly practices under its belt, Fox River Mills wasn't sure where to begin with its booth. Unlike static buildings, a booth poses unique challenges by its very nature: Many parts are inherently disposable, power sources are mostly out of an exhibitor's control, and the booth, which can weigh thousands of pounds, has to be shipped over large distances in tractor-trailers

### FAST FACT

Tractor-trailers spew about .30 pounds of greenhouse gases for every metric ton of freight they transport one mile.

spewing about .30 pounds of greenhouse gases for every metric ton (2,240 pounds) they transport one mile. The problem is old, but the solution — going



Greener — is still in its trial-and-error phase. So to start shrinking its carbon footprint, Fox River Mills turned to MG Design Inc. “Our

**FAST FACT**

Trans-oceanic shipping accounts for 4.5 percent of global greenhouse gas emissions.

goal was to incorporate as many sustainable options as possible,” says Doreen O’Reilly, account executive for the Pleasant Prairie, WI-based MG Design.

**Were You Born in a Barn?**

After researching Green materials and ideas for a month at Web sites such as [www.GreenFloors.com](http://www.GreenFloors.com) and Green Building Supply, MG Design and Fox River Mills debated using drapes and carpets made of bamboo fiber and cabinets manufactured from fast-growing aspen. But it found these decisions were difficult.

Bamboo, for example, renews itself five to 10 times as fast as most hardwoods and requires minimal pesticides during its growth. Plus, rugs comprised of bamboo fibers can last up to five times as long as traditional carpeting. On the other hand,

nearly all bamboo for flooring is grown in China, Vietnam, or Myanmar, which means it has to be shipped thousands of miles to the U.S. market. And while bamboo is arguably a Greener alternative than plenty of traditional options, many sustainable-building guidelines suggest selecting materials manufactured locally, which they often define as within a 500-mile radius, to minimize the pollution from, for instance, trans-oceanic shipping. According to the United Nation’s International Maritime Organization, such shipping accounts for 4.5 percent of global greenhouse gas emissions — twice that of the entire aviation industry.

Eventually, MG Design and Fox River Mills settled on a 20-by-30-foot booth design that looked like Old McDonald’s Farm — and was almost as natural as the oink-oink-here venue from the memorable children’s song, too. Set against a 20-by-16-foot barn-red back wall created from Forest Stewardship Council (FSC)-certified plywood, four sales stations were positioned in the corners of the booth. Each was framed, corral-like, with the slats made of wood reclaimed from an old exhibit, and colored a weatherworn gray with water-based, low-VOC wood stain. While the slats accounted for 40 percent

**Fox River Mills Inc. incorporated a mix of reclaimed wood, rhythm board, and bark peeled from cork oak trees for the silo and main structure of its 20-by-30-foot custom exhibit.**



**A GREEN GLOSSARY**



Green-speak has become so much a part of our daily life in the past few years that The Oxford American Dictionary’s Word of the Year for 2006 was “carbon neutral.” But environmental lingo can be almost as confusing as it is widespread. Search Google for “Green glossary” and you’ll get more than 10,000 hits, with lexicons ranging from the construction industry to cleaning fluids. To help navigate your way out of that terminology traffic jam, we’ve collected some of the most common Green terms in the glossary below.

**Brown Power:** Electricity generated from the combustion of fossil fuels, such as coal, oil, and natural gas, which generates significant amounts of greenhouse gases.

**Carbon Dioxide (CO<sub>2</sub>):** A gas that is the product of fossil fuel combustion. Although carbon dioxide does not directly injure human health, it contributes to global warming.

**Dioxins:** A toxic chemical byproduct created by many industrial processes, especially prevalent in waste from pulp and paper mills. This toxic waste is believed to cause cancer and birth defects.

**Ecological Footprint:** The total amount of land, food, water, and other resources needed to sustain a person or organization.

**Formaldehyde:** A chemical used to manufacture adhesives, plastics, fabric treatments, etc., which is emitted from those materials as a gas, and may be a carcinogen in humans.

**Fossil Fuels:** The remains of plant and animal life that are used to provide energy in the form of coal, oil, and natural gas.

**Greenhouse Gas:** Any gas that contributes to the greenhouse effect, including carbon dioxide, methane, and nitrous oxide.

**Greenwashing:** Misleading eco-friendly initiatives that conceal a company’s environmentally destructive practices or products.

**Organic Cotton:** Cotton that is manufactured from organically grown cotton plants. No chemicals are used to grow it, and the final cloth is unbleached and dyed with natural plant dyes.

**Polyvinyl Chloride (PVC):** A common thermoplastic resin used in a wide variety of manufactured products, from apparel to buildings. PVC products release chemicals into the environment linked to cancer as well as birth and neurological defects.

**Powder Coating:** Durable finishing method for metals using a dry powdered plastic that is heat-fused onto the surface. Virtually no solvent is required and little waste is produced.

**Sustainability:** Defined in 1987 by the World Commission on Environment and Development as efforts “meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

**Volatile Organic Compounds (VOCs):** Materials that evaporate from many household and industrial products. VOCs are suspected of causing or exacerbating acute and chronic illnesses.

of the sales stations' structure, the remaining 60 percent consisted of graphics and cork. In the past, Fox River Mills displayed its socks inside the stations on foam-core boards that would routinely be damaged as the socks were removed, resulting in the company tossing approximately 250 boards a year into the dumpster. Now it switched to a reusable display board, which will save the company the \$1,000 it spent on replacing the foam-core boards each

**FAST FACT**  
The United States tosses 135 million tons of garbage into the nation's landfills each year.

year — and avoid adding more waste to the 135 million tons of garbage tossed into the nation's landfills annually.

The floors and walls of the exhibit were made from bark peeled from cork oak trees. Because the trees are shaved for their cork — the kind used in wine-bottle stoppers — and not cut down, the trees regenerate quickly with a minimal impact on their surrounding environment. In fact, the cork used to construct Fox River Mill's booth was made from the waste left over after the cork stops are produced.

The visual center of the company's booth was a stylized silo. Ten feet high, it symbolized the pastoral architecture and grain crops of the Midwest

where Fox River Mills socks are fabricated, in part, from cornstarch, which is now used in making eco-friendly substitutes for a variety of products including everything from plastic bags to golf tees. The silo was constructed from rhythm board, a material made entirely from leftover wood pulp, then corrugated into paperboard. First used by cereal magnate Will Keith Kellogg in 1906 to package his corn flakes cereal, rhythm board is durable, recyclable, and completely biodegradable.

Adding to the barnyard ambiance were chairs with tractor-like seats, while all 600 square feet of the space were illuminated with a total of just 2,500 watts worth of lighting — saving about 215 pounds of greenhouse gases compared to the usage in the previous year's booth.

Like a battery that can be recharged over and over, Fox River Mills plans to reuse portions of the 600-square-foot exhibit after the ORM shows. For the SnowSports Industries America 2009 show in January, for example, it plans on reusing several segments of its existing exhibit.

"The booth can be reused and recycled in multiple ways," O'Reilly says, "and Fox River Mills will spend less money than it did renting. So, at least in our case, going Green also meant saving green, too."

# It All Comes Out in the Trash

Terex Corp. goes Green by taking out the trash generated in its 50,000-square-foot exhibit at ConExpo-Con/Agg.

**T**erex Corp. knows how to get down and dirty. After all, the Westport, CT-based company is the third largest manufacturer of construction equipment — such as dump trucks, mining trucks, backhoe loaders, and mining excavators — in the United States. But when the company decided to start taking steps that would reflect its ever-Greening corporate culture, it found a way to really clean up.



When planning its massive exhibit for the 2008 ConExpo-Con/Agg show in Las Vegas last March, Terex was equally concerned with what came out of its exhibit as what went into it. It knew it could use all the FSC-certified wood, recycled



Terex Corp. worked with The Freeman Co. to recycle a majority of the materials used in its three-story 50,000-square-foot exhibit.

## Recycled:

- 127.5 tons steel
- 10,000 lbs. carpet
- 250 tons gravel
- 1,200 linear feet of modular aluminum



carpet, and light-emitting diodes (LEDs) in the world in its exhibit, but it might as well build it out of coal and sealskins if the materials just ended up in a landfill afterward. And according to the U.S. Environmental Protection Agency (EPA),

**FAST FACT**

Landfills produce leachate, a toxic liquid that leaks into the soil and ground water.

the millions of tons of waste that enter the nation's 1,754 active landfills every year are responsible for nearly 36 percent of all methane emissions, which contribute more to global warming per ton than carbon dioxide. Even worse, the landfills also produce leachate, the toxic liquid that leaks into the soil and contaminates ground water.

Working with its Dallas-headquartered exhibit house, The Freeman Co., Terex constructed a three-story outdoor exhibit with a total footprint of 50,000 square feet — or about 22 times the size of the average newly built American home. The exhibit property included almost 143.9 tons of steel and 27,000 square feet of carpet, creating a work space for more than 300 Terex staff members during the show. Requiring 11 days of 24-hour shifts to install, there was little that was Green about the epic exhibit — until ConExpo was over.

With Freeman's help, Terex arranged for a local metal recycler to haul away 127.5 tons of steel, or about 88.6 percent of the metal

## ENVIRONMENTAL RENTAL



According to several industry experts, renting your company's exhibit properties is about as Green as it gets. The following information constitutes a case for considering all your options — including rental — in your quest to decrease your program's ecological impact.

**Recycle:** Renting exhibit properties means less waste. "Once a booth has lost its usefulness to you, it doesn't have to be destroyed," says Jane Kerr, director of LaborSource for CEP Exhibit Productions Inc. in Bolingbrook, IL. "Someone else can rent it and refrain from adding yet another exhibit to our nation's landfills."

**Reduce:** Consider renting a property from a supplier with warehouses in or near the show's host city. Renting locally can mean a significant reduction in fuel consumption, as opposed to shipping an owned property across the country and back for every show.

**Reuse:** Unlike custom exhibits, rental exhibits aren't built for one company and then stored on a shelf between shows. According to Mark Smith, product manager for Eagan, MN-based Skyline, rentals are inherently Green. "You don't have five different booths for five different exhibitors; you have one booth for five exhibitors."

used in the exhibit. The 10,000 pounds of rental carpet was returned to Freeman's rental inventory, where it will be recycled into drainage pipe for septic systems when it wears out. Approximately 1,200 linear feet of the modular aluminum and panel system used for the conference room and offices was returned to Freeman's inventory as well, where roughly 90 to 95 percent of it will be recycled once its shelf life is completed. Additionally, a local landscaping company picked up some 250 tons of gravel from the site for use in paving roads and pathways in the Las Vegas area.

By recycling materials used in the exhibit and avoiding landfills, Terex probably saved much more energy than if it had simply

used Green materials and junked the booth after the show. Based on information from the Steel Recycling Institute and the Energy Information Administration,

**FAST FACT**

The energy Terex Corp. saved by recycling the metal in its exhibit could power 255,000 60-watt bulbs for 26 hours.

the energy Terex saved by recycling the metal could light 255,000 60-watt bulbs for 26 hours. And simply using recycled metal prevented 159.38 tons of iron ore, 63.75 tons of coal, and 2.55 tons of limestone from being mined for new steel.

There are many ways to make your booth more sustainable, but Terex proved that sometimes it's not what you put into your exhibit that makes it Green, it's what you take out — and how.



# Leader of the Pak

Tetra Pak Inc. Greens its booth with recyclable aluminum, recyclable carpet, and its own Green products.

**T**etra Pak Inc. was trying hard to think outside the box — which is not easy for the Vernon Hills, IL-based U.S. operation for Tetra Pak International S.A. After all, in 2007 the company manufactured 137 billion of its unique box-like paper cartons, which allow liquids such as milk and orange juice to be stored at room temperature for up to a year. Now, with 22 billion of those cartons recycled annually and a record of earth-friendly initiatives, Tetra Pak wanted its trade show exhibit to reflect its positioning as a company that promotes sustainable manufacturing practices. “This message is the core of our strategy for the next few years,” says Nina Westberg, senior marketing specialist for the company. “It’s important our booth reflects that for key shows, including the Natural Products Expo West/Supply Expo.”



**By integrating its own eco-friendly product into its exhibit design, Tetra Pak Inc. not only highlighted its Green efforts, it also conveyed key brand messages.**

But with more than 52,000 retailers and manufacturers attending the Natural Products Expo in Anaheim, CA, the country’s largest trade show in the natural products industry, Tetra Pak needed to stand out. The industry had mushroomed nearly 55

percent from \$36.4 billion in 2002 to \$56.7 billion in 2007, representing a market ripe with opportunity. But the 2008 show had a record 3,392 exhibits, many of which had gone Green and

materials and how we would use them.”

Tetra Pak rounded up the usual sustainable suspects to convey its Greenness in the 20-by-40-foot exhibit: recyclable aluminum, Ply-boo (a plywood alternative derived from bamboo) and water-based finishes for the counters and product-information stations, along with bamboo and recycled/recyclable carpet for flooring. It also used energy-efficient LEDs in the booth’s six light fixtures. But while once exotic, these materials are now almost commonplace, and not necessarily enough to make attendees perceive you as nature nurturing in a show where almost 100 exhibitors use some form of the words “Green,” “Natural,” or “Organic” in their company names.

were shouting their eco-friendly claims from the treetops. “Tetra Pak was looking for a different way to exhibit,” says Tim Hamann, an account executive at the Denver division of Chicago-headquartered Czarnowski Inc., which designed the booth. “The key was the

So Tetra Pak bolted in front of the pack by integrating its eco-friendly — and historic — packages into the booth’s design. The iconic carton was once included in an exhibition of “inspired designs” defining everyday life at the Museum of Modern Art in New York, and for the exhibit, nearly 150 of the cartons were strung together

## SHIP SHAPE



Shipping and transportation are commonly accepted as the most ecologically unfriendly aspects of exhibiting. But what can you do to decrease your transportation-related emissions?

► **Pad wrap your shipment.** Pad wrapping your shipment eliminates the extra weight of heavy shipping crates, which can weigh in at as much as 200 pounds apiece.

► **Keep it local.** Consider storing your exhibit property in the host city after the show and shipping it directly to your next show from there. Ask your transportation company if it has a nearby facility where you can store the booth between shipments, or consult the show contractor about available warehouse space.

► **Watch your weight.** The heavier your shipment, the more carbon you’ll emit during transportation, so opt for lighter weight alternatives when possible. Also look for ways to avoid shipping nonessential items to shows.

**FAST FACT**

Tetra Pak Inc. opted for six iPods instead of using energy-guzzling LCD or plasma monitors to display product information.

into a striking 14-by-16-foot juice-box curtain — which became an instant draw for attendees, who could then learn from company staffers about how every Tetra Pak carton is just 7 percent packaging and 93 percent product, while a glass container is almost 40 percent packaging and 60 percent product. By using its own sustainable product as part of the design, Tetra Pak didn't just go Green for Green's sake, it did so in a way that made sense for its brand and incorporated its key messages.

with live wheat grass and a real oak tree at the three product stations conveyed an au naturel feel. Instead of energy-guzzling plasma screens or LCD monitors, Tetra Pak used six iPods, placed at the product stations, to communicate its story with three short videos on each iPod about its products as well as their environmental sustainability.

Unlike some companies in their early Greening efforts, Tetra Pak had firm environmental goals for the booth. To increase brand awareness and communicate new environmental positioning to the press, it hoped for coverage from six media outlets, but received 14 interviews with



Aside from 150 of its cartons, an oak tree, oak leaves, and live wheat grass highlighted Tetra Pak Inc.'s eco-friendly booth.

Next to the curtain was a product wall with almost 80 samples of consumer items from an array of companies that package their products in Tetra Pak cartons, backed by a thick covering of real oak leaves. Overhead, an artfully cut Plyboo structure simulated the view of looking up through a canopy of tree branches, while nearby Plyboo boxes

publications such as Beverage Industry Magazine, more than twice its goal.

By uniquely blending Green messaging into its branding and products, Tetra Pak avoided the gratuitously Green vibe many companies' eco-friendly efforts give off, and achieved the kinds of results that won't have it packing in its sustainable booth any time soon.

# The Wearing of the Green

Patagonia Inc. builds its new booth by reusing part of its old one.



Patagonia Inc. has been Green almost as long as the exotic and unspoiled region of South America the outdoor-apparel retailer is named after. Even the mission statement of the Ventura, CA-based company founded in 1972 is good for the earth: "To build the best product, to cause the least harm, and to use business to inspire and implement solutions to the environmental crisis."

That's not just a bunch of corporate blather filling the air like smog during rush hour in LA, either. The company commits at least 1 percent of sales or 10 percent of pre-tax profits — whichever is greater — to environmental groups, donating more than \$30 million to more than 1,000 organizations since 1985. Furthermore, all of its cotton products are made from 100-percent organically grown cotton, its fleece comprises fabric manufactured from recycled water bottles, and 12 percent of its Ventura headquarters'

electricity comes from solar panels. The company even boasts a vice president of marketing and environmental initiatives, and its Common Threads program encourages customers to return their Patagonia underwear and other clothes to be recycled at the end of their useful life.

That's why Patagonia enlisted the help of Atmosphere Studios LLC to help it design a kinder, Greener booth to debut at the Outdoor Retailer Show Winter Market in 2006.

For a company where Green is as deeply embedded in everything as chlorophyll is in plants, its trade show booth lagged a few years behind Patagonia as a whole: It was a hodgepodge of laminates and some earth-unfriendly materials along with a few Green items. While not exactly as bad for public relations as an oil spill in a protected wetland, the exhibit clashed with the mission statement

**FAST FACT**

Twelve percent of the energy required to power Patagonia's Ventura, CA, headquarters comes from solar panels.

of the Greener-than-thou Patagonia brand.

“Patagonia wanted its exhibit to be in synch with its Greened corporate culture,” says Tom Jennings, a designer at Salt Lake City-based Atmosphere. For some companies, that would mean little more than a couple boards of Plyboo and a recycling bin. For Patagonia, the mandate was as important as its

wearing anything made of it was like taking a hit off a bong full of DDT.

But this was not the first time Patagonia had taken eco-friendly action with regard to its exhibit-marketing efforts. In 2005, the company stopped using regular carpet in its trade show booths and replaced it with recycled sisal area rugs. The company also started using Douglas Fir

increase its presence on the show floor as well. So instead of the 30-by-70-foot exhibit it had in 2005, the company wanted its new booth to measure 40-by-80 feet with a 500-square-foot mezzanine, an increase in overall square footage of slightly more than 75 percent. But that meant the booth would now have an enlarged ecological footprint, too.

**FAST FACT**

According to [www.Scorecard.org](http://www.Scorecard.org), diesel emissions pose the greatest cancer risk of all air pollutants.

with a mezzanine using these recycled elements as the core and featuring a mountain-village theme that was larger, yet Greener than the previous booth.

For the mezzanine and overhead treatments, Patagonia used reclaimed wood as well as cold-rolled steel, which requires less energy to manufacture than the standard hot-rolled version, adding to its desirability. Not only was the steel made from 50-percent recycled metal, its high strength-per-weight ratio meant the company needed less of it than it would aluminum or wood, which translated into several hundred pounds that Patagonia wouldn't have to ship in diesel-powered tractor-trailers, ultimately preventing hundreds of pounds or more of CO<sub>2</sub> from poisoning the air. It was one of the Greenest moves Patagonia could make, since diesel emissions pose the greatest cancer risk of air pollutants, according to environmental watchdog site [www.Scorecard.org](http://www.Scorecard.org).

Inside the booth, the miniature shops were framed in the rustic, reclaimed barn wood, each accented with a different product line, from Patagonia's fleece jackets to its cold-weather hats. Arranged on racks and shelves built from reclaimed wood, the products were



To keep its booth in tune with its eco-focused mission statement and product line, Patagonia Inc. used reclaimed wood from a previous exhibit and paired it with sisal rugs, cold-rolled steel, and low-VOC paints to construct its 40-by-80-foot exhibit for the Outdoor Retailer Show Winter Market.

showdown decision in 1994 when founder Yvon Chouinard gave his company 18 months to switch to organic cotton — a ballsy move, considering cotton products accounted for a fifth of Patagonia's business. But Chouinard did it simply because regular cotton was

**FAST FACT**

Cold-rolled steel requires less energy to manufacture than hot-rolled steel and has a higher strength-per-weight ratio.

so full of pesticides (the crop consumes less than 3 percent of farmed land globally but eats up about a quarter of all pesticides sprayed) that he believed

wood reclaimed from old barns, as well as recycled galvanized metal for the exhibit's wall panels.

But going Green is far from a one-and-done process: It's an ongoing evolution of fixes and adjustments, of trade-offs among price and quality and availability. “That old booth was a good start,” Jennings says, “but like its clothing, Patagonia wanted to go the extra step.”

**Green Isn't Grungy**

Not only did Patagonia want to expand its reputation as a Green-as-grass company in a way it could measure, it wanted to

To shrink it, Patagonia and Atmosphere started with the most basic — and easiest — of Green practices: recycling. Whatever the final redesign of the booth would be, they would reuse the previous exhibit's reclaimed wood, sisal area rugs, and recycled metal, as well as an antique reception desk that Patagonia staffers had found and restored to its original luster. “We salvaged everything we could from the old booth,” Jennings says.

But Atmosphere knew that the recycled materials couldn't mean a hand-me-down look. So it devised a two-story design

lit by 75-watt halogen bulbs. Patagonia reduced the number of fixtures by about half from the 2005 booth to save energy and to “focus on the products like a diamond in a Tiffany’s window,” Jennings says.

Instead of carpeting, visitors trod on the plain cement floor, whose bare surface was occasionally broken by the sisal rugs. The upstairs mezzanine offered a cabin-in-the-woods simplicity of plain plywood and a few sisal rugs, as well.

**Going the Last Green Mile**

While Patagonia’s Web site offers the interactive Footprint Chronicles, where customers can track the carbon footprint of Patagonia products from design through delivery, the booth is still a few steps behind, as no such capability exists yet for its exhibits. Still, the 2006 booth established a rough

baseline as well as a blueprint for finding Greener materials and measuring their impact.

Patagonia plans to continue reusing the existing booth, recycling the wood, metal, and rug components, and keep new construction to a minimum, relying on easy-to-transport graphics and low-VOC paints to make seasonal color shifts and maintain a fresh look. “Patagonia didn’t just jump on the Green train,” Jennings says. “It’s willing to take years to Green a product — or a booth.”

The company understands what others are just learning — that going Greener is like reforesting the Patagonia region itself, a process that’s never done, but whose success is judged by your commitment over time to evolving and perfecting your approach.

# An Inconvenient Tooth

Dentsply International Inc. builds a new modular booth with sustainable components to appeal to a younger demographic.



**D**entistry has come a long way since the ancient Egyptians treated a toothache by covering it with the split-open body of a freshly killed mouse. One day soon, dentists will likely be able to regrow decayed teeth and gum tissue with stem cells, and immunize patients against cavities. But whether they’re drilling into sensitive nerves with sharpened stones or laser beams, the need for companies to stay ahead of the competition doesn’t change.

Dentsply International Inc., for example, a provider of dental supplies with more

than \$2 billion in 2007 revenues from sales of products such as artificial teeth, tooth whiteners, and topical fluoride, wanted to show attendees at the Chicago Dental Society Midwinter Meeting last February that it is a leader not just in whitening teeth but in Greening its image, as well.

But York, PA-based Dentsply wasn’t looking for a basic rinse-and-spit PR

**SMALL AND SUSTAINABLE**



You don’t have to go big to go Green. In fact, small booths are some of

the Greenest exhibits going. Small 10-by-10-foot exhibits eat up fewer natural resources in their construction, their light weight nature means less energy is used for shipping, and they add less volume to landfills. These three small exhibits use everything from Eco-Resin panels to recycled aluminum to give a polite but powerful nod to



Mother Nature.

**Green Baggin’ It**

Ecobags’ modular exhibit, designed by Go Green Displays, comprises recycled aluminum, graphics printed on fabric made from recycled yarn, and LEDs. The flooring is made of recycled rubber tires and packs into cases made of recycled plastic and filled with biodegradable



packing material.

**All Bamboo, All the Time**

Aptly named the Bambooth, this exhibit is about as Green as they come. Created for and sold by Green Events Source, this snazzy 10-by-10 features a bamboo frame, Eco-Resin panels, natural or no-VOC finishes, and graphics printed with vegetable-based inks.



**Eco-Logial**

Designed by Eco-Systems Sustainable Exhibits Inc., this booth for Clothing Matters features eco-friendly graphics made with water-based ink and Paradise Fabric using 100-percent recycled content. The booth also includes a dressing room where attendees can try on the exhibitor’s natural-fiber fabrics.

## AVOIDING AN ECO BLUNDER



No one wants to be labeled as a Greenwasher. But how can you promote

your Greenness without suffering the potential consequences? The following tips will help you proactively prepare for jaded journalists.

### 1. Avoid overstating your

**Green claims.** A hybrid vehicle might be less harmful to the environment than a gas-guzzling Hummer, but calling it carbon neutral is an outright lie. When publicizing your Green efforts, opt instead for messages that promote your eco-friendly actions as comparably Greener than traditional alternatives.

### 2. Be wary of one-and-done

**efforts.** It's OK to acknowledge how far you've come in your attempt to go Green, but be sure to let attendees and the press know that it's just the beginning. You're far less likely to be labeled a Greenwasher if you are honest about what you've done thus far, and make a commitment to doing more in the future.

### 3. Prepare to answer the tough questions.

If you're going to tout your eco-friendly exhibit, be sure you're ready for the questions that kind of claim might elicit. You don't need to have a Green answer for everything, but be prepared to address some of the non-Green components of your company's exhibit or practices in case a reporter digs up some skeletons in your company's carbon closet.

gesture. Wanting to send an eco-friendly message to all attendees, it particularly wanted to address the under-40 demographic with its Green-leaning preferences. Dentsply wanted to grab younger clients and cement a business relationship it hoped would last longer than a temporary filling by demonstrating it cares about environmental issues — a

#### FAST FACT

Using recycled aluminum eliminates the mining, refining, and reduction processes.

unique attribute, given that a third of the toxic mercury in wastewater comes from dentists' offices.

"Dentsply wanted to show young dentists that it is aware of today's issues and that 'this is not your father's tooth implant,'" says Kent Jones, senior vice president at 3D Exhibits Inc. in Elk Grove Village, IL, which built the company's exhibit.

It was a canny play to a younger generation for which a pro-Green stance is common. For example, an ABC News/Washington Post/Stanford poll in 2007 found that adults younger than 40 were 25 percent more likely than those over 40 to think that global warming will be a very serious problem, and more than 20 percent more likely than their older cohorts to think global warming actually can be addressed through concrete actions. With

well over a third of American dentists below the age of 44, Dentsply's strategy was sure to resonate with the company's target audience among the show's 34,500 attendees.

### Crowning Glory

Dentsply's old booth was about as attractive as bridgework done in Eastern Europe. Ten years old and a mash up of pieces kluged together, "The booth was a modified portable exhibit littered with product brochures," Jones says. With the 2008 redesign, Dentsply had a booth that gleamed like bleached bicuspid.

The materials in its new exhibit adhered to the standards set by the federal government's Leadership in Energy and Environmental Design (LEED) program. Establishing an independent authentication of the

booth's eco-friendliness was a pre-emptive promotional tactic, since 90 percent of those polled in a 2008 Boston College's Center for Corporate Citizenship Survey said they believed that any company that makes Green claims has to prove those claims are legitimate.

The resulting exhibit consisted of 12 island-like stations called "pods," representing the company's eight divisions. The wood used for the pods — and the exhibit's shipping crates — was FSC certified. For the pods' goal-post-like uprights, Dentsply used recycled aluminum, which eliminates the mining, refining, and reduction processes. The aluminum was also powder-coated, avoiding the use of oil-based paints, which might contain VOCs.

Because of the pods' portable nature, Dentsply can ship as many of them as it needs to any given show, as opposed to the old configuration, which forced them to ship the whole booth to every venue no matter if it was one or all eight divisions exhibiting. "In the end, Dentsply saves in shipping costs and in greenhouse gas emissions," Jones says.

Other exhibit elements, including countertops, kick plates, and display-case backs, were made of Marmoleum, a natural material blended from linseed oil, wood flour,



The Marmoleum, recycled aluminum, and FSC-certified wood in Dentsply International Inc.'s new exhibit adheres to USGBC LEED standards.



Dentsply's exhibit consists of 12 island-like pods, allowing the company to ship as many — or as few — of the pods to any given show as needed, thus reducing CO<sub>2</sub> emissions.

resin binders, and dry pigments, then laid onto a natural jute backing. With a life span estimated at 40 years, the durable Marmoleum doesn't have to be discarded anytime soon, either, saving on waste products and therefore energy consumed. (And when Dentsply does toss it, the hypoallergenic material

**FAST FACT**

Marmoleum is a durable, natural material made from linseed oil, wood flour, and resin binders.

will safely biodegrade back into the ecosystem.)

A low-voltage lighting system and fluorescent fixtures in the headers consumed approximately half the energy of the previous booth's lighting and focused theatrical-style illumination on each of Dentsply's portable product displays. Finally, the exhibit's carpet was partly manufactured from recycled plastic bottles: Its 1,167 square yards represented 5,251 pounds of bottles and

carpet not dumped into landfills, and an energy savings of 513 gallons of oil that didn't have to be spent in manufacturing new rugs.

**The Tooth Will Out**

Due to a combination of factors, Dentsply had virtually no time to toot its Green horn prior to the show, other than a general press release. Instead, the company printed "Certified Green" stickers and plastered them on each of the eight pods to reinforce the message that many of its Green efforts were validated by LEED government standards.

But Dentsply's plan to Green up its act didn't end with the exhibit. The company is evolving the booth by exploring ways to offset the carbon wasted in manufacturing shipping crates as well as shipping itself, proving once again that going Green is less like pulling teeth and more like straightening them: It takes time.

# Green Primer

The Sherwin-Williams Co. reduces its exhibit's carbon footprint by turning to sustainable materials.



The most popular color at The Sherwin-Williams Co. isn't Grape Mist or Cherries Jubilee. It's Green. For 142 years, the Cleveland-based coatings manufacturer for the commercial, industrial, and consumer markets has lived up to its slogan, Cover the Earth, by identifying markets for its products from railroad cars and farms to homes and stadiums. So when the company launched the earth-friendly GreenSure designation for its coatings that meet or exceed the standards set by the USGBC for LEED-certified buildings, it wasn't just varnishing its image; it was entering one of the hottest market segments in the \$20 billion paint and coating industry. In fact, the demand for eco-friendly paint is spreading so fast that according to

Green Seal, a Washington, DC-based nonprofit group that certifies products and services, the number of Green paints has more than doubled in the past four years.

But while Sherwin-Williams was Greening its products, the coatings manufacturer painted itself into a corner with its old 20-by-20-foot exhibit. "Sherwin-Williams has zero- and low-VOC paints, its GreenSure designation, and many Green Initiatives, but it didn't have a booth that could promote that," says Tresa Makowski, the company's director of trade communications.

The exhibit's three towers, made from Plyboo, were assembled with mechanical fasteners made of recycled plastic and aluminum.



PHOTO: OPUS DESIGN INC.

"Since our exhibit messaging is targeted to the building and construction industries that are building Green, it seemed like the perfect opportunity to 'build Green' ourselves," she says, adding, "We looked at the old exhibit and said 'How can we do this better?'"

Working with Opus Design Inc. a division of Gallo Display Inc., both of

The company also swapped out ecologically unfriendly elements for Greener alternatives. For example, in place of plywood for the counters and towers, the new booth used Plyboo. Instead of laminate for the counters, it employed Paperstone, a material made of 100-percent post-consumer waste paper and petroleum-free resin. The

**FAST FACT**

Soy-based ink can be removed quicker than petroleum-based ink, and biodegrades four times as thoroughly.

to be. So, to promote the exhibit's and Sherwin-Williams' eco-friendliness at its debut at the American Institute of Architects (AIA) National Convention and Design Exposition in Boston last May, the company

in weight would have meant a corresponding increase in the amount of CO<sub>2</sub> emitted when Sherwin-Williams shipped the booth.

Additionally, instead of shipping the exhibit back to Cleveland after each of the four shows Sherwin-Williams plans to exhibit at this year, the company will store the exhibit in the host-city show contractor's



**To communicate its move toward Greener exhibiting practices, The Sherwin-Williams Co. placed signs throughout its booth that outlined the exhibit's eco-friendly materials.**

**Rather than using conventional plywood for the counter tops and towers in its exhibit, the company opted for Plyboo, a more sustainable alternative derived from bamboo.**

**In lieu of synthetic carpet, the exhibit's floor was covered using polyethylene terephthalate (PET) recycled carpet, made from reclaimed plastic bottles.**

**Instead of transporting its exhibit property back to Cleveland after each trade show, Sherwin-Williams stores its booth at a warehouse in the show's host city.**

Cleveland, Sherwin-Williams decided on a 20-by-20-foot island booth that was as simple as a primary color. Opus purchased most materials for it locally to reduce greenhouse gas emissions from shipping, then integrated them into a design that went beyond the usual Green elements. For example, Sherwin-Williams used mechanical fasteners on the three tower-like product stations made of recycled plastic and aluminum — a move that allowed the company to nearly eliminate welding, which produces gases such as carbon dioxide.

flooring was a polyethylene terephthalate (PET) recycled carpet made of yarn created from reclaimed soda bottles. Graphics were printed on Green fabrics and Plyboo panels with a soy-based ink,

**FAST FACT**

The demand for eco-friendly paint is spreading so fast that the number of Green paints has more than doubled in four years.

which makes paper recycling easier because soy ink can be removed quicker than regular petroleum-based ink, and biodegrades four times as thoroughly.

In the end, though, you are only as Green as your audience perceives you

positioned lime-green signs on each station explaining the ways it reduced the booth's carbon footprint. Staffers also emphasized the booth's Green features by infusing its eco-friendly attributes into conversations with attendees.

Finally, in a behind-the-scenes move that was among the most eco-friendly of them all, Sherwin-Williams chose to pad wrap its exhibit components rather than build seven standard wood crates, which Opus estimates would have added as much as 2,100 pounds to the 5,000-pound booth. The nearly 40-percent increase

warehouse or its transportation company's closest facility and then transport it directly from show to show. Based on the Greenhouse Gas Protocol formulas from the World Resources Institute and the World Business Council for Sustainable Development, by the time it concludes its exhibiting schedule for 2008, that tactic will have prevented an estimated 5,529 pounds of greenhouse gases from fouling the air, proving that what Sherwin-Williams did to Green its booth was much more than just a pigment of its imagination.

# You Want a Piece of Me?

To stand out from the crowd, Syracuse Center of Excellence in Environmental and Energy Systems lets attendees take its booth apart — literally.

Few organizations would be willing to risk their exhibit-marketing budgets on a house of cards, but that's exactly what the Syracuse Center of Excellence in Environmental and Energy Systems (Syracuse CoE) did at the 2007 Greenbuild International Conference and Expo in Chicago. A community of more than 200 businesses and institutions in central

upstate New York that fosters sustainable innovations in environmental and energy systems, buildings, and urban environments, Syracuse CoE was asked by one of its partners, National Grid, an electricity provider, to use Greenbuild to brand the central upstate region as a flourishing habitat for businesses that wanted to go Green. But there was just one problem: The

organization itself was, well, green when it came to Green exhibiting.

Even though it had exhibited at the 2006 Greenbuild show, the 10-by-10-foot exhibit was about as Green — and as bland — as a slice of preservative-filled Wonder Bread. “We decided to get creative and make a radical departure from the previous year’s booth,” says Martin Walls, the communications manager for Syracuse CoE.

When Walls began searching for a replacement, he did what all good businesspeople do when they want to think outside the box: He Googled like a high-school student with a term paper due the next day. “We searched for sustainable exhibits and didn’t

find anything,” he says, reflecting an experience common to exhibitors who try to find Green alternatives. After all, according to

**FAST FACT**  
Exhibitors claim the second largest obstacle to Greening their exhibits, behind price, is a lack of available alternatives.

“An Inconvenient Booth,” exhibitors claim the second largest obstacle to Greening their exhibits, behind price, is a lack of available alternatives.

Eventually, Walls’ quest turned up a company in Michigan that could have built a Green exhibit; however, this particular solution would have just created another problem. “Building it in Michigan, then shipping it to Chicago

**Portable modular takes on new meaning for Syracuse Center of Excellence in Environmental and Energy Systems, which enlisted the help of design students to create an exhibit comprised of recycled cardboard cards.**



## MOTHER NATURE'S HIT LIST



Do you know which exhibit materials are the worst eco-offenders, and do you know why they're on Mother Nature's hit list? Tim Morris, president of Grand Rapids, MI based Eco-Systems Sustainable Exhibits Inc., exposes four of the most eco-unfriendly materials widely used in the exhibit industry. While you might not be able to eliminate all of these troublemakers immediately, simply removing one of these eco-villains is a good first step in the right direction.

**1. Polyvinyl Chloride (PVC)** — Typically found in exhibit graphics and wall structures, PVC is often sold under the brand name Sintra. Simply manufacturing this thermoplastic polymer creates and releases the toxic chemical dioxin. Plus, PVC is not biodegradable, and it can leak harmful additives into the air or ground when it's burned or buried. Morris urges exhibitors to eliminate PVC entirely, replacing it with a similar material such as ReCo. At the very least, keep PVC use to a bare minimum and reuse and recycle as much of it as possible.

**2. Particle Board** — Most particle board, fiberboard, and plywood products that use glue as part of their manufacturing processes likely contain and release urea formaldehyde, a VOC classified by the EPA as a Probable Human Carcinogen. These products are often covered with laminates, which provide a barrier preventing the material from off gassing. However, the formaldehyde still escapes from unfinished surfaces and edges. "Plus, as the materials biodegrade, they produce methane gas, which is 10 times more potent than your typical greenhouse gas in terms of the amount of damage it does to the environment," Morris says. He suggests coating all of these surfaces with a low-VOC sealant, such as AFM Safe Seal, or better yet, replace these products with formaldehyde-free pressed wood or MDF certified by the FSC.

**3. Adhesives** — Just about every exhibit is manufactured using some type of adhesive. While water-based glue generally isn't a problem, petroleum- or solvent-based adhesives emit a high level of VOCs, which cause various health issues. Morris proposes you request that your exhibit house use no- or low-VOC adhesives, which tend to be of the water-based variety, such as Eco-Bond, Adhesin, or even Elmer's Carpenter's Glue.

**4. Synthetic Carpet** — Petroleum-based carpet is a toxic soup of sorts, as toxins can be found in everything from its dyes and backing glues to its stain-resistant treatments. Plus, almost all synthetic carpet takes roughly 100 years to degrade. And given the enormous amount of carpet the industry uses, Morris asserts that use of synthetic exhibit carpet is one of the industry's biggest environmental sins. He suggests pairing the convention-center concrete with a few throw rugs in your exhibit, or using products such as cork, sisal, or sea-grass mats that biodegrade faster and contain fewer toxins than traditional carpet.

for Greenbuild, then back to Michigan, and all over the country for any other shows if and when we reused it wouldn't be very sustainable," Walls says, especially with current estimates that transportation and logistics can account for up to 75 percent of a company's carbon footprint. In fact, based on EPA estimates, just the round trip for a fully loaded tractor-trailer from Detroit to Chicago and back would spew about 6,922 pounds of CO<sub>2</sub> emissions into the air, or about 15.7 percent of what the average U.S. household produces in an entire year.

But in his quest for a newer, Greener property, Walls knew he had to find a suitable home for his existing one. So, practicing what it preaches, Syracuse CoE put its old vinyl-and-steel booth to use as an

**FAST FACT**

Transportation and logistics can account for up to 75 percent of a company's carbon footprint.

exhibit on sustainability in Syracuse's Carousel Center mall instead of tossing it into a landfill. What's more, Syracuse plans to repurpose the old exhibit's steel frame for future use.

**Class Act**

With the clock ticking and his choices dwindling, Walls had one of those eureka moments when the LED light bulb goes off over your head. Since education is one of the pillars of the sustainability movement,



Chairs in the booth were made of a bamboo and soy-bean resin composite, and topped off with old T-shirts.

thought Walls, why not use students to design and fabricate a sustainable exhibit?

Walls and colleague Sara Pesek approached the Industrial and Interaction Design department at Syracuse University's College of Visual and Performing Arts, where he asked program coordinator Donald Carr if his fourth-year students (who typically are assigned a major design project in that year) might be interested in taking the exhibit on as their project. Intrigued by the proposal, Carr hand-picked five charges that took up the challenge with the determination and creativity of Harold and Kumar going to White Castle.

The team researched Green materials such as Plyboo and Kirei Board (made from sorghum stalks that remain after the plant is harvested). They also contacted a Chicago exhibit house to see if they could use leftover parts from any used exhibits

they were dismantling, since they considered constructing a booth out of existing materials they could re-purpose. But after much discussion, none of the ideas seemed daring enough — or practical, given the six-week lead time Walls and Pesek had given them.

Ultimately, what Carr and his students created stood out at Greenbuild like an Amish farmer at the International Consumer Electronics Show: A 20-by-20-foot exhibit with 10-foot walls made of 16-by-9-inch die-cut cardboard cards with slots cut into them so they could be fitted together into a Jenga tower-like house of cards.

#### It's in the Cards

Made from recycled cardboard by a Chicago printer, the 1,500 cards were more than an unexpected solution to the Green-exhibiting challenge. Printed with the organization's logo in environmentally safe ink on one side and information about the group on the other, the cards did triple duty as giveaways, informative promotional literature, and a quasi-experiential activity

whereby attendees slowly but surely dismantled the booth over the four-day show.

As the attendees walked away with the oversized cards, the exhibit's shrinking profile triggered even more passersby to stop in. "We encouraged people to take cards away with them," Walls says. "We didn't want to ship anything back to Syracuse."

But the cardboard walls were only one element of the booth's sustainability.



The 1,500 16-by-9-inch die-cut recycled cardboard cards in Syracuse CoE's exhibit doubled as a giveaway and contained the organization's logo along with information about the group.

The floor visitors stepped on was made of Flor, a modular carpet tile from Interface Flor Inc., another Greenbuild exhibitor. Made of 80-percent post-consumer fibers, the flooring was later donated by Syracuse CoE to the South Chicago

Chamber of Commerce, which installed it in a community center. The booth's four chairs, coffee table, and four light boxes were made from bamboo and soybean resin composite, while the chairs' cushions were made of T-shirts purchased at — and later returned to — the Salvation Army. Information about Syracuse CoE in the 12-by-8-inch light boxes was illumined by LEDs and

food co-op powered by a coal-burning plant. "Most trade shows are a mass of PCs and flat-screen TVs sucking energy," Walls

#### FAST FACT

Kirei board is made from stalks of the sorghum plant left over after it's harvested, then mixed with nontoxic adhesives.

says. "That's not very sustainable." So Syracuse CoE eschewed most lighting, preferring to bask in the glow of the exhibit hall's lights themselves. But it still needed to power the bulbs in the four light boxes featuring information on the organizations, so Carr and company developed a special in-house energy source that also became an in-booth activity.

One of Carr's students found instructions on a Web site for turning a bicycle into a power generator. While one bike wouldn't have been enough to energize a normal assortment of lights for the booth — Carr estimates it would have taken five people on five bikes cycling continually to accomplish that — the pedal-pushing idea could generate enough juice to illumine the LEDs and the

compact fluorescent light bulbs (CFLs), which burn approximately 80 percent less energy than incandescent bulbs and can last up to 15 to 30 times longer.

Still, a Green booth with a non-Green energy source is like an organic

### GREEN LIGHT



Every time you switch on an incandescent bulb, you're using the same energy-inefficient device Thomas Edison introduced in 1878. Flash forward to 2008, exhibitors have two main options for Greener lighting: light-emitting diodes (LEDs) and compact fluorescent lights (CFLs).

► **LEDs are 100 percent efficient.** They turn 100 percent of the energy they use into light, while incandescent bulbs convert just five

percent. A 7-watt LED generates about as much light as a 40-watt incandescent. LEDs also last as long as 35,000 to 50,000 hours, or about 17.5 to 50 times longer than incandescents.

► **CFLs are 20 percent efficient.** A 10-watt CFL emits nearly as much light as a 40-watt incandescent. CFLs may last 30,000 hours, or 15 to 30 times as long as incandescents. And while CFLs contain mercury, their energy efficiency means less of the toxin is created by power plants, translating to a 70-percent reduction in the amount of mercury that enters the eco-system compared to incandescent bulbs.

CFLs inside the light boxes. The stationary bike was a graphic demonstration of Syracuse CoE's commitment and ingenuity — and a tool for breaking the ice between staff and attendees. "It was like the old country fair, where people competed to see who could swing the mallet hard enough to hit the bell," Walls says. During the five hours the booth was open each day, there was rarely a moment when the bicycle seat wasn't filled by an attendee pedaling away and powering the lights.

As the exhibit shrunk and the Greenbuild attendees carried it away, piece by piece, it became clear the

Just as important, the booth left a minimal ecological footprint. Visitors generated the booth's electricity. Syracuse CoE donated the carpet tile. Walls ordered just 600 copies of the handout from Collaborating for a Sustainable Future (which used recycled paper printed with soy ink, of course), guessing correctly that he would run out before the show was over and not have to ship any of them home. And Syracuse CoE's booth visitors took the booth walls home with them.

Syracuse CoE shipped just three pallets to the show, half the number it



**Booth visitors were invited to climb on a stationary bike and pedal away, providing energy to power the exhibit's lighting.**

booth's plain-brown-wrapping simplicity and novelty had made it a media and crowd favorite. Hoping to be mentioned in one or two stories in major news outlets, Syracuse CoE received coverage by the Chicago Sun-Times, Syracuse's Post-Standard, MSNBC, the BBC, and China's Xinhua News agency.

used in 2006, despite the fact the 2007 booth was four times larger. It shipped only one back, putting the leftover cards to good use as packing material in and around the sole pallet. Sustainable and successful, the Syracuse CoE booth proved that sometimes, getting taken apart by your customers is a good thing.

# Reuse as Directed

Northrop Grumman Corp. battles a besieged trade show budget by reusing its booth components for nearly 20 years.

**B**ack in the 1980s when the Cold War was still hot, the money flowed freely for defense contractors such as Los Angeles-based Northrop Grumman Corp. In fact, over a five-year span in that decade, the United States lavished \$1.6 trillion on its defense budget. But when the Soviet Union imploded in 1989, the big bucks disappeared.

The war game might have been called on account of peace, but the company still had to attend as many as 200 shows a year with booths ranging in size from 40-by-50 feet to small island and peninsula exhibits. Complicating the challenges of a slimmed-down exhibiting budget even more was the fact that an estimated 95 percent of the shows were held in nonconventional venues with varying ceiling heights and changing pillar placements, such as hotels and military bases, that made it difficult to stick with one or two configurations.

The solution, then, was to look back to the way the United States went Green during another war — World War II, when raw materials were scarce, and industry reused about 25 percent of



its waste, according to the National Recycling Coalition. Or as the ubiquitous 1940s wartime slogan put it, "Use It Up, Wear It Out, Make It Do, or Do Without!"

## Coming Full Circle

For almost 20 years now, Northrop Grumman has been using up its old exhibits and making do. It assembles the structures from an armada of components including wall panels, cabinets, reception counters, and stem lights.

Instead of simply throwing out its exhibit every three to five years as is common in the industry, and adding to



the 251 million tons of waste generated annually, according to the EPA, the company holds on to the parts, then mixes and matches them to create the best fit for the show in question. It also pad wraps the panels to avoid using bulky wooden shipping crates that can weigh 150 to 200 pounds apiece. By doing that, the company prevents roughly 8 pounds of greenhouse gases for every 500 pounds trucked 100 miles, according to the Greenhouse Gas Protocol developed by the World Resources Institute and the World Business Council for Sustainable Development. Rolling up as much as 25,000 miles a year on the road, that means the company is preventing 6,420 pounds of greenhouse gases from polluting the air.

The Greenest part of the exhibit, though, happens to be the oldest: the wall panels. Ranging in size from 4-by-8 feet to 18-by-10 feet, the approximately 250 panels are made of one-quarter-inch birch-veneered plywood

over ribs of a multi-laminate material. The panels have been reused so many times — about 25 percent date back as far as the 1980s and early '90s — that some have wads of stickers 30 deep from the shows they've been shipped to. While not technically sustainable, the panels' number and diversity allow the company to put together its exhibits in a variety of sizes and configurations. By replacing them rarely, little carbon or other natural

**FAST FACT**

According to the EPA, the United States generates 251 million tons of waste each year.

resources are expended in creating new panels.

After 20 years, age and use eventually catches up with the panels, so Northrop Grumman is slowly replacing the old panels with ones made from FSC-certified plywood, and freshening the more senior panels with coats of low-VOC paint.

But simply reusing its plywood panels isn't the

only sustainable step the company has taken. Instead of super-size graphics whose weight and bulk would only cause trucks to spew more CO<sub>2</sub> into the air during shipping, Northrop Grumman has turned to smaller, lighter, digitally printed graphics. LEDs have taken the place of most energy-gobbling halogens, which have an average lifespan of 3,000 hours compared to 30,000 to 50,000 hours for LEDs. And while the company won't be purchasing new carpet until later this year, it plans to buy a carbon-neutral variety, which means that it will have zero net greenhouse gases emitted during its entire life cycle from manufacture to recycling.

By recycling, reducing, and reusing everything it can, Northrop Grumman's eco-friendly attitude proves that sometimes going Green is less about transitioning to new materials than it is about reusing materials that already exist.

**ONLINE RESOURCES**



For the latest Green news and eco advances, check out a few of the following

Web sites. And don't forget to visit [www.GreenExhibiting.com](http://www.GreenExhibiting.com) for Green articles, resources, products, and services specific to the exhibiting industry.

► **Greenwire**

[www.eenews.net/gw](http://www.eenews.net/gw)  
Greenwire is Ground Zero for energy- and environmental-policy news coming out of Capitol Hill, the 50 states, and the international community.

► **Treehugger.com**

[www.treehugger.com](http://www.treehugger.com)  
TreeHugger offers step-by-step how-to info on Greening your lighting, electricity, water, and clothes, as well as a buyer's guide for Green furniture.

► **Healthy Building Network**

[www.healthybuilding.net](http://www.healthybuilding.net)  
Everything you need to know about what you should avoid putting in your booth, from PVC plastic to pressure-treated wood, and anything with formaldehyde. The site's section on life-cycle analysis will explain the virtues and drawbacks of current tools for measuring a material's overall impact on the environment.

► **GreenBiz.com**

[www.greenbiz.com](http://www.greenbiz.com)  
Even in Green, the bottom line has to be black. GreenBiz.com zeroes in on how companies are adapting to the growing demand for Greener products and services, and how they leverage any success meeting those needs into their branding.



**Northrop Grumman Corp. reuses its plywood panels, some of which date back to the '80s and '90s, to construct custom exhibits to fit a variety of booth spaces.**

PHOTO: COURTESY OF NORTHROP GRUMMAN CORP.