

**Social Responsibility**

# Sourcing Green in the Supply Chain

**With a greater focus on the air we breathe, the water we drink and the land we manage, organizations will have more responsibility to monitor how their operations affect the environment.**

By John Yuva

It's visible along street corners, with vehicles on the road and in organizations across the country, as more steps are being taken to be environmentally responsible. Whether it's recycling, carpooling or telecommuting, there's a greater focus on environmental awareness. In the fourth article of ISM's *Principles of Social Responsibility* series, three elements will be explored that embody the *Principle of environment*:

1. Encourage your own organization and others to be proactive in examining opportunities to be environmentally responsible within their supply chains either "upstream" or "downstream."
2. Encourage the environmental responsibility of your suppliers.
3. Encourage the development and diffusion of environmentally friendly practices and products throughout your organization.

ISM and supply management organizations are working diligently to improve the environment in which we live and work. In fact, Craig R. Carter, Ph.D., assistant professor of supply chain management in the College of Business Administration at the University of Nevada in Reno, and a member of ISM's Social Responsibility Committee, says that there are several benefits to supply management executives in viewing and managing ISM *Principles* within a broader framework of social responsibility. The lessons learned regarding the drivers, barriers and work-arounds of one *Principle* often apply to other *Principles*.

A more environmentally proactive stance is often viewed positively by other stakeholders, including customers and shareholders. "Environmentally responsible firms may be able to charge a premium for their products, and have stocks that can outperform less environmentally friendly firms, particularly if environmental initiatives are undertaken in a strategic manner," he explains.

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Just how many organizations are involved with environmental initiatives? ISM's baseline study revealed that of the organizations that responded, 51 percent have a written policy for employees, while 40 percent have a written policy for suppliers. There is a myriad of opportunities for employees and corporations to make a difference in the environment, from in-house recycling or Adopt-A-Highway to more comprehensive programs like those created by MBDC and the American Chemistry Council (ACC). For example, the ACC's Responsible Care program is voluntary and aims to "achieve improvements in environmental, health and safety performance beyond levels required by the U.S. government." MBDC's Cradle



to Cradle Design concept "nurtures a company's relationship with its customers by helping clients design products that can be perpetually recycled and 'reincarnated,' leased again and again to a customer base."

Regardless of the industry, corporations have an opportunity to impact the environment through waste, air, water and land management initiatives. By examining the environmental programs of Office Depot and UPS, organizations can see firsthand how the three elements of the environment *Principle* are implemented and achieved.

## Element One

**Encourage your own organization and others to be proactive in examining opportunities to be environmentally responsible within their supply chains either "upstream" or "downstream."**

Environmental stewardship starts with supply managers who can begin an initiative internally and work toward moving programs to suppliers and customers. Kevin J. Williams, C.P.M., manager, technology solutions for American Express Corporate Services in Hebron, Connecticut, and a member of ISM's Social Responsibility Committee, says that when assessing impacts on the unique resources available to supply managers and organizations, it stands to reason that business can make far more impact with a single decision than individuals can. "In supply management, we can increase the impact exponentially by ensuring that our suppliers are adopting and supporting environmentally sound practices," he says. "The results are not only a better planet to live on, but potentially increasing employment and reducing costs."

Located in Delray Beach, Florida, Office Depot operates 900 retail stores in North America. As a major retailer of office products, the company is built on values and commitments, including those related to good citizenship, positive social impact and environmental stewardship. Tyler Elm, director of environmental affairs, says that not only are these values an integral part of the company's cultural fabric, but it's good business as well. How has Office Depot been environmentally proactive?

One successful program is its recycling of ink and toner cartridges. In 2003, when customers dropped off their empty ink and toner cartridges for recycling, they received a free ream of paper. Elm highlights the benefits/rewards of this program:

- The company collected about 4.5 million ink and toner cartridges (3.5 million ink cartridges and just over 1 million laser cartridges).
- Approximately 1.3 million British thermal units (Btu) of processed energy was conserved (i.e., the energy required to manufacture the plastic cartridges).
- More than 600,000 Btu of embedded energy was conserved (i.e., the oil and natural gas resources embedded within the cartridges' styrene resin shell).
- Of the embedded energy conserved, the approximately 615,000 gallons of fuel would fuel the average mid-size car for nearly 17 million miles.



By Jason Steed

## In Brief: The Environment Principle

This is the fourth in a series of seven articles detailing ISM's *Principles of Social Responsibility*. The *Principles* are the result of an ISM initiative to promote excellence in social responsibility, assisting in the implementation and continuous improvement of supply management organizations and professionals.

Social responsibility is defined as a framework of measurable corporate policies and procedures and resulting behavior designed to benefit the workplace and by extension, the individual, the organization and the community.

This month's article details the *Principle of environment*; ISM encourages professionals to:

1. Encourage your own organization and others to be proactive in examining opportunities to be environmentally responsible within their supply chains either "upstream" or "downstream."
2. Encourage the environmental responsibility of your suppliers.
3. Encourage the development and diffusion of environmentally friendly practices and products throughout your organization.

In addition to a broad set of audit questions pertaining to social responsibility behavior, the following questions related specifically to environment can be used by an organization to determine if it is moving forward, aspiring to industry best practices and seeking information from others.

1. Is your organization environmentally responsible? What specific programs and procedures are in place?
2. Does your organization recycle? What percentage of disposable waste is recycled? What does your organization do to reduce the volume of waste created that must then be recycled?
3. How does your organization comply with laws and regulations in the handling of hazardous waste?
4. How does your organization report its environmental results?
5. How does your organization continue to learn what it needs to know about environmental and waste issues?
6. Does your organization collect copies of suppliers' environmental plans? Are the plans of suppliers assessed and approved by your supply organization?
7. Does your organization work with engineering in the design of products for disassembly, reuse and recycling?

**Source:** ISM *Principles of Social Responsibility*

Equally impressive results are present in the hydrogen fuel cell project for Atlanta-based UPS. Robert Hall, UPS fleet environmental manager, says the hydrogen fuel cell initiative is part of UPS' overall sustainable business objective. "At UPS, we believe our business success depends upon balancing economic, social and environmental objectives," he says. With more than 88,000 vehicles, 2,850 facilities and as the world's 11th-largest airline, UPS faces significant challenges to reduce its environmental impact. Hall says that to address those challenges, the company is working to advance new industry technologies to reduce emissions and conserve energy. The fuel cell project is an example of this effort. ►

The mission behind UPS' hydrogen fuel cell initiative is threefold, says Hall. First, with more than 88,000 vehicles on the road, UPS has the responsibility to conduct its business in a way that minimizes its environmental impact. He says the company takes this responsibility very seriously and it has identified specific environmental goals. "Our goals include continually seeking out and testing alternative fuel technologies, such as hydrogen fuel cell vehicles, that reduce emissions produced by our fleet," explains Hall. "By learning more about these technologies, we are able to continuously improve our fleet and reduce our impact on the environment."

Second, deploying alternative fuel cell vehicles and improving fuel efficiency in UPS' diesel/gasoline fleet helps it reduce dependence on fossil fuels and better manage its overall fuel costs. Hall says this combination directly affects the company's bottomline. "Historically, UPS' fuel cost averages 3-4 percent of revenues, so it makes good business sense to position ourselves to take advantage of new fuel technologies," he explains. "UPS has also implemented advanced operational technologies that improve efficiencies in our facilities and reduce the number of miles traveled by our vehicles." Hall adds that in late 2003, the company unveiled a new operational system called package flow technology that is expected to reduce mileage by more than 100 million miles each year, saving UPS nearly 14 million gallons of fuel when fully deployed.

Third, as a leader in the transportation industry, UPS is uniquely positioned to advocate for new technologies. Hall says that by becoming a leader in the charge to test and deploy alternative fuel technologies, UPS will help drive down costs, making it possible for other companies (and individuals) to afford the technology and reduce their impact on the environment. "From the deployment of a small fuel cell car just over a year ago, to the deployment of the nation's first medium-duty fuel cell-powered delivery vehicle in August 2004, UPS has already made significant progress," he says. "We plan to continue the rapid application of this technology and our hope is that in the near future, we can deploy zero-emission engines across our entire fleet."

## Element Two

### Encourage the environmental responsibility of your suppliers.

The ultimate goal of the environment *Principle* should be to influence environmental awareness and practices from all suppliers, including those at the raw-material stage. Williams says that like any other initiative, supply managers must understand their supplier's/customer's key business drivers. From there, they can look to align the benefits of an environmental initiative with their overall mission and strategic goals. "By linking socially responsible practices to high-level goals, you can more easily attain executive sponsorship to start a new environmental program," he says.

In promoting its environmental guidelines, Office Depot instituted a paper procurement policy with 10 guiding principles designed for the company's stakeholders, customers, merchants and suppliers. The policy addresses three general areas: recycling and pollution reduction, responsible forest management and conservation, and issue and market development. "It's a very science-based policy

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that gives preference to suppliers that truly are engaged on the issues and provide products that are environmentally preferable," says Elm. For example, Office Depot uses environmentally preferable paper, meaning that it's paper made from recycled fiber. Thus, the company is engaged in using and making products with recycled content.

In a company-supplier partnership, Office Depot and HP teamed up for an electronics recycling program. As the industry's first nationwide free in-store drop-off electronics program, customers could bring their obsolete electronics to any U.S. Office Depot location over an eight-week period. The items were then placed in pallets and shipped back to one of two recycling facilities in the United States where they were shredded into pieces the size of a quarter. The raw materials were then separated based on various metal types and plastics, and recycled to make new products. "We're working with the EPA and some solid-waste authorities to look at the data we collected

for the possibility of designing an efficient and cost-effective, yet convenient approach for our customers to recycle their obsolete products on an ongoing basis," says Elm.

Within the eight-week period, customers responded to the eRecycle initiative:

- The company collected 11,487 pallets of obsolete electronics (this is equal to 441 truckloads).
- Nearly 325,000 products were collected, amounting to more than 10.5 million pounds.
- Monitors, in particular the cathode ray tube (CRT) monitors, were over 42 percent of the products received.
- Personal computers accounted for 24 percent.

UPS is also having success working with its suppliers on specific guidelines for the packaging that's produced. Hall says that in 1998, UPS partnered with the Alliance for Environmental Innovation to produce an action plan to help UPS dramatically reduce the amount of natural resources needed to make its express packaging. Feedback was solicited from UPS' packaging suppliers as part of the project. "As a result of this joint project, we were able to increase the use of post-consumer recycled materials by 22 percent, cut wastewater discharge by more than 15 percent and use 12 percent less energy compared to previous UPS packaging," he says. "Today, all UPS packaging suppliers must adhere to these environmental guidelines."

## Element Three

**Encourage the development and diffusion of environmentally friendly practices and products throughout your organization.** It can start with recycling bins throughout an organization and move into more strategic initiatives involving environmentally friendly products and services.

In March 2003, Office Depot implemented an expanded waste reduction and recycling program that targets about 80 percent of its waste stream at the company's global headquarters. Elm says the initiative targeted paper and cardboard (which accounts for 70-75 percent of the waste stream), as well as bottles, metal and plastic. "On average, we collected nearly 16,000 pounds of mixed





says. "Package flow technology is projected to save the company 14 million gallons of fuel and reduce CO<sub>2</sub> emissions by 130,000 metric tons annually."

## Influencing What Can't Be Controlled

Organizations are making great strides in instituting environmental policies internally and externally. However, despite this forward progress, some of the most challenging aspects of environmental stewardship are issues and practices that extend beyond organizations' immediate supply chain. For example, Elm says that with paper there are issues around forest management. Where is the wood fiber sourced and how are those lines managed? "Unlike recycling and controlling how much recycled content is in our paper products, we don't have direct control over how lands are managed," he says. "The conservation of forests and the biodiversity that they contain can have a substantial effect on our business, both positive and negative."

Elm adds, however, that while the company can't directly control these issues, it can influence them. In March of last year, the company launched the Forest and Biodiversity Conservation Alliance, a \$2.2 million, five-year strategy where Office Depot works with the conservation science community. Through the support of Conservation International, Nature Conserve and the Nature Conservancy, the company can address environmental issues that may be out of its immediate control, yet within its sphere of influence.

With a greater focus on the air we breathe, the water we drink and the land we manage, organizations will have more responsibility to monitor how their operations affect the environment. However, by examining their processes and being proactive in instituting environmental programs throughout the supply chain, everyone wins directly and indirectly. This is the potential of the *Principle of environment*. [ism](#)

Starting in March 2004, DaimlerChrysler provided an "F-Cell," a fuel cell-powered Mercedes-Benz A-Class car, which UPS modified for early-morning package deliveries in southeastern Michigan. The car is fueled daily at the EPA's hydrogen fueling station at its National Emissions Testing Laboratory in Ann Arbor.

paper per month and built a total of just over 190,000 pounds of mixed paper for 2003," he says. "With corrugated cardboard, we collected about 7,000 pounds per month on average, which yielded nearly 83,000 pounds of corrugated cardboard for the year."

Complementary recycling and waste reduction initiatives were also occurring during the same period:

- Insulated thermal mugs with the slogan "Earth Day Everyday" were distributed to all employees with the goal of reducing disposable waste.
- All nonrecyclable dishes and utensils in the corporate cafeteria (which services about 3,000 people) were replaced with those made of recyclable plastic.
- An Internet-based retail store portal and corporate intranet were established to allow employees access to information in new ways — eliminating paper-intensive reports and operational manuals.
- The company also established an online procedure that enables employees to receive their paycheck stubs without providing every person with a paper receipt.

UPS is developing environmentally friendly practices around its trucks and delivery routes. Hall says the company operates more than 1,800 alternative fuel vehicles in North America, including the largest fleet of compressed natural-gas delivery trucks in the United States. Other alternative fuel vehicles are powered by propane, liquefied natural gas, electric power, hybrid electric power and hydrogen fuel cells. "In 2003, our alternative fuel fleet traveled 13.4 million miles making deliveries to homes and businesses," he says.

To make this possible and complement UPS' environmental initiative, its entire delivery fleet is dispatched by its proprietary package flow technology, which is designed to improve customer service and provide greater internal efficiency. Hall explains that the new technology, a \$600 million upgrade, more completely automates two key processes: planning the daily delivery route and the process of actually loading each vehicle. "Testing and initial deployment suggest UPS can reduce the mileage driven by its delivery trucks by more than 100 million miles each year," he

## ISM's SR Web Site: [www.ism.ws/sr](http://www.ism.ws/sr)

ISM is committed to becoming the central repository of information in support of matters related to social responsibility in supply management. The following resources can be accessed through the ISM Web site at [www.ism.ws/sr](http://www.ism.ws/sr).

- *Principles of Social Responsibility*.
- The accompanying supply management audit for the social responsibility *Principles*.
- Links to other social responsibility related Web sites. For example, the environment Web sites include the Environmental Resource Center, the PEW Center, and the EPA: Federal Register Environmental Documents.
- Social responsibility articles and research.
- ISM's Committee on Social Responsibility.
- Ways you can foster social responsibility and show your support for the ISM *Principles*.