

strategy+business

Start with Sourcing by Martha Turner and Pat Houston

from **strategy+business** issue 51, Summer 2008

reprint number 08206



Procurement lies at the heart
of a successful green strategy.

START WITH SOURCING

by Martha Turner and
Pat Houston

Recently the senior vice president of supply chain management and sourcing at a global consumer packaged goods (CPG) company decided to look into procuring more environmentally responsible materials and packaging. He knew what he didn't want: a "green-washing" program with no strategic objectives, except the right to say that the company was reducing its carbon footprint. As with any other major initiative, he had a mandate from his executive team to create substantial benefit for the business, with a connection to a target market and a fundamental link to the brand proposition. Beyond that mandate, however, he was less certain. Having identified green sourcing as the right goal to pursue, what should he do next?

Today, organizations around the world are being compelled — by their employees, their customers, con-

sumers, and their supply chain partners — to undertake green initiatives. But although they are caught in a deluge of information and opinions about the importance of being green, they find much less reliable information and advice about the mechanics of beginning, let alone maintaining, an effective green shift in operations.

Although this particular senior vice president didn't know where to go, he was starting in a good place. Sourcing, having gained its credibility in the C-suite, lies at the nexus of a number of functions and business units, and is therefore in a position to influence action across an organization; it can be a strong leverage point for starting a green initiative. By working with senior leaders in other functions, sourcing executives enable a successful, holistic, multifunctional strategy for reducing environmental impact while cutting costs and building

Martha Turner

(martha.turner@booz.com) is a principal with Booz & Company in New York. With deep expertise in strategic sourcing, she specializes in improving operating efficiency and effectiveness for consumer packaged goods and media companies and leads the firm's work in green sourcing.

Pat Houston

(pat.houston@booz.com) is a vice president with Booz & Company in New York. He specializes in operational and organizational transformation, with particular emphasis on sourcing and supply chain initiatives in the consumer and media industries, and he leads Booz & Company's North American sourcing business.

Also contributing to this article was Booz & Company Associate Jodi Miller.

better relationships with suppliers and communities. They can do so by making gradual improvements and continually making the green initiative more relevant to the company's overall strategy.

A Clear Look at Green

Green sourcing is not a departure from the way sourcing is currently being practiced; it's an augmentation. When considering the trade-offs between one material, service, or supplier and another, the sourcing function has traditionally measured the value of each by analyzing either the economics of the deal or the deal's impact on the customer. Green sourcing starts with the same considerations, but it also takes into account the environmental impact of a particular choice, be it transportation, materials, energy source, or packaging design, on the ecological footprint made by a product or service.

It's essential that companies have a rigorous and carefully structured sourcing program in place before attempting a green sourcing initiative. It requires even deeper insight than does a traditional strategic sourcing program, because the choices among environmentally friendly products and services can be extremely complex, and thus a network of suppliers that can provide the necessary transparency is essential. To fully understand the trade-offs inherent in their choices, sourcing executives must be able to analyze the entire value chain of a product or service, in terms of both cost and environmental impact. In doing so, they can make certain that various components in that chain interact in a way that benefits the whole system.

The classic example of these value chain interdependencies is a 32-watt energy-efficient lightbulb that costs US\$6. It may appear more expensive than a 100-

watt bulb that is available for 75 cents, but the green bulb actually has a lower cost of ownership once other factors are taken into account. Its 10,000-hour life is 10 times longer than the life of the cheaper bulb — and it will burn only \$48 worth of electricity compared to \$150 worth for the conventional bulb. A shift in lightbulb supplies, however, may be worth making only when multiplied across a company's dozens of facilities around the world.

Today, such analyses can go far beyond lightbulbs; they can look at similar trade-offs among a wide range of materials and services, including renewable energy, janitorial supplies, packaging, and many aspects of building construction. Although not all of the analyses will yield the clear value proposition of the lightbulb example, they are worthy of closer examination.

This kind of careful scrutiny yields a significant advantage. When a company learns more about the impact of various choices throughout its value chain, it is better able to control and potentially reduce costs. Green sourcing has a number of other benefits as well. At an obvious level, it allows companies to capitalize on the growing awareness of green issues, helping them attract customers, motivate current employees, and recruit new employees. It enables companies to respond more effectively to regulation, or even to anticipate it. Finally, green sourcing allows companies to deliver on the promises made in corporate social responsibility (CSR) reports: According to the *Green Purchasing Report*, a 2007 study from the research firm eyeforprocurement, fulfilling the CSR mission was the primary reason that survey respondents pursued green sourcing initiatives.

Beyond those benefits, green sourcing encourages

the same kind of in-depth, widespread awareness of practices and processes that companies have gained from adopting Lean Six Sigma, process optimization, collaborative decision making, and other quality-oriented methods. Indeed, the potential of green sourcing today is reminiscent of the quality movement in the late 1980s, when that idea had just begun to mature. This was the era in which, following the lectures of W. Edwards Deming and the examples of the Toyota Motor Corporation and other Japanese manufacturers, companies began to systematically focus on eliminating waste and making operations more reliable. To accomplish these goals, they had to give up the idea that improving product quality was “overengineering,” and that better products cost more to produce. Instead, when production processes were understood and continuously improved, costs continually dropped. As an additional benefit, companies were able to tout the quality of their products to customers and back up the claims with hard evidence. Within a few years, in many companies, quality took its place alongside price and service to become the third full-fledged element of strategic sourcing. Today, thanks to changing circumstances and new enablers, environmental sustainability is poised to become an important fourth element.

Pressures and Enablers

Public opinion, government regulation, the competitive landscape, and investor interest are making it necessary for companies to develop a stand on green sourcing. The idea that the natural environment is declining at a dangerous rate is far more commonly accepted now than it was 10 or 15 years ago, and society at large is becoming more committed to sustainability — pushing individual

consumers to factor environmental considerations into their buying decisions.

Governments are also becoming more aggressive in requiring companies to make changes to their manufacturing processes. First, there are more regulations than ever, addressing issues such as mandated carbon trading schemes and cap and trade programs. Multinational companies, especially, are under pressure to somehow reconcile the varying standards among different countries and even among different regions in the same country. For instance, many countries in Europe are pushing companies to reduce carbon emissions and use more recyclable materials in their products. This leaves management with the conundrum of whether to align the whole company’s policies with the highest common denominator and bear the costs of setting stringent standards worldwide, or to deal with the complexity of a patchwork of standards in operations around the globe.

Second, governments are promoting green materials and services as buyers in their own right: Both the U.S. federal government and local governments have been leaders in the use of hybrid vehicles, the adoption of paper with a high percentage of postconsumer waste, and the construction of buildings certified by the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) program. The U.S. federal government, for example, has undertaken a multi-year renovation of the Pentagon that uses a great deal of recycled material, including more than 59,000 square feet of carpet tiles made from recycled material and 53,500 linear feet of recycled steel wall studs.

With consumer interest in green products on the rise, many investors are more attracted to green companies, as evidenced by the creation of the Dow Jones

Executives at one large consumer products company said they were committed to green initiatives, but they couldn't agree on what that meant.

Sustainability Indexes and its U.K. counterpart, the FTSE4Good Index Series, which track the performance of, respectively, sustainability-driven companies and companies meeting global CSR standards. Institutional funds that invest along social guidelines in Europe and the U.S. also appear to be encouraging more businesses to think about sustainability: In recent years, these funds have reached \$4 trillion in assets — enough to buy 91 percent of all outstanding Nasdaq stocks and more than enough to ensure that green stays at the top of every corporate agenda.

Meanwhile, as both internal and external pressures drive the need for change in sourcing practices, a number of elements are making such change more feasible. Foremost among these elements is the increasingly collaborative nature of supplier relationships. This allows more visibility into sourcing decisions and makes it easier to define mutually beneficial goals. For instance, DuPont Packaging and Industrial Polymers announced in 2007 that it was collaborating with Plantic Technologies Limited, an Australian bioplastics company, to develop polymers based on corn starches that could be used for cosmetics and food packaging and to market them under the DuPont Biomax brand. The partnership offered advantages to both companies: It broadened Plantic's market reach, and it brought DuPont closer to its goal of growing revenues from non-depletable resources to \$8 billion by 2015 — a goal that the company clearly states it can achieve only by supplementing its own research and development with that of strategic partners.

Another element making green sourcing more feasible is an increase in requests from the top. Procurement officers have been tasked by the C-suite

with investigating alternatives and weighing trade-offs among price, service, quality, and sustainability. For instance, they might be asked to determine whether the company can save costs by substituting tools and supplies that use energy and water more efficiently, have more recycled fiber, are built to last longer, or can be sourced somewhere nearer to where they are needed. Furthermore, because it influences 40 to 45 percent of the cost base of most companies — a percentage that is growing — sourcing is recognized as a strong potential agent of change. Sourcing's control over those expenditures today tends to be more comprehensive than it once was, since the sourcing function extends more and more to operations that touch every part of the company, including those areas not traditionally under the influence of procurement, such as marketing and professional services like the legal department. Sourcing is now recognized as a competitive tool to manage costs, services, and supplier relationships.

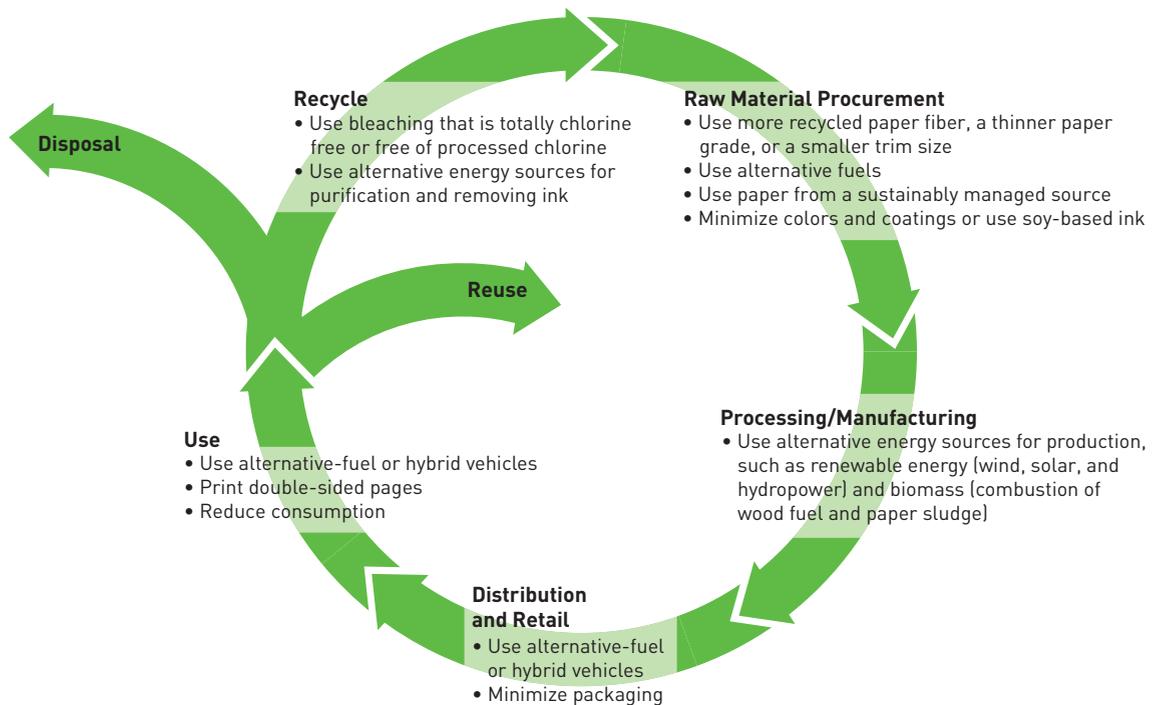
Finally, green sourcing is enabled by new technologies — including more efficient energy options, brighter LEDs, and transportation designed to burn cleaner fuels — and by new processes, thanks to computer models that help companies analyze options and trade-offs.

Justifying the Investment

Despite the pressing need for greener practices and the recent advances discussed above, good practices (let alone best practices) in green sourcing are not yet clearly defined, and there are still hurdles to overcome in creating those definitions. At one large CPG company, for instance, a number of executives stated that they are committed to green initiatives and sustainable sourcing — but they had trouble defining what that

Exhibit 1: Simplified Life-Cycle Analysis in Paper Production

Conducting a life-cycle analysis with a value chain perspective uncovers greener sourcing alternatives.



Source: Booz & Company

meant in terms of their day-to-day decision making. Green sourcing is still treated as an incremental part of the procurement function, rather than as a full-fledged dimension of strategic sourcing. According to the *Green Purchasing Report*, only 31 percent of 188 companies surveyed in a variety of industries were actively practicing green purchasing. Even some companies that have launched green sourcing initiatives have not tied them to one another, to goals at the business unit or brand

levels, or to the company's overall strategy.

Ultimately, no green initiative will succeed unless it has a proven value: better economics for the company, benefit to the customer, or a marketing advantage. To date, articulating this value has proven difficult. In terms of the bottom line, the costs and benefits of green sourcing have been diffuse and hard to quantify. As with quality, it has taken some time for green sourcing to move past its reputation as an expensive add-on valuable

3M's commitment to sustainable sourcing has reduced its emissions by 2.6 billion pounds and saved a total of \$1 billion.

only to companies that are willing to pay more to assuage their ecological concerns. Customers, for their part, will buy green products or services in numbers that justify the investment only when the seller can conclusively show the benefits — that fuel costs are lower, that the products will last longer, or that the use of the service will be more pleasant and less wasteful than any alternatives.

The fundamentals of green sourcing are similar to those of quality in three ways: approach to costs, brand appeal, and cross-functional insights into processes.

Approach to costs. Traditionally, sourcing has been pressured to cut costs rather than to consider the sustainability of materials and services. But the underlying goal of both quality and green sourcing is the same: to eliminate waste. In eliminating waste, sourcing organizations gain a way to look at value rather than costs, by taking into account the total cost of ownership. Quality required companies to give up the idea that better products cost more to produce and raise prices for consumers; green sourcing means giving up the idea that environmental quality costs more. Take, for example, the trade-off between petroleum-based and soy-based lubricants used for manufacturing. At first glance, petroleum seems the cheaper choice, at \$1,500 for an annual purchase of 300 gallons, compared to \$3,195 for soy. But petroleum has costs that are not immediately obvious: \$300 per year in waste costs, \$2,400 in costs for spill administration, \$1,000 in fees to minimize the waste from spills. When these factors are taken into account, the monetary cost of using petroleum-based lubricant for a year is \$5,200 — and that's not considering the less-quantifiable environmental cost of using a nonrenewable resource. With no such add-ons, soy is

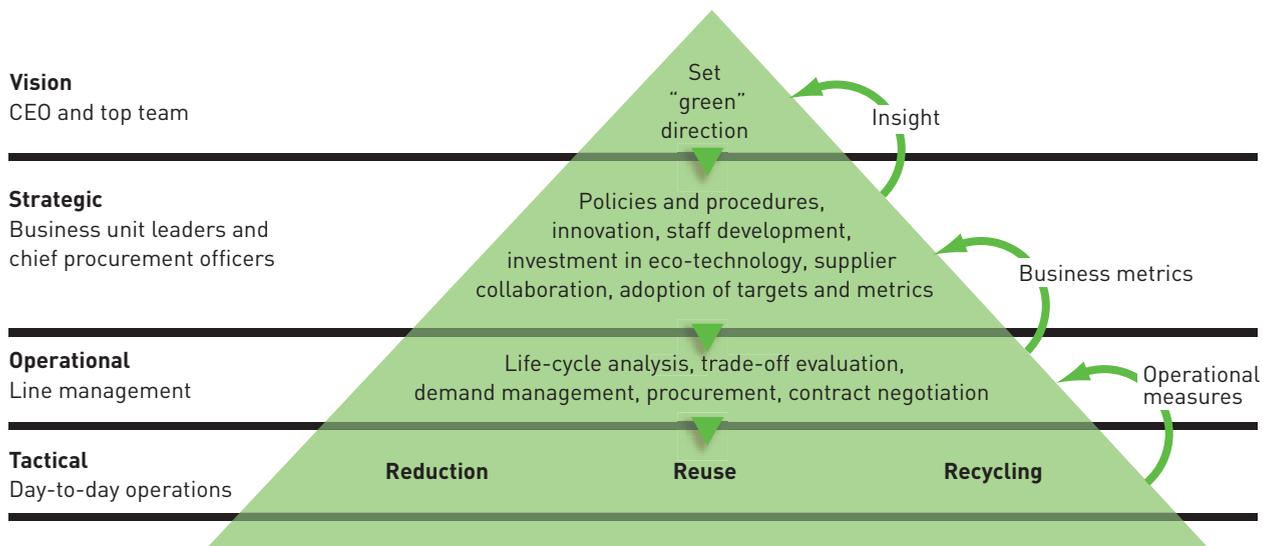
clearly the more cost-effective choice in addition to being more environmentally friendly.

Furthermore, green sourcing leads to holistic efficiencies by forcing companies to pay continual attention to the whole supply chain and their overall carbon footprint. (See Exhibit 1.) The pitfalls of focusing on just one area were borne out by a study conducted for Trinity Mirror, a U.K. newspaper publisher, by the Carbon Trust, a U.K.-based research and advisory group, on how to reduce the ecological impact of Trinity Mirror's publications. The easy assumption is to move from virgin paper to recycled, but the Carbon Trust found it was not that simple. Looking at the entire value chain, the group determined that 80 percent of the total carbon emissions come from paper production. If the supplier that makes the paper uses a carbon energy source to make 50 percent recycled paper, it actually has greater carbon emissions than it would create using a hydraulic energy source to make 100 percent virgin paper. As a result, the Carbon Trust indicated that the ideal solution would be to buy paper with high recycled content from a supplier using low-carbon energy sources.

Brand appeal. Just as Ford Motor Company became indelibly associated with quality during the years of its "Quality Is Job One" ad campaign, a few forward-looking brands today are making green look both functional and cool. For companies that want to do the same, it's important for green sourcing initiatives to be tied to the brand's identity. Clif Bar & Company, for instance, makes energy bars out of organic ingredients and promotes a healthy, outdoorsy image; given that background, the company's espoused five aspirations (to support its planet, community, people, business, and brands) make sense, as do the measures that support

Exhibit 2: A Framework for Building Green Sourcing Capability

A variety of capabilities come together in a green sourcing strategy, with decision rights and information flows aligned holistically. The broader the section of the triangle, the more people who are directly involved; arrows represent directly designed information flows, tracking results in cost savings and waste reduction and tying all the parts of the supply chain together.



Source: Booz & Company

these aspirations, such as purchasing all of its energy from NativeEnergy, a Native American–owned and farmer-owned renewable energy wind farm; running its fleet on biodiesel; substituting fractionated palm kernel oil for the more frequently used, chemically processed partially hydrogenated oil; and using recycled materials for packaging.

Even companies whose products don't evoke hikes in the Sierra Nevadas can build a green brand, supported by the right initiatives. Look at the Starbucks Corporation. There is nothing intrinsically green about coffee, which had a successful run for many years without being tied to environmental sustainability. But from its inception, Starbucks has worked to minimize its environmental impact, whether in store design or the sourcing of its coffee beans, and it is always looking for new ways to do so. Recently, the company switched to thinner trash bags, which reduced the amount of plastic it sent to landfills by 750,000 pounds per year and produced annual savings of \$500,000. The company has not been shy about sharing news of these efforts with consumers; support for the environment is a key part of Starbucks's brand proposition.

Cross-functional insights into processes. In evaluating the environmental impact of the value chain from end to end, the procurement function cannot act alone. It must develop a strong sourcing organization that ties

together the supply chain, marketing, innovation, and research and development, as well as an operating model that sustains and supports ongoing collaboration with all these internal stakeholders and with external partners, such as suppliers.

An isolated sourcing organization that has not developed these links will be limited to small ventures into green sourcing, such as ordering recycled paper or reconditioned toner cartridges, rather than comprehensive changes such as those made by Trinity Mirror. Anheuser-Busch Companies Inc. provides a good example of how such partnerships can offer advantages that cannot be developed in a vacuum. In conjunction with its suppliers, Anheuser-Busch reduced the lid diameter for four types of cans, saving 17.5 million pounds of aluminum in 2006 — which not only reduced the amount of energy needed to produce, transport, and recycle the cans, but saved money as well.

Elements of an Initiative

To reap the benefits of green sourcing, companies must tackle the issue at a number of levels, from the visionary down to the tactical. (See Exhibit 2.)

Setting a vision. Appropriately conceived, a green sourcing initiative allows a company to create an internal and external identity for itself, as opposed to having its identity defined by outsiders. In devising their over-

A Permanent State of Green

At Kaiser Permanente, green sourcing is just one part of an overall corporate strategy that reflects the deep roots that environmental awareness has in the organization's culture.

"Rachel Carson, who is still recognized as one of the people who kicked off the environmental movement, came to address a number of Kaiser Permanente physicians back in 1963," says Robert Gotto, senior sourcing director for Kaiser Permanente, an integrated health plan and provider based in Oakland, Calif., that provides care to members through a network of hospitals and clinics. "She was a pretty controversial figure at the time, and Kaiser Permanente reached out to her because the physicians wanted to understand her ideas and how they were relevant to the health-care industry."

Nearly a half century later, care for the environment is almost as firmly

embedded in the organization's culture as is care for patients. In 2001, Kaiser Permanente formed an environmental stewardship council that chose three major areas of focus:

green buildings, environmentally responsible purchasing, and environmentally sustainable operations. The decision to make purchasing a major part of the strategy stemmed from the fact that Kaiser Permanente spends about US\$14 billion per year on various products and services, and it wanted that money to be spent in a way that supported the company's values. It turned out that making purchasing decisions based in part on environmental criteria didn't just "save the earth," it also saved money.

"One of the myths you have to address right up front is that cost-cutting initiatives and environmentally responsible initiatives are in any way in conflict," says Gotto. "We have a list

of more than 30 initiatives, delivered through the green sourcing program, in which we made environmentally preferable choices. Most of those initiatives have been cost-neutral, but there have been a significant number that have delivered cost savings — about \$9 million annually. None of them have involved a cost increase."

Some savings have come from measures unique to the health-care industry, such as replacing some single-use medical devices (such as trocars, which are ports that introduce instruments into blood vessels) with those that can be reprocessed by suppliers and safely used again; this initiative represents savings of about \$2 million annually for Kaiser Permanente. Others are more widely applicable, such as the organization's policy that all desktop and laptop computers be purchased according to Electronic Product Environmental

all green vision, companies should consider their brand image, mission, and history; companies with a portfolio of brands should look at each one to understand how its image can be linked to green initiatives. 3M, for example, has a 32-year history of building its green identity. It has defined its vision as a commitment "to actively contribute to sustainable development through environmental protection, social responsibility, and economic progress." To pursue this commitment, the company decided, among other things, to use life-cycle management across its broad product portfolio to continuously lighten the burden of its products on the environment, to set and achieve aggressive pollution prevention goals, and to make such prevention profitable by developing new technologies and products to serve that market. This strategy has led to the reformulation of many of 3M's products and processes, reducing the amount of pollutants it would otherwise have emitted by 2.6 billion pounds and saving a total of \$1 billion.

Other companies are in earlier stages of this process.

Cadbury Schweppes PLC, for example, launched its "Purple Goes Green" initiative, so named for the distinctive hue of its candy packaging, in 2007 with the goal of combating climate change by reducing its use of energy, packaging, and water. The company is backing up its vision by setting concrete goals to achieve by 2020: It aims to cut its carbon emissions in half; reduce its packaging by 10 percent per ton of product; introduce water-reduction programs in water-scarce sites; and use more environmentally sustainable forms of packaging, including 60 percent biodegradable and 100 percent recyclable packaging.

Determining action. With a vision in place, companies must define the activities that will make it a reality. These fall loosely into two categories. First (identified as "strategic" in Exhibit 2) are the broad, all-encompassing activities that support the execution and branding of greenness at the company level. These are the measures that allow the company to meet the objectives outlined in its vision — to take the Cadbury example, using alter-

Assessment Tool guidelines, which ensures that the level of energy consumption and the extent of toxic materials used are factors in the purchasing decision. Thanks to the reduction in energy consumption in the use of these computers, the U.S. Environmental Protection Agency (EPA) estimated that Kaiser Permanente would save about \$4 million per year.

These examples underscore the key role that Kaiser Permanente's suppliers play as external partners in its green sourcing program. The relationships were a challenge in the early stages of the program: Suppliers were slow to respond or even resistant to Kaiser Permanente's environmental goals, whether because they were concerned that revealing the chemicals in their products would make them vulnerable to litigation or because they felt there was not enough demand for environmentally

friendly products from the rest of the health-care industry.

In response, Kaiser Permanente established a strategic supplier program in which it works with key suppliers to identify environmental opportunities and find mutually acceptable solutions. Kaiser Permanente's sourcing department also makes a point of seeking out other companies in the health-care industry that have environmentally sustainable cultures, such as Johnson & Johnson and Baxter International Inc. Finally, Kaiser Permanente has recently begun using an automated sourcing tool that measures environmental criteria in weighing suppliers' proposals.

The organization's holistic approach to developing a green sourcing program led it to the conclusion that it could accelerate the impact through partnering with others. Therefore, in 2007, Kaiser Permanente launched a

global health and safety initiative that brought together supply chain leaders from more than 20 U.S. health-care systems, as well as government agencies, including the EPA; nonprofit organizations, such as Health Care Without Harm; and group purchasing organizations, which do the contracting for 90 percent of medical expenditures in the U.S. The members of this informal consortium recognized that a united approach to green purchasing would accelerate change within the supply chain. To that end, Gotto now meets monthly with a number of U.S. health-care supply chain colleagues. One of the group's first goals is to identify the products in the industry that have the most environmental impact and to find more sustainable alternatives.

— M.T. and P.H.

native energy sources would be one of the activities underscoring the company's vision of reducing carbon emissions. Marketing efforts, such as the creation of the Purple Goes Green program and its dissemination to the public, are also included in this category. The marketing of green efforts should generate recognition and goodwill among consumers, employees, and other stakeholders.

The second category is made up of more narrowly targeted operational and tactical activities that are specifically intended to drive business and increase revenue and profit for a particular brand, product, or service. An example is the promotion of a newly repackaged product that can be promoted to consumers on the basis of its reduced material content or its new biodegradable packaging.

Managing demand. In strategic sourcing, demand management typically entails specifying the right product with the right characteristics and the right price point to provide the best value to the customer without

creating a disadvantage for the company — for instance, by adding unnecessary cost complexity. Green sourcing has the same goals, but seeks to meet customers' needs while adhering to an even more stringent set of specifications, such as trying to identify opportunities to reduce emissions. Companies need to understand their customers' needs and develop their green strategy around those needs, providing visibility into customers' habits versus the value and cost associated with options in, for example, product design or packaging specifications. With this information on the table, companies can work to serve customers while crafting solutions in line with the company's overall green strategy.

Building collaborative supplier relationships. Suppliers can be key partners in helping companies develop green sourcing strategies, offering ideas about product innovation and how to reduce environmental harm throughout the supply chain. For instance, a company sourcing a particular kind of produce would need suppliers' input to determine which would have more of

The quality movement took several decades to achieve sustained results. Green sourcing can generate early victories, but it is not a quick fix.

an effect on the overall carbon footprint — sourcing produce grown locally that require a hothouse or sourcing them at a distance with the associated transportation impact. This was the trade-off that the U.K.'s Marks & Spencer PLC studied in early 2007, when the retailer announced that it would double its regional food sourcing, minimize the amount of food transported by air, and mark all food that did travel by air freight with the label “flown” to make consumers aware of the carbon impact of that purchase. Companies can also work with suppliers to develop the suppliers’ own green sourcing initiatives, as integrated health plan and provider Kaiser Permanente is doing with its partners.

Conducting cradle-to-cradle life-cycle analysis. Such analysis examines the entire life cycle of a product or service with the goal of producing it, distributing it, and disposing of it (or, in the case of a service, disposing of the materials and by-products associated with it) in a way that renders its total impact environmentally neutral. As one can imagine, it’s an intensive exercise, and may not be realistic in every case. However, even a focus on a few high-leverage areas can uncover significant savings. For example, Sonoco Products Company, a supplier of industrial and consumer packaging, found that if it used composite materials instead of steel in its cans, it could reduce the cans’ weight by 27 percent, the energy they require by 34 percent, and greenhouse gas emissions by 20 percent.

Implementing material, technology, and process innovation. Green sourcing looks at using the right kinds of materials, technology, and processes supported by the right kind of organization. In traditional strategic sourcing, this may entail finding low-cost, high-value sourcing materials; making technology more efficient;

or developing new inventory control techniques. In green sourcing, it may mean working with suppliers to purchase materials with a higher percentage of recycled content, to implement technology that is more energy efficient, or to develop more paperless transactions. In all cases, implementation demands an end-to-end perspective on production and service costs, including key cost drivers.

Measuring a set of the gains. All of these elements must be supported by appropriate metrics (shown as arrows to the right of the triangle in Exhibit 2). Measurement is a critical element, yet one that few companies have tackled; those that have waded in are using a variety of standards as they attempt to certify and audit their green practices and those of their supplier network. A number of industries have heard calls for standardization, which must be heeded as soon as possible.

Difficulties in measuring results are a major reason that green initiatives fail. As with traditional strategic sourcing, the final (and ongoing) step in a green sourcing plan is to set specific targets and measure the results. One groundbreaking program that illustrates how suppliers might be involved is Wal-Mart Stores Inc., which requires its suppliers to respond to questions about their packaging, providing such details as the ratio of product to package and the amount of recycled content used in the packaging. Wal-Mart assigns the suppliers a score based on their answers. The company will use this data to reduce the amount of packaging it uses by 5 percent by 2013. About 97,000 products are currently being evaluated in this way; the company aims to put 160,000 through the process.

Hewlett-Packard Company also uses a sophisticated audit process; it evaluates its suppliers’ environmental

permits and reporting, pollution prevention and resource reduction, hazardous substances, wastewater and solid waste, air emissions, and product content. The company further recognizes that its effect on the environment stretches beyond its own processes and those of its suppliers, and thus trains suppliers to audit their own partners.

Developing metrics is challenging. It is difficult to measure the benefits of green sourcing because they cut across so many dimensions. Whereas the value of reduced errors could be easily quantified during the early days of the quality movement, the positive results of, for instance, cleaning up a manufacturing process may be harder to measure because they involve so many parameters, including customer goodwill, political regulation, and operational costs. However, leading companies have already begun measuring themselves on such elements as greenhouse gas emissions, energy efficiency, the use of environmentally sustainable raw materials, the carbon footprint of facilities, and water efficiency. Setting concrete goals along these lines — as Cadbury Schweppes and others have done — and communicating explicit targets to suppliers are strong motivators to make sure that the vision set at the highest level is realized in practice.

In attempting to quantify the benefits of green sourcing, it's important to remember that it is a long-term effort and to strategize accordingly. The quality movement, for instance, took several decades to achieve sustainable results, and there was a further lag before its reputation caught up. Companies should aspire to early victories to build support but recognize that green sourcing is not a quick fix.

Pushing through Uncertainty

Although many companies have undertaken some steps toward green sourcing, most have yet to take a holistic approach that provides a comprehensive view of its benefits or ties it to overall corporate strategy. Companies need to better assess their efforts at green sourcing and improve its impact on growth and the bottom line.

Just as the current state of green sourcing reminds

senior managers of the excitement of the early days of the quality movement, it has also spurred other emotions. The dawn of any change movement in operations and practices is marked by uncertainty, concern, even fear. But green sourcing has amassed enough evidence of its value to prove that it, like quality, is no flash in the pan. For those who persevered with quality, the rewards were substantial in cost savings, more effective operations, and a stronger connection with customers. Those companies that fully engage today in green sourcing can look for comparable results. +

Reprint No. 08206

Resources

Daniel C. Esty and Andrew S. Winston, *Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage* (Yale University Press, 2006): Numerous examples of companies that prove that sustainable can also mean profitable.

eyeforprocurement, "Green Purchasing Report," July 2007: Results of a survey on current practices in green sourcing.

Georgina Grenon, Joseph Martha, and Martha Turner, "How Big Is Your Carbon Footprint?" *Supply Chain Quarterly*, Fourth Quarter 2007: Companies are looking for opportunities to conserve energy and reduce carbon emissions in their supply chains.

Art Kleiner, "Materials Witnesses," *s+b*, Fall 2005, www.strategy-business.com/press/article/05302: The hidden challenges of green sourcing, including learning to overcome competitive secrecy and diverging specifications.

William McDonough and Michael Braungart, *Cradle to Cradle: Remaking the Way We Make Things* (North Point Press, 2002): Discussion of the need to create carbon-neutral products.

Hardin Tibbs, "How Green Is My Value Chain?" *s+b Leading Ideas Online*, 10/23/07, www.strategy-business.com/li/leadingideas/li00048: An argument for turning the value chain into a value loop.

Carbon Trust Web site, www.carbontrust.co.uk: Provides a variety of resources for reducing carbon footprints, including case studies.

For more on global perspectives, sign up for *s+b*'s RSS feeds at www.strategy-business.com/rss.

strategy+business magazine
is published by Booz & Company Inc.
To subscribe, visit www.strategy-business.com
or call 1-877-829-9108.

For more information about Booz & Company,
visit www.booz.com

booz&co.

© 2008 Booz & Company Inc.