

Chain Reaction

Your firm cannot be “sustainable”
unless your supply chains become sustainable first



Sustainability and corporate stewardship is a social ideal and a business necessity. The former tension between efficiency and sustainability has vanished as being sustainable is now a source of competitive advantage and a matter of corporate survival rather than a costly inconvenience. Many CEOs and marketers embrace sustainability as a top-line priority. Yet the dream of doing good works and making a good profit will go unfulfilled unless orderly supply chains literally and sustainably “deliver the goods.”

Three new commandments—go green, get sustainable, be ethical—are wooing corporate disciples. Delivering sustainable goods and “the good” to customers, employees, society and the environment isn’t just an ethical action or an example of corporate citizenship. Companies that embrace these values have an opportunity to cultivate public favor, generate additional revenue from new products and demand, trim costs, and deliver firms from potential long-term ills. Sustainability is a growth industry, differentiating brands, firms, products and processes. While the concept of corporate sustainability around growth, development, management and supply chains has been around for more than two decades, public perceptions and market incentives have changed dramatically in recent years.

Al Gore made “the inconvenient truth” of climate change and social-corporate sustainability a compelling vision for audiences around the world. Others have raised similar concerns. For example, recent recalls of pet food, hamburger, toothpaste and processed meats have driven countless consumers toward producers of organic and natural foods. A critical mass of customers is

demanding changes in products, processes and corporate practices. As these customers put their money where their values are, firms will respond.

This rising groundswell has generated a green wave of coverage and public concern in the popular and professional press. Sustainability topics recently graced the covers of leading national and regional newspapers and diverse high-profile magazines, including *BusinessWeek*, *Business 2.0*, *The Economist*, *Forbes*, *Fortune*, *Time* and *Vanity Fair*.

Of course, the transition to sustainable practices will not be entirely pain-free. Globalization amplifies consumer pressure and scrutiny. As supply chains become more global and diffuse, they also become more difficult for executives and consumers to monitor, and suppliers and producers may hold different ethical priorities. The costs of collecting and monitoring such information are extensive, but the advantages may be significant too. Additionally, if firms do not inaugurate changes, then governments may step in to mandate them. For example, the Minnesota legislature recently enacted the most aggressive standards for renewable energy in the United States; utilities must gradually increase

the percentage of electricity generated by renewable sources to 25 percent by 2020.

Chains of Reasoning: Sustainability in Action

To assess corporate sustainability practices, A.T. Kearney and the Institute for Supply Management (ISM) surveyed a diverse group of Fortune 100 firms across several industries—including consumer goods, pharmaceuticals, electronics and airlines—with revenues from \$1 billion to \$70 billion. We sought to discover how these companies promote sustainable practices according to three core values:

- **Economic development:** promoting profits, creating jobs, attracting customers, reducing costs, anticipating and managing long-term risks, and fostering long-term competitiveness
- **Environmental stewardship:** conserving energy and resources, consuming more renewable and less-polluting energy, increasing recycling, minimizing packaging and reducing the firm’s “carbon footprint”

- **Social well-being:** improving labor standards and conditions, enhancing communities and creating and delivering socially responsible products and services

Our study reveals that almost 60 percent of firms adopt sustainable practices to strengthen brand names or differentiate their products (see figure 1). More than one-half of the 250 largest U.S. corporations issued reports in 2005 on sustainability or corporate social responsibility. That year, 3M announced that it had exceeded each target in its initial five-year Corporate Environmental Goals (CEG) program and launched a second set of CEG objectives for 2005-2010. CEO Lee Scott committed Wal-Mart to become more environmentally efficient. In recent years, DuPont reduced its energy use by \$3 billion. McDonald’s introduced healthier menu items and no longer uses Styrofoam packaging. CVS drugstores offer walk-in clinics providing low-cost basic health care. United Parcel Service is adding alternative-fuel vehicles to

Figure 1
Companies adopt sustainability strategies to achieve multiple goals



Source: A.T. Kearney and Institute for Supply Management™ (ISM) Sustainability Management Survey, 2007
Note: ¹Multiple responses allowed

*Percentages rounded

fleets. General Electric will invest \$1.5 billion in developing environmental technologies by 2010. British Petroleum announced plans to invest \$500 million through 2016 to create and launch the world's first Energy Bioscience Institute.

Clearly, the majority of firms are now saying and proclaiming the right things, and recognize the growing number of real successes where doing well and doing good go together. Indeed, it is safe to say that “wave-one” sustainability is well underway with firms responding to public pressure to “go green,” and mitigating the kinds of public relations disasters that afflicted Exxon, Nike, Union Carbide, Wal-Mart and others.

Now it is time for “wave-two” sustainability: for companies to move beyond saying the right words to truly making sustainability happen. Our study reveals that achieving genuine sustainability is the result of making supply chains more sustainable. Since typically 50 percent of a product's value, and often upward of 70 percent, is derived from suppliers, claims of corporate sustainability are likely just empty promises without this effort. Companies and consumers realize that customers do not just buy products, they also buy the supply chains that deliver the products.

Our survey suggests that for many firms wave-two sustainability has started, with a growing number of companies putting in place specific, comprehensive sustainability strategies for internal operations and external relationships. Rather than offering only general statements of good corporate citizenship, these companies have improved their supply departments with updated sustainability measures and practices, evaluating suppliers and their supply-management organizations across multiple dimensions of sustainability.

These companies are complementing the diverse innovative efforts radiating from other areas of the firm to cut costs, reduce risks, generate new products and revenue streams,

and attract customers (*see sidebar on page 5: Sustainable Practices in Full Bloom*).

The Characteristics of Sustainable Supply Management

Traditionally, supply managers sought to provide necessary inputs at the lowest market prices. However, as executives and consumers move to distinguish market prices from social costs—that is, market price plus externalities and social consequences—supply is redefining and expanding its role by managing both internal and external costs. Supply managers can foster sustainability by ensuring that suppliers incorporate sustainable innovations in operations and processes. They can investigate new processes and technologies that reduce dependency on scarce and potentially expensive resources. Managing the supply chain then becomes the catalyst for triggering corporate behavior that is truly green and socially responsible.

In 2006, Timberland, maker of shoes and boots, began to label its products with information identifying the factory's labor record, the amount of energy consumed, and the percentage of renewable energy used. Timberland's CEO, Jeffrey Swartz, wants customers to make value judgments at the point of sale.

“We found that our supply chain goes further than we imagined. You have to go back to the cow that supplied the leather,” Swartz said. “The vast majority of our carbon footprint comes before we even make the shoe.” Timberland is also creating tags measuring the ecological effects of a product on a scale of 1 (best choice) to 10 (worst choice).

David Rabey, director of purchasing and supply at the U.K.'s Department for Environment, Food, and Rural Affairs, declares, “If procurement declines the opportunities this issue provides then it will no longer be regarded as an important profession. I'm disappointed so many CPOs think

[sustainability] is a fad for the ‘hemp and sandals’ brigade. It’s a worldwide issue that is increasing in importance.”

Fortunately, more companies are catching on every day, but these efforts need to be anchored in the right strategy, organization and management practices. The A.T. Kearney study identified the following characteristics that differentiated the best from the poorest performers.

Devising a sustainable strategy. Our survey reveals that already 38 percent of firms have a formal sustainability strategy for managing supply chains. Such a strategy defines the values a company wants to emphasize, declares how it will enforce those values, and identifies consequences when the guidelines are not met by suppliers or employees. Deep principles inform the firm’s purposes and values, which shape corporate behaviors and guidelines for engaging suppliers. By making these values, principles and guidelines explicit, a company improves its accountability and performance.

Supply managers’ growing responsibilities demand that they conceive and manage the sustainability of their supply chains in the broadest sense. We recommend that supply managers survey one-, five- and ten-year horizons for potential supply-demand imbalances and draft appropriate risk-management strategies. Such strategies may include securing diverse supplies of potentially scarce resources or introducing new, less-scarce resources into production. Consider how semiconductor and telecom firms cope with rising copper prices.

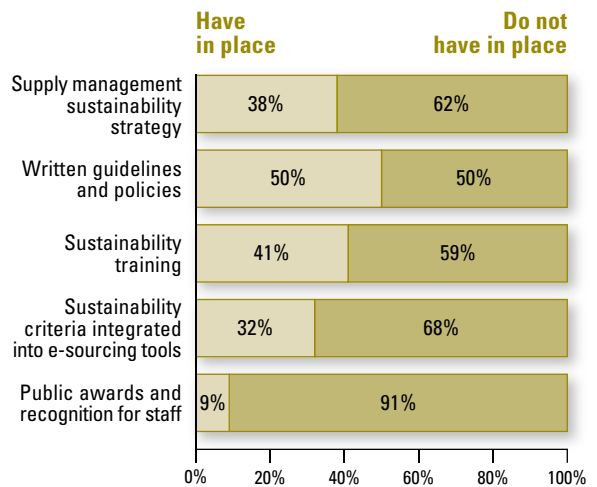
Retooling the organization. More than one-half of companies evaluate supply management executives against some sustainability standards. As firms increase the role of sustainability in their supply management practices, they are drafting specific guidelines and procedures, creating training programs and introducing sourcing tools

that equip buyers to support sustainability goals. Currently, 50 percent of firms provide written sustainability guidelines to supply management staff, about 41 percent provide training on sustainability management, and 9 percent of companies offer public awards or recognition for supply management staff or for staffers meeting sustainability goals (see figure 2).

Managing supplier relations. Currently, 48 percent of firms reward suppliers with good sustainability practices or jointly improve processes with suppliers that do not. About 44 percent of firms measure the sustainability performance of major suppliers, and 24 percent require a third party to certify suppliers’ sustainability practices.

With the advent of new technologies, supply enjoys a range of alternate suppliers and products. For example, companies can investigate ways for enhancing the sustainability of logis-

Figure 2
Firms are embedding a sustainability ethic throughout the organization



Source: A.T. Kearney and Institute for Supply Management™ (ISM) Sustainability Management Survey, 2007

*Percentages rounded

tics, an unavoidable feature of global commerce and supply chains, that contributes significantly to pollution and global warming. The roaring engines of jets, ships and trucks spew emissions and particulates into the atmosphere in staggering amounts. Maersk and Burlington Northern Santa Fe, both large shippers, are exploring how to minimize pollution from their fleets.

Bioplastic products, or plastic products developed from plants, minimize toxic waste, reduce greenhouse gas emissions and biodegrade quickly. Bioplastics appear in some cell phones, automobiles, packaging and fabrics. Commercial producers include NatureWorks, a subsidiary of Cargill, and Metabolix.

Breakthrough energy technologies offer innovative ways to meet energy needs sustainably, such as solar panels, nuclear batteries (BetaBatt, Inc. and various universities), offshore wind turbines (General Electric), submerged sea-current turbines (Marine Current Turbines Ltd), and reverse electrodialysis, a system for generating sustainable energy by creating water currents derived from mixing fresh water and salt water (Wetsus). Even the nuclear industry seeks

to go green with new proposals such as UREX+ waste reprocessing.

Within the food industry, supply leaders anticipate price and supply volatility and public concerns over fatty foods, genetically modified foods, child labor and netted dolphins to secure access and pricing to “hot” commodities such as soybeans, free-range chicken and corn for ethanol. The cheap, renewable soybean, for example, is attracting attention as it helps thwart obesity and produces myriad foods.

In the next year, the proportion of companies rewarding suppliers’ sustainability practices will increase by 50 percent. Two-thirds of firms will track robust sustainability measures for major suppliers or will jointly improve processes with suppliers. The trend is sharp and unmistakable: Firms are binding ever tighter to suppliers that complement sustainability practices.

Monitoring and enforcing performance. Although supply managers typically lack weapons, status and clout for measuring performance and vigorously enforcing standards, already more than one-half of firms track “classic” standards—those arising from environmental and

Sustainable Practices in Full Bloom

A furniture manufacturer provides a good representative case of supply chain sustainability. Its supply chain manager recognizes the sustainability issues that arise from importing lumber. Was the forest clear cut? Were saplings planted after the timber harvest? Was the land restored? How were sawyers and millers paid? How were locals treated? What happened to animals living in the forest? What is the remaining local and global supply

of the timber? Suppose the supply manager anticipated an embargo on clear-cut timber, expected civil violence in the lumbering region to interrupt exports, or read about activist groups protesting the treatment of peoples and animals indigenous to the timbering forest. Further suppose the supply manager secured environmentally sustainable, socially responsible sources of timber from a tree farm or rural cooperative.

This astute, sustainability-oriented supply manager secured necessary resources, avoided dramatic price rises and supply shortages, attracted new customers, and created an opportunity to market “green” and sustainable practices, products, processes and relationships. Less-knowledgeable competitors now suffer from reduced prestige, lost supply, price volatility and other disadvantages.

labor debates during the past 20 years—such as suppliers’ labor practices, use of recycled materials and effects of material waste. These are the standards most visible to consumers, shareholders, activists and executives. In addition, companies track “advanced” sustainability metrics, for example, a growing number of firms measure the toxicity of input materials, use of sustainable sources, and wages paid by suppliers. Already, some firms even go so far as to track standards related to pressing issues such as greenhouse gas emissions (*see figure 3*).

In the future, companies will inevitably adopt sustainability measures relevant to currently prominent social and environmental issues.

“Some of our customers have started to purchase our products based on our commitment to sustainability.”

— Senior vice president of supply management
Furniture manufacturer

They will do so because public activists are attentive to long-term concerns such as energy production and consumption, and because such concerns affect long-range competitiveness, profitability and revenue. When such indicators become part of supplier-evaluation processes, companies can enforce them vigorously and, where sensible, help suppliers improve.

Sustainable supply management will become the litmus test of any company’s claims of social

and environmental responsibility. These tests are often conducted and scored by knowledgeable and vocal activists, who will be more than happy to draw the public’s attention to company practices they see as less than sustainable.

We are already witnessing the influence of activist groups focused on supply issues. Oxfam monitors labor conditions at shoe factories. Critics blasted Wal-Mart for deceptively labeling non-organic foods as organic. Empowered by Internet sites monitoring corporate actions and publicizing misdeeds—such as walmartwatch.com and ExxposeExxon.com—consumers are now well educated and quickly mobilized over corporate transgressions. A recent study by

Fleishman-Hillard and the National Consumers League reports that a company’s record of social responsibility is the most important factor determining consumers’ brand loyalty when they compare products of similar quality.

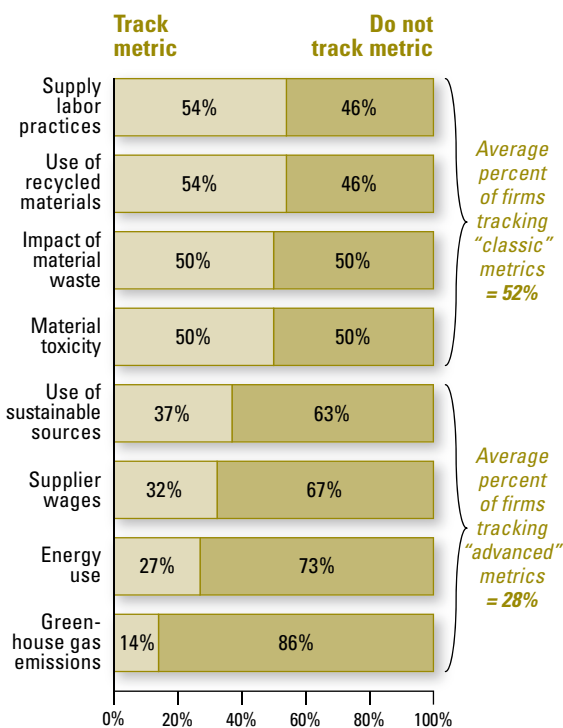
In response, more companies are demanding that their suppliers meet specific standards. Our study reveals that in 2002, 12 percent of firms severed relationships with a supplier that failed

to meet formal sustainability criteria. In just five years this number has already risen to more than 50 percent of companies that deselect suppliers for not meeting such standards. The study anticipates this number could rise to 70 percent or more in the near future.

Third-party certification is also a booming business. Gary Hirshberg, CEO of Stonyfield Farm, producer of organic foods, believes that third-party certification is more credible to con-

sumers than self-monitoring. Stonyfield recently announced that Climate Counts, a nonprofit organization it helped found, will independently monitor environmental effects of the operations and products of consumer-products companies. The goal is to create easily comparable measures for consumers. Other third-party monitors include the Marine Stewardship Council, which monitors seafood, VeriFlora, which reports on flowers, and Green Seal, which keeps tabs on governmental and corporate buying. Such groups may be members of the growing Global Ecolabelling Network.

Figure 3
Companies are tracking new measurements to reflect the latest concerns



Source: A.T. Kearney and Institute for Supply Management™ (ISM) Sustainability Management Survey, 2007

*Percentages rounded

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In the next year, we expect profound changes in how companies manage their supply chains. Supply managers, responding to corporate and social pressures, will feel compelled to innovate and implement sustainability programs quickly. We expect huge and rapid increases in the numbers of firms that participate in joint programs with suppliers to improve sustainability processes, track sustainability metrics and require third-party certifications of suppliers' practices. Perhaps most telling is the growing number of firms that will avoid suppliers that fail to meet formal sustainability requirements.

Creating sustainable supply chains are as much matters of corporate survival as of environmental care and social responsibility. The following offers some guidelines on how to begin:

Survey the strategic context. To derive the strategic focus of a supply management unit, companies must first identify and understand their economic, environmental and social priorities. What supply chain priorities follow from specific corporate goals: resource efficiency? energy consumption? reducing carbon footprints? best-in-class social behavior by the suppliers? ensuring access to likely scarce input materials? Setting a foundation for supply managers to implement best practices requires developing a documented and aligned sustainability strategy.

Understand risks and opportunities. What opportunities exist to limit the exposure of supply chains to social and environmental risks and to future supply-demand imbalances? Will the opportunities affect suppliers' operations, purchases, internal operations, commodity production, commodities, packaging, distribution or logistics? Which sourcing categories should prepare for major supply-demand imbalances down the road? What are the risks and implications of the eco-footprint left by global suppliers and low-cost

“Many of the products are being marketed as innovative offerings that sustain the environment by either the materials used in their manufacture or the impact they have on energy conservation and the environment.”

— Senior vice president of sourcing
Retailer

sources? Are there exploitable opportunities for the supply chain to help the firm meet existing market demand in new ways or to create and meet new demand? Which business partners reliably offer access to innovations that foster sustainability?

Get ready. Companies must ensure that current management strategies are adequate. Are appropriate processes in place for evaluating how suppliers and internal operations meet evolving customer needs or incorporating innovative solutions to current or future issues? Is the right organizational structure in place? Does the firm need to hire dedicated staff or embed skills in the existing organization? Should targets, incentives and internal measurements change? How do other companies do this?

Set priorities. Sustainable companies set formal priorities for implementing plans based on “ease of implementation” (internal costs, time and resources) and expected value (expected revenue,

savings, increased efficiency and reduced liabilities). They set visible, measurable targets.

Go. Sustainable firms ensure that appropriate incentives, supporting processes and resources are in place to implement the plan. They monitor progress against specific goals and measures, and determine necessary adjustments.

Build Sustainable Advantage

The best companies view sustainability not only as a chance to contribute to social goals, but as a powerful source of competitive advantage. Improving sustainability allows them to cut costs, create new products and demands, avoid long-term ills and give their firms an edge over less-sustainable companies. To move from a superficial gloss to a profound commitment, companies need to incorporate socially responsible values into their supply chains. Only then will sustainability truly take root.

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