

## **BSR** Insight Article

# Business Opportunities in Sustainable Consumption



Not long ago, Southern California Edison conducted an experiment aimed at lowering household energy use. The utility company gave its customers ambient orbs that glowed red when their energy use was high and green when use was low. Within weeks, energy use in this pilot group declined by 40 percent during peak periods.

The success behind this exercise was simple: Southern California Edison gave consumers accurate, easily understandable information (red means "stop;" green means "go") that influenced the way its customers used the company's service.

In the business value chain cycle—including product design, material input, processing and assembly, distribution, engagement and use, and end-of-use—Southern California Edison focused on customers'

engagement and use to improve the sustainability of its service.

This example is important because, in the past, most sustainability efforts have centered around material input, processing and assembly, and distribution. While these first-generation corporate sustainability efforts have demonstrated that some environmental and social considerations can be managed, the overall trajectory of the economy continues on an unsustainable path. By recent estimates, our global footprint now exceeds the world's capacity to regenerate by about 30 percent. And if current demands continue, by 2030 we will need the equivalent of two planets to maintain our lifestyle.

The newest frontier in sustainability—sustainable consumption—advocates a system that allows individuals to meet their needs without disrupting the planet's healthy ecosystems. At BSR, we have begun a conversation with businesses about sustainable consumption through workshops, discussions, and our newest report, "The New Frontier in Sustainability: The Business Opportunity in Tackling Sustainable Consumption." In an era when the world faces significant constraints on natural resources—and equally significant demands to use those natural resources to create the products and services that meet people's daily needs—progress on sustainability now depends on attending to the overlooked areas of the value chain cycle: product design, engagement and use, and end-of-use.

Historically framed as a limitation on business, sustainable consumption actually represents a new set of opportunities for companies, and some have already begun to find novel ways of delivering value to more of the world's people without unduly taxing natural resources.

#### **Product Design**

The shift to sustainable consumption begins with product design because the design function is a concentration point for decisions around a large set of human and material resource flows. For example, design choices about material weight and packaging have direct impacts on transportation costs and fuel use, while choices about energy efficiency directly impact energy consumption in a product's use phase. In some cases, a focus on sustainable consumption may result in the radical redesign of familiar products, and in other cases, there may be an opportunity to deliver value through services rather than products.

In short, it all starts with design, and by embedding sustainability considerations into the design phase, product attributes and consumer behaviors can be influenced in potentially valuable ways. One way to support this approach is to marry "human factors" and "systems thinking" in design analysis. For example, Zipcar's ideal vehicle for car-sharing would be designed to function more like smart phones, with a GPS, an intuitive user interface, and a set of standard applications to help drivers manage, say, their fuel consumption or communicate with parking lots for available spaces. This approach recognizes that people's interactions with their cars include more than just the need for mobility, so additional services are added to capture more experiences like ease of navigation, finding the closest gas station,

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#### Publication Date July 13, 2010

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#### **Engagement and Use**

Personal choices have a huge impact on sustainability, and today's consumers are "in the driver's seat." But because they do not always make the best choices or use products and services in the best way in terms of sustainability, companies have many opportunities to give consumers the keys to more sustainable behavior by increasing their awareness of how consumption choices and behavior impact sustainability. Southern California Edison's experiment is a great example of this: The simple cues from the glowing lights indicated when the consumers needed to reduce their energy consumption. In another example from a utility company, a study found that the average person will reduce their energy consumption by 8 percent if a smiley face is included on their electrical bill to reinforce positive behavior. Products, services, policies, programs, and communications that reflect user characteristics, needs, and skills can serve to improve, support, and sustain behavior.

A National Geographic Society/GlobeScan survey of 17,000 consumers in 17 countries revealed that factors such as lack of information, high prices, or lack of available options—which, in the recent past, may have been barriers to environmentally friendly behavior—are no longer the reasons consumers decide not to take action. For companies, this presents an opportunity to capture market share by providing credible information about the environmental attributes of their products.

#### End-of-Use

At the end of their use, many products are discarded and end up in landfills. This waste often stems from inefficient product design, materials selection and manufacturing, and service-delivery systems, which equate to lost capital and revenue for companies. These investments are often lost as the energy and materials embedded in the product are used and then buried or incinerated. By extending as far as possible the productive life of these materials and the energy required to make them, companies can generate a much greater return on investment.

Waste can be defined as anything that does not create value, and companies can think through how and for what function the product is being used, and therefore incorporate waste prevention into the design phase of products. Some companies are drawing inspiration from nature by putting in place closed-loop systems that mirror the natural closed-loop production in living plant cells. These zero emissions or zero waste objectives refer to the "upstream" return of all materials that currently end up in landfills or incinerators. Instead, this "waste" contributes to the materials and production cycle as feedstock for new products or services, or it is reintegrated into nature through a decomposition process that does not lead to environmental impacts.

Several companies have started to address end-of-use with success. In April, Sony announced its "Road to Zero" mission, setting targets and tactics for multiple environmental challenges like climate change, biodiversity, and toxics across six life cycle stages from research and development through take-back and recycling.

## The Transformation Opportunity

Sustainability can and should be thought of as a way to create opportunities and become a substantial source of competitive advantage, not solely as a way to mitigate risk. Many companies are beginning to radically transform their business models, using sustainability to reconceptualize how they deliver value, create innovative products with small footprints, aim toward closed-loop systems, and engage consumers through choice and behavioral change.

At BSR, we will be working with companies on this subject on an ongoing basis. In June, we convened a group of individuals in New York from agriculture, apparel, food, retail, personal care, and beauty companies to understand what tools and resources companies need to address consumption. In September, we will hold another workshop in London to continue exploring these opportunities for companies. We believe, based on discussions with many of our members and our own analysis, that this topic represents an important emerging frontier in corporate sustainability strategies. If you're interested in helping to shape these strategies, contact Linda Hwang at Ihwang@bsr.org.

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