



# Making the Business Case

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## You must be the change you wish to see in the world.

—Mahatma Gandhi

Today, business and government attitudes are changing around the world. New, more aggressive laws are being written in all major global markets, and businesses are looking to free themselves from the insecurity of petroleum as their only energy (and/or product material) option. In addition, the economy and all the issues surrounding deregulated markets are now forcing companies in all industries to find new ways of doing business. As markets flail around trying to reset, the need for transparency, a key element in sustainable business practice, is becoming part of the strategy of recovery.

Photo: W. Jedlička, 2009

After standing alone for years on the moral high ground, eco-practitioners are finally seeing the shift from *if* companies should get into that green thing to *how* and *how soon* sustainability practices can be incorporated into business operations.

Using the language of change, businesses are asking what natural capital is and how it is spent. What economic lessons can be drawn from nature? How do market forces shape the way we live, work, and even play? How can we nurture the green thumb on the invisible hand? Today's eco-leaders understand the interplay between producer and consumer, governments and people, stockholders and stakeholders, humans and the environment, and how all of these things interconnect and direct what and how we create.

#### **Consumption and Renewal**

The concept of birth, life, death is linear. It has a beginning, a middle, and an end. We view the things we surround ourselves with as having the same linear quality. Things are made, we use them, and then we toss them away. But the reality is, there is no "away." All things we make have a life after we use them, as garbage (landfill or incineration) or feeder stock for new objects (recycling or reuse reclamation). Objects are reborn (recycled or reclaimed) and put back into the system again, becoming part of a circular pattern of consumption that imitates nature: making, using, and remaking without limit. Imagine an upwardly spiraling system where we not only refresh what we take and use but we restore what we have previously destroyed through linear consumption. To get to this level, we need to start reexamining not just how we do what we do but why we do it.

#### Choices, Choices, Choices

Examples of human impact on the environment abound in both recent and ancient history. The best-known one is the fate of the Easter Islanders. This group, it has been suggested, drove themselves to extinction by their own excesses and lack of planning. As we consider the choices we make each day, think about what must have been going through the mind of the Easter Islander who cut down the last tree, leaving his people no way to build, repair, or heat their homes; build or repair boats to fish (their main food source); or even get off the island. With a simple strike of his ax, he sealed his people's collective fate.

In our lifetime, we may not be faced with this dilemma, but every choice we make each day adds or subtracts from the resources available to us tomorrow. Bad choices are accumulating like a death by a thousand cuts. Our salvation will come in much the same way: by regular people making everyday choices.

One of the most powerful ways we can have an impact is by what and how we choose to consume. What we buy reveals a lot about how we frame our own impacts. A great example is buying a perfect red apple rather than one that is blemished but just as sweet and free of chemicals needed to attain that perfection.

Nature's Path really understands its customers' drive for more than just a breakfast cereal. For their

This seemingly small redesign—"Same net weight, 10% less box"—by Nature's Path resulted in significant energy, water, and wood resource savings. In addition to resource savings, Nature's Path uses the box's "billboard" to communicate with its audience about eco-issues, using text and graphics to both inform the mind and entertain the eye.



product Heritage Flakes they use organic grains, but they also support sustainable farming practices and biodiversity efforts.

Not only does the box illustrate an attractive product plus key into potential buyers looking for more healthful choices and good taste, it seals the deal by talking about packaging-reduction efforts. "Same net weight, 10% less box" is featured on the front. Finally, someone has addressed a nagging thorn in the consumer's side since boxed cereal was first marketed over 100 years ago: how to fill the box without leaving such a huge space at the top.

On the product's side panel, Nature's Path continues the discussion of packaging reduction by citing annual water savings (700,000 gallons), energy savings (500,000 kilowatts), and paperboard savings (about 1,300 trees). These are serious and significant impacts that come from a 10 percent reduction in box size. Now, along with information detailing nutrition and sustainable production practices, consumers can make an educated decision about the food they eat and the impact of that choice. By connecting with consumers on a deeper level, Nature's Path has armed them with the information needed to know they do have a choice—and to recognize that what instinctively seemed wrong was indeed very wrong.

As we look at the decisions we make with regard to design, in order to achieve more than simply making things less bad, we have to provide ways for users/viewers to participate in the pursuit of good.

Like Nature's Path, we need to consider all of our design choices as part of a greater contract with society. As producers of goods, a group of resource consumers whose design choices are compounded by the millions of units produced, we are charged with nothing less than the health and safety of our fellow beings. Nowhere was this contract more brutally illustrated than in the case of the Tylenol murders in the early 1980s, which showed how easily our distribution system can be compromised and how seemingly benign design choices could lead to harm.

At the time, Johnson & Johnson, the maker of Tylenol, was distributing the product using common and completely legal techniques for this product category. To its credit, Johnson & Johnson responded quickly and decisively. It not only pulled all of the company's products immediately from the store shelves but became very active in the development of tamper-evident packaging—the norm across the pharmaceutical industry today.<sup>1</sup>

As designers, we're charged with nothing less than the health and safety of our fellow beings.

#### Underconsumption

It's odd to think of not consuming enough, but this in fact is a very real problem. Malnutrition is a form of underconsumption (not having access to enough nourishment); so is lack of education (not taking in or being allowed access to knowledge). Lack of research and the foresight it enables also is a type of underconsumption (not consuming enough time to make sure the effort, project, or piece will be smart in the long run).

There are also systematic imbalances caused by underconsumption in nature. The standard mode of forest management for the past century has included the aggressive suppression of natural fires. By doing so, too much underbrush is allowed to build up. When this accumulated brush catches fire, what would have been taken care of by nature's renewal system quickly becomes a devastating catastrophe resulting in complete destruction. More progressive forest managers have found that working within nature's plan allows their areas to remain healthier, more diverse, and better able to recover after disturbances.

On the industry side, underconsumption of recycled goods has kept market viability for these goods out of balance with virgin goods. With few exceptions, recycled goods can be cheaper to produce than virgin goods, enjoying lower energy inputs, less processing needed, and so on. And yet, due to "low demand" in some categories, the price for a recycled option might be higher than its virgin equivalent.

As we begin to examine products and behavior with an eye to restore what we've been taking out of natural systems, rather than create unstable monocultures for our convenience, balance becomes key. We must look at things as a system and find ways of working to maintain all elements in harmony. To do this, we need to not rush to find *the* solution—one that is convenient for us but completely ignores long-term impacts.

#### Overconsumption

Writer Dave Tilford tackled the idea of consumption in a 2000 Sierra Club article, "Sustainable Consumption: Why Consumption Matters":

Our cars, houses, hamburgers, televisions, sneakers, newspapers and thousands upon thousands of other consumer items come to us via chains of production that stretch around the globe. Along the length of this chain we pull raw materials from the Earth in numbers that are too big even to conceptualize. Tremendous volumes of natural resources are displaced and ecosystems disrupted in the uncounted extraction processes that fuel modern human existence. Constructing highways or buildings, mining for gold, drilling for oil, harvesting crops and forest products all involve reshaping natural landscapes. Some of our activities involve minor changes to the landscape. Sometimes entire mountains are moved.2

An ecological footprint is defined as the amount of productive land area required to sustain one human being. As most of our planet's surface is either under water or inhospitable, there are only 1.9 hectares (about four football fields) of productive area to support each person today (grow food, supply materials, clean our waste, and so on). That might sound like a lot, but our collective ecological footprint is already 2.3 hectares. This means that, given the needs of today's human population, we already need 1.5 Earths to live sustainably. But this assumes all resources are divided equally. Those with the largest footprint—the biggest consumers of global resources—are U.S. citizens, who require 9.57 hectares each to meet their demands. If everyone in the world consumed at that rate, 5 Earths would be needed to sustain the population. People in Bangladesh, in contrast, need just 0.5 hectares; for people in China today, the footprint is 1.36 hectares.3

What will China's footprint look like in just a few decades? As China continues to prosper and

grow, what will happen when its new population of 1.5 billion citizens demand *their* fair share of the pie? If the rest of the world continues to use the United States as the benchmark for success, we would need 25 Earths to meet that level of consumption. Something has to change. (Want to make it personal? Calculate your own footprint: *www.footprintnetwork.org.*)

Part of why the U.S. footprint is so large has to do with trade access to more than the country's balance of natural capital. Much of this natural capital comes from countries that have some resources but not much else from which to earn cash. Due to corruption, or desperation, many of those countries are selling off their resources quickly, regardless of the long-term consequences. With such unbridled access fueling its success, North America (and the United States in particular) hasn't yet become deeply concerned about the need to use resources efficiently. After six months, 99 percent of the resources to make the things we use is converted to waste—disposed of as finished goods, but mostly as process waste.<sup>4</sup>

How did the United States get into this position? After World War II, the chairman of President Eisenhower's Council of Economic Advisors stated that the American economy's ultimate goal was to produce more consumer goods. In 1955, retail analyst Victor Lebow summed up this strategy that would become the norm for the American economic system:

Our enormously productive economy... demands that we make consumption our way of life, that we convert the buying and use of goods into rituals, that we seek our spiritual satisfaction, our ego satisfaction, in consumption....

We need things consumed, burned-up, replaced and discarded at an ever accelerating rate.<sup>5</sup>

This mid-twentieth-century view is in sharp contrast to how resources and goods were viewed in preindustrial times, when moving goods around or even making them in the first place was a really big deal. In those days, people in the Old World thought hard about resource use. What they had around them was pretty much all there would be, so they had to figure out how to make it work. In contrast, the New World was perceived as nothing but space, filled with endless vistas of trees (and a few indigenous people). Because of this seemingly limitless abundance, the New World was detached from the realities of resource management. The idea that resources are limitless and easily obtained still lingers today compounded by the high level of resources demanded to meet consumption demands led by the West, and the United States in particular. Dave Tilford notes in his article "Sustainable Consumption: Why Consumption Matters,"

"Since 1950 alone, the world's people have consumed more goods and services than the combined total of all humans who ever walked the planet before us."

As the new sustainability paradigm works its way into daily practice, companies are making the terms right-sizing, supply chain optimization, energy reduction, and others part of their language. In

December 2008, computer maker Dell announced changes to its packaging that will save more than \$8 million (and 20 million pounds of material) over the next four years. This latest expansion of its green-packaging program is targeting reductions for desktop and laptop packaging worldwide.

It should be noted, that though it's not a steadfast rule; it is becoming more and more common for companies undergoing sustainability-driven change (including its associated change drivers such as overhead reduction, risk reduction, and so on), to start to look for opportunities both for the thing being targeted for change, as well as all associated objects and systems. In the case of packaging, for instance, this would include looking hard at print (inserts, manuals, promotional items), transport and logistics, and warehousing—as well as the package itself. As companies, and even consumers, reposition themselves both for the new paradigm, as well as to better weather the storms of financial uncertainty, the idea of "consuming well" rather than simply more, is becoming the mantra for a better and more sustainable economy.

#### **Understanding Consumption**

If all developing countries consumed as the West does, we would need several Earths to satisfy that "need." The concept of spending every dime ever made—like using resources until they're gone—must change, or we as a species have no hope of survival.

Civilizations have understood the concept of capital (money) for thousands of years. How much we have and how quickly we earn it has come to be the indicator of successful effort. But with the idea of long-term change in mind, we need to reexamine why and how we consume, look for ways to move in

a more restorative direction, and also look for new ways to measure our success.

Each year since 1995, San Francisco-based think tank Redefining Progress has been using a tool they created, Genuine Progress Indicator (GPI), to measure how well Americans (or any country) are doing both economically and socially. This GPI paints a very different picture of American society than mainstream indicators such as gross domestic product (GDP), or gross national product (GNP). Over the years, a variety of conferences sponsored by various groups, have brought together interested parties with the ultimate aim of coming up with a globally applicable index of "gross national happiness (GNH)," and "genuine progress index" (GPI). It is the intent of the groups supporting these indicators that these metrics supersede the current global economic indicators, GNP and GDP, with the more realistic indicators to include things like: income distribution, quality of life, education, value of household and volunteer work, crime, resource depletion, environmental damage, military spending, and so on.7

Tillford highlighted some of the problems with our current economic metrics:

In 1998, more than \$100 billion was spent in the United States dealing with water, air, and noise pollution—and considered growth by the nation's GDP. That same year, criminal activity added \$28 billion to the GDP through replacement of stolen goods, purchase of home security systems, increased prison building, and other necessary responses.

By the curious standard of the GDP...the happiest event is an earthquake or a hurricane. The most desirable habitat is a multibilliondollar Superfund site.... It is as if a business

kept a balance sheet by merely adding up all "transactions," without distinguishing between income and expenses, or between assets and liabilities.<sup>8</sup>

The originator of the GDP (and GNP) measure, Simon Kuznets, acknowledges these indicators were not a measure of well-being but only economic activity. Expanding on this idea in her booklet "Economic Vitality in a Transition to Sustainability," economist Neva Goodwin notes: "Qualitative improvement of goods as services determines material well-being as much or more than physical quantity of output (especially in the more developed economies)." Goodwin goes on to point out:

It is not inherent in market systems that they will orient towards social goals. It is a half-truth that market capitalism is the best economic system yet invented. The other half of the truth is that, when markets are allowed to work as though they were self-contained systems, operating within a vacuum, they become increasingly self-destructive, because they degrade the social and environmental contexts in which they exist, and upon which they are entirely dependent. 9

These ideas have huge implications for print, product, and packaging, the backbone of today's free market system. Too many of the things humans create today have remained market viable simply because they have not had to carry their true weight—their true costs for resource impacts, transportation impacts (greenhouse gas loads, plus fuel extraction and refinement), human health and its economic impacts, and so on.

For industries that exist on the sheer volume of units produced, how will producers survive when people

start to ask such fundamental questions as: Can we each be happy without having more and more stuff? Can we create more economic activity without creating stuff (service-based versus manufacturing-based economy)? Can the activities we value happen without having stuff at all? Is stuff really the problem, or is it just the way we perceive and produce stuff? And, if we're in the business of making and selling stuff, how can we key into new ways of thinking to help drive true innovation, especially when "satisfaction" is a moving target? (Want to know more? Watch Free Range Studio's *Story of Stuff* at *www.storyofstuff.com.*)

Change will come not by just thinking outside the box but by throwing the box out the window and looking at the space it leaves behind. Was the box or effort needed, will we miss it or some part of it? Was it done well? What impacts did it make? Was making it an investment in our future? Did it add to natural capital (resources each nation naturally possesses), or was it simply a drawdown of our account? Is it possible to "create more good," as systems thinking pioneer William McDonough is often heard to ask?

With perhaps a few exceptions, no one wakes up in the morning calculating how to trash the planet. Instead, our daily lives are a series of choices, each minuscule in its individual impact. But when multiplied billions of times, day after day and year after year, the impact is enormous.

So far, what we've been doing is "successful" because of—or in spite of—our choices. The funny part about being successful, though, is that it can turn you into a one-trick pony, creating a huge disincentive to change. Capital investment in one production system or reliance on one material type

or resource flow, as is common practice, locks a firm into a narrow operating model. Though the rewards are great when the timing is right, there's no guarantee it can go on forever—that is, be sustainable in the original sense of the word. But in the general scheme of evolution, the species that can adapt quickly are the ones that survive.

In its report *Sustainable Consumption Facts and Trends: From a Business Perspective*, the World Council for Sustainable Development looked at these consumption trends:<sup>10</sup>

#### 1. Global drivers of consumption

Global consumption levels and patterns are driven by a variety of factors. Rapid global population growth is one of the most obvious. With world populations expected to grow to 9 billion by 2050, all sectors will be growing. Of particular concern will be sharp raises in middle-class levels of consumption in developing countries patterned on the Western style of "consumerism."

#### 2. Global consumption patterns and impacts

Global consumption has put unsustainable and increasing stress on Earth's ecosystems. In only the past 50 years, human kind has degraded 60 percent of Earth's ecosystem services. The consumption of natural resources (energy and materials) is expected to rise to 170 percent of the planet's biocapacity by 2040, even though human well-being does not require high levels of consumption.

#### 3. The role of the consumer

Consumer attitudes and behaviors are becoming increasingly focused on environmental, social, and economic issues, with some market

sectors becoming more and more willing to act on those concerns. However, "willingness" to act does not always translate into change. A variety of "barrier" factors include: availability, affordability, convenience, product performance, conflicting priorities, skepticism, and force of habit.

### 4. The role of business in mainstreaming sustainable consumption

Business approaches to sustainable consumption can be grouped into these broad categories:

- Innovation. Business processes for any effort are beginning to incorporate ideas to maximize societal value and minimize environmental cost.
- Choice influencing. Through the use of value-based marketing, companies are leveraging techniques to encourage and empower consumers to help shift markets in a more sustainable direction.
- Choice editing. "Unsustainable" products and services are finding it difficult to remain in the market as consumer groups and other players focus attention on their impacts.

#### 5. The challenge ahead and options for change

To help drive real and far-reaching change, consumers need to be well informed, provided with healthful choices, and encouraged to embrace a fundamental shift in the way they approach their daily lives. Businesses, governments, and stakeholders need to continue (or open) dialogs about how to best position opportunities for change for the long-term benefit of all.



Your product in its natural environment.

#### **Nearly All New Products Fail**

The old ways of coming up with this week's brilliant ideas and then churning them out by the gazillion despite the consequences still works great. Or does it? Store shelves, or any audience-demanding media, are bulging with "brilliance," each competitor fighting with its neighbor to be the lucky one to connect. With the markets brimming with choice and competition, there is a generally accepted industry rule of thumb that nearly 70 to 90 percent of all new products fail. Why?

The simplest answer is that the whole social environment is changing. Or maybe the old

products aren't as good as they could be. In addition, audiences are becoming better educated.

From required information printed on pieces/
products, to information provided by advocacy
groups, to instant information access through the
Internet, the days of dumping "whatever" out there
(at least in the developed world) are over. Finally,
there are simply more of us, not only to distribute
to, but to compete with. As the days of the
one-trick pony draw rapidly to a close, not only
must the things we make do everything they
promise, but they must offer more to cut through
the noise of the competition.

Nothing exemplifies this concept of offering more better than sustainable products. These products are produced to not only meet a need; depending on the item, they are also: healthier, more energy efficient (saves run-time dollars), more resource efficient (meaning more selling units possible per resource unit), and have minimal impact on the waste stream compared to their less conscientious competition. In other words, these products are in general better for both the end user and society at large.

### Why Aren't All Products Already Sustainable?

Manufacturers, their creative service vendors, and potential end users all play a part in trashing our planet, and fear is one of the key factors why change is slow to arrive: Potential end users fear that unfamiliar products aren't as good (or what they're used to) coupled with fear of wasting their everstretched dollar; manufacturers fear that potential end users won't accept the new product; and the manufacturer's creatives fear being fired (losing the account) for stepping too far outside the norm.

Yet innovation is about embracing fear and using it to your advantage. Fear is good, and a powerful motivator. In the PricewaterhouseCoopers LLP 2002 Sustainability Survey Report, respondents acknowledged the fear that failure to adopt green business practices would have an adverse effect on consumer perception and thus negatively impact their market share.

In its 2007 Cause Evolution & Environmental Survey, Cone LLC (coneinc.com), a strategy and communications agency, found that, of the people responding:<sup>11</sup>

- 93 percent believe companies have a responsibility to help preserve the environment.
- 91 percent have a more positive image of a company when it is environmentally responsible.
- 85 percent would consider switching to another company's products or services because of a company's negative corporate responsibility practices.

One fear industries have is that if they do not adopt sustainable business practices, they will be legislated into action anyway—and not in a way advantageous to the industries. Farsighted industries recognize this and stay ahead of this curve to be best positioned for the inevitable.

#### What Does Change Look Like?

If change is inevitable, what will it look like? What is *sustainability*? To answer that in a design context, let's step back and look at the bigger picture in a systems context.

The world is a very complicated place, so it's no surprise that each industry is, too. Add to that the

business of implementing sustainability, which will require us to reexamine the way we do everything, covering a great mix of industries and disciplines. Naturally, everyone will want their voices heard and their bottom lines respected. Defining just what is sustainable is such an important question that the Sustainable Packaging Coalition (SPC) has made nailing down the answer for packaging their top-most priority.

The SPC looked to create a set of goals, not mandated rules. Its general idea was that if you define the solution, the problems will take care of themselves. The SPC criteria for a sustainable package are applicable to *any* effort, have eight clearly defined points, but really only ask these simple questions:

- Does it make us or the planet sick? Don't do it!
- Can we use renewable resources—energy as well as materials—and then use them again without going back to virgin sources?
- Are we doing it efficiently, considering all true costs (supply chain "eco-ness" [going past simple environmental regulation compliance], materials use, loop participation, social impacts, etc.)?

#### What Is Sustainability?

Goals and ideas used to define what a sustainable package or product might look like do not supply a full definition of what sustainability is. So again we ask: What exactly is sustainability?

The simplest answer is one that's been kicking around for some time; it was formalized in 1987 by the United Nations' World Commission on Environment and Development (the Brundtland Commission):

Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.<sup>12</sup>

This most basic idea has been at the core of human society since settled communities began. Ideas like "Don't eat your seed corn" and "Do unto others as you'd have others do unto you," that form the core of sustainability thinking, are concepts that have been overlooked in our collective push to the future. Let us discuss each of these ideas.

"Don't eat your seed corn." In today's environment, this phrase means do not use up what you need to keep the system going. With that in mind, one can quickly pull an example from sustainable forestry practices. Traditional clear-cutting is a very efficient and low-cost way to harvest wood. This method treats wood like annually tilled wheat rather than what it really is, the slow-growing cornerstone of a region's survival system. Sustainable forestry practices using planting, growing, and harvesting methods that mimic nature, though, have allowed for healthful and profitable ecosystems for generations.

"Do unto others as you'd have others do unto you."

This idea is perfectly illustrated by the new directives companies are giving their suppliers. In addition to establishing the Walmart scorecard that sets new benchmarks for packaging 13 and has made the entire packaging industry review what it's doing, Walmart also announced plans to measure the energy use and emissions of the entire supply chain for seven product categories, looking for ways to increase energy efficiency. 14 Eventually this initiative is expected to include other products (if not all) carried by the company. It would be no surprise then that other big-box retailers as well as consumer

goods producers (CPGs) have begun implementing similar benchmarks for their vendors.

Put simply, companies are demanding of their suppliers the same criteria for ethics and foresight that consumers and legislators are demanding of them. Rather than simply accepting whatever a company feels like selling, retailers (and other commercial buyers) are now saying to their suppliers, "Do unto us as others would have us do unto them."

#### What Sustainability Is Not

Sustainability is not a tax on production. It is the end to hidden subsidies and the beginning of assigning true costs. The best illustration in current terms is producer- (or user-) pays policies. Here, those people who use and benefit from a thing or service pay the full load for it—from the impacts of collecting the raw materials all the way through processing at end of life.

#### Dave Tilford explains:

Over 2,500 economists, including eight Nobel Prize winners, support the notion of market-based mechanisms for environmental solutions—like carbon taxes and emission auctions, where polluters pay for the right to emit, develop, or use nature's services. In addition, though many economists are hesitant to question our current measurements of economic growth, a small but active number believe only a true cost accounting of economic activities will give us an accurate figure of the state of the economy.

These true cost economists note that, as the GDP climbed 3.9 percent in 1998, the cost to taxpay-

ers from loss of wetlands and their economic services (like water filtration) climbed 3.7 percent. From 1973 to 1993, the GDP rose by 55 percent, while real wages dropped by 3.4 percent nationally. The emerging field of "ecological economics" is beginning to question these accounting incongruities. <sup>15</sup>

One can easily ask: Is paying the full cost of creating, using, and disposing of a product a tax or just the end of the free ride? What could be more fair than saying "If you want it, you must pay?"

Sustainability is also not specifically a barrier to trade in the classic sense. Setting standards for health, whether applied to the product itself (e.g., banning lead paint in toys) or to issues affecting our collective health (e.g., wood certified as not having been harvested from rain forests or old-growth forests), sets the stage for eliminating poorly conceived or manufactured goods and serves our collective long-term best interests. Insisting trading partners not create goods in a way (or with materials) that have been outlawed at home is hardly an unreasonable request. Companies able to meet these standards find new audiences and markets are open to them, while companies wishing only to dump whatever wherever are being forced to rethink this shortsighted strategy.

#### Tearing Down the Tower of Babble

Sustainability is quickly becoming the common language for business. Unlike the never-ending stream of business fads that get chief executives excited but leave middle management cringing, now management, marketing, design, engineering, production, procurement, and logistics can all sit down at the conference table and at least begin on

the same page. Although each discipline still has its own language and motivations, the conflicting babble that was the norm of conference rooms everywhere is becoming united in some sort of vision, with shared goals and ethics.

Coming now from a similar place of understanding, marketers understand that they must have a clear and verifiable reason for demanding certain design criteria. Designers now know that if they want to specify a given decorative material or technique, the impacts of that choice must have sound reasons—simply being "pretty" or "different" isn't enough. Along these same lines, purchasing agents understand that if their design colleagues keep telling them to ask vendors to avoid certain materials, that guidance must be heeded, no matter how attractive "other stuff" that's "cheaper" may sound.

Another advantage of using sustainability as part of a company's core ethics has been to increase employee satisfaction, thus reducing turnover. Everyone wants to feel good about the work they do.

We are seeing the very beginning of one of the most amazing times since the dawn of the industrial revolution. Today, we have the opportunity to completely remake everything we do but to get it right this time rather than just stumble into solutions. From the biggest buildings and entire communities to a simple brochure—every new project is an opportunity for innovation. Every innovation is an opportunity for increasing market share or adding to natural capital (putting back natural resources we've blasted through). Every change we make in the market and in how we manage resources is an opportunity to redefine the way we will live over the next 100 years and beyond. Sustainability is hope, it's exciting, and it's a complete

paradigm shift. There has never been a better time to create real, lasting, and positive change.

Even the longest journey starts with one small step. As consumers and lawmakers push for solutions, all eyes are turning to designers for answers. The time for a leisurely stroll has past; now it's time to hit the ground running.

Today we have the opportunity to completely remake everything we do, but to get it right this time, rather than just stumbling into solutions.

#### The Next Great Era of Design

In the western world, at the dawn of the Industrial Revolution, production was the domain of the craftsman. Ordinary objects were artful, durable, and meant to be respected for their function and value as a needed object. Everything was hard to come by, and once a thing outlived its primary function, new uses were found for its parts. Nothing was wasted. As mass-produced goods started to come on the scene, much of the decoration added by craftsman was reproduced in the factory-made product to let consumers know that even though the thing wasn't handmade, it still had value. This era was the age of Industrial Arts.

As the pace of life accelerated, we entered the era of streamlined design, form follows function—

Bauhaus, prairie style, mission style, mod, pop, futuristic—smooth elegant lines, bold shapes, fun, playful, sleek, streamlined. All of these ideas made up the palette of choices in the new age of Industrial design.

But something happened as life raced through the 1900s. As the century screamed to a close, form and function became slaves to price and quantity. Quality, aesthetics, fit, and finish—all were abandoned to hit that ever-lower price. But that wasn't all that was abandoned. Integrity, fair play, stewardship—these ideals got tossed by the wayside, too, as companies leveraged loopholes and backdoor subsidies found in lax environmental regulations, inhumane worker laws, and artificially cheap energy that was openly subsidized or did not carry its full environmental and health impact costs. Poverty became ever more entrenched for most, even as living standards improved for many, while whole ecosystems were collapsing and there was nowhere to go but down.

Thankfully, that's not the end of the story. Today we're watching the dawn of a new era. In September 2007, a sustainableday.com blog entry noted:

The IDSA [Industrial Designers Society of America] has come full circle to openly embrace sustainable design since once supposedly banning environmental design legend Victor Papanek from the society for speaking up against the damage that the industrial design profession has done.

... In this age of mass production when everything must be planned and designed, design has become the most powerful tool with which man shapes his tools and environments (and, by extension, society and himself). This demands

high social and moral responsibility from the designer.

As we merged into the new era and the us-versusthem ideas from the green-versus-mainstream days started to find new direction, a flurry of articles came out titled "Green Is Dead." If you paid the slightest bit of attention, though, it was obvious they were out to shock, nothing more. Once you read the articles, you would discover that green as a late twentieth-century "movement" was not dead per se but was finally maturing from a rabble of unshaven idealism to real and actionable strategies for sustainable living and business. A place to actually be rather than a place to simply dream about. In the early days, the image of the radical green proponent made selling the concepts of sustainability nearly impossible for working designers committed to "green" in practice. Afraid to seem too "alternative," too "out there," and too far from the norm, designers continued to produce products they knew were not forward-thinking simply for fear of losing market share.

Today, the concepts of sustainability—not "greenness" alone—are being integrated into business models and product strategies across the board. Rather than being legislated into action, businesses—not limited to the fringe faithful, but big corporations—are actively looking at their total impact and opportunities (*triple bottom line*) as triggers for increased competitive advantage, creative levers, and profitability, and, of course, as a tool to increase positive consumer perception and market share.

The time was right for change. Green was being perceived as exclusive rather than inclusive, "only for the true believers," which limited the further integration of its actionable principles.

If green were dead, as the articles claimed, then its legacy is not only living on but thriving—and moving closer to the reality green originally had hoped for. Not through calls for the immediate dismantling of capitalism but through thousands of actions taken every day, by regular people, who recognize opportunities to make positive incremental changes. These changes are made for a variety of reasons—some ethical, some legislated, and some profit driven—but all with an eye on sustaining a positive advantage.

As with any maturing system, there will come a day when we won't have to talk about sustainability. Not because it's dead but because it's simply just another part of good business. Governments, companies, designers, and consumers are waking up to embrace new products, services, and ideas that deliver on the promises they make. Things that aren't just all surface beauty or brief functionality but truly innovative and useful. And, most important, they were created with all stakeholders in mind, including ones not born yet.

So though it's not "official," and even the idea of naming a design era is a western-centric one, it is not too soon to say that the early twenty-first century marks the next great era of design: sustainability.

#### **How to Avoid Change**

"Those of us who have spent years working towards sustainable prosperity, trying to move investors and corporate leaders to take action to address major environmental and social threats, have often felt like Sisyphus of Greek mythology—destined to spend our lives rolling a huge boulder uphill. Today, it is possible to survey our progress and feel that we have

reached a point where that boulder is not going to roll back down the hill," Mindy S. Lubber, president of Ceres, notes.<sup>16</sup>

For change agents steeling themselves up for the long haul, pulling those resistant to change into the new era will be a task with us for some time. Entrenched interests hate change. Ending slavery, women's suffrage, and universal equal rights were all "crazy" ideas that reactionaries swore would doom civil society if they became law. Yet society prospered, becoming better by being able to benefit fully from the talents and contributions of all citizens. With tongue planted firmly in cheek, in a January 2008 sustainableisgood.com piece titled "7Rs of Anti-Sustainability," author Dennis Salazar asks reactionaries and laggards alike to consider these helpful tips as they look for ways to resist shifting to a world that benefits more than the select few:

- Refuse to consider thoughts and opinions other than your own. If you are right and everyone else is wrong, why bother?
- 2. Remain glued to the status quo. After all, if what you have been doing works, why take a chance on changing anything?
- Reject any idea that even remotely sounds like compromise even though sometimes that is the best way to accomplish progress.
- 4. Resist any new technology unless it is absolutely perfect and supports your position. "See, I told you it wouldn't work" can be so satisfying.
- 5. Ridicule anyone who appears to be profiting from their work in sustainability, especially if their margin appears to exceed your own.

- 6. Repel anyone seeking knowledge or help. Everyone knowing as much as you do cannot be a good thing.
- 7. Resign yourself to the fact that the environmental problem is too large to be fixed. Seek new goals that are easier to achieve!

#### It's the Other Guy's Problem

One of the things heard over and over from those slow to embrace change is "We're not changing until the other guys does, or he'll have an unfair advantage." In their defense, this is absolutely true. As long as the full cost of impacts for the things we make and the way we make them are not managed by enforceable law, someone is going to cash in on that hidden subsidy. To the other guy, however, *you* are the "other guy" expected to make the first move.

The problem, of course, is that if everyone is waiting for the other guy to act, no one will. Keeping the whole system stagnant often makes the

For the first time in the brand's history, Burt's Bees has released a comprehensive Corporate Social Responsibility (CSR) Report, "The Greater Good Social and Environmental Progress Report: 2008 and Before," documenting the brand's commitment to sustainable business practices. After many years of pioneering sustainable practices and leading the Natural Personal Care industry, Burt's Bees intends to rigorously measure its progress and has set ambitious, quantitative goals to better assess its achievements and understand its challenges.

Even the materials chosen for the report convey their values. The company chose 100 percent post-consumer recycled, FSC (Forest Stewardship Council) Certified stock and vegetable-based inks and printed only a limited quantity to minimize paper, and instead drove traffic to a flip-through pdf on its Web-site, www.burtsbees.com. They also diagram the resources saved by the choice of paper to help put these efforts into perspective.

#### Today.

in the world, adored

by consumers, desired

by our customers and working in harmony with our environment. Following our North Star, the business model we call.
The Greater Goods\*\* calls for a deep commitment to our
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Many of these people have a personal relationship with our brand. Calling them "devoted," as we're deliphed to continually learn, is an understament. We're thankful for that and we know that muturing their develors as we grow important. It means the choices we make will always need to effect a sustainability miridost—one that's based on common

sense and common good. We use natural ingrediers loss, these are the time-tested ones. Our "kitchin o'enery" approach means mineral processes that mainteins pay. Our probadings is made of materials that are post consecuracy-cled (PCR) whenever possible, recyclable, and design to minimize waste. And we don't believe an inals was put it is earth to be tested on.

"Offering a natural product wrapped in environmentally sensitive packaging is only part of the story."

Our vision is a commitment to sourcing ingredients responding to manufacturing in ways that proble one day help to had our planet, and to collisions in "and veolutions in "and veolutions in successful choices. We did we want to be "introdutive, of our horses, defined as as,"

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not yet a fully sustainable company, but we're on



The GREATER GOOD™ Business Model Operating our company with the highest level of social responsibility.



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consequences much worse than if everyone had just done their bit to begin with. In game theory, the idea of waiting for the other guy is part of "The Prisoner's Dilemma."

Two prisoners are arrested for the same crime. Put in separate cells, unable to get their stories in line, the guards try to coax each to implicate the other. If neither goes along with the guards, they will both receive a sentence of just 1 year. If one accepts the deal and the other keeps quiet, then the squealer goes free while the quiet one gets 10 years. But if they both implicate the other, they each get 5 years.

If one prisoner wants to attempt to get out of responsibility and get off scot-free, he will try and put all the blame on the other guy, even though he risks the other guy doing the same. Even if each conspirator assumes the other would crack, they would still be better off implicating the other, as they would get only 5 years each rather than perhaps get 10 years alone for keeping quiet. A rational person acting in her own self-interest would always betray her fellow prisoner. Yet that puts both in jail for 5 years, when, in theory, they could have had only a year each if they had both just kept quiet. In other words, if they had taken a chance and done the hard thing rather than try to stick it to the other guy, the outcome would have been better for the two as a community.

In a September 2007 *Economist* article, "Playing Games with the Planet," the author argues that the pessimistic among us would assume that the international response to climate change (and so sustainability in general) will go the way of the prisoner's dilemma. Noting that rational leaders will always neglect the problem, on the grounds that

others will either solve it, allowing their country to become a free-rider, or let it fester, making it a doomed cause anyway, the author concludes the world would be condemned to a slow roasting even though global impacts could be averted if everyone simply cooperated and took on a share of the load no matter what.<sup>17</sup>

The article goes on to cite a study by Michael Liebreich of New Energy Finance, a research firm. Liebreich draws on game theory to reach the opposite conclusion. The game in general changes dramatically, Liebreich points out, if players know they can play more than once. With this expanded option, players have an incentive to cooperate with their opponent to maintain good favor in later rounds.

Liebreich's paper in turn cites a study by Robert Axelrod and William Hamilton, which highlights three elements for successful repeat play:

- 1. Players begin the game cooperating.
- 2. They should deter transgressions by punishing the offender in the next round.
- 3. Rather than hold grudges, players should cooperate with misbehaving players again after imposing an appropriate punishment.<sup>18</sup>

With this new insight into game play and its possible implications for negotiating action on sustainability issues, the *Economist* article notes:

Mr. Liebreich believes that all this holds lessons for the world's climate negotiators. Treaties on climate change, after all, are not one-offs. Indeed, the United Nations is even now trying to get its members to negotiate a successor to its existing treaty, the Kyoto Protocol, which expires

in 2012. Many fear that the effort will collapse unless the laggards can be persuaded to join in. But the paper argues that rational countries will not be deterred by free-riders. They will continue to curb their emissions, while devising sanctions for those who do not.

Due to the complexities involved in sustainability in general and all the details that would need to be covered to mandate specific change, establishing basic codes of ethics is becoming part of the total strategy for holding players accountable for their actions—even if specific laws do not yet exist. Codes of ethics give both players and governing bodies tools by which to judge transgressors as well as a means to prod those who would try to get a free ride. Covering more turf than any one law, codes of ethics help pull all of the intricate and scattered threads into one more manageable guide., Codes of ethics, beyond the basics (the Sarbanes-Oxley Act in the U.S., for example, also known as the Public Company Accounting Reform and Investor Protection Act of 2002, was enacted as a reaction to a number of major corporate and accounting scandals [Enron, WorldCom]), have become essential tools for farsighted companies, especially privately held companies not usually held to new transparency regulations, to get ahead of legislative action, allowing them more time to better manage inevitable change. They also provide benchmarks for improvement to maintain and increase forward progress and to promote (and maintain) positive consumer (or investor) perception. Codes of ethics help companies show a variety of efforts (environmental, fair trade, community involvement), in a tangible way: "We're not there yet, and we have a way to go, but these are our goals, and this is what we've done so far."

## Taking Responsibility and Thriving

Codes of ethics for design have a long history., The Code of Hammurabi, the first written code of law in human history, was established by the sixth Babylonian king, Hammurabi (ca. 1760 BCE). The laws are numbered 1 to 282 and are inscribed in cuneiform script on an eight-foot stela. <sup>19</sup> Numbers 229 to 233 assign stiff penalties for compromising production integrity. Personal guarantees meant much more than today's platitudes:

If a builder build a house for some one, and does not construct it properly, and the house which he built fall in and kill its owner, then that builder shall be put to death.

Imagine what products would be like if these laws were applied today. Perhaps we would be less far along in terms of progress, or maybe we would have evolved our society in a much more thoughtful way. Doing things more thoughtfully is the idea behind the precautionary principle.

#### The Precautionary Principle

Long-used aphorisms such as "An ounce of prevention is worth a pound of cure," "Better safe than sorry," and "Do no harm"—the latter still in the Hippocratic Oath for doctors—are accepted as part of humankind's collective "common sense" and the core of the precautionary principle, a moral and political principle set.

Though there are many definitions of the precautionary principle in use to justify all sorts of preemptive action strategies, at a 1998 meeting of scientists, lawyers, policy makers, and environmentalists at Wingspread, headquarters of the Johnson Founda-

tion (a philanthropic effort founded by Herbert Fisk Johnson, Jr. the third generation leader of S.C. Johnson & Son, Inc.), the precautionary principle was summarized this way:

When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof. The process of applying the precautionary principle must be open, informed and democratic and must include potentially affected parties. It must also involve an examination of the full range of alternatives, including no action. <sup>20</sup>

This idea is most often applied to impacts on human and environmental health—highly complicated systems with very unpredictable interactions. Release of radiation or toxins, massive deforestation, reduction in biodiversity or wholesale ecosystem collapse, and use of ozone-depleting fluorocarbons causing global adverse impacts all imply:

... a willingness to take action in advance of scientific proof [or] evidence of the need for the proposed action on the grounds that further delay will prove ultimately most costly to society and nature, and, in the longer term, selfish and unfair to future generations.<sup>21</sup>

The core of this concept embraces people's ethical responsibility to maintain the health of natural systems and acknowledges the fallibility of human-kind. In the absence of perfect understanding, an ounce of prevention (or forethought) is worth a pound of cure.

In 1982, the United Nations' General Assembly adopted the World Charter for Nature, the first international endorsement of the precautionary principle.<sup>22</sup>

#### **World Charter for Nature**

Reaffirming the fundamental purposes of the United Nations, in particular the maintenance of international peace and security, the development of friendly relations among nations and the achievement of international cooperation in solving international problems of an economic, social, cultural, technical, intellectual or humanitarian character,

#### Aware that:

- (a) Mankind is a part of nature and life depends on the uninterrupted functioning of natural systems which ensure the supply of energy and nutrients,
- (b) Civilization is rooted in nature, which has shaped human culture and influenced all artistic and scientific achievement, and living in harmony with nature gives man the best opportunities for the development of his creativity, and for rest and recreation,

#### Convinced that:

- (a) Every form of life is unique, warranting respect regardless of its worth to man, and, to accord other organisms such recognition, man must be guided by a moral code of action,
- (b) Man can alter nature and exhaust natural resources by his action or its consequences

and, therefore, must fully recognize the urgency of maintaining the stability and quality of nature and of conserving natural resources,

#### Persuaded that:

- (a) Lasting benefits from nature depend upon the maintenance of essential ecological processes and life-support systems, and upon the diversity of life forms, which are jeopardized through excessive exploitation and habitat destruction by man,
- (b) The degradation of natural systems owing to excessive consumption and misuse of natural resources, as well as to failure to establish an appropriate economic order among peoples and among States, leads to the breakdown of the economic, social and political framework of civilization.
- (c) Competition for scarce resources creates conflicts, whereas the conservation of nature and natural resources contributes to justice and the maintenance of peace and cannot be achieved until mankind learns to live in peace and to forsake war and armaments,
  - Reaffirming that man must acquire the knowledge to maintain and enhance his ability to use natural resources in a manner that ensures the preservation of the species and ecosystems for the benefit of present and future generations,
  - Firmly convinced of the need for appropriate measures, at the national and

- international, individual and collective, and private and public levels, to protect nature and promote international co-operation in this field,
- Adopts, to these ends, the present World Charter for Nature, which proclaims the following principles of conservation by which all human conduct affecting nature is to be guided and judged.

#### General Principles

- 1. Nature shall be respected and its essential processes shall not be impaired.
- The genetic viability on the earth shall not be compromised; the population levels of all life forms, wild and domesticated, must be at least sufficient for their survival, and to this end necessary habitats shall be safeguarded.
- 3. All areas of the earth, both land and sea, shall be subject to these principles of conservation; special protection shall be given to unique areas, to representative samples of all the different types of ecosystems, and to the habitats of rare or endangered species.
- 4. Ecosystems and organisms, as well as the land, marine, and atmospheric resources that are utilized by man, shall be managed to achieve and maintain optimum sustainable productivity, but not in such a way as to endanger the integrity of those other ecosystems or species with which they coexist.
- 5. Nature shall be secured against degradation caused by warfare or other hostile activities.

Over the years, the precautionary principle has been at the heart of codes of ethics of many groups as well as government's environmental policies, especially in the European Union (EU). On the corporate side, adoption of the precautionary principle can be seen in the 2006 Chemicals Strategy for The Body Shop International, a UK-based cosmetics and personal care products company.<sup>23</sup>

In government, the European Commission's new regulatory system for chemicals, REACH (*r*egistration, *e*valuation and *a*uthorization of *ch*emicals) explicitly cites these principles as a basis for decision making whenever the scientific data are insufficient. Virtually unknown in the United States for years since its introduction in 2003 (formally adopted 2007), it is now gaining ground. In December 2001, the *New York Times Magazine* listed the principle as one of the most influential ideas of the year, citing the intellectual, ethical, and policy framework the Science and Environmental Health Network (SEHN) had developed around the principle as an example.<sup>24</sup>

In 2003, the city of San Francisco passed a precautionary principle purchasing ordinance, with Berkeley following suit in 2006.<sup>25</sup> Encompassing everything from cleaning supplies to computers, this ordinance requires the city to weigh the environmental and health costs of its annual purchases.

Items in the ordinance not only touch on solid sustainability principles and put them into practice but implement far-reaching ideas, such as accounting for true costs (the cost of all impacts along a supply chain, not just direct impacts of a single good or service).<sup>26</sup>

#### **Hannover Principles**

As complex as the planet itself, sustainability cannot be approached in a one-size-fits-all way. Different industries have different opportunities as well as unique obstacles. Ultimately, it's not important how we get there, as long as we're all moving in the same direction—and doing it sooner rather than later.

Like the precautionary principle, the Hannover Principles<sup>27</sup> were created to provide a guide for designers, planners, governmental officials, and all involved in setting design priorities for humanity, nature, and technology. Commissioned by the city of Hannover, Germany, as the general principles of sustainability for the 2000 World's Fair, and first drafted by William McDonough and Michael Braungart, the Hannover Principles, along with the Earth Charter and Blue Planet 2020 plan, are intended to serve as the basic tools for the development and improvement of humankind and as part of a commitment to once again live as part of the earth.

#### The principles ask us to:

- Insist on the right of humanity and nature to coexist in a healthy, supportive, diverse, and sustainable condition.
- Recognize interdependence. The elements of human design interact with and depend upon the natural world, with broad and diverse implications at every scale. Expand design considerations to recognize even distant effects.
- Respect relationships between spirit and matter. Consider all aspects of human settlement including community, dwelling, industry, and trade in terms of existing and evolving

connections between spiritual and material consciousness.

- Accept responsibility for the consequences of design decisions upon human well-being, the viability of natural systems, and their right to coexist.
- Create safe objects of long-term value. Do not burden future generations with requirements for the maintenance of vigilant administration of potential danger due to the careless creation of products, processes, or standards.
- Eliminate the concept of waste. Evaluate and optimize the full life cycle of products and processes to approach the state of natural systems, in which there is no waste.
- Rely on natural energy flows. Human designs should, like the living world, derive their creative force from perpetual solar income. Incorporate the energy efficiently and safely for responsible use.
- 8. Understand the limitations of design. No human creation lasts forever, and design does not solve all problems. Those who create and plan should practice humility in the face of nature. Treat nature as a model and mentor, not an inconvenience to be evaded or controlled.
- 9. Seek constant improvement by the sharing of knowledge. Encourage direct and open communication among colleagues, patrons, manufacturers, and users to link long-term sustainable consideration with ethical responsibility, and reestablish the integral relationship between natural processes and human activity.

#### **Kyosei**

During most of the Edo Period (1603–1867), Japan closed itself off to the world, suffering no invasions but also forgoing outside trade. Due to this self-imposed isolation, old skills as well as new ideas for resource management for this island nation became of the utmost importance. Nothing was to be wasted, and everything must have purpose.<sup>28</sup> Over the years, *Kyosei*, the idea of living and working together for the common good, has been applied to a variety of subjects from biology to business. More recently, it has become synonymous with corporate responsibility, ethical decision making, stakeholder involvement, and user and producer responsibility. A specific code of ethics, called the shuchu kiyaku, has direct roots in Confucian writings.<sup>29</sup>

Originating in China, Confucian writings were highly influential in the evolution of ethical codes and principles in Japan. The following is a short list of some highlights of Confucian philosophy:

- Reciprocity should be practiced throughout one's life. In short, treat others the way you would like to be treated.
- Virtue, not profit, should be the goal of the superior person.
- There should be a balance between self-interest and altruism.
- We do not exist in isolation; we are part of a larger and more complex family (literally and figuratively) where harmony can be achieved by acting appropriately with one another.

#### **Caux Round Table**

The Caux Round Table (CRT) is an international network of principled business leaders working to promote moral capitalism, where sustainable and socially responsible prosperity can become the foundation for a fair, free, and transparent global society. The CRT was founded in 1986 by Frederick Phillips, former president of Philips Electronics, and Olivier Giscard d'Estaing, founding Dean and Director General of INSEAD business school, as a means of reducing escalating trade tensions. At the urging of Ryuzaburo Kaku, then chairman of Canon, Inc., the CRT began focusing attention on global corporate responsibility in reducing social and economic threats to world peace and stability.<sup>30</sup>

Formally launched in 1994 and presented at the UN World Summit on Social Development in 1995, the CRT Principles for Business articulate a comprehensive set of ethical norms for businesses operating internationally or across multiple cultures. The principles emerged from a series of dialogues catalyzed by the Caux Round Table during the late 1980s and early 1990s. They are the product of collaboration among executives from Europe, Japan, and the United States, and were fashioned in part from a document called the Minnesota Principles. The principles have been published in 12 languages, reprinted in numerous textbooks and articles, and utilized in business school curricula worldwide. They are recognized by many as the most comprehensive statement of responsible business practice ever formulated by business leaders for business leaders.

The Caux Round Table believes that the world business community should play an important role in improving economic and social conditions. Through an extensive and collaborative process in 1994, business leaders developed the CRT Principles for Business to embody the aspiration of principled business leadership. As a statement of aspirations, the principles aim to express a world standard against which business behavior can be measured. The CRT has sought to begin a process that identifies shared values, reconciles differing values, and thereby develops a shared perspective on business behavior acceptable to and honored by all.

These principles are rooted in two basic ethical ideals: *kyosei* and human dignity. As mentioned, the Japanese concept of *kyosei* means living and working together for the common good, enabling cooperation and mutual prosperity to coexist with healthy and fair competition. Human dignity refers to the sacredness or value of each person as an end, not simply as a means to the fulfillment of others' purposes.

An excerpt from the Caux Round Table Principles for Business follows. (The full document is available at *www.cauxroundtable.org.*)

## **Excerpt from the Caux Round Table Principles for Business**

#### Principle 1.

The Responsibilities of Businesses Beyond Shareholders Toward Stakeholders

The value of a business to society is the wealth and employment it creates and the marketable products and services it provides to consumers at a reasonable price commensurate with quality. To create such value, a business must maintain its own economic health and viability, but survival is not a sufficient goal. Businesses have a role to play in improving the lives of all their customers, employees, and shareholders by sharing with

them the wealth they have created. Suppliers and competitors as well should expect businesses to honor their obligations in a spirit of honesty and fairness. As responsible citizens of the local, national, regional and global communities in which they operate, businesses share a part in shaping the future of those communities.

#### Principle 2.

#### The Economic and Social Impact of Business Toward Innovation, Justice, and World Community

Businesses established in foreign countries to develop, produce, or sell should also contribute to the social advancement of those countries by creating productive employment and helping to raise the purchasing power of their citizens. Businesses also should contribute to human rights, education, welfare, and vitalization of the countries in which they operate.

Businesses should contribute to economic and social development not only in the countries in which they operate, but also in the world community at large, through effective and prudent use of resources, free and fair competition, and emphasis upon innovation in technology, production methods, marketing, and communications.

#### Principle 3.

#### **Business Behavior**

#### $Beyond\ the\ Letter\ of\ Law\ Toward\ a\ Spirit\ of\ Trust$

While accepting the legitimacy of trade secrets, businesses should recognize that sincerity, candor, truthfulness, the keeping of promises, and transparency contribute not only to their own credibility and stability but also to the

smoothness and efficiency of business transactions, particularly on the international level.

## Principle 4. Respect for Rules

To avoid trade frictions and to promote freer trade, equal conditions for competition, and fair and equitable treatment for all participants, businesses should respect international and domestic rules. In addition, they should recognize that some behavior, although legal, may still have adverse consequences.

#### Principle 5.

#### Support for Multilateral Trade

Businesses should support the multilateral trade systems of the GATT/World Trade Organization and similar international agreements. They should cooperate in efforts to promote the progressive and judicious liberalization of trade and to relax those domestic measures that unreasonably hinder global commerce, while giving due respect to national policy objectives.

#### Principle 6.

#### Respect for the Environment

A business should protect and, where possible, improve the environment, promote sustainable development, and prevent the wasteful use of natural resources.

#### Principle 7.

#### Avoidance of Illicit Operations

A business should not participate in or condone bribery, money laundering, or other corrupt

practices: Indeed, it should seek cooperation with others to eliminate them. It should not trade in arms or other materials used for terrorist activities, drug traffic or other organized crime.

In industry, Canon first announced its *kyosei* corporate philosophy in 1988. Its environmental initiatives include a global recycling program for ink cartridges and certification under their International Organization for Standardization (ISO) 14001 Certification Initiative. Canon's corporate Web site presents its position:<sup>31</sup>

The world is undergoing a major transformation from a "throwaway" to a "recycling" society. Not satisfied with the progress made to date, Canon is making progressive efforts for the next generation, including the creation of a total cyclical system unifying the development, manufacturing and sales functions, while supplying products that are increasingly friendly to the environment. Canon will continue its quest to become a truly global corporation by fulfilling its environmental responsibilities.

"Canon is a company devoted to the environment and sustainability. As an organization, we are guided by the corporate philosophy of Kyosei—all people, regardless of race, religion, or culture, harmoniously living and working together into the future," said Joe Adachi, president and chief executive officer, Canon USA, Inc. "With this philosophy at our core and adhering to high-performance standards, such as the ISO standards, we are continuously improving our environmental assurance and performance in all business activities to have the

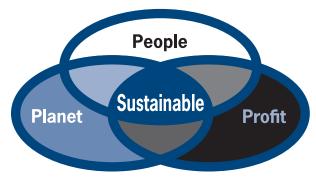
least impact on our environment and burden for future generations."

#### **Triple Bottom Line**

Everyone has heard the complaint "We'd like to go eco but are afraid our customers won't buy it," or the flat-out "Green doesn't sell." That might have been true once, but it is not anymore.

Sociologist Paul Ray reported in his groundbreaking study of consumer attitudes, *The Cultural Creatives: How 50 Million People Are Changing the World*, that about a quarter of U.S. adults fit into a segment he tagged "cultural creatives." Their readiness to act on personal ethics as a purchase decision-making tool and their willingness to speak out about product impacts as well are becoming hot-button issues in today's boardrooms. Those practices are spilling into and influencing society in general, and forward-thinking businesses are keen to get ahead of the waye.

Cultural creatives consider themselves strongly aware of global warming, rain forest destruction, overpopulation, and exploitation of people in poorer countries. They want to see more positive



Visualizing the Triple Bottom Line.

action on these problems and are more than willing and able to buy and invest according to their values—sustainability values. It's these values, and the devastating effect a tarnished image has on brand equity, that is causing the greatest concern for brand owners. Businesses, take note: Consumer activism works—and not for your convenience.

In Europe, consumers responding to rate increases for trash removal staged a revolt. Rather than tote home packaging that would need to be disposed of on their dime, they repacked purchased items in reusable containers from home, leaving the original packages piled at the end of the checkout line for the store to deal with.

This quiet revolution was an example of attitude changes that led to the creation of producer responsibility laws there. But rather than simply rolling over and absorbing the new costs, or blindly pushing the problem down the distribution chain, firms started selling their waste to the expanding recycling industry as a valuable resource—turning a disposal liability into a profit center. In addition, companies paid more attention to reducing packaging and product needs overall, increasing per-unit profitability.

In the best of all worlds, according to general sustainability models, goods would be produced and consumed locally. In the real world, that's not how it works. We live in a global economy, and not all communities are able to produce all of the goods they need. But the fact that we're transporting goods outside the reach of our own laws doesn't mean that manufacturers can, or should want to, produce things and waste with reckless abandon. Even the most conservative study will show there are sound bottom-line arguments to be made for achieving

## Everything we do makes a statement on how we feel about the environment on some level. What are your products saying about you?

profitability and positive image goals through basic sustainable business practices.

#### The Price Behind the Sticker

Beyond the general view of landfills bursting at the seams, ills related to print and packaging abound. Consider forests laid bare by clear-cutting to produce pieces that are used only once before being tossed in the bin. Marine animals, starved to death by plastic bags filling their bellies wash up on what were once pristine shores, their corpses rotting amid soda bottles and tampon applicators. Not all award-winning design is viewed in a gallery.

It's estimated that winning back an audience costs as much as five times more than it did to attract it in the first place. Even if the actual figure is a fraction of that, it makes good economic sense to take great care with the image being conveyed to audiences, past, present, and future.

Everything we purchase, produce, deliver, and sell makes a statement regarding how we feel about the environment and ultimately the consumers served on some level, What is your work saying about you?

In a September 1999 *Economist* article, the author notes:<sup>32</sup>

Companies with an eye on their "triple bottom line"—economic, environmental and social sustainability—outperformed their less fastidious peers on the stock market, according to a new index from Dow Jones and Sustainable Asset Management.

This triple bottom line is known by many names: TBL; 3BL; People, Planet, Profit (the 3Ps); and Ecology, Economy, Equity (the 3Es). All describe the idea of the major forces of our world that must be served to achieve sustainable balance, given our current market models. John Elkington has been attributed with coining the phrase "triple bottom line" in 1994, with an expansion in his 1998 book, Cannibals with Forks: The Triple Bottom Line of 21st Century Business.33 The concept, as well as its companion, the triple top line (effects to a company's top-line financial performance because preventive measures require less capital investment and reduce the cost of capital), requires that a company's responsibility be to stakeholders (all people involved in or impacted by a venture) rather than shareholders (only those who profit from the venture). According to stakeholder theory, rather than the business of a business being to maximize shareholder (owner) profit, ventures should be looking to benefit all concerned—workers, management, shareholders, and the communities and firms on the supply chain. Triple-bottom-line ideas go much further than those that deal with purely environmental impacts.

After the 2007 ratification of the International Council for Local Environmental Initiatives (ICLEI), triple-bottom-line criteria for urban and community accounting became the dominant framework for public sector full-cost (true-cost) accounting. Then additional UN standards were developed to focus on

natural capital and human capital needs to assist in assigning values for triple-bottom-line accounting and ecological footprint reporting.

"People + Planet + Profit" is one of the most common triple-bottom-line heuristics to describe the complex interactions of sustainability and business demands. It doesn't matter how eco a business is, if it's not profitable, it cannot sustain its efforts or its positive impacts in that market sector.

In the equation, People (human capital) refers to equitable and beneficial business practices: how a company treats its workers, the community, and the region in which it operates. A triple-bottom-line venture tries to benefit the many groups it interacts with and impacts, and works to not exploit or endanger them. The "people" section here would see "upstreaming" of a portion of profit from the marketing of finished goods back to the original producer of raw materials. Fair trade, too, is a core part of this section. A triple-bottom-line venture would never knowingly use child labor, would pay fair salaries to its workers, would maintain a safe work environment and tolerable working hours, and would not otherwise exploit a community or its labor force. Such a venture often participates in giving back to the community through healthcare and educational efforts. Quantifying the "people" portion of the triple bottom line is a relatively new effort, as it is extremely subjective. The Global Reporting Initiative (GRI) has developed guidelines to enable corporations and nongovernmental organizations to report on the social impact of a business.

Planet (natural capital) refers to a venture's environmental practices. A triple-bottom-line venture embraces the core concepts from the precautionary

principle "Do no harm." "Natural capital" is a term closely identified with the Natural Capitalism economic model outlined by Paul Hawken, Amory Lovins, and Hunter Lovins in their 1999 book, Natural Capitalism: Creating the Next Industrial Revolution (www.natcap.org). A triple-bottom-line venture looks to minimize its ecological footprint by carefully managing its consumption of energy and materials inputs, reducing manufacturing waste, and ensuring that waste is not toxic before disposing of it not just in a legal manner but with an eye on long-term impacts. Ethical cradle-to-grave planning is the minimum framework for triple-bottom-line manufacturing businesses. Life cycle assessment of all components to determine true environmental impact and costs is key. This assessment includes looking at impacts from the growth or mining of raw materials, to manufacture, to distribution, to eventual disposal by the end user. Companies going one step further consider a Cradle to Cradle<sup>TM</sup> approach, looking at the same cradle-to-grave impacts but also considering remanufacture and material afterlife opportunities and impacts.

In today's materials-handling model, the cost of disposing of nondegradable or toxic products is borne by the communities the things finally end up in. In a triple-bottom-line scenario, any venture that produces and markets a product would be responsible for it all the way through to final disposal. As the full costs for impacts are borne by the company ultimately profiting by the venture, triple-bottom-line companies would avoid ecologically destructive practices (example: overfishing or unchecked use of nonrenewable resources). Paying close attention to environmental sustainability is more profitable for a business in the long run, as costs for clean-up or restitution would be paid in inflated dollars, with

impact costs far exceeding profits from taking actions with only the short term in sight. Arguments that it costs more to be environmentally sound are usually disproved when time, depth, breadth, and ripple-through of impacts are permitted to be fully accounted for. The first question one must always ask when countering the cost questions is: Is the long-term health of the company what's important, or just the next quarter? Reporting metrics for sustainability are becoming more standardized internationally and are more tangible than metrics for social impacts. Respected reporting institutes and registries include the Global Reporting Initiative (GRI) (www.globalreporting.org), Ceres (www.ceres. org), Institute 4 Sustainability (www.4sustainability. org), and others.

Profit (monetary capital) is the goal shared by all businesses, regardless of their ethics. Within a sustainability framework, the idea of profit needs to be seen as the economic benefit enjoyed by all stakeholders, not just the company's stockholders. It's the idea that only a healthy company, earning ethically derived profits, is truly a contributing member of the community and society at large. A company operating at a loss or burdened with huge liabilities even if its base operations make money not only earns no income for its owners but has no resources to help support anything else (tax dollars, corporate giving, wages, etc.). The company is, in essence, a drain on resources, both economic and environmental. Which side of the bottom line are you standing on?

#### **Blended Value Proposition**

In addition to the triple bottom line and triple top line, readers should be aware of the blended value proposition (BVP). In an article introducing BVP, Joel Makower, contributing editor for GreenBiz.com, and author of the book *Strategies for the Green Economy*, notes:<sup>34</sup>

Before you glaze over about yet another sustainability-minded catchphrase, consider that this brave new term is being bandied about in the nation's top business schools—or, at least, those with sustainability programs. It's been a featured topic in mainstream business and investing publications, and has been uttered by the venerable John Elkington, who coined "triple bottom line" in the first place.

The BVP concept is embedded in the growing world of social enterprise and social entrepreneurs—the moniker given to nonprofit businesses that David Bornstein, author of *How to Change the World*, describes as entrepreneurs with the "determination, savvy, and ethical fiber to advance an idea for social change in society on a large scale." The notion of social enterprise, which has gained traction in the U.K., also is being seen by China's government as a means of meeting the needs of its communities and providing training, employment, education, and other benefits to its citizens.

The idea of the BVP is a different from triple-bottom- or top-line approaches. Here, instead of measuring a discrete economic, environmental, and social accounting lines on a company's balance sheet, Jed Emerson, the father of BVP, began to consider a single "blended" figure. He says, "We've lost sight of the reason we create companies and make investments: to make our lives better—the manifestation of the human drive toward value."<sup>35</sup>

Emerson, originally a social worker, was interested in why some nonprofits were far more effective than others. It was through his investigation into this topic work that he developed the methodologies for SROI (social return on investment). Being able to quantify SROI became the key that foundations were looking for to aid in investing their endowments, enabling them to better identify companies that did not undermine the very social problems the foundations were trying to solve. After BVP proved itself as an investment tool, it became a way of assessing corporate value in general.

In his article, Makower goes on to say:

Unlike socially responsible investing, which is laden with "good" and "bad" companies, BVP does not strive to be so virtuous. It acknowledges, for example, that there's value in creating economic wealth, so long as it is balanced with creating other forms of value. That idea alone could blunt the skeptics.

BVP has a long and arduous path ahead, but don't count it out quite yet. Those frustrated with the slow growth of "triple bottom line" thinking in the corporate world would be wise to tune in to the BVP conversation taking shape. It's bound to be instructive—no matter where it all ends up.

#### **Transparency and Honesty**

Companies at the forefront of sustainability today have a history of commitment to their message. They continuously address their impacts as part of their operating strategy. The idea that it's cheaper to nip problems in the bud as opportunities and

technologies arise rather than deal with huge calamities later is a key element in making long-term sustainability sustainable.

For those new to sustainability, the simple plan of action should be to use the opportunity for creating trust (and foster brand loyalty) by actually being trustworthy. Although no one can address all issues overnight, everyone can make a genuine pledge to do what they can now while they continue to address the rest as technology and economics allow, and as opportunity arises.

#### Ceres

Pledging to do what they can now and taking verifiable steps to show progress toward a more sustainable future are the member companies of Ceres. Ceres (pronounced "series") is a network of investors, environmental organizations, and public interest groups working to address sustainability challenges.<sup>36</sup>

## Mission: Integrating sustainability into capital markets for the health of the planet and its people.

In 1989, Ceres introduced a bold vision, where business and capital markets promoted the wellbeing of society as well as the protection of the earth's systems and resources. Ceres brought together investors, environmental groups, and other stakeholders to encourage companies and markets to incorporate environmental and social challenges into everyday business. By leveraging the collective power of investors and other key stakeholders, Ceres has achieved dramatic results over the years.

Ceres launched the Global Reporting Initiative, now the de facto international standard used by over 1,200 companies for corporate reporting on environmental, social, and economic performance.

Ceres member Nike became the first global apparel firm to disclose the names and locations of its contract factories worldwide in 2005. Ceres member Dell Computer agreed in 2006 to support national legislation to require electronic product recycling and "take-back" programs, and Ceres member Bank of America announced a \$20 billion initiative in 2007 to support the growth of environmentally sustainable business activity to address global climate change.

Over the years, Ceres has brought together Wall Street and corporate leaders along with the United Nations to address growing financial risks and opportunities posed by climate change. These groundbreaking meetings have produced plans seeking stronger analysis, disclosure, and action from companies, investors, and regulators on climate change.

Ceres publishes cutting-edge research reports to help investors better understand the implications of global warming. Among the reports are 2008 Investor Summit on Climate Risk Final Report; Managing the Risks and Opportunities of Climate Change: A Practical Toolkit for Investors; Mutual Funds and Climate Change: Opposition to Climate Change Begins to Thaw; Investor Progress on Climate

Risks; and Opportunities, Corporate Governance and Climate Change: The Banking Sector.

#### Ceres Principles

In the fall of 1989, Ceres announced the creation of the Ceres Principles, a 10-point code of corporate environmental conduct to be publicly endorsed by companies as an environmental mission statement. Embedded in the code was the mandate to report periodically on environmental management structures and results. In 1993, following lengthy negotiations, Sunoco became the first Fortune 500 company to endorse the Ceres Principles. As sustainability ideas matured and gathered more support, numerous other firms have adopted their own equivalent environmental principles.

By adopting the Ceres Principles or similar code, companies not only formalize their dedication to environmental awareness and accountability but also actively commit to an ongoing process of improvement, dialogue, and comprehensive public reporting. Jeffrey Swartz, president and chief executive officer (CEO) of The Timberland Company, a Ceres member firm, explains in its 2006 Corporate Social Responsibility (CSR) Report:

Publishing a statement of accountability is necessary, but not sufficient. If we write a report and fail to initiate a conversation, we have missed an opportunity. And if our report represents our only venue for engagement, then we have failed. An engaged community—a convening of stakeholders committed to environmental stewardship, community strength, global human dignity, and the quality of life for our workers and those citizens with whom we are privileged to serve—is my intent. Our process of reporting

is not "us" to "you." This report is a forum for you. React, respond, challenge, commit. I commit back to you that we will listen and act.

#### **Overview of Ceres Principles**

#### **Protection of the Biosphere**

We will reduce and make continual progress toward eliminating the release of any substance that may cause environmental damage to the air, water, or the earth or its inhabitants. We will safeguard all habitats affected by our operations and will protect open spaces and wilderness, while preserving biodiversity.

#### Sustainable Use of Natural Resources

We will make sustainable use of renewable natural resources, such as water, soils, and forests. We will conserve nonrenewable natural resources through efficient use and careful planning.

#### Reduction and Disposal of Wastes

We will reduce and where possible eliminate waste through source reduction and recycling. All waste will be handled and disposed of through safe and responsible methods.

#### **Energy Conservation**

We will conserve energy and improve the energy efficiency of our internal operations and of the goods and services we sell. We will make every effort to use environmentally safe and sustainable energy sources.

#### **Risk Reduction**

We will strive to minimize the environmental, health and safety risks to our employees and the communities in which we operate through safe technologies, facilities, and operating procedures, and by being prepared for emergencies.

#### **Safe Products and Services**

We will reduce and where possible eliminate the use, manufacture, or sale of products and services that cause environmental damage or health or safety hazards. We will inform our customers of the environmental impacts of our products or services and try to correct unsafe use.

#### **Environmental Restoration**

We will promptly and responsibly correct conditions we have caused that endanger health, safety or the environment. To the extent feasible, we will redress injuries we have caused to persons or damage we have caused to the environment and will restore the environment.

#### **Informing the Public**

We will inform in a timely manner everyone who may be affected by conditions caused by our company that might endanger health, safety, or the environment. We will regularly seek advice and counsel through dialogue with persons in communities near our facilities. We will not take any action against employees for reporting dangerous incidents or conditions to management or to appropriate authorities.

#### **Management Commitment**

We will implement these Principles and sustain a process that ensures that the Board of Directors and Chief Executive Officer are fully informed about pertinent environmental issues and are fully responsible for environmental policy. In selecting our Board of Directors, we will consider demonstrated environmental commitment as a factor.

#### **Audits and Reports**

We will conduct an annual self-evaluation of our progress in implementing these Principles. We will support the timely creation of generally accepted environmental audit procedures. We will annually complete the Ceres Report, which will be made available to the public.

For the full content of the Ceres Principles, go to: *www.ceres.org*.

#### **Designers Accord**

One of the ways designers can make a huge step toward a more open and sustainable society is by taking ownership of their responsibilities. Most impacts happen not beginning in manufacture but on the drawing board, where the ideas that get produced were put into motion in the first place. Enter the Designers Accord.

The Designers Accord is not an industry representative body or a third-party certification standard. As noted in an October 2008 *Fast Company* article, it is "an agreement to reroute design, manufacturing, and even the economy toward a livable ecological



future." The article quotes founder Valerie Casey, "Our goal isn't to create a thing. It's to re-create our mind-set."<sup>37</sup>

Made up of over 100,000 members of the creative community, the Designers Accord is a global coalition of designers, educators, researchers, engineers, and corporate leaders who pledge to reduce their organizations' carbon footprints, raise social and environmental impact with every client and every product, and collaborate with one another. The last item, to collaborate, is a concept that may be totally new to some designers outside the sustainability community. At one time, protecting "secrets" was considered the only way to gain advantage; today, transparency and openness are becoming the new benchmarks by which investors and potential clients judge a well-run business. Additionally, as people search for answers, companies willing to share their knowledge are finding new clients looking for project partners rather than just service vendors.

The Designers Accord Web site (www.designersaccord .org) notes:

Adopting the Designers Accord provides access to a community of peers that shares methodologies, resources, and experiences around environmental and social issues in design. . . . The vision of The Designers Accord is to integrate the principles of sustainable design into all practice

Promotional Product Solutions (PPS) was one of the promotional-product industry's early providers of socially responsible promotion options. In 2008, it joined Ceres to improve disclosure and help advance the company's environmental and social responsibility goals. PPS is one of more than 70 companies in the Ceres company network, which includes nearly 30 Fortune 500 corporations.

and production. Our mission is to catalyze innovation throughout the creative community by collectively building our intelligence around sustainability.

Endorsed by AIGA (American Institute of Graphic Arts), Cumulus, the IDSA (Industrial Designers Society of America), and the o2 International Network for Sustainable Design, the Designers Accord asks participants to "invert the traditional model of competition, and encourages sharing best practices so all can innovate more efficiently."

The accord asks all adopters, supporters, and endorsers to follow a basic code of conduct:

Do no harm; Communicate and collaborate; Keep learning, keep teaching; Instigate meaningful change; Make theory action.

A company without eco-ethics itself cannot produce a truly eco-product. As companies look for ways of initiating change, the guidelines of the Designers Accord provide a simple framework. Firms may already be following many of the framework's requirements, such as educating their teams (provide education allowances) and sharing information with clients (create value added). Other requirements are a bit more work, but when firms get a handle on their carbon footprint, for example, they can look deeper at other expenses, such as energy use, materials, travel, and work flows (person hours)—all cash outflows that impact their bottom line.

In a typical 12-step program, they say that the first step is admitting you have a problem. As firms find ways to negotiate change, the first step is to embrace change and be an active part of it. The Designers Accord is a great first step.

#### **Sustainability Means Business**

In addition to statistics tracking performance showing superior performance by Dow Jones and Sustainable Asset Management, in October 2007, Innovest Strategic Value Advisors released the Carbon Beta and Equity Performance study. The study evaluates the relationship among climate change, companies' ability to manage the associated risks and opportunities, and their financial performance. Innovest notes this is the first study to take this approach, and it lays the foundation for further research and investment products. According to this review of 1,500 companies, there is a strong, positive, and growing correlation between industrial companies' sustainability in general and climate change in particular, and their competitiveness and financial performance.<sup>38</sup>

Historically, though many have understood the need for embracing larger sustainability issues, tangible action has been slow. Innovest suggests there have been a number of reasons for this, some of which include:

Investment professionals have long believed that company resources devoted to environmental issues are either wasteful or actually injurious to their competitive and financial performance and therefore to both the performance of the companies themselves and investor returns.

Until recently, there has been a dearth of robust, credible research evidence and analytical tools linking companies' environmental performance directly with their financial performance.

Innovest points out that since there is now growing and incontrovertible evidence that superior overall environmental performance can in fact improve profitability as well as reduce risk levels, there is little doubt that there is now sufficient motivation to get companies to address their impacts as part of their long-term strategic plans.

As background for the study, Innovest states:

Few environmental issues pose as real, significant, and widespread a financial threat to investors as climate change. International policy responses aimed at cutting greenhouse gas emissions, together with the direct physical impacts of climate change will require investors and money managers to take a much closer look at how their portfolios might be affected by company "carbon" risks and opportunities.

In their report, Innovest asks investors and other fiduciaries to assess their portfolios for carbon risk for a variety of reasons.

There is increasing evidence showing that superior performance in managing climate risk is a useful proxy for superior, more strategic corporate management, and therefore for superior financial performance and shareholder value creation.

In the longer term, the outperformance potential will become even greater as the capital markets become more fully sensitized to the financial and competitive consequences of environmental and climate change considerations.

These ideas have already started to work into the decision-making process of those in industry. The Walmart scorecard that has set new benchmarks for packaging is only one criteria set in one part of its operation. Today, as more and more verifiable data and tools to handle them become available, we're seeing a variety of new initiatives, from carbon

footprint metrics to verified resource and supply chain integrity. All are being implemented to help companies better—and more quickly—identify partners willing and able to help them reach their own sustainability goals.

"How companies perform on environmental, social, and strategic governance issues is having a rapidly growing impact on their competitiveness, profitability, and share price performance," said Dr. Matthew Kiernan, founder and CEO of Innovest, in a February 2, 2005, article from SRI World Group.<sup>39</sup> In the bigger picture, one of the attractive things about adopting sustainability practices as part of a company's larger strategic plan is risk management. It is no surprise, then, that some of the first companies to invest serious time and effort in understanding and using sustainability criteria for long-term business strategies were insurance companies and insurance underwriters. As sustainability practices mature and develop, providing tangible historical data to reflect on, this question is bound to come up: Were the companies that resisted change the ones that could only operate with the help of hidden subsidies funded by the well-being of future generations? Companies should now be asking themselves: How much more, in inflated future dollars, will it cost us to change if we wait?

#### **Design and Sustainability**

In December 2007, *Packaging Digest* and the Sustainable Packaging Coalition (SPC) released the results of a joint survey looking at the state of sustainability and packaging and to use as a benchmark of current attitudes and practices. The survey showed that "sustainability is a hot button for the industry, and its impact is likely to grow in the

coming years."<sup>40</sup> Though this survey came out of the packaging industry, packaging is not an isolated component of commerce. Concerns or regulation changes that apply to packaging will, or already are, impacting product and print producers.

The *Packaging Digest*/SPC survey was drawn from the SPC membership as well as subscribers to *Packaging Digest* and *Converting* magazines. The respondents represented a cross-section of today's packaging industry, with the biggest share coming from CPGs, followed by materials manufacturers, converters, machinery manufacturers, packaging services, and retailers.

Looking at the survey data, 73 percent reported that their companies have increased emphasis on packaging sustainability over the year leading up to the survey. This is no surprise, given the timing of policy changes by the world's biggest retailer, Walmart, to focus on sustainability in general and packaging in particular in this time frame and the full adoption of the EU Directive on Packaging and Packaging Waste. The data also indicate that while awareness surges, packaging businesses (and print efforts in general) have been slow to incorporate sustainable business practices, particularly in the United States, where sustainability directives are not as deeply and federally mandated as they are in other countries.

In their article announcing the survey, editorial director John Kalkowski comments on the difficult position packaging firms find themselves in:

Pressure is mounting on the industry to act now . . . sustainability is reaching new levels of awareness across the industry, especially among companies with more than 1,000 employees and those with formal, written sustainability policies,

where 46 percent of respondents rated themselves as "very familiar." Still, only 21 percent of all respondents claimed they were very familiar with the issues of sustainability in packaging. Nearly 40 percent said they were "somewhat familiar," while 10 percent said they were not familiar at all.

Change in general seems to be a big issue, with about a third of the *Packaging Digest*/SPC survey respondents expressing concerns about the rise in current raw materials prices as well as how to implement sustainability practices using their existing infrastructure. Moving to sustainability sparks concerns similar to those triggered by change due to purely economic factors. In capital- and process-intensive industries, these concerns are understandable. But resistance to change due to fear should not be considered a viable option. As *The* Economist article discussing implementing sustainability practices and the prisoner's dilemma points out, the world will be condemned to a slow roasting, even though global impacts could be averted if everyone simply cooperated and took on a share of the load in the first place.41

In his talk at the 2006 Sustainable Packaging Forum, Tyler Elm, then sustainability director for Walmart, noted that the move toward a more sustainable business model for the company was initiated as a defensive strategy—to reduce operations costs, liabilities, and exposure. Walmart is, after all, a very large target. But as management dug deeper into what sustainable business practice really meant, they discovered instead of a defensive tool, it was a powerful offensive strategy. Risk and exposure were reduced or eliminated as they dealt with issues before they became problems or additional costs. And systems or operations that were costs under

the old way of doing things were now generating income.

Walmart's online Environmental Overview states:

Ecologically responsible business practices result in significant gains for our customers, associates, and shareholders. For example, by inventing trucks that get twice the mileage of our current vehicles, we will radically reduce emissions and fossil fuel, but we'll also save millions of dollars at the pump.<sup>42</sup>

Here we can see that rather than simply demanding the lowest cost at any price strictly from the goods it sells, Walmart is looking to leverage a variety of opportunities within its own organization to maintain the price structure customers expect while still serving the need to maintain a viable profit structure.

In a February 7, 2008, Reuters article, "Walmart to Pay More for 'Greener' Goods," author Nichola Groom details Walmart's policy changes. To incorporate sustainability in both operations and product offerings, and to meet aggressive impact reduction and efficiency goals, Walmart is openly saying it is willing to pay more, if need be, for products that last longer, hurt the environment less, and better address stakeholder issues not reflected in previous pricing structures. According to the article, Walmart management feels that adding sustainability to the mix does not absolutely need to result in automatic increases in end retail prices. It quotes Walmart's senior vice president of sustainability, Matt Kistler:

Bad quality products create waste, and so having tighter standards on the social side, on the environmental side, and on the quality side will reduce waste. . . . We are looking at a very small amount of dollars, and the savings in the supply chain that we are finding because of sustainability in some cases will more than offset the incremental costs of what we are paying for a better quality item.

In 2004, Walmart launched a company-wide, long-term initiative "to unlock" its "potential." Leaders from nearly every part of Walmart formed entrepreneurial teams focusing on areas such as packaging, real estate, energy, raw materials, and electronics waste. These teams partnered with environmental consultants, nonprofit organizations, and other groups to help examine Walmart's business practices "through the lens of restoration and sustainability."

#### Kistler goes on to reflect:

What we are learning about our footprint on the environment is both shocking and inspiring. Despite our excellence in efficiency, commerce creates a lot of waste. Fortunately, we've identified plenty of opportunities that, if captured, can transform our entire industry. Because we're experimenting in many areas, we expect to make mistakes along the way.

Walmart has established three aggressive goals for its sustainability efforts:

- 1. To be supplied 100 percent by renewable energy
- 2. To create zero waste
- To sell products that sustain our resources and environment

In the service of its sustainability efforts, Walmart acknowledges:

What gets measured gets managed. Our teams are developing sets of common sense metrics that hold us accountable for the goals we're setting. We will share these metrics on this Web site once they are established.

It would be fairly easy to dismiss sustainability efforts as only the turf of Walmart-size giants. In any discussion, such companies are the elephant in the room that simply cannot be ignored—plus a little action on their part has huge ripple-through impacts. But consumer advocacy groups are happy to point out that cost and environmental impact savings are accessible to the individual as well as the corporate giant. And it is in fact the actions and ethics of the individual that help drive corporate-level change.

After all, corporations are simply collections of individuals acting as a group. The journey begins with us asking ourselves "How will history judge us?" Once we understand what drives individual choices, we can use that knowledge to empower individuals to make good decisions. With all eyes turning to industry professionals for answers, we have the opportunity to completely remake everything we do—but get it right this time.

### Footprint of Print and Digital Media Supply Chains

#### Don Carli

#### The Institute for Sustainable Communication

Print has profoundly changed the world since the days of Johannes Gutenberg, but now due to the prodigious volumes of energy and materials consumed and mountains of waste produced, the printing industry is challenged to profoundly

change itself. Current patterns of print and digital media production and consumption are unsustainable and must be reconfigured if we are to enjoy the essential services and benefits they provide to business, government and society.

Most of us think about the flows of energy and materials associated with print and digital media the way fish think about water; it just "is." This is despite the fact that large organizations typically spend between 5 and 35 percent of every dollar spent (exclusive of labor) on paper and printing. To put the amount of energy involved in context, according to the Energy Information Administration (EIA), the U.S. papermaking industry used 75 billion kilowatt hours of energy in 2006—second only to the petroleum industry.<sup>43</sup>

It is unlikely that print can or will be fully replaced by digital media, as many resource-reduction proponents seem to think. Packaging is still a major use of print that cannot be replaced, and digital media, though not tangible, consumes prodigious amounts of electricity. In 2006, the EIA reports that data centers and servers in the United States used over 60 billion kilowatt hours of electricity.

Print as we know it must be reinvented so that it can be used to package knowledge and goods for human consumption in ways that also address the challenges of sustainability, energy security, and climate change. The reinvention of print and digital media will require a new "greening."

In order for it to succeed, this new greening of print cannot be based on the "Greening 1.0" moralethical imperatives urged by environmentalists or on purely emotional appeals. The "Greening 2.0" of print and digital media must be based on a conceptual framework called "sustainability" that is

being used to redefine the way business is done by Fortune 1000 companies—one that balances economics, the ecology, and social equity using emotional appeals grounded in a triple-bottomline business case.

Sustainability, energy security, and climate change are challenging issues that compel every business, every government, and every individual to rethink the ways in which energy is used and waste is managed. This section will raise more questions than it answers, but that is primarily because the printing industry has not yet responded to many of the urgent questions that exist.

Sustainability, energy security, and climate change are also becoming mainstream corporate governance priorities among the largest corporations in the world. Supply chain sustainability is now the focus of a growing number of companies that are also dependent on print for the packaging, promotion and advertising of their products. In response to initiatives from organizations such as the Carbon Disclosure Project, The Carbon Trust and the Climate Group, corporate and publishing giants like Walmart, Procter & Gamble, Time Incorporated and NewsCorp are beginning to press their supply chains to reduce their carbon footprints and reconfigure their products and services to measure, manage, report, verify and continuously improve their triple-bottomline performance.

In response, printers and their suppliers will need to rethink what they say about being "green." Because papermaking and other print-related processes are among the largest industrial uses of energy in the world, print supply chains will need to reconfigure the flows of energy, materials, and waste associated

Corporate and publishing giants are beginning to press their supply chains to reduce their carbon footprints and reconfigure their products and services to measure, manage, report, verify, and continuously improve their triple-bottom-line performance.

with printing if they want to win the business of such Fortune 1000 clients.

Addressing the new green priorities of business will require that printing companies and their suppliers look beyond cost, productivity, and print quality. They will also have to reach beyond superficial measures undertaken to green up the image of a company in a hurry. Companies that fail to understand and address issues of climate change, energy security, and sustainability in measurable and material ways are more than likely to be shunned.

A key question is whether investor, consumer and print buyer priorities will demand the greening of print supply chains in ways that exceed the ability of the graphic arts industry to respond in a timely and effective manner. To a great extent, the answer to this question will depend on printers receiving clear and unambiguous market signals from print buyers that sustainability, energy security, and climate change are priorities in their vendor selection criteria and purchasing decisions. An

example of such a signal is aligning the reward and recognition buyers and suppliers with innovation and the achievement of triple-bottom-line benefits. It will also depend on graphic arts firms sending clear signals to their suppliers that they require more and better standards-based information about the environmental aspects and impacts associated with the goods and services that they buy. An example would be requiring ISO 14040-based life-cycle analysis of all input raw materials to the printing process.

For most printers, being green used to mean complying with the law and "doing the right thing" for the planet, whether it was good for business or not. However, the new meaning of green is as much about doing the right things for business as it is about doing the right things for the planet. The greatest challenge that the printing industry faces is shaking off outmoded ways of thinking about environmental or green issues and developing new ways to identify, analyze, and act on information relevant to sustainability and climate change.

According to Professor Kenneth Macro Jr. of Cal-Poly's Graphic Communication program:<sup>44</sup>

It seems that many if not most of the printers that I talk to are unfamiliar with the concept of sustainability, and they seem to hope that this preoccupation with climate change and things green will blow over. This is no time to be thinking like an ostrich. Instead of putting our heads in the sand we need to be putting our heads together to take action and ensure that our industry is sustainable and that print is seen as a responsible medium.

While historically, being green referred to environmental regulatory compliance, the new green is about beyond compliance sustainability that seeks to continually improve the environmental, social, and economic performance of a business, product, or service. Green products historically have been expected to cost more and to have lackluster performance, but the promise of the new green was perhaps best described by Walmart CEO Lee Scott. At a meeting of the Walmart Sustainable Value Networks in March 2007, Scott said: "A working family shouldn't have to choose between a product that they can afford and a sustainable product."45 The new green being championed by companies like Walmart, GE, Timberland, Bank of America, Unilever, Starbucks, and others creates and delivers value for money and is designed to do a better job of satisfying the primary needs sought. Greener printing must do the same.

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The new wave of green sweeping over business is the crescendo of a movement that has been under way for over a decade, and there is little evidence that it will subside. According to John Grant, author of the "Green Marketing Manifesto," the new interest in green is not likely to fade because it is so strongly linked to a climate change agenda that is scientific. <sup>46</sup> Grant maintains that on top of climate change, there is a related set of issues:

[W]ater shortages (not just from low rainfall, but because we have seriously depleted the underground aquifers), seas holding only 10 percent of the edible fish stocks they did 100 years ago, soil erosion, storms, spreading diseases. Add war, economic turmoil, food shortages, water shortages and social disintegration and you can see why some call the impending (climate) crisis a global Somalia.

According to Michael Longhurst, member of the UN Environmental Program advertising advisory committee and senior vice president of business development at McCann-Erickson:

Sustainability is not "green marketing." It is not energy saving. It is not a social program. It is all of these things and more. Sustainability is a collective term for everything to do with responsibility for the world in which we live. It is an economic, social and environmental issue. It is about consuming differently and consuming efficiently. It also means sharing between the rich and poor, and protecting the global environment, while not jeopardising the needs of future generations.

The goal of sustainable consumption was adopted at the Rio Earth Summit in 1992, and in Johannesburg in 2002 the world will meet to assess what has been achieved. Sustainability is an issue for governments, for industry, for companies and ultimately for consumers.<sup>47</sup>

There has been a sea change in the degree to which sustainability, climate change, energy security, and corporate social responsibility are on the lips and on the minds of consumers, Fortune 500 CEOs, institutional investors, judges, and politicians. Three-time Pulitzer Prize—winning *New York Times* columnist

and author Tom Friedman recently described conservation and energy efficiency as a national security imperative and rebuffed criticisms that environmentalism is a concern of the "girlie man," calling it "the most tough-minded, geo-strategic, pro-growth and patriotic thing we can do."<sup>48</sup>

Proactively addressing the challenges of climate change and sustainability will position companies to meet the growing demand for greener products and sustainable supply chain partners. Failure to identify and reduce the greenhouse gas, energy, and resource footprint of business operations and supply chain may put businesses at risk.

## Sustainability is not "green marketing." It is not energy saving. It is not a social program. It is all of these things and more.

Michael Longhurst Senior vice president of business development at McCann-Erickson

The sustainability of print will depend on how printing companies and their suppliers respond to these questions:

- Can your company quantify and communicate how the print-related products and services that it offers are economically, environmentally, and socially preferable to nonprint alternatives?
- Is your company prepared to provide buyers with a life cycle greenhouse gas inventory or

- footprint analysis of your operations and of the goods and services that you sell to them?
- Is your company prepared for significant spikes in the price of energy or of materials that depend on the affordable and available petrochemicals and fossil fuels?
- Is your company prepared to address the likelihood of state and or federal legislation to cap and trade greenhouse gas emissions?
- Is your company prepared to take advantage of a Green Employment Tax Swap (GETS) in which a tax on carbon dioxide is used to rebate federal payroll taxes?
- Is your company prepared to pay a premium on insurance and/or loans for failing to implement a comprehensive ISO 9000/14001/26000 quality/environmental/social responsibility management system?
- Is your company prepared to tell a prospective high-potential employee about how your company's dedication to sustainable business practices will improve his or her quality of life and career opportunities?

To address these questions, it is important to understand some of the powerful forces that have been at play in recent years. Among the major factors redefining what it means to be green are profound shifts taking place in the attitudes and behaviors of investors, consumers, and business leaders with regard to sustainability in general as well as energy security and climate change in particular.

Major corporations are reexamining the standards of conduct and measures of performance that

determine how they do business. Demand and action frameworks for sustainable supply chain management and procurement are arising from individual companies, such as Walmart, and from industry groups, such as the Sustainable Packaging Coalition, the Sustainable Advertising Partnership, and the Sustainable Green Printing Partnership and from organizations such as the Institute for Supply Management and the Supply Chain Council. As a result, the world's largest corporations are scrutinizing the corporate social responsibility performance of their operational practices and supply chain business practices—including what they print, how they print and how print-related products and services are valued.

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For many companies in sectors such as pharmaceuticals and automobiles, the greening of their supply chain practices began a decade ago with a focus on their tier-one suppliers. Despite the fact that printing can represent 20 percent or more of every dollar spent by most corporations, it is not

typically considered a tier-one supply chain function. As a result, printing has come under scrutiny only recently, now that the lean-and-green sustainability initiatives directed at tier-one supply chain purchases are beginning to yield diminishing returns. While there is heightened interest in familiar topics such as the use of postconsumer recycled content, two new topics are the carbon footprint associated with printing and print-related logistics as well as fiber source's chain of custody associated with paper.

While debates about the relative merits of various forest certifications, such as the third-party certifier Forest Stewardship Council, the forest industry's own Sustainable Forestry Initiative, and the chain-of-custody group Forest and Chain-of-Custody Certification have been making headlines in the trade press of late, climate change, energy security, corporate social responsibility, and carbon disclosure are the issues of greatest significance in the business press. Business leaders from major companies are feeling growing pressure from investors, markets, and regulators to address the challenges of sustainability and the impacts of climate change. For example, the Carbon Disclosure Project<sup>49</sup> has called on over 2,500 of the world's largest companies to voluntarily report on the greenhouse gasses emitted by their operational and supply chain activities.

Some may see voluntary reporting of greenhouse gas emissions as a burden or a risk. Yet others see the process of conducting greenhouse gas inventories and transforming business processes to reduce their carbon intensity as providing them with critical expertise and experience for what is likely to be a dramatically different regulatory environment in the next three to five years. The majority of

Fortune 500 companies publish voluntary corporate social responsibility reports in accordance with the guidelines established by the Global Reporting Initiative. <sup>50</sup> Few printing companies do so.

Starting in 2007, and continuing in 2009, the United States Congress is considering several bills that would establish caps on greenhouse gas emissions and then allow businesses to trade credits in order to stay below those limits. In addition, the governors of five western states recently agreed that they would coordinate efforts to set caps for greenhouse gas emissions from their region and create a market-based, carbon-trading program.<sup>51</sup>

In March 2007, a group of 50 major U.S. investors with over \$4 trillion under management asked the U.S. Congress to enact tough federal legislation to curb carbon emissions and dramatically change national energy policies. They called for the United States to "achieve sizable, sensible long-term reductions of greenhouse gas emissions" and recommended three policy initiatives:

- 1. Realignment of energy policy to foster the development of clean technologies
- Directions from the Securities & Exchange
   Commission specifying what companies should
   disclose to investors on climate change in their
   financial reporting
- 3. A mandatory market-based solution to regulating greenhouse gas emissions, such as what has come to be known as cap-and-trade.<sup>52</sup>

In addition to investor pressure for greenhouse gas reporting, consumer attitudes toward climate change and the environment have also changed. A nationwide poll conducted by Knowledge Networks<sup>53</sup> asked American consumers how much they

have heard about "the problem of global warming or climate change due to the buildup of greenhouse gases." In response, 72 percent said a great deal or some (22 and 50 percent, respectively), up from 63 percent a year earlier, when 15 percent said a great deal and 48 percent some. Those who said "not very much" or "not at all" dropped from 38 percent to 28 percent. Of the respondents, 75 percent embrace the idea that global warming is a problem that requires action. Perhaps most interesting, when asked to "suppose there were a survey of scientists that found that an overwhelming majority have concluded that global warming is occurring and poses a significant threat," the percentage saying that they would favor taking high-cost steps increased sharply, from 34 percent to 56 percent.

As evidence of this change, there are an estimated 63 million adults in North America who are currently considered "LOHAS" consumers. <sup>54</sup> LOHAS stands for *l*ifestyles of *h*ealth *a*nd *s*ustainability and describes a \$226.8 billion U.S. marketplace for goods and services focused on health, the environment, social justice, personal development, and sustainable living. One of the factors that caused Walmart to see sustainability as a game-changing business growth strategy was the overwhelming and unexpected response of consumers to an organic cotton yoga outfit. <sup>55</sup> The other was the inspiring response of Walmart employees to Hurricane Katrina.

As businesses wrestle with these issues, they are finding that climate change, energy security, and the intensifying focus on sustainable business practices can have a significant impact on how they do business; on whom they buy their equipment, energy, and materials from; on their ability to attract and retain talented and motivated employees; on which markets they have permission to operate in;

and on which customers they are valued by. As the world reaches consensus on understanding climate change and the importance of striving for sustainability in the supply chains of business, companies are increasingly looking at how to manage sustainability's triple bottom lines, <sup>56</sup> navigate a carbon-neutral <sup>57</sup> path, and position themselves for success is an increasingly complex and carbon-constrained world.

# Addressing the issues at the nexus of commercial opportunity and sustainability presents the graphic communication industry with new opportunities.

For a myriad of reasons, a growing number of large corporations, publishers, and government agencies are under pressure to manage the sustainability and climate change impacts of the supply chain practices. As a result, major corporations are rewriting their vendor qualification scorecards, putting new environmental management and greenhouse gas emissions information requests in their requests for information and new sustainability reporting and verification provisions in their requests for proposals.

Increasingly, printing companies can expect to be asked:

 How do you measure, manage, and report on your company's environmental performance and its carbon footprint?

- Does your company have a dedicated director of sustainability and a published sustainability policy as well as a formal environmental management system that tracks energy and materials use, greenhouse gas emissions, and waste?
- How much time does your senior management spend guiding your company's sustainability policy and its sustainability performance strategy?
- How is your senior management recognized and rewarded for achieving your company's sustainability performance objectives?
- Does your company document the environmental life cycle impacts, energy use, and greenhouse gas emissions associated with the products and services that you manufacture and purchase?
- What is your company doing to develop continuous improvement strategies addressing climate change and sustainability in its supply chain practices?

Since 1987, the Social Value Network has been a forward advocate of the triple-bottom-line ideals. Approaching their twentieth anniversary, the organization wanted to further raise awareness of their work as well as boost membership to meet new market opportunities. SVN's creative team, design firm BBMG, interviewed 20 pioneering business leaders to see how they turned their values into action and what it would take to transform business in the twenty-first century, creating the commemorative booklet "20 Ideas that Changed the Way the World Does Business." In addition. BBMG's overhaul of SVN's visual presence, coupled with key marketing efforts, resulted in annual membership levels increasing, and sold-out conferences. The pieces shown here were printed by an FSC-certified printer using renewable energy, contain FSC-certified 50% PCW paper, and are printed with vegetable-based inks.

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#### CHAPTER ① Making the Business Case

The world depends on print to a far greater extent than is commonly understood, and yet print is not sustainable. This is not a time for the graphic arts to rest on its laurels and wait for buyers and specifiers of print to change their priorities. It is a time, instead, for graphic arts print service providers to redefine themselves and work together to identify, analyze, and act on making print sustainable and addressing the challenges presented by global warming in timely and innovative ways.

Addressing the issues at the nexus of commercial opportunity and sustainability presents the

graphic communication industry with new opportunities to reinvent the ways in which the industry packages knowledge and goods for human consumption. There is opportunity to create new fortunes and a sustainable future for print. Our common future will depend largely on our ability to communicate and collaborate as well as on our ability to design, produce, and distribute knowledge and goods in ways that manage their life cycle costs, measure their triple-bottom-line impacts, and create significant quality of life benefits.