

# Advancing Sustainability: From 1.0 to 3.0

By Knowledge@Wharton

Most forward-looking companies agree that corporate sustainability means creating value for shareholders, customers and communities while recognizing constraints on natural resources. But the path to achieving that end is often unclear for many finance executives. In this white paper, experts from GE, Wharton and elsewhere offer their insights on balancing those considerations, and explain why the business case for sustainability is compelling — even for companies tightening purse strings.

The Empire State Building is legendary in more ways than one. But like many other buildings in the city, it is an environmental headache. Buildings in the Big Apple — nearly half of which were built before 1945 — are responsible for up to 70% of the city's carbon footprint. Now, the Empire State Building Company (ESBC) wants to make the popular 102-story tourist attraction — with its 2.8 million square feet of office space — one of the most energy-efficient buildings in the city.

Launched in 2008, ESBC's \$20 million investment in energy retrofitting the skyscraper (including measures such as replacing 6,500 windows, installing new insulation and upgrading air ventilation, all due to be completed in 2013) comes with the help of various sustainability, energy and property experts, including Jones Lang LaSalle and The Clinton Climate Initiative. Eventually reducing its carbon footprint by 38%, the retrofit will lower the building's energy costs by \$4.4 million annually and help it avoid 150,000 tons of greenhouse gas (GHG) emissions over the next 15 years, according to Lauralee Martin, CFO and COO of Jones Lang LaSalle, who wrote about the project in a recent [blog post](#) titled, "Sustainable Cities, Building by Building."

That may be music to the ears of numerous CFOs and other C-suite executives. There's no shortage today of companies unveiling — or planning to unveil — sustainability initiatives of various shapes and sizes, and they are turning to their finance chiefs to help them understand how those initiatives can also boost their top and bottom lines.

But perhaps the first problem these executives face is defining sustainability itself. The Merriam-Webster dictionary says that sustainability is "of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged." But in the corporate world, it's a word with an abundance of definitions, and often a matter of heated debate. Sit in a room with 100 sustainability experts, and you'll get one hundred definitions of the word, quips one executive. Still, the object of any corporate sustainability initiative is clear: Create value for shareholders, customers and communities while recognizing constraints on natural resources.

Meanwhile, the enthusiasm over sustainability is easy to understand. According to a [white paper](#) by consulting firm McKinsey & Co. titled "Unlocking energy efficiency in the U.S. economy," energy efficiency measures could save the U.S. economy up to \$1.2 trillion by 2020. Progress is already being made. Blue-chip multinational corporate names, such as Bloomberg, eBay, McDonald's, Pepsi and Target, have been working with the Environmental Defense Fund (EDF), a U.S. nonprofit organization, as part of its Climate Corps program, to identify 1.6 billion kilowatt hours of energy savings that would eliminate 1 million metric tons of air pollution over the past four years.

However, forward-looking companies such as these know that sustainability amounts to far more than statistics, notes Robert L. Corcoran, vice president of corporate citizenship at General Electric, which is also an EDF ally. "What is your company's reputation worth?" he asks. "What is your shareholder base worth? What is your customer base worth? This is about good, responsible business."

## In pursuit of a payback

Despite the progress, however, experts say something is amiss. All told, "there is still concern that some companies don't



# GE Capital

actually walk the talk,” and that many corporate sustainability efforts are getting stuck, observes Ann R. Klee, head of GE’s global environmental, health and safety programs.

A paper published by EDF in July 2011 titled “[Show Me the Money](#),” noted that “companies often see a host of barriers standing in the way of these cost savings and associated GHG emissions reductions being realized.” Among the barriers: High upfront capital costs, long payback periods, uncertainty of savings and perceptions of risk. All that is happening at a time when companies are facing a tough economic environment in which short-term survival pressures are squeezing resources as never before. The paper also observed how industrial companies retrofitting their sites require rapid positive returns on investments, and it cited research finding that approximately half of the executives and managers surveyed required energy efficiency projects to have payback periods of less than three years.

Meanwhile, in some circles, there’s a worrying sense of frustration. “The magnitude of this progress on any kind of a global scale — as much publicity as it has received — is quite tiny,” says Robert Giegengack, an emeritus professor in the University of Pennsylvania’s department of earth and environmental science and an advisory committee member of the University’s Initiative for Global Environmental Leadership. “Probably by 2010, the CO2 output of the world was twice what it was in 1990. We’ve had zero impact, apart from providing lots and lots of people the opportunity to talk at great length [about climate change]. We are not making progress toward the goal of achieving sustainability.... As long as we’re using resources faster than they are being replenished by natural systems, our behavior is unsustainable.”

It’s a situation that could get worse. Countries may soon lack any binding agreement to reduce greenhouse gas emissions. The Kyoto Protocol, the world’s only binding climate agreement that was hammered out at a summit in 1997, expires at the end of 2012. Under that protocol, many countries pledged to reduce their greenhouse gas emissions between 2008 and 2012 by 5% from 1990 levels. Yet despite the economic crisis, worldwide CO2 emissions resulting from energy consumption reached a new record high of 33 billion tons in 2010, a 45% increase over the 1990 level, according to [an article](#) published on October 18 by Germany-based *Spiegel International*. The article also noted that hope is waning that the next global

climate summit in Durban, South Africa, in November 2011 can achieve much.

But has “clean energy become a dirty word,” as suggested by an adviser to President Obama quoted in the *Spiegel* article? In some circles perhaps, but corporate America’s C-suite generally recognizes the importance of sustainability efforts, says J. Wesley Hutchinson, a Wharton marketing professor and director of the Wharton Behavioral Laboratory. Recently, Hutchinson polled members of the Laboratory’s Advisory Panel of Executives about why their companies pursue sustainability and other CSR initiatives. “The big reasons were first, it’s just a matter of being a good corporate citizen,” he says. Second was that it affects the brand image. Next, over 60% said it helps attract and retain desired employees.

And while sustainability programs can save a company money and keep it “ahead of the regulatory curve,” says GE’s Klee, there’s another pivotal benefit: The boost to a company’s overall reputation among all stakeholders. “I would argue sustainability is the single-most important factor in enhancing that asset. You obviously need to have really good products at the right price points, but if you are the company [producing and selling] those products in the most sustainable way, increasing [your profile] with the market, that’s a huge — yet hard to quantify — benefit.”

The good news is that achieving those benefits doesn’t have to cost a lot. In fact, sometimes it just involves finding new ways to inspire individual action on a local level. At GE, for example, “we initially thought it was about these big capital projects, like putting solar panels on roofs. And we did some of that,” says Corcoran, who is also president and chairman of the GE Foundation. But other initiatives quickly saved, rather than cost, the company money. At a number of its facilities, GE began rolling out resource usage “treasure hunts,” enlisting cross-functional teams that visited sites on weekends and identified unnecessary energy consumption, like machines that are left on round-the-clock, seven days a week, but actually only need to run three days a week. That detailed exercise has saved GE \$150 million so far.

And it’s straightforward to replicate, regardless of the size of a company or site. For example, with the help of EDF, IUE-CWA, a 45,000-member U.S. labor union whose members are based at more than 300 factories nationwide, ran a pilot treasure hunt of its own at a manufacturing plant, which identified \$70,000 in annual savings (20% of current energy costs) and more than 700 metric tons of carbon reduction (20% of carbon emissions) through better use of lighting, equipment and the like.



## Mid-sized companies are key

Even for CFOs tightening their companies' purse strings, the business case for sustainability is compelling. As Penn's Giegengack notes, "Any company, proportionally speaking, has the resources to devote to this exercise."

Klee agrees. "The thing about sustainability is that you can tailor it to the needs of the company. There's a lot you can do if you're a 10-person shop, or a 100- or 5,000-person company." And while mid-size companies might not have the same economies of scale, "in many respects, they are the key to sustaining sustainability," she notes. "I suspect they are going to be driving innovation in sustainability, because they will have an energized workforce and they are the link between consumers and big companies like GE."

Whatever the size, companies most of all need a clear vision from the start — and throughout the company — of what sustainability can achieve. "The direction and support have to come from the top, but it's got to be driven from the bottom, at every level," says Klee. "If you empower your employees, they are going to come up with the ideas. Eighty percent of people turn off lights when they're not in a room at home; only 20% do the same thing at work because they don't feel empowered to identify and fix problems. Those little things add up."

Another critical element is developing robust metrics to ensure a program is on track. But that can be easier said than done. Often, says Klee, companies don't measure quantitative "real things," such as greenhouse gas emissions, energy intensity, water or chemical use and waste generation.

From her vantage point as head of EDF's corporate partnerships program, Boston-based Gwen Ruta sees companies approaching sustainability programs in two ways. One is by setting absolute targets — such as a company pledging to reduce its greenhouse gas emissions by x% by a particular date — and the other is by setting "intensity" targets, such as a company pledging to reduce emissions per dollar of revenue, or per widget produced, by x% within a certain time frame.

"The absolute goals are tougher," she says. "But they're the only ones that actually matter. It really doesn't matter if you've reduced your greenhouse gas emissions per widget if you're

producing 10 times more widgets."

Companies that have absolute targets are in the minority. "Many more companies have intensity goals, and it's scary for them to do more," she says. "You have to have the imagination to think about your business differently if you want to put in an absolute goal. But that's the same thing CEOs do when they want to bring out a new product line, or change the overall corporate strategy. It is what they get paid to do."

Amid that target setting, a big challenge is maintaining a program's momentum. "Make it clear that you can't just stop — the target gives managers and the people on the ground making this happen permission to keep looking and being innovative," adds Ruta. The message employees should receive, she says, is: "If we made these savings in the first couple of months, there's got to be more 'there' there."

## Widening the focus: Suppliers, distributors and customers

The "there" isn't just within the firm. "The most useful sustainability projects may be outside of the firm, either with suppliers or customers," says Gérard Cachon, a Wharton professor of operations and information management. He cites Walmart, the world's largest retailer, as an early champion of sustainability that has leveraged outside resources throughout its supply chain, and won kudos from customers as a result. When evaluating the eco-friendliness of the products on its shelves, for example, the company focused on two big sources of energy use among customers — lighting and laundry. "With lighting, it offered more efficient solutions. For washing, they offered cold-water detergents and clothing that could be cleaned better in cold water," Cachon says.

Listening to customers can indeed generate big wins, and set new sector-changing trends. In his book, *The Future of Value: How Sustainability Creates Value Through Competitive Differentiation*, Eric Lowitt includes Monadnock Paper Mills, a mid-sized, New Hampshire-based firm, among his list of "Sustainable Market Leaders." One reason: In 2007, the firm joined forces with another company, NexGen Packaging, to develop a Forest Stewardship Council-certified commercial printing paper, which eventually helped it become retailer Gap's primary supplier of clothing tags. Already known in the industry for its eco-friendly manufacturing, that innovation "sent its peers racing to step up their green certification efforts," wrote Lewitt.

However, broadening a green focus to suppliers and distributors might be too ambitious for companies new to sustainability. "It's actually easier if you're a Walmart to drive it



down through your supply chain," says Klee. "For a mid-market [company], you may not want to start with that. You really have to start with your own programs, and that's where you're going to see the biggest bang for the buck initially." But even mid-market firms will need to know what their supply chains are doing, "just to meet regulatory requirements," she says. "That to me is the next level."

Above all, sustainability veterans emphasize the importance of communication — internally with employees to help a program gain acceptance and become part of the larger culture, and externally with other stakeholders. At GE, that means holding meetings with non-governmental organizations and other environmental groups, which traditionally were wary of the company. As nerve-wracking as those meetings can be for everyone, "it's better to be talking with people than not having candid discussions on tough issues," Corcoran says. "Those dialogues became critical to us because we learned about sensitivities in different communities, and the stakeholders also saw that we are responsible."

## CSR reporting: Finding the right metrics

Another key component to transparent sustainability — and one that demands greater attention of cost-conscious CFOs — is a need for formal corporate social responsibility (CSR) reporting. Investors and other stakeholders are increasingly demanding greater public disclosure about the performance of companies' sustainability investments. Wharton's Hutchinson says his laboratory's survey indicated that at the moment, "CSR reporting runs the gamut," from a few paragraphs in annual reports to stand-alone publications, with about one-third of companies surveyed seeking independent audits to validate their facts and figures.

The process can take some CFOs out of their comfort zones as they guide their firms through which metrics to use, committing themselves to future goals and practices. "This is where it starts getting teeth," Hutchinson says. "Once you pick your set of measures and commit publicly to publishing them every year, you create a CSR track record that can go up or down. You give up a little bit of control, where [sustainability and other CSR initiatives] move out of PR and start to feel more like financial reporting."

All told, CSR reporting "is always a marketing exercise," he

says. "It's inescapable. Annual reports are a marketing exercise to some extent, once you go beyond the pure financials. Companies are creating documents that shape public opinion about your company." What's clear is that all aspects of communication will be changing as sustainability evolves.

So what can CFOs expect over the next, say, five to 10 years? Giegengack predicts a greater questioning not just of the outputs and impact of sustainability, but also of the term itself. "People rush forward in this whole campaign of doing useful work in pursuit of an unobtainable goal. That disturbs me," he says. "We really need to build into the definition of sustainability that as one natural resource is depleted, another will be identified or developed to replace it," with resources being re-used and disposed of efficiently and safely for the environment.

Ruta of EDF foresees greater reliance on innovative technology and collaboration between companies, nongovernment organizations and the general public. "To solve these environmental problems is going to take a huge amount of innovation," she observes. "Innovation happens better and faster when you're looking at the problem from multiple viewpoints, and you can come at it with different life experiences. That's social responsibility at its best."

There's much room for improvement. Results from [a survey](#) conducted in 2010 by Cone LLC, a brand communications consultancy in Boston, suggest that many companies are ignoring a critical source of ideas and support for their sustainability efforts. Of some 1,000 American consumers polled, 84% felt they had ideas that could help companies create products and services benefitting consumers, businesses and society, yet only 53% said companies provided them with a platform to share those ideas. What's more, Cone found 87% felt sustainability communication is one-sided, with companies sharing the positive information about their efforts while withholding the negative; and 67% were confused by how companies talk about their social and environmental commitments.

That may change sooner rather than later. "The really exciting part of sustainability is the engagement with the end user," says Klee of GE. Together with engineers and product developers, she imagines customers talking about how companies can design products that are smart from the get-go, that have the smallest footprint and are the most environmentally benign from cradle to grave. "I'd love to see the conversation heading in that direction," she says. "But I don't want to wait five years for that."



## KEY TAKE-AWAYS

- Sustainability is more than just numbers. It's about good, responsible business that takes into account a company's reputation, shareholders and customers.
- Often, sustainability initiatives don't require a huge capital outlay. Instead, look for ways to inspire employees to make small adjustments that add up.
- Setting absolute goals around sustainability helps to keep employees motivated.
- Looking beyond the company for ideas — to suppliers, distributors and customers — can generate big wins.

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