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When Addressing Climate Change Is Good Business

Smart companies are working to reduce their role in global warming now to get ahead of regulators and gain a competitive edge.

by Suzanne Charlé

Debate around the economics of global warming — who will pay the bill and who will profit — is heating up. Government leaders have already proposed broad efforts to limit the effects of greenhouse gases. In the U.S., California and several northeast and mid-Atlantic states have their own plans to cap emissions, and several proposals are awaiting action in Congress. European Commission Chief José Manuel Barroso has called for a "post-industrial revolution" that would slash greenhouse gas (GHG) emissions by 20 percent by 2020, with 20 percent of all energy coming from renewable power and 10 percent of vehicle fuel from biofuels. "This is a major wake-up call for American companies to formulate their own strategies," says Truman Semans, director for markets and business strategy for the Pew Center on Global Climate Change.

Recognizing that it is better to lead in this matter than to be pushed, some executives are publicly addressing global warming. In January, CEOs and chairmen from 10 of the largest corporations in the U.S. — including General Electric, DuPont, Alcoa, BP America, Duke Energy, and Caterpillar — gathered with the heads of four major nonprofits to urge Congress to pass legislation that, among other things, would spur the growth of green technologies and create a mandatory "cap and trade" program limiting GHGs. The group, the U.S. Climate Action Partnership (USCAP), stressed that by proactively dealing with the issue, companies can earn a voice in planning policy and thus avoid "stroke of the pen" risks, in which new government rules can undermine a company's value overnight. "If you're not at the table when these negotiations are going on," James Rogers, Duke Energy's chief, told the *Wall Street Journal*, "you're going to be on the menu."

A Plan for Change

Familiar corporate assumptions about corporate environmental responsibility and sustainability are now giving way to an emerging consensus about the means and methods for reducing carbon emissions. Consider, for example, a recent report from the Pew Center on Global Climate Change. A survival guide to the carbon-constrained marketplace, "Getting Ahead of the Curve: Corporate Strategies That Address Climate Change" examines the experiences and best practices of 31 large corporations, along with input from the Business Environmental Leadership Council (BELC), whose 42 members represent $2.4 trillion in market capitalization and more than 3.3 million employees.

"These companies recognize the importance of reducing their carbon footprint *before* there is governmental regulation — just as good drivers start putting on the

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brakes before they come to the stop sign," notes Andrew Hoffman, author of the report and Holcim Professor of Sustainable Enterprise at the University of Michigan's Erb Institute for Global Sustainable Enterprise.

This isn't just about corporate responsibility. Ninety-three percent of the executives questioned say formulating strategies to deal with climate change is an important part of their fiduciary responsibilities. Some even argue that the Sarbanes-Oxley Act comes into play: To protect investors, corporate leaders need to disclose how their company's GHG emissions might affect earnings now and in the future. For similar reasons, interest is also growing in the investment community. Richard Fuld Jr., chairman and CEO of Lehman Brothers and a member of USCAP, stressed the need for "a coordinated set of global solutions."

Goals and methods for taking action are as different as the companies involved. Swiss Re, the world's largest reinsurer, with a carbon footprint of just less than 50,000 metric tons, intends to become carbon neutral by 2013 (a carbon footprint is the aggregate of GHG emissions produced directly by operations and indirectly upstream and down). The reason: Climate change is starting to have a major impact on Swiss Re, its partners, and its clients. And so, on the one hand, although Swiss Re's efforts are merely a "rounding error" compared with those of other companies, Chris Walker, managing director and head of sustainability business development, argues: "We need to do this if we are going to be seen as credible." Shell, on the other hand, with a carbon footprint of 868 million metric tons (greater than that of the entire United Kingdom), recognized in the 1990s that it was at the heart of the debate over climate change and set out to diversify its energy portfolio — and at the same time manage its carbon footprint — before federal regulations were put in place.

Find Opportunity

The Pew Center offers several recommendations for a climate strategy. If some of these measures seem familiar, there's a reason: The steps to achieving environmental consciousness are the same types of actions companies have taken over the years to raise their long-term value.

Here is a brief overview:

1. Conduct an emissions profile assessment. Analyzing GHG emissions is not an easy task. Most companies measure direct and indirect emissions but vary in their choice of emissions. Duke Energy, for instance, measures only direct emissions from facilities it owns and operates. Other companies measure emissions generated by the use of their products: Ninety-three percent of Whirlpool's GHG profile comes from the use of its home-appliance products. Financial-services firms and other companies, including IBM and Interface, a carpet manufacturer, focus on factors such as business travel, commuting, and material transport. The task for multinational, energy-intensive corporations is even more complex.

2. Gauge risks and opportunities. Executives must consider how carbon constraints can affect operations and sales, in both negative and positive ways. Companies usually first focus on risk management: Cinergy developed new technologies to reduce emissions from its coal-fired electric generating units and then merged with Duke Energy to add nuclear capacity. Swiss Re factors climate change into its risk modeling.

At the same time, smart companies are identifying business opportunities and connecting GHG reductions to core business strategies. Alcoa has pledged that 50 percent of its products will come from recycled aluminum by 2020 — a significant cost-saving move, because recycled aluminum requires only 5 percent of the energy required to produce primary aluminum. DuPont, meanwhile, has made fundamental shifts, away from businesses that are heavily reliant on fossil fuels — by selling its Dacron and Nylon divisions — and focusing on high-growth businesses making bio-based materials. This change is evidenced by DuPont's acquisition of Pioneer Hi-Bred International, a seed company specializing in biotechnology and genetic engineering. "The real challenge is beyond our own footprint. It is in the market opportunities," says Linda Fisher, vice president and chief sustainability officer for DuPont.

3. Evaluate options for technological solutions. "Companies that are just starting to reduce GHGs usually have a variety of 'low-hanging fruit' that can lower their emissions profiles," says Andrew Hoffman of the Erb Institute. Swiss Re, for instance, began by turning down heating and cooling in its offices and turning off lighting systems during nonworking hours. Short-distance trips for internal meetings have been curtailed and replaced with telephone and videoconferences. "If you've never focused on energy efficiency before, achieving a 30 percent reduction is simple," says Andreas Schlaepfer, head of internal environmental management at Swiss Re.

Other companies achieve dramatic GHG reductions through a single initiative. Shell has significantly reduced GHGs by capturing methane gas rather than flaring it in the field and at refineries. "The gas is pumped back underground, to enhance well production, or fed into facilities for power production," says Hoffman. GHG reductions can also be made outside the company, by contributing funds to reduce emissions elsewhere, a system that can be more efficient and less costly than focusing solely on on-site reductions. Swiss Re plans to achieve 85 percent of its reduction target through off-system investments in the World Bank Community Development Carbon Fund, a program in which private companies fund small-scale projects, such as reforestation and micro-hydro projects, that reduce GHGs in developing nations.

4. Set goals and targets. Companies have made a wide range of commitments to reduce GHG emissions, differing in timing, objectives, baseline year, and emissions covered. The Pew Center's study identified three overarching drivers: cost savings, social responsibility, and reputation. Companies typically differentiate between GHG-reduction targets, which sometimes carry upfront costs, and energy efficiency targets, which many companies consider proprietary business strategies.

Targets vary across units. DuPont, for example, expects the output of its titanium technologies division to double between 1990 and 2010. The goal is for the division increase energy use during this period by only 40 percent — a large task, because energy constitutes a significant percentage of the selling price of titanium dioxide. Other, less energy-intensive units will have even higher targets. So far, the titanium technologies unit is achieving its aim. "Inspirational goals call an organization to act beyond conventional boundaries," says Craig Heinrich, leader of the global energy team for titanium technologies. "An easy goal fails to challenge the creative potential of the organization."

5. Engage the organization. Employee buy-in is important. "The best technology only gets you so far," says Vince Van Son, manager of environmental finance and business development for Alcoa. "Employees will devise innovative ways to achieve clearly stated goals when they understand the linkage with the company's vision and value." Alcoa, which formed its corporate climate change strategy team in 1997, has been a leader, reducing its direct GHG emissions to 25 percent below 1990 levels and garnering accolades as one of the top green companies in the world. Companies encourage employees in a variety of ways: Google, for instance, offers employees a subsidy to buy hybrid cars.

Senior leadership is crucial: "On a scale of one to 10, senior support is 11," says Pat Atkins, Alcoa's director of energy innovation. Some CEOs, like the members of USCAP, have put their reputations on the line by publicly taking the lead in environmental sustainability. Work inside the corporation is equally important: Alcoa's Paul O'Neill, an industrial engineer turned economist and CEO and, later, Treasury Secretary under President George W. Bush, challenged company engineers to minimize the number of anode effects in operations — a check routinely used in the smelting process that produced high levels of perfluorocarbon gases, which is one of six focal GHGs. Although resistant at first, the engineers ultimately developed advanced cell control algorithms that have reduced emissions by more than 75 percent since 1990.

6. Formulate policy strategy. Companies are jockeying to shape legislation, at the state, national, and international levels. Although the electricity industry's Washington trade group rejects any GHG cap, its chairman, Duke Energy's Rogers, is an outspoken proponent of mandatory global-warming constraints. "The greatest risk we face is 'stroke of the pen' risk, the risk that a regulator or congressman signing a law can change the value of our assets overnight," he says. To assure Duke's place in the national policy debate, the company has instituted voluntary GHG-emission reductions.

In 2003, Alcoa executives testified on behalf of the McCain–Lieberman Climate Stewardship Act. The reason: Alcoa, which supports cap-and-trade systems in which regulatory limits are imposed if all gases are included, advocates legislation that takes into account actions by companies that precede legislation, and wants a 1990 baseline for determining allocations.

7. Manage external relations. Companies measure the costs of climate-related strategies in three ways: absolute, normalized, and financial return. Roughly 40 percent of the companies surveyed participate in voluntary external carbon trading programs such as the Chicago Climate Exchange (CCX). Executives at Baxter International, a supplier of medical devices and a founding member of CCX, explain that involvement in CCX will help the company withstand scrutiny of future emissions verification and trading programs, and in the meantime has attracted favorable press for its members.

"External outreach to NGOs, suppliers, customers, investors, regulators, even competitors, is critical to success," says Andrew Hoffman of the Erb Institute. NGOs such as Environmental Defense, the World Resources Institute, and the Pew Center can promote technical research and advance public awareness. They "add legitimacy," says DuPont's Linda Fisher. They can also be partners, even at the beginning of the process. Environmental Defense, which helped Cinergy determine its voluntary baseline, serves ex officio as a member of Duke Energy's GHG management committee, which oversees the allocation of $21 million.

Consumer education is another important element.

Whirlpool, which led the industry in introducing energy-efficient appliances, educated consumers by educating the retailers. It also convinced *Consumer Reports* to include energy efficiency in the rankings of appliances, and worked closely with the Sierra Club, the Natural Resources Defense Council, and the Alliance to Save Energy in a successful push for legislation to give tax credits for efficient appliances.

Investors have become increasingly interested in climate change, as evidenced by the mounting number of shareholder resolutions and direct requests from investor groups. Recognizing this, Exelon Corporation, the largest nuclear operator in the U.S., added a global climate change section to its 10-K for the first time in 2004.

Time and again, executives who participated in the study declared that the question was not *whether* they should take action on climate change, but *when.* David Bresch, head of the atmospheric perils group for Swiss Re, says: "You should always remain one step ahead of the competition. But if you are two steps ahead, you lose the crowd. The ideal is for you to be the leader of the pack and [have] everyone pulling in the same direction." At the same time, Eileen Claussen, president of the Pew Center on Global Climate Change, warns that laggards are at risk: "There will be winners and losers," she notes. "Prudent steps taken now to address climate change can improve a company's competitive position relative to its peers and earn it a seat at the table to influence climate policy." +

Resources

Jeffrey Ball, "In Climate Controversy, Industry Cedes Ground," *Wall Street Journal*, January 23, 2007: Related to the release of the Pew report, the WSJ reviews companies pushing for a mandatory emissions limit and examines the battle brewing between Big Oil and Detroit. http://online.wsj.com/article/SB116949687307684055-search.html?KEYWORDS=%3FIn+Climate+Controversy%2C+Industry+Cedes+Ground%2C%3F&COLLECTION=wsjie/6month (subscription required).

Daniel Gabaldon, Tom Hansson, Eric Spiegel, and Joseph Van den Berg, "The Next Wave of Generation Investment," Booz Allen Hamilton white paper, May 2006: In the course of analyzing how utilities can most effectively invest in new generation capacity, the authors highlight how the industry should get in front of GHG regulation rather than waiting for the ax to fall. http://www.boozallen.com/media/file/Next_Wave_of_Generation_Investment.pdf

Andrew Hoffman, "Getting Ahead of the Curve: Corporate Strategies That Address Climate Change," Pew Center on Global Climate Change, October 2006: This survival guide to the carbon-constrained marketplace examines the experiences and best practices of 31 large corporations. It includes 12 in-depth case studies. http://www.pewclimate.org/global-warming-in-depth/all_reports/corporate_strategies/index.cfm

Michael Margolick and Doug Russell, "Corporate Greenhouse Gas Reduction Targets," Pew Center on Global Climate Change, November 2001: Report on the ways companies have set targets to reduce GHG emissions and their success at achieving their goals in climate change. http://www.pewclimate.org/docUploads/ghg_targets.pdf

Swiss Re, "Becoming Greenhouse Neutral": How the insurer plans to achieve its goal. http://www.swissre.com/internet/pwswpspr.nsf/fmBookMarkFrameSet?ReadForm&BM=../vwAllbyIDKeyLu/aliy-5vtdpg?OpenDocument

U.S. Climate Action Partnership, "A Call for Action," January 22, 2007: The heads of 10 corporations and four nonprofits make recommendations for legislation to "slow, stop, and reverse the growth of greenhouse gas emissions." http://www.us-cap.org/ClimateReport.pdf

Whirlpool Corporation, "Environmental Stewardship Helps Consumers, Communities, and Our Global Business": How the appliance maker has worked to lower GHG emissions. http://www.whirlpoolcorp.com/social_responsibility/environment/default.asp

World Resources Institute/World Business Council for Sustainable Development, "Corporate Accounting and Reporting Standard": This revised edition of the Corporate Standard helps companies identify, calculate, and report GHG emissions. Published in 2001, it has become the international standard for creating a corporate GHG inventory. http://www.ghgprotocol.org/

Carbonfund.org Web site: Carbonfund.org works with businesses, nonprofits, congregations, and event planners to reduce carbon dioxide emissions through offsets, through which companies help pay to reduce emissions in another location. The group provides a carbon calculator that estimates companies' carbon footprints. http://carbonfund.org/

Chicago Climate Exchange Web site: North America's first voluntary GHG reduction and trading system. http://www.chicagoclimatex.com/

Duke Energy Web site: How the utility is working to reduce GHG emissions. http://www.duke-energy.com/environment/climate_change

Erb Institute for Global Sustainable Enterprise at the University of Michigan Web site: Organization offering professional education, public outreach, and scientific scholarship supportive of the transition to sustainability. http://www.erb.umich.edu/

Natural Resources Defense Council Web site: In-depth examination of global-warming policy and its ramifications. http://www.nrdc.org/globalWarming/default.asp

Pew Center on Global Climate Change Web site: Includes the report on corporate best practices. http://www.pewclimate.org/

Shell's Environment and Society Web site: How one energy giant is dealing with the GHG problem. http://www.shell.com/home/Framework?siteId=envandsoc-en&FC3=/envandsoc-en/html/iwgen/welcome.html&FC2=/envandsoc-en/html/iwgen/leftnavs/zzz_lhn1_0_0.html

U.S. Climate Action Partnership Web site: Consortium of businesses and environmental organizations working together to address global warming. http://www.us-cap.org/

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