

Bean Counters, Not Tree Huggers

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Looking for proof that climate change is happening? Stop looking for receding glaciers, rising sea levels or increasing storm severity and start looking at the changing marketplace. Some business associations and lobbyists still dispute the science of climate change, but businesses, many of which remain agnostic about the science, are focusing on the undeniable economics of the problem. Companies are already incurring significant costs associated with climate change and have forecast much more. Accordingly, they are adopting strategies to address the issue.

First, companies are developing *adaptation* strategies to respond to the physical effects that climate change imposes on their operations. For example, Diavik Diamond Mines Inc. relies on ice bridges to move equipment and materials through the northern regions of Canada. Last winter, however, the ice never thickened enough to allow transport of the heaviest trucks. So Diavik absorbed the additional costs of shipping materials by helicopter. Continued warming will disproportionately affect other vulnerable sectors such as agriculture, fisheries, forestry, health-care, insurance, real estate and tourism, as well as offshore energy infrastructure such as oil rigs and pipelines, prompting many in those sectors to explore their own adaptation strategies.

Second, we see the growing prevalence of *mitigation* strategies. To date, more

than 60 corporations with net revenues of roughly \$1.5 trillion have voluntarily set reduction targets for their greenhouse gas emissions. While there is certainly some public relations value in professing concern for the environment, voluntary reductions are based on the need to create and protect shareholder value. The intersection of fiduciary responsibility and climate risk is coming into focus, particularly around the “materiality” of greenhouse gas emissions under the Sarbanes-Oxley Act of 2002, which some believe creates new climate-related legal risks for companies and their directors. This possibility is not just hypothetical: Eight states and New York City have filed a lawsuit against five of the nation’s largest power companies demanding that they cut carbon dioxide emissions. Some insurance companies are beginning to rethink their policies for directors and officers accordingly.

Finally, *competitive* strategies underlie all good management decisions. More and more companies are shifting their responses to climate change from a focus on risk management and bottom-line protection to an emphasis on new business opportunities and top-line enhancements. For some, this means plans to alter existing technologies and capitalize on emerging markets for existing products. For example, Alcoa has developed a new process technology that improves operations while reducing greenhouse gas

emissions from the smelting process. Looking ahead, the company sees an opportunity in recycling because aluminum produced from recycled materials requires only five percent of the energy needed to make primary aluminum. That means a 20-fold reduction in greenhouse gas emissions and a reduction in operating costs. Additionally, as automakers face pressure to improve gas mileage, they are likely to buy more aluminum and less steel in an effort to lighten their vehicles.

For others, competitive climate strategies can involve an alteration of the core business model. DuPont has identified its most promising growth markets in new bio-based materials that employ renewable resources instead of traditional petrochemical feedstocks. This year, the company announced a partnership with BP to develop, produce and market a next generation of bio-fuels. The first product to market will be biobutanol, which is targeted for introduction in 2007 in the United Kingdom as a gasoline bio-component that offers better fuel economy than gasoline-ethanol blends and has a higher tolerance to water contamination than ethanol. In the next few decades, Dupont hopes that over 60 percent of its business will stem from the use of biology to reduce fossil fuels.



The most ambitious climate strategies involve efforts to develop clean, green technologies. In 2005, global investment in wind power and solar power reached \$11.8 billion and \$11.2 billion respectively, up 47 percent and 55 percent from 2004. Announcing a set-aside of \$100 million for investments in cleaner energy, transportation and air and water technologies, venture capitalist John Doerr of Kleiner Perkins Caulfield & Byers said, "This field of greentech could be the largest economic opportunity of the 21st century." Wall Street stalwarts such as Goldman Sachs, Bank of America, JPMorgan Chase & Co. and Citigroup are seeing the opportunity as well, adopting guidelines for lending and asset management aimed at promoting clean-energy technologies. How large is the magnitude of the costs related to climate change? A recent report by Sir Nicholas Stern, former chief economist for the World Bank, states that mitigation costs could rise as much as 3.5 percent of GDP, but the economic benefits of early action to curb greenhouse gases would far outweigh the costs, eventually by as much as \$2.5 trillion a year.

Corporate lobbyists and avowedly pro-business politicians love to talk about the invisible hand of the market, but the fact is that companies know they need rational regulation in order to develop and execute an effective mix of adaptation, mitigation and competitive strategies. Individual states are already acting. California's recent landmark legislation to require a 25 percent cut in industrial greenhouse gases by 2020 is only one of many state-level standards. Much like the events preceding the formation of the Environmental Protection Agency in 1970, a growing patchwork quilt of state and regional regulation is motivating many corporations to support a national climate policy.

Naturally, businesses want a seat at the table when that policy is defined. Policies, by their nature, entail choices that favor certain actions, companies and industries over others. But this much is certain: The debate about whether or not climate change is occurring is over. The market shift proves the climate shift. The bean counters are now moving faster than the tree huggers. They're just waiting for the federal government to catch up and help them write the new rules. 