Executive Summary

This report compiles the experience and best practices of large corporations that have developed and implemented strategies to address climate change. Based on a 31-company survey, six in-depth case studies, a review of the literature, and experience gained by the Pew Center in working with companies in its Business Environmental Leadership Council (BELC), the report describes the development and implementation of climate-related strategies. It is primarily a "how to" manual for other companies interested in developing similar strategies. But the report will also be of value to investors and analysts in evaluating the effectiveness of company strategies for managing climate risk and capturing climate-related competitive advantage. Finally, it will offer policymakers insight into corporate views on greenhouse gas (GHG) regulation, government assistance for technology advancement, and other policy issues. Although the report focuses primarily on U.S.-based multinationals, it considers the global context of climate change and related market transformation.

The report describes eight specific steps clustered into three stages that describe the various components of a climate-related strategy. Table ES1 summarizes these steps, which include assessing emissions and exposure to climate-related risks, gauging risks and opportunities, evaluating action options, setting goals and targets, developing financial mechanisms, engaging the organization, formulating policy strategy, and managing external relationships. The report is organized along the framework presented in the table, though it must be emphasized that individual companies do not necessarily follow the steps shown in a linear fashion.

Lessons learned at each step of the strategy development process are presented throughout the report. Taken together, four overarching themes emerge from the survey results and case studies. The first is the importance of strategic timing. Some companies acknowledge the dangers of starting too early on climate action, while others highlight the risks of starting too late. Despite continuing uncertainty, there is general consensus among the companies in this report that recent changes in the level of external awareness about climate risks, state government action, momentum toward stronger federal policy, and consumer demand for cleaner and more efficient products make it imperative to act now. Well-timed strategies can prepare companies for eventual regulation and create flexibility for longer-range strategic options.

A second theme is the importance of establishing an appropriate level of commitment. While the companies in this report are leaders in their industries, some caution against getting too far ahead of the competition. For many companies, uncertain demands from government, the marketplace, and the financial community—coupled with limited hard data and models to guide aggressive action—make it challenging to support extensive expenditures on GHG reductions. Therefore, many companies justify early action on other grounds: the managerial imperative to undertake low-risk initiatives that produce immediate or near-term cost benefits; their fiduciary obligation

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Table FS1

Stages of Climate-Related Strategy Development

II ward	Manage External Relations	what external constituents are important to the success of climateralated strategies? How should they be engaged?	Step 8
Stage III Focus Outward	Formulate Policy Strategy	How might possible policies help or hurt business and/or ongoing climate-related activities? What policy options are on the table? What is a desirable policy outcome? What are the best ways to influence climate policy at the state, national, or international level?	Step 7
e II nward	Engage the Organization	How can buy-in from the workforce be achieved? How important is senior leadership? Where are the sources of support and resistance? How can resistance be overcome? How the periphery to the core?	Step 6
Stage II Focus Inward	Develop Financial Mechanisms	What financial instruments are available to support GHG reductions? What are the pros and cons of emissions trading (internal and external), carbon shadow pricing, lower hurdle rates, and special capital reserves?	Step 5
	Set Goals and Targets	Why set GHG reduction targets? What kinds of efficiency or reduction targets should be set, and over what time period? How do efficiency improvements relate to GHG reductions? How can targets be connected to business strategy? What kind of goals are achievable regarding new business opportunities? What kind of adaptation strategies should be considered?	Step 4
e I nate Strategy	Evaluate Action Options	what options are available for reducing emissions? Are there any "low-hanging" emission-reduction opportunities? Where can we innovate? What long-run steps can be taken? How can climate-related strategies enhance top-line and bottom- line objectives?	Step 3
Stage I Develop a Climate Strategy	Gauge Risks and Opportunities	What risks are posed by emissions from operations and GHG-intensity of products and services? Where can we excel and get ahead of peers in climatefriendly or risk-reducing business lines? How may demand for products and services change? What products and services may flourish given carbon constraints?	Step 2
	Assess Emissions Profile	What kinds of direct and indirect GHG emissions are being created, from what sources, and in what quantities? What metrics can be used to track emissions, and what technologies or techniques are required to measure them?	Step 1

to address risks from climate change and from related regulations, particularly to the extent these could affect future asset values and market positioning; and socially and ethically responsible business values—that is "doing the right thing."

A third theme for many companies is the need to **influence policy development**. Any policy that regulates GHG emissions will certainly constitute a major market shift, setting new "rules of the game" and changing the competitive landscape. Companies in this report feel they cannot leave the ultimate form of such regulations to chance. All policies are not equal; they will, by their nature, favor certain actions, companies, and industries. Early action is seen as a way for companies to gain credibility and leverage participation in the process of policy development, and thereby have a measure of control over their future business environment.

A fourth and final theme is the importance of creating business opportunities. Companies with a history of climate-related activity are trying to shift their strategies from a focus on risk management and bottom-line protection to instead emphasize business opportunities and top-line enhancements. Firms that incorporate climate change into their core business strategies will be in the best position to take advantage of emerging opportunities and gain competitive advantage in a changing market environment. Sustainable climate strategies cannot be an add-on to business as usual; they must be integrated with a company's core business activities.

In the end, it is the consensus of the companies in this report that climate change is driving a major transition—one that will both alter existing markets and create new ones. As in any such transition, there are risks and opportunities, and there will be winners and losers. In this context, a growing number of companies believe that inaction is no longer a viable option. All companies will be affected to varying degrees, and all have a managerial and fiduciary obligation at least to assess their business exposure to decide whether action is prudent.