

Climate change: a hotter topic for audit committees

Introduction

The discussion on climate change has shifted markedly in the past two years. A report from Lehman Brothers notes that “in the world of business and finance, climate change has developed from being a fringe concern, focusing on the company’s brand and its corporate and social responsibility, to an increasingly central topic for strategic deliberation and decision-making by executives and investors around the globe.”¹ Legislators, investors, consumers, and employees have all served as key drivers for pushing climate change into mainstream discussion.

Climate change presents opportunities for growth and long-term value creation (see the first appendix for a summary of some of the major potential opportunities). However, adapting to a carbon-restricted economy undoubtedly presents significant material risks for companies. This issue of *InSights* identifies several major risks and outlines the fast-developing disclosure trends relating to carbon emissions. It also highlights the evolving governance approach to climate change and considers possible implications for audit committees.

In addition to drawing on interviews of Audit Committee Leadership Network (ACLN)² members conducted for a previous report on sustainability,³ this issue features the opinions of a range of subject-matter experts. For a complete list of research participants, please see the second appendix, on page 12.⁴

Executive summary

- **Climate change presents material risks** (Page 2)

Regulatory changes appear imminent and could have significant implications for the economy and individual companies. Many companies face a broad set of risks associated with climate change, including financial, litigation, and reputational risks. Audit committees may be drawn into overseeing some of these risks, pursuant to their risk management responsibilities.

- **Companies face fast-expanding environmental disclosure requirements** (Page 6)

Disclosure trends have been evolving quickly, in line with heightened environmental concerns across a wide range of stakeholders. More companies are voluntarily disclosing data, activist investors are

¹ John Llewellyn, *The Business of Climate Change: Challenges and Opportunities* (New York: Lehman Brothers, 2007), 1. Available at http://www.lehmantrust.biz/who/intellectual_capital/pdf/business_of_climate_change_i.pdf.

² The Audit Committee Leadership Network is a group of audit committee chairs, drawn from leading North American companies, who are committed to improving the performance of audit committees and enhancing trust in financial markets. The network is convened by Ernst & Young and orchestrated by Tapestry Networks to access emerging best practices and share insights into issues that dominate the new audit committee environment.

³ Ernst & Young and Tapestry Networks, “Commentary on the governance of sustainability,” *ViewPoints*, January 23, 2008. Available at http://www.tapestrynetworks.com/documents/Tapestry_EY_Summit_View5_Jan08.pdf.

⁴ For more information about *InSights*, see “About this document” on page 10. Generally, this document uses a modified version of the Chatham House Rule whereby names of contributors to the research and their companies or organization affiliations are a matter of public record, but the comments made in the conduct of the research are not attributed to individuals.



pushing for broader disclosures, and regulators are setting tougher requirements. Audit committees typically get drawn into new corporate disclosure initiatives.

- **Governance approaches to climate change are evolving** (*Page 9*)

Companies are adapting the way they oversee climate-change strategies. Investors are looking for full board involvement, but there is no consensus on the most effective approach to board-level oversight. Most participants in this research see some role for the audit committee, particularly as it relates to disclosure practices and the potential that greenhouse gas emissions data will have to be audited.

Climate change presents material risks

Climate change will affect a broad range of industries, as noted below. As such, participants interviewed for this issue of *InSights* highlight a variety of climate-change risks, some of which may fall to the audit committee to oversee because of the committee's risk management responsibilities. ACLN members interviewed last fall recognized the potential for more audit committee involvement, with one member commenting that "[Enterprise risk management] gives [the audit committee] a little bit more access to sustainability issues."⁵ Another member reflected that a "lack of good environmental practices can be a very big risk."⁶

Industries affected by climate change⁷

The impact of climate change will vary significantly across industries. For example:

- Utilities and energy industries. These will likely be the central focus of any legislation enacted to reduce carbon emissions. They will also face pressure to invest in renewable energy.
- Extractive industries, such as chemicals, metals, and mining. These too are likely targets of regulation; chemical sites are also physically vulnerable to changes, such as rising ocean levels.
- Transportation and automotive industries. These will likely face consumer pressure to develop more energy-efficient products (e.g., hybrid cars) as the cost of energy increases.
- Retail and manufacturing industries. These will focus on reducing energy, packaging, and transportation costs.
- Real estate industry. This industry will likely face requirements to build more energy-efficient structures and to mitigate physical risks from extreme weather conditions.
- Pharmaceuticals. Climate change may affect health patterns by increasing the rates of certain diseases.
- Banking and financial services. These are incorporating climate risk into their investment and commercial banking decisions. They will also be at the center of many carbon trading programs.

⁵ From unpublished interview notes for Tapestry Networks and Ernst & Young, "Commentary on 'the governance of sustainability.'"

⁶ Tapestry Networks and Ernst & Young, "The governance of sustainability," *InSights*, November 16, 2007, 3. Available at http://www.tapestrynetworks.com/documents/Tapestry_EY_Euro_ACLN_InSights_Nov07.pdf.

⁷ These examples are based on information in John Llewellyn, *The Business of Climate Change: Challenges and Opportunities*.

Regulatory risks

All of the participants in this research view regulatory changes as the most significant risk facing companies as a result of climate change. As one remarked, *“Regulatory changes will be the major reason companies address climate change.”*

In Canada, companies already face federal and provincial regulation. The federal government set out initial greenhouse gas (GHG)⁸ reduction targets and time frames in March, with regulated industries being required to reduce their emissions by 18% by 2010 for every unit of production. (There are additional measures for Canada’s key emitting sectors: oil sands and electricity.)⁹ The initiative includes a carbon emissions trading market and carbon offset system. In addition, Canada has a growing array of provincial climate-change initiatives, which include carbon taxes (implemented in Quebec and British Columbia) and North America’s first carbon reduction and offset program, implemented by Alberta.

In the United States, regulatory intervention is also happening at the state and municipal levels. For example, a group of Northeast and Mid-Atlantic states have formed the Regional Greenhouse Gas Initiative (RGGI) to enable organizations to sell CO₂ allowances. Similarly, California’s Global Warming Solutions Act of 2006 requires significant emitters to quantify and verify their 2008 emissions in 2009.¹⁰

The political discussion at the U.S. federal level has also intensified over the last 18 months. More than 700 entities reported lobbying the federal government on climate change in the first three months of 2008, up from the 430 in the second half of 2007.¹¹ 2008 has already proven to be a significant year for environmental legislation, with the debate in June on the Lieberman-Warner Climate Security Act (S.3036) marking the first time that GHG cap-and-trade legislation had come to a vote on the Senate floor. A recent *Congressional Quarterly* article observed, “Virtually every corner of the U.S. economy has a stake in a cap-and-trade global warming bill. By putting a price on carbon dioxide, Congress would fundamentally change the way Americans use energy and would transform the economy.”¹²

Although the Act stalled, most participants believe legislation is inevitable and point to the fact that both presidential candidates, Republican Sen. John McCain of Arizona and Democratic Sen. Barack Obama of Illinois, support putting a cap on GHG emissions. *“A regulatory response is coming within the next few years,”* as one participant put it. *“It’s now a matter of when, not if, it will happen,”* he continued. In part, this reflects a change in attitude in the corporate sector. Those firms that vehemently argued against the science for many years have, for the most part, stopped doing so. Moreover, some firms have moved from advocating their own positive approach to environmental concerns to advocating a federal policy change. For example, the U.S. Climate Action Partnership (USCAP), a coalition of 25 major corporations and six

⁸ Most GHG literature relates to six gases listed in the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases (HFC, PFC, SF₆). A “carbon footprint” is the combined emissions of these gases, translated into carbon equivalents.

⁹ Environment Canada, “Government Delivers Details of Greenhouse Gas Regulatory Framework,” press release, March 10, 2008. Available online at <http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=B2B42466-B768-424C-9A5B-6D59C2AE1C36>.

¹⁰ More information on California’s legislation is available at http://www.lao.ca.gov/analysis_2008/resources/res_anl08003.aspx.

¹¹ Emily Cadei and Coral Davenport, “Everyone Wants a Say on Climate Change,” *Congressional Quarterly*, June 24, 2008. Available at <http://public.cq.com/docs/cqt/news110-000002903640.html>.

¹² *Ibid.*

leading nongovernmental organizations, has called on Congress for action on GHG emissions.¹³ Many private sector participants advocating federal action are doing so because they feel it is increasingly difficult and costly to operate within the complex patchwork of state and municipal requirements in this area.

As a result of increased legislative activity, many participants believe that companies need to begin assessing the impact of climate-change regulation immediately, if they have not done so already: *“One of the major risks is being caught short of legislation. If you’re not paying attention and progressing towards a regulatory trend, then your amount of catch-up and total cost will be higher,”* warned one participant.

The risk of being targeted by investors

Innovest, a specialist research firm, stated in 2007 that “few environmental issues pose as real, significant and widespread financial threat to institutional investors as climate change. Pension fund trustees, asset managers, corporate directors and executives as well as other fiduciaries will increasingly be called to ensure that their portfolio assets are being managed and protected prudently with respect to climate risk.”¹⁴

Mainstream investors have taken heed, as illustrated by “an astonishing \$14 trillion-plus in assets [under management]”¹⁵ held by the 360 investors that had signed up to the United Nations’ Principles for Responsible Investment (PRI) by June this year. The Principles “provide a menu of possible actions for incorporating [environmental, social, and corporate governance] issues into mainstream investment decision-making and ownership practices.”¹⁶ A group called the Investor Network on Climate Risk (INCR) has also been successful in maintaining investor interest, as is evident from the fact that it held its third summit of investment, financial, and corporate leaders in February.

Investors are engaging companies more on climate change, as shown by the steep rise in the number of climate-related shareholder proposals put forward in recent years. As of late May, a record 54 corporations had received climate-change-related proposals, up from 20 in all of 2007 and 12 in 2006.¹⁷ Average support for such proposals rose to 32% last year, up from 15% in 2004.¹⁸ Indications suggest that 2008 will see yet another increase. As one participant noted, *“Shareholder proposals are a blunt weapon to encourage investor/board dialogue.”* This participant believes that forward-looking companies should take up the invitation to dialogue because *“shareholders can act as an early-warning system for companies.”*

¹³ United States Climate Action Partnership, *A Call for Action* (Washington, DC: United States Climate Action Partnership, 2008), 3. Available online at <http://www.us-cap.org/USCAPCallForAction.pdf>.

¹⁴ Innovest, “Carbon Beta Analytics Webinar: Quantifying Carbon Risk and Company Performance for Investors,” February 21, 2008. Available at http://www.innovestgroup.com/index.php?option=com_content&task=view&id=172&Itemid=61.

¹⁵ Principles for Responsible Investing, *PRI Report on Progress 2008* (New York: Principles for Responsible Investing and the United Nations Environment Programme 2008), 2. Available at http://www.unpri.org/files/2008PRI_Report_on_Progress.pdf.

¹⁶ Principles for Responsible Investing, “About [the Principles for Responsible Investment],” <http://www.unpri.org/about/>.

¹⁷ Jaelyn Jaeger, “Climate Change Resolutions Gain Steam in ‘08,” *Compliance Week*, May 28, 2008. Available to subscribers at [http://www.complianceweek.com/index.cfm?fuseaction=article.SavedSearchResults&sort=article_publishdate&lastsort=x&order=desc&searchstring=and%20%3D1%20and%20\(topic.Topic_ID%20in%20\(49\)%20\)&startrow=1&maxrows=20&search_ID=117](http://www.complianceweek.com/index.cfm?fuseaction=article.SavedSearchResults&sort=article_publishdate&lastsort=x&order=desc&searchstring=and%20%3D1%20and%20(topic.Topic_ID%20in%20(49)%20)&startrow=1&maxrows=20&search_ID=117).

¹⁸ William J. Holstein, “A Bumper Crop of Green Proposals,” *BusinessWeek*, June 26, 2008. Available at http://www.businessweek.com/managing/content/jun2008/ca20080626_395541.htm?chan=top+news_top+news+index_managing.

Investors are also underweighting their investments in companies that they see as laggards on climate change, with some declining to invest in them altogether. That being the case, companies that are slow to act may find it increasingly difficult to attract long-term stable investors, such as U.S. pension funds and union funds and European institutional investors.

Financial, compliance, and transaction risks

Climate change presents a number of financial risks. First, companies that have to make changes to their products or operations could face significant financial challenges. Capital or operating expenditures may have to ramp up materially, which would compress margins and in turn affect a company's share price or debt rating. Companies that are slow to act may also see slowing customer demand for their products.

Second, companies may have to increase staff to ensure compliance with new regulations or to ensure robust reporting under new disclosure rules. For global companies operating in jurisdictions that have higher standards than the United States, the costs are already significant. However, even largely domestic firms are facing additional costs as states and municipalities implement their own standards.

Third, those companies that are slow to react could experience increases in their directors' and officers' (D&O) insurance premiums as insurers build climate risk into their underwriting process. One major European insurer already incorporates data gathered by the Carbon Disclosure Project (CDP) into its underwriting determinations, according to one participant. See ["Companies face fast-expanding environmental disclosure requirements"](#) for more on the CDP.

Fourth, companies may find their cost of capital increases as investors and banks incorporate climate risk into their investing and lending decisions. Fifth, companies could understate climate risk if their due diligence professionals do not integrate such analysis into their merger and acquisition assessments.

Reputational risks

Climate change presents companies with significant reputational challenges, which, as several participants pointed out, can *"take a long time to repair if not managed well."* Several participants warned that companies that take a prominent position on climate change but that do not follow through also face significant reputational risk. One participant noted, *"[Another] risk is reporting risk ... there can be errors or mistakes, and that can have reputational risks."* For example, one major investor interviewed for this research undertook some research into companies that claimed they were reducing their carbon footprint and found that a major U.S. company that had claimed success had excluded operations that produced the most carbon. As a warning to other such companies, *"We highlighted that firm's inadequacies in our annual report,"* noted the investor. See ["Companies face fast-expanding environmental disclosure requirements"](#) for more on disclosure trends.

More broadly, one consultant speculated that, as GHG disclosures become more commonplace, large companies may decide to proactively adopt GHG reduction programs. *"No company wants to be seen as a major polluter that does not care about GHG emissions,"* noted that participant.

Litigation risk

Companies have faced the threat of environmental litigation for years. However, climate change presents new and potentially significant exposures. Near term, companies may face litigation related to their claims about how environmentally friendly their products are – so-called “greenwashing.” The Federal Trade Commission (FTC) has stated it will update its environmental marketing guidelines (its “Green Guides”)¹⁹ in 2009, in recognition that “there’s a heightened potential for deception,” as FTC chair Deborah Platt Majoras suggested earlier this year.²⁰ The FTC has already held hearings on renewable energy and green packaging. Legal experts believe that as the FTC provides more guidance on claims that are misleading or untested, companies could be more exposed to litigation in this area.

Long term, several participants referred to carbon emissions as having the potential to be the “*next asbestos or tobacco*” in terms of liability. These participants argued that companies that are dilatory in addressing their emissions may find themselves subject to litigation of some kind in the future, and that the potential exposures “*could be significant.*” Clearly this is highly speculative, but to the extent these participants’ predictions are correct, it would behoove companies to take action sooner rather than later.

Companies face fast-expanding environmental disclosure requirements

Disclosure trends on GHG and environmental matters have been developing relatively fast, in line with the overall levels of heightened interest from all stakeholders.

More companies are voluntarily disclosing GHG data

In terms of voluntary disclosure, over 1,500 companies have voluntarily adopted the G3 Guidelines put out by the Global Reporting Initiative (GRI). The guidelines have become the de facto global standard for reporting.²¹ GRI covers a broad range of sustainability issues and is not limited to environmental factors. One participant referred to its guidelines as the gold standard.

An increasing number of companies have also voluntarily participated in the CDP. The CDP captures information on all six GHG emissions and offers strategies for managing and disclosing carbon activities.²² Activist shareholders in the United States have been using non-participation in the CDP as a reason to target companies with shareholder proposals; when companies agree to participate, those shareholders typically withdraw their proposals. As a result, participation rates have increased across all industries over the past two years (56% of the S&P 500 participated in 2007, up from 47% in 2006).²³ The CDP expects even higher

¹⁹ Federal Trade Commission, “FTC Reviews Environmental Marketing Guides, Announces Public Meetings,” press release, November 26, 2007. Available at <http://www.ftc.gov/opa/2007/11/enviro.shtm>.

²⁰ Louise Story, “FTC Asks if Carbon-Offset Money is Well Spent,” *New York Times*, January 9, 2008. Available at http://www.nytimes.com/2008/01/09/business/09offsets.html?_r=2&adxnnl=1&oref=slogin&adxnnlx=1217948486-Jhc7zQIRdLWjiXjuYeujJQ.

²¹ Global Reporting Initiative, “What we do,” <http://www.globalreporting.org/AboutGRI/WhatWeDo/>.

²² Beginning in 2002, the CDP has sent questionnaires to the world’s largest publicly owned companies seeking detailed information on the risks and opportunities posed by climate change

²³ RiskMetrics Group, *Carbon Disclosure Project Report 2007 US S&P 500* (London: Carbon Disclosure Group, 2007), ii. Available at <http://www.cdproject.net/currentreports.asp>.

response rates in 2008. In light of the rise in voluntary disclosures, companies are increasingly using their internal auditors to review carbon data reporting and disclosure processes.

Investors' demands for better disclosure are growing

Mainstream investors have been demanding improved corporate disclosure on climate change and the associated risks. For example, the Investor Network on Climate Risk petitioned the Securities and Exchange Commission (SEC) in November 2007 “requesting formal guidance from the SEC on climate-related risks and economic opportunities companies should be disclosing.”²⁴ It is not yet clear how the SEC will respond, although one participant conjectured that “*the SEC may become more investor friendly under a new administration*” and might use more extensive disclosures as a means to protect investors.

The Ontario Securities Commission (OSC) has already been drawn into environmental disclosures.²⁵ After reviewing the management discussion and analysis (MD&A) environmental disclosures of 35 companies from industries with a high environmental impact, it concluded there was too much variety in the disclosures, with some companies merely providing boilerplate disclosures of environmental risks and liabilities without any attempt to quantify the future impact to the company. The OSC issued guidance for better disclosures.

Investors are also focusing on changes to accounting standards as a means to push for broader disclosure. Some, for example, are pressing the Financial Accounting Standards Board (FASB) to take an expansive approach to its proposed revision of FAS 5, which relates to loss contingencies, and to require a broader set of contingencies, including environmental contingencies, be disclosed, and with greater precision. These investors have also been pushing for a more expansive approach to materiality in terms of the requirements set out in item 303 of Regulation S-K, which focuses on material disclosures in the MD&A.

In response to growing investor demands, the Canadian Institute of Chartered Accountants (CICA) has issued advice on climate-change disclosures. Most recently, it published a briefing paper encouraging companies to provide sufficient information so investors can “assess the impact of climate change on the future earnings of a company and the competitive advantage of one company over another.”²⁶

Mandatory requirements are expanding

Companies already face a range of environmental disclosure rules, and those environmental risks that are material have to be disclosed in annual reports and quarterly financial statements.

²⁴ Investor Network on Climate Risk, “Investors, Environmental Groups Push the SEC to Require Full Corporate Climate Risk Disclosure,” press release, June 12, 2008. Available at <http://www.incr.com/NETCOMMUNITY/Page.aspx?pid=912&srcid=330>.

²⁵ Ontario Securities Commission, *OSC Staff Notice 51-716 Environmental Reporting* (Ontario: Ontario Securities Commission, 2008). Available at http://www.osc.gov.on.ca/Regulation/Rulemaking/Current/Part5/sn_20080229_51-716_enviro-rpt.jsp.

²⁶ Canadian Institute of Chartered Accountants, *Executive Briefing: Climate Change and Related Disclosures* (Toronto: Canadian Institute of Chartered Accountants, 2008), 5. Available at http://www.cica.ca/download.cfm?ci_id=44431&la_id=1&re_id=0. Also relevant is Canadian Institute of Chartered Accountants, *MD&A Disclosure about the Financial Impact of Climate Change and Other Environmental Issues: A Canadian Performance Reporting Board Discussion Brief* (Toronto: Canadian Institute of Chartered Accountants, 2005). Available at http://www.cica.ca/multimedia/Download_Library/Research_Guidance/MDandA_Business_Reporting/English/E_CPRB_Discussion_Brief_2005.pdf.

At the U.S. state level, legislators are implementing additional new standards, oftentimes drawing on private sector initiatives. For example, Ceres' *Global Framework for Climate Risk Disclosure* was used as the basis for California Senate Bill 1550, "Corporations: climate risk disclosure."²⁷ This framework requires "a description of the company's corporate governance actions, including whether the board has been engaged on climate change and the executives in charge of addressing climate risk. In addition, companies should disclose whether executive compensation is tied to meeting corporate climate objectives, and if so, a description of how they are linked."²⁸ Other demanding state- and municipal-level requirements have been enacted, and participants expect more to come.

U.S. federal environmental disclosure requirements are also set to expand in the future. For example, the U.S. Environmental Protection Agency (EPA) has been tasked with developing mandatory GHG emissions reporting rules that would come into effect by June 2009. The rules would require companies to report GHG emissions above appropriate thresholds, and, according to one participant, companies reporting above those thresholds would account for 80% of all GHG in the United States. Although it is expected that the disclosures to the EPA would be confidential, one participant believes there could be a positive knock-on effect on the quality and quantity of responses to voluntary disclosure initiatives "*because companies would have climate-change data at hand.*" Interestingly, mandatory reporting on carbon emissions for heavy emitters has been in place in Canada since 2004, and that data is freely available to the public.²⁹

Third-party assurance of GHG data may precipitate audit committee involvement

GHG disclosures may become a pressing issue for audit committees if the data has to be assured by a third party, as some participants believe will happen over the next "*five to ten years.*" Mandatory third-party assurance is a realistic option; indeed, as mentioned above, the Canadian province of Alberta already requires heavy emitters to submit carbon emission inventories and qualifying carbon offset statements to the government, and it also requires that these statements be reviewed by an independent third party.³⁰ Several participants believe that the audit committee will feel compelled to evaluate the data processes and outputs in such a third-party verification environment because "*they recognize these issues carry significant reputational risk.*"

External auditors are already involved in assuring environmental data, so expanding to GHG emission data would be a natural step. Leading companies are voluntarily seeking third-party assurance of their GHG data, noted one participant, because of the expectation that assurance will be mandated at some point and because those firms recognize the potential reputation damage of releasing inaccurate data. Another research participant said his firm had sought guidance from its external auditor on current climate-change disclosure practices and on predictions of where disclosure is headed: one such prediction was that external auditors

²⁷ Ceres, "Investors Praise California Senate Leaders for Passing Historic Climate Disclosure Bill," press release, May 22, 2008. Available at <http://www.ceres.org/NETCOMMUNITY/Page.aspx?pid=905&srcid=705>.

²⁸ Ceres, *Global Framework for Climate Risk Disclosure* (Boston: Ceres, 2006), 6. Available at <http://216.235.201.250/NETCOMMUNITY/Document.Doc?id=73>.

²⁹ More information is available at Environment Canada, "Facility GHG Reporting," http://www.ec.gc.ca/pdb/ghg/facility_e.cfm.

³⁰ See Shawn Denstedt, Ryan Rodier and Matthew Keen, "Major Commitments to Alberta's Climate Change Regime Announced," *Osler*, March 12, 2007. Available at <http://www.osler.com/resources.aspx?id=11718&tracklinkSP=SPOTRecentOslerUpdate>.

will start auditing such data in the medium term. Indeed, the Climate Disclosure Standards Board (CDSB), which comprises leading audit firms and other related parties, is looking at the future of such disclosures and takes as its starting position that “companies should disclose in audited annual reports material climate change-related information.”³¹ Interestingly, consumers may become more vocal in calling for independent validation of climate-change-related information provided by companies: a 2007 survey found that 70% of those interviewed believe “climate change claims should be proven by independent parties.”³²

Governance approaches to climate change are evolving

At present, “*management teams are driving climate-change strategies,*” noted one participant. However, investors would like to see the full board become engaged with the company’s climate-change strategy. They do not wish to have boards micromanaging sustainability programs, but, as one participant put it, “*a board that is disinterested in these issues has blinders on.*” He continued by stating provocatively that “*a board that has not ensured that their company has a climate-change policy on how to deal with a carbon-restrained world is irresponsible.*” Another participant remarked, “*It is up to the board to look long term.*”

No clear consensus on the best approach

Currently, there is no set standard for how climate-change issues should be overseen. Global reporting standards, such as those offered by GRI and the CDP, require companies to disclose who has direct responsibility for the oversight of the company’s economic, social, and environmental performance. The standards also focus on how the company reviews progress and status regarding climate change.

One participant believes companies have learned from their mistakes in handling previous environmental issues and are ensuring their climate-change strategies are “*integrated across the company and not relegated into a few people’s hands.*” Another participant noted, “*The board or one of its committees has to ... ensure an appropriate mix of executives from across the company is actively involved.*”

Previous research has shown boards are taking a variety of approaches to overseeing climate-change matters.³³ Those companies with more mature climate-change and/or environmental strategies have established stand-alone board committees, such as a public policy committee or health, safety, and environment committee. Estimates suggest about 25% of Fortune 500 companies now have a board overseeing environmental issues, up from 10% five years ago.³⁴ One participant considers a specialized committee to be useful because “*they can be staffed with directors with the right sorts of expertise.*” However, other participants feel that the issues run across committees – particularly audit and compensation committees – and feel that more effective coordination and communication between committees is the key to successful committee-level oversight.

³¹ Climate Disclosure Standards Board, “The Climate Disclosure Standards Board Fact Sheet,” <http://www.cdproject.net/cdsb.asp>.

³² AccountAbility and Consumers International, *What Assures Consumers on Climate Change?* (London: AccountAbility and Consumers International, 2007), 24. Available at <http://businessassurance.com/downloads/2007/07/what-assures-consumers-on-climate-change.pdf>.

³³ See Tapestry Networks and Ernst & Young, “The governance of sustainability,” for more on committee oversight.

³⁴ Joann Lublin, “Environmentalism Sprouts Up On Corporate Boards,” *Wall Street Journal*, August 11, 2008. Available at http://online.wsj.com/article/SB121840356252128043.html?mod=hps_us_inside_today.

Several North American audit chairs said last fall that if sustainability is discussed at the board level, it is likely to end up on the audit committee's agenda because of the related risk component.³⁵ However, one investor noted that although *“some of these [climate-change] issues will spill over to the audit committee, it won't be the major focus of the audit committee.”* Indeed, another cautioned that *“investors don't want to overburden the audit committee; it has to stay focused on its financial reporting responsibilities.”*

All agree audit committees will become more involved in GHG disclosures

Participants agree unanimously that audit committees will play a more active role in the future with regard to GHG disclosures. If regulators require third-party assurance of data and the inclusion of more data in a company's financial statements, *“the audit committee will have to validate the reporting process,”* noted one participant. In addition, one participant stated, *“[The] audit committee would likely become involved if the company participates in market-based trading schemes, which necessitate precision in the measurement and disclosure of carbon data.”* After all, mused another participant, *“If there is a mistake, then the audit committee will have to sort it out.”*

Conclusion

Climate change is accelerating up the board agenda, in line with a steep increase in interest in the issue among a broad group of stakeholders. Its effects will be felt across multiple industries. The associated risks run the gamut and include regulatory, financial, and reputational risks. Disclosure requirements are becoming more demanding, and that trend is only expected intensify in the future – perhaps coming to include, for example, the need for GHG emissions data to be assured by a third party.

Audit committees will have to determine their role in overseeing their companies' approach to climate change. In doing so, committee members may wish to ask management the following questions: What risks have we identified that could be material? What information do we disclose on these issues, and how robust are the reporting processes? What trends are most important to us in this area? What is the most appropriate way to oversee climate change, both at the board and committee levels?

About this document

InSights is produced by Tapestry Networks to provide assessments of key issues of interest to audit committees. Initially, *InSights* will be distributed to network members who, in turn, will share it with colleagues on audit committees and boards, and their advisers. It will be distributed by Ernst & Young to its partners. Anyone who receives *InSights* may share it with those in their own network. The ultimate value of *InSights* lies in its power to help all constituencies develop their own informed points of view.

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³⁵ Tapestry Networks and Ernst & Young, “The governance of sustainability,” 5.

Appendix one: summary of major opportunities presented by climate change

Many of those interviewed for this issue of *InSights* agreed that the opportunities for companies to get out in front on climate change far outweigh any potential material risks. The most commonly cited were:

- **Strategic opportunities.** In a recent global survey by McKinsey & Company, 60% of executives reported that they regard climate change as strategically important, and more than 70% consider it important to development, investment planning, and brand management.³⁶ Leading companies are positioning themselves ahead of their peers, making major changes in their product portfolio, oftentimes ahead or in anticipation of regulatory or consumer demand changes linked to carbon reductions or clean technologies. Investors are seeking out investment opportunities in the renewable-energy or clean-technology sectors, while financial institutions are developing new “green funds” and improving the investment performance of existing funds by identifying those companies that are adapting most effectively to climate change.
- **Product opportunities.** The “green” consumer is no longer a fringe demographic. Recent analysis by the Natural Marketing Institute (NMI) estimated that 19% of consumers have a strong preference for buying so-called green products, and last year such spending accounted for \$209 billion in sales.³⁷ NMI predicted that figure may reach more than \$400 billion by 2010.³⁸
- **Operational efficiencies.** Companies that have relatively large carbon footprints are recognizing that climate-friendly policies present significant cost-saving opportunities in their own operations as well as in those of their suppliers. Two areas in which green initiatives can yield operational efficiencies are packaging and waste reduction. Reduced transportation costs are an ancillary benefit of lighter and less bulky packaging.
- **Financial and tax opportunities.** The carbon-trading market is potentially huge. One specialist believes that within 20 years, the global market for carbon could reach \$3 trillion.³⁹ For those companies that have significant carbon credits, this could prove to be a major financial driver in future years. In addition, companies can take advantage of an expanding set of tax incentives offered by states and municipalities, notably those tied to building new operations or facilities that meet Leadership in Energy and Environmental Design (LEED) requirements.

³⁶McKinsey & Company, *How companies think about climate change: A McKinsey Global Survey* (McKinsey & Company, 2007). Available at <http://www.mckinseyquarterly.com/PDFDownload.aspx?L2=3&L3=50&ar=2099>.

³⁷ “Green product sales expected to reach \$400B by 2010,” *Sacramento Business Journal*, June 9, 2008. Available at <http://www.bizjournals.com/sacramento/stories/2008/06/09/daily8.html>.

³⁸ *Ibid.*

³⁹ Peter Fusaro, of Global Change Associates, quoted in Simon Kennedy, “‘Carbon trading’ enriches the world’s energy desks,” *MarketWatch*, May 16, 2007. Available at <http://www.marketwatch.com/news/story/energy-desks-betting-big-future/story.aspx?guid=%7BD81A7B6C-E9F7-4896-B704-75881E5D2392%7D>.



Appendix two: list of interviewees

Tapestry Networks interviewed a range of experts in the field of climate change to gain a wider perspective. Below is a list of the participants:

- Ken Bertsch, Executive Director, Morgan Stanley Investment Management
- Cathy Cobey, Senior Manager, Advisory Services, Ernst & Young Canada
- Doug Cogan, Director, Climate Risk Management, RiskMetrics Group
- Brian Gilbert, Executive Director, Fraud Investigations & Dispute Services, Ernst & Young
- Jody Howard, Director, Social Responsibility, Caterpillar
- Anne Kelly, Director of Governance Programs, Ceres
- Don Kirshbaum, Investment Officer for Policy, Connecticut Retirement Plans and Trust Funds, Office of State Treasurer
- Sandra Lauterbach, formerly Senior Analyst, AIG Global Investment Group
- Jon Lukomnik, Program Director, Investor Responsibility Research Center Institute, and Board Member, Sears Canada
- Mike McCauley, Senior Corporate Governance Officer, Florida State Board of Administration
- Craig Metrick, Consultant, Mercer Investment Consulting
- Zoe Riddell, Vice President-US, Carbon Disclosure Project
- Edward Scott, Chief Ethics and Compliance Officer, Caterpillar
- Tim Smith, Senior Vice President, Environment, Social and Governance Group, Walden Asset Management
- Melanie Steiner, Senior Manager, Advisory Services, Ernst & Young Canada
- Peter Wilkes, Managing Director, Innovest Strategic Value Advisors
- John Wilson, Director, Corporate Governance, TIAA-CREF