

Internal Audit perspectives.

Climate change: How Internal Audit can
promote a disciplined response.

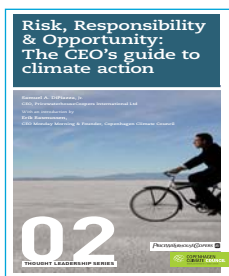
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10Minutes on Climate Change



The CEO's Guide to Climate Action

The climate change issue is real. A growing number of corporate leaders are tackling climate change in its various forms head-on, cognizant of pending regulation and the reality that a business case for change does exist.

The buildup of man-made gases in the atmosphere is trapping the sun's heat at intense levels, which in turn causes destructive changes in global climate patterns—adversely affecting interrelated ecosystems and causing unforeseen changes such as rising sea levels, more extreme weather and storms, and decreased water availability in areas where water has historically been plentiful.

To date, the US has lagged behind other parts of the world in developing a coordinated corporate response to this global concern. However, a number of factors indicate that now is the time for US businesses to address its implications more systematically.

There is a significant upward trend for companies to report non-financial data to the markets. This data will be subject to public scrutiny, and companies need to take the appropriate steps to ensure that the proper processes and controls are in place to manage these new streams of information. While many issues around climate change are not formally regulated, many companies are looking for ways to prepare themselves for proposed regulatory changes.

Corporate branding is increasingly tied to socio-environmental global issues—climate change is also emerging as a critical concern that harbors significant potential for forward thinkers.

Stakeholder activism on climate change soared last year, with almost twice the number of related resolutions put forth compared to the number that were pushed out just two years earlier.¹ At the same time, the global investment community

See what others are doing to drive value for their corporate brand and the environment:

- General Electric—“Imagine a way to fly that not only helps save millions of gallons of fuel, but actually reduces emissions. The GE GENx aircraft engine, from GE.”
- CSX—“Until we can move a ton of goods using no fuel, we've got the next best thing. CSX trains can move a ton of goods 423 miles on one gallon of fuel. CSX: How tomorrow moves.”
- ConocoPhillips, Clean Coal—“At ConocoPhillips we believe we're defined by what we pass on to the next generation. That's why ConocoPhillips is working to provide clean, efficient technology to turn coal into clean fuels for homes, schools, and businesses. Our process helps capture carbon and remove impurities that affect our air quality so we can pass on what matters to the ones that matter most.”

¹ CERES, “Investors Achieve Major Company Commitments on Climate Change,” www.ceres.org, August 2008.

and numerous other key stakeholders in businesses worldwide are increasingly concerned about the risk that climate change presents to business.² This is the kind of dramatic leap into prominence that has observers viewing the issue as one that will soon become a major boardroom discussion.

Momentum toward federal regulation of greenhouse gases in the US

In addition to the long-term business case for sustainability, greenhouse gas emissions management and energy use is also on C-suite agendas as business leaders contemplate intensifying legislation and regulation.

The most vulnerable industries today include energy and utilities companies, industrial products, and automotive manufacturers. However, the impact of growing societal concerns about climate change on any business in today's increasingly interconnected global economy is such that every executive should be considering the emerging risks associated with climate change as part of short- and long-term business and contingency planning.

Public policy shifts, largely driven by the Obama administration, are bringing climate change, carbon emissions, and energy use to the forefront for US businesses. This shift will bring new challenges and opportunity around how businesses manage carbon emissions as a financial asset.

Most recently the US Environmental Protection Agency (USEPA) has proposed a rule that would require the monitoring and reporting of greenhouse gas (GHG) emissions. In total, 85%–95% of US GHG emissions, from approximately 13,000 facilities, would be subject to inventory by the USEPA. This rule will establish a

baseline for emissions and enable policy makers to make informed decisions regarding mandatory reductions of GHG emissions.

There is already one mandated carbon-trading scheme in the US (the Regional Greenhouse Gas Initiative) and others are being planned. A review of just the first four months of 2009 shows the increased attention by regulators around climate change issues:

- EPA—Proposed Mandatory Greenhouse Gas Reporting Rule (March 10, 2009)—In response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110–161), the EPA has proposed a rule that requires mandatory reporting of GHG emissions from large sources in the United States. The proposed rule would collect accurate and comprehensive emissions data to inform future policy decisions.
- National Association of Insurance Commissioners—Climate Change Risk Disclosure (March 17, 2007)—The National Association of Insurance Commissioners (NAIC) adopted a mandatory requirement that insurance companies disclose to regulators the financial risks they face from climate change, as well as actions the companies are taking to respond to those risks.
- The American Clean Energy and Security Act, Waxman-Markey (April 1, 2009)—There are four primary sections being considered in this Act:
 - Clean energy section that promotes renewable sources of energy, carbon capture and sequestration technologies, low-carbon fuels, clean electric vehicles, and the smart grid and electricity transmission;

² "Carbon Value—Robust carbon management," PwC, 2008.

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- Energy efficiency section that increases energy efficiency requirements and standards across all sectors of the economy, including buildings, appliances, transportation, and industry;
 - Global warming section that places limits on emissions of heat-trapping pollutants; and
 - A transitioning section that protects US consumers and industry and promotes green jobs during the transition to a clean energy economy.
- Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act (April 17, 2009)— This finding will link the causes of greenhouse gases to be regulated in a similar fashion to other environmental pollutants under the Clean Air Act.

Creating a well-defined plan

The business implications of climate change are broad, yet they can prove to have a positive outcome for your organization with a proactive, well-defined, and socially responsible plan. A well-designed response — one that is integrated with the corporate strategy — can improve your organization's ability to adapt to emerging risks, operate efficiently, engage stakeholders to understand their changing needs, and enhance the value of the corporate brand.

As the uncertainties associated with climate change come into focus, businesses will inevitably find themselves prone to unforeseen circumstances.

For example, energy prices can spike and demand for raw materials can continue to rise, thus elevating costs that, in turn, exert pressure on margins.³ Or, resources can be rendered scarce, and supply chains can be disrupted or transformed, as can distribution networks and transportation infrastructure.⁴

³ "Carbon Disclosure Project Report, FTSE 350," 2008.

⁴ "Exploring Emerging Risks," PwC, 2009.

⁵ "Carbon Value—Robust carbon management," PwC, 2008.

Although there is no clear or easy way to anticipate all emerging risks and their magnitude, climate-related risks can be broken down into two categories, first-order impacts and second-order impacts, to help identify where the business has the most measure of control.

First-order risks relate to direct and geophysical impacts on a business. They will most likely affect physical assets and operational activities. For example, mining or agriculture sectors could face water shortages that increase production costs, or power generation companies may face costly regulatory impacts.

Second-order risks relate to indirect impacts and responses by internal and external stakeholders and competitors. These risks have the potential to impact employees, access to capital, and reputation. For example, manufacturers face increasing raw material prices, large power users face increasing electricity prices, and consumers face rising food prices.⁵

Business leaders who understand the need to address climate change aggressively can begin planning how they will adapt to climate-related risks and identify new business opportunities. This assessment begins by asking key questions, including:

- What local, regional, and global climate change risks might provide short- and long-term opportunities? How might they impact the company's supply chain and brand? What are our first- and second-order risks and how should they be monitored?
- How can we enhance our competitive position by addressing climate change?
- Does climate change yield opportunities for new products and services?

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- How will new regulations impact the company's return on investment and production costs?
- How can we assess and measure our carbon footprint? Have we identified our inventory of carbon assets and liabilities?
- What information do internal and external stakeholders expect? How can relevant information be disclosed effectively through climate change and sustainability reporting?
- In order to achieve our goals, what are the processes, procedures, and controls required for data collection and management?

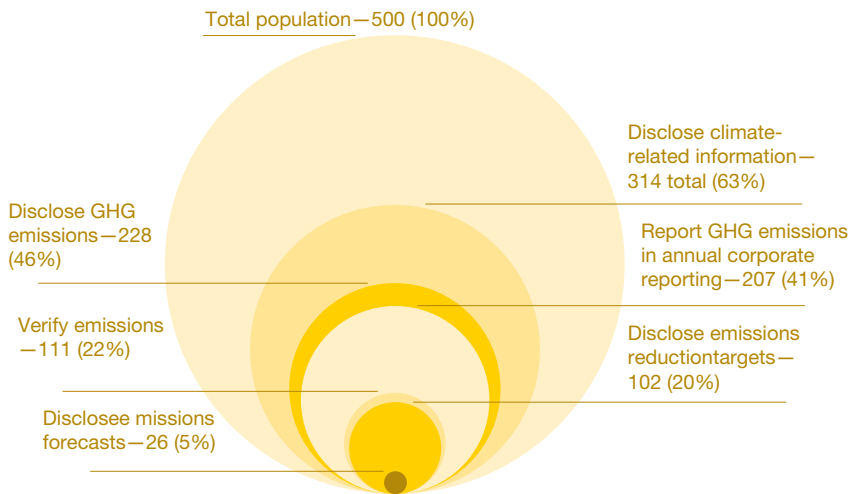
Reporting and disclosure

Despite the absence of a standard measurement and reporting framework for greenhouse gas emissions and climate-related risks, more and more businesses are finding ways to quantify and report their performance toward greenhouse gas

emissions targets and quantify potential financial risks. Their calculations are based on forecasts for carbon and energy prices and modeling that measures the impacts of a possible severe weather event. Some companies seek third-party verification of performance data, particularly emissions, as this data must be reliable for use in either voluntary or mandatory carbon-trading markets.

While US companies have no specific requirement from the Securities and Exchange Commission to disclose climate-related risk, general guidance can be viewed as requiring it. As such, some companies, particularly those in energy-intensive industries, now disclose climate risk in their Form 10-K filings, and others may soon follow. Many other companies view disclosure as a requirement for communicating with a broader group of stakeholders, and they address that need with sustainability reports.

The S&P 500 increasingly sees the importance of climate-related disclosure and reporting



GHG = greenhouse gas
Source: Carbon Disclosure Project, 2008

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The role of the Internal Auditor in meeting strategic imperatives

With the impact that climate change will have on our business environment, company leadership should be setting strategic goals in response to climate change risks and the implications for their organizations. With new and emerging regulations, companies have to be prepared. Internal Audit can be a powerful ally in meeting this challenge by applying its core competencies to this transformational issue.

With climate change having such broad implications, Internal Audit can do the following:

- Facilitate an assessment of first- and second-order risks to the business.
- Review systems, process, and controls to facilitate readiness for third-party verification of GHG emissions.
- Assess disclosure and reporting practices against leading practices.
- Make certain that emissions and carbon footprints are being adequately measured and reported.
- Review policies, procedures, or programs for creating a “green” workplace that adheres to management’s Corporate Social Responsibility initiative.
- Ensure proper protection through insurance for potential risk areas that may result from climate change.
- Ensure that vendors and suppliers are adhering to their own policies and contributing to “green” production.
- Review controls around carbon trading and other functions.

Internal Audit can be leveraged to provide the appropriate risk oversight and monitoring to your company’s strategic objectives around climate change. Internal Audit should work collaboratively with all stakeholders to realign audit coverage to focus on the processes that are critical to drive sustainability and shareholder value. Opportunities include providing focus on internal controls related to verifiable internal measurements of greenhouse gas emissions, reviewing processes and controls around non-financial reporting and transactions, and preparing organizations for third-party verification of carbon emissions measurements. As companies become subject to new regulation, they should compare any current measurement and reporting methods with new requirements.

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Right here, right now. Your source:

This is a crucial time during which proactive enterprises can build sustainable operations, enabling them to identify and manage strategic, operational, reporting, and compliance risks—and to leverage those risks more effectively for strategic advantage. The issue of climate change—and your company’s response—is about more than how your brand will be perceived in a world becoming more and more attuned to creating a sustainable environment; it is about financial accounting and reporting implications as well. Internal Audit can be a catalyst for framing the issue and working with appropriate C-suite sponsorship to drive competitive advantage by understanding these emerging risks.

PwC has published a series of comprehensive thought leadership articles, including *10Minutes on Climate Change* and *The CEO’s Guide to Climate Action*. For a deeper discussion about how Internal Audit can help support this initiative, please contact:

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