



# WORLD CLIMATE CHANGE REPORT



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## CLIMATE CHANGE

### ORGANIZATIONAL STRUCTURE

This article examines the risks and opportunities related to climate change for businesses, nonprofit institutions, and governmental organizations and explores the emerging role of the climate change officer. The author says it is critical for organizations to have strong executive-level leadership that is empowered to leverage resources and personnel throughout the organization. Given the far-reaching implications of climate change for industry and government, the author sees a need to examine organizational structures and culture, to establish an empowered climate change leadership function—including a dedicated climate change officer—able to engage all organizational components, and to incorporate climate change response into job descriptions and expectations.

### Is Your Organization Positioned to Meet the Challenge of Climate Change?

By DANIEL M. KREEGER

**A** historic wave of challenges and opportunities associated with greenhouse gas emissions management is sweeping through the public and private sectors. In addition to the obvious risks associated with climate change itself, an unprecedented alignment of consumer, investor, regulatory, and industry interests is forcing us all to take stock in how we develop and implement emissions management strategies. Additionally, significant opportunities await organizations that position themselves to capitalize on these market and regulatory forces.

Climate change and related policy present extraordinarily pervasive risks, challenges, and opportunities for organizations. Risks directly and/or indirectly related to climate change include increased operational costs, diminishing resources, destructive weather patterns, regulation, legal/liability, and more public and community relations risks. Opportunities include reducing operational costs, shifting to alternative and safer resources, generating revenues, operational stability, and reducing the impacts of operations on the environment.

According to results from surveys conducted in 2008 by the Carbon Disclosure Project, more than half of the

Global 500 companies have tasked a board level or executive level person with addressing climate change (see Figure 1).<sup>1</sup> In addition, close to 1,000 American cities had signed on to the U.S. Conference of Mayors Climate Protection Agreement by August 2009 (see Fig. 3), over 600 public and private colleges and universities have become signatories to the American College & University Presidents' Climate Commitment (ACUPCC), and more than half of American states are involved in regional pacts (24 states as members, 10 states are formally observing) (see Fig. 2). It is becoming increasingly clear that the development of sound greenhouse gas emissions management strategies are, and will continue to be, a cornerstone to successful operations in the public and private sectors.

Fig. 1

#### Climate Change Governance Trends Published in Carbon Disclosure Project (CDP) Reports from 2008 and 2009

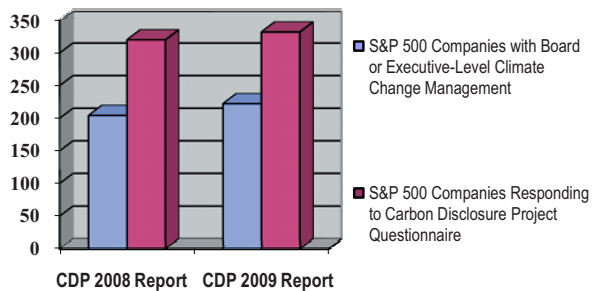
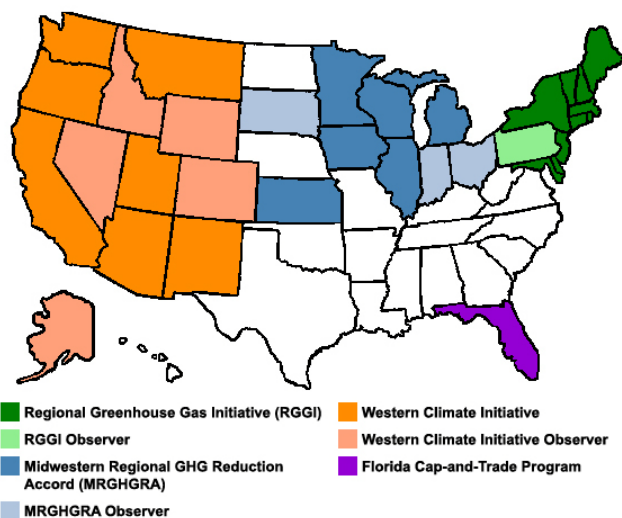


Fig. 2

#### U.S. States Participating in Regional Climate Pacts



Businesses, institutions, and government entities that are successful in establishing sound emissions management infrastructure, inducing culture change, empowering qualified professionals, and developing new partnerships (and enhancing old ones) will mitigate risk and create new opportunities while others struggle to catch on. The question is ... is your organization ready?

Here are some thoughts to consider:

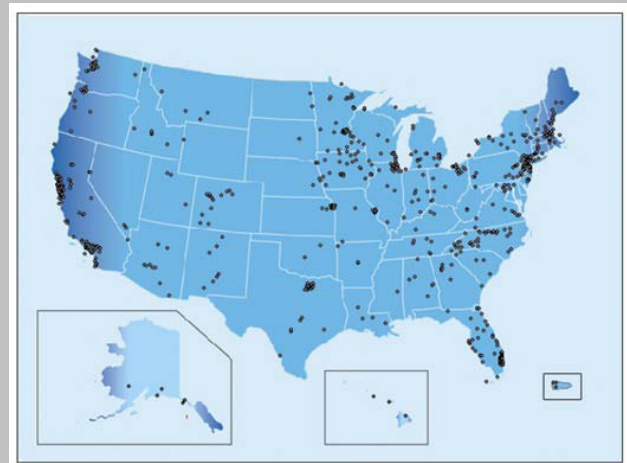
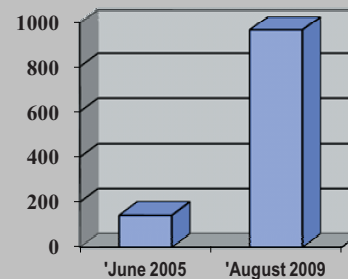
<sup>1</sup> See Carbon Disclosure Project *Quick Facts 2008*, available at [https://www.cdproject.net/CDPResults/67\\_329\\_168\\_CDP6%20Quick%20Facts.pdf](https://www.cdproject.net/CDPResults/67_329_168_CDP6%20Quick%20Facts.pdf).

- Regardless of your perspectives on climate change, there is an exceptionally strong business case for developing a robust infrastructure and sound strategies for mitigating risk, reducing inefficiencies, that can lower operating costs while cutting greenhouse gas emissions. Additionally, in its Global 500 Report 2009,<sup>2</sup> the Carbon Disclosure Project indicated that 86 percent of the Standard & Poor's 500 respondents to the survey indicated that they see climate change business opportunities.
- The business of climate change and greenhouse gas emissions management involves a wide range of disciplines, including, at the very least, environmental management, regulatory compliance, legal and liability, investor/stakeholder relations, finan-

Fig. 3

#### Cities Participating in the U.S. Conference of Mayors Climate Protection Agreement

- U.S. Cities Participating in the U.S. Conference of Mayors Climate Protection Agreement



cial markets, energy consumption and efficiency measures, renewable energy application and project development, natural resources, public affairs, government affairs, and waste stream and supply chain management.

- Climate change response is an emerging field, but the increased focus on climate change among investors, stakeholders, consumers, regulatory bodies, and scientists is driving its development. Most

<sup>2</sup> See <https://www.cdproject.net/CDPResults/CDP%202009%20Global%20500%20with%20Industry%20Snapshots.pdf>.

professions take years to evolve and develop standards and best practices (e.g. ethics and compliance officers, chief information officers, etc.). Thus, the availability of qualified professionals available is small but growing.

### **The Realities—Pressure From All Sides**

There is no industry or sector that escapes the impact of climate change itself or the heightened scrutiny of consumers, investors, stakeholders, and regulators. Regardless of the source of the pressure, all organizations are forced to take a hard look at how climate change affects the organization and how the organization may be contributing to climate change.

The manner in which organizations respond to climate change considerations is already being examined by consumers, investors, stakeholders, and regulators. In a growing age of transparency, powered by evolving technology and social pressure, the audiences interested in how organizations respond to climate change are becoming more sophisticated. Pressure will mount as the ability of concerned entities to assess the quality of response grows, creating greater public and community relations risks.

### **Assessing Your Organizational Structure**

Successfully managing climate change risk and seizing upon opportunities involves the broadest range of disciplines.

A critical first step is to establish an infrastructure that can support the development and implementation of sound climate change strategies. Establishing an intuitive organizational structure can enable climate change leadership by empowering management at all levels across an organization to put risk management solutions and business strategies into action.

To be successful, organizations need to affect organizational and operational change using top-down, bottom-up, and across-the-board efforts. But it is critical that there be strong leadership at the top that voices a strong commitment to confronting climate change at all levels within the organization. This executive level leadership must be empowered to leverage resources and personnel from across all internal divisions.

Figure 4 illustrates the complexity of breaking down the silos from the perspective of climate change strategies, while figure 5 includes an example of what an organizational structure might look like (note: some organizations will not have functions included in the chart below—e.g. supply chain & product development).

While there is flexibility in the makeup of the team and the organizational structure necessary to be successful, there are certain qualities in an organization's climate change response that are pivotal:

- All organizational components involved in climate change management must be involved in the structure;
- An empowered individual or team must be at the helm, resulting in leadership that is able to affect change at the highest levels and throughout the organization;
- The individual components must traverse organizational silos to collaborate with one another; and
- The climate change officer (CCO) must understand most of the many disciplines associated with climate change to ask the right questions and make effective decisions.

### **The HR Perspective on Climate Change**

In addition to the risks and opportunities related to an organization's operations, climate change represents significant challenges for the human resources component of an organization. These include:

- Inducing change in organizational culture by incorporating climate change response into employee performance reviews; developing incentive structures for employees whose innovations result in risk mitigation, cost and emissions reductions, and/or new or increased revenue streams; and establishing internal communications campaigns.
- Staffing new positions with qualified professionals.
- Reviewing and developing new organizational structures to accommodate change in management and operations.

### **Uh Oh . . . Change Management?**

The single greatest challenge organizations face in addressing climate change may not have anything to do with climate change itself.

Most large organizations in the public and private sectors were established decades ago. As those organizations have evolved, organizational structures were changed to accommodate the great challenges that have arisen over the years, which include:

- Privacy issues related to the advent of the Internet;
- Environment, health, and safety divisions in response to mounting public concerns over the impacts of chemicals, pollution, and emissions on the environment and on people;
- Securities, accounting, and financial considerations in response to the 2002 Sarbanes-Oxley Act; and
- Affirmative action and employee relations movements.

However, few organizations are prepared to confront the wide-ranging and significant impacts, as well as promising opportunities, presented by climate change. Developing an effective response to climate change will likely require organizations to be open-minded about how to adapt their leadership and management structures to prompt culture change and ensure the internal stakeholder buy-in necessary to successfully implement climate change strategies.

### **The Great Debate**

The great debate will focus on developing a 21<sup>st</sup> century organizational structure that brings together executive leadership; supports collaboration among mid-management across all organizational components; encourages and rewards innovation by all employees; and enables effective alliances with industry, nongovernmental organizations, and government entities. However, the inevitable obstacles facing those seeking to change the organizational structure and management approach cannot be overlooked:

- Organizations, by their nature, tend to be shy away from radical change because the dominant mentality of "this has always worked, so why won't it work now."
- Individuals in executive-level positions may feel as though they will be "restructured" or that they will lose influence, and as a result, will often oppose these efforts.

Fig. 4

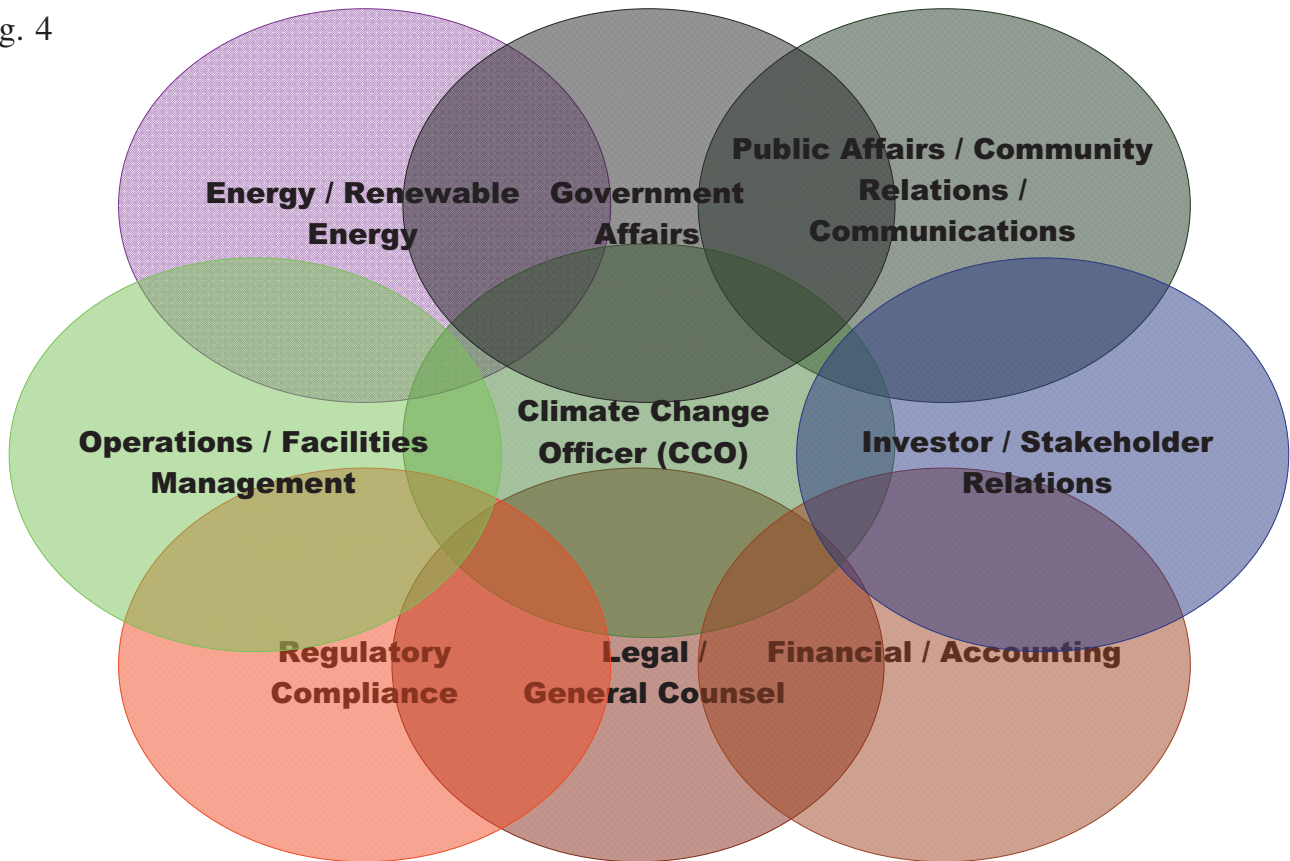
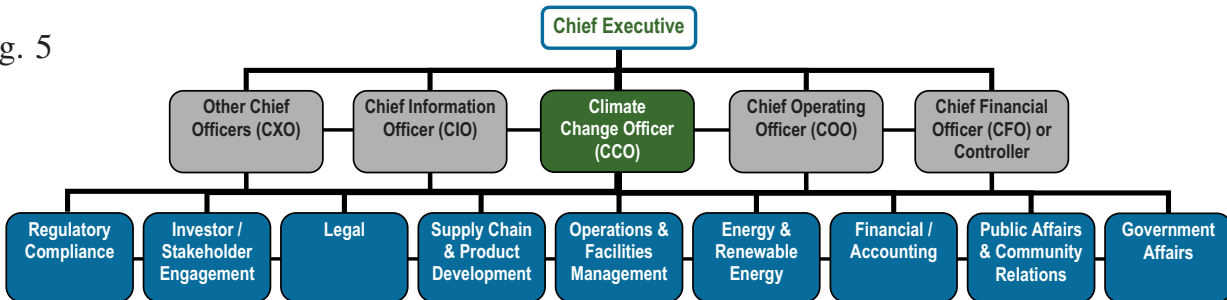


Fig. 5



- Regardless of the cause, organizational change and change management programs can prove to be very costly.

Thus, any efforts that contemplate these crucial considerations will need to account for organizational costs, risks, opportunities, and most importantly, a **return on the investment**. Business and government do not make significant operational and organizational changes unless there is a bottom line reason or quantifiable justification to do so.

### **The Need for a Climate Change Officer**

As a result of the enormous organizational impacts and cross-component nature of climate change response, the need for qualified professionals to serve as climate change officers has become clear.

An unprecedented number of organizations are making climate change a vital consideration in their operating strategies. However, to do so, they must have quali-

fied professionals doing the work. So from where are these climate change professionals coming?

While a niche for climate change management professionals is evolving, most of the responsibilities have been bestowed upon a combination of environment, health, and safety professionals; public affairs and social responsibility functions; and legal and regulatory advisers. As noted above, however, because the function of addressing climate change as a business consideration requires a solid understanding from a wide range of disciplines, a new position has evolved that requires a grounded business perspective on climate change. After all, organizations do not make a radical change to operating paradigms unless it makes sound business and fiscal sense to do so.

### **Regulatory Mandates**

In addition to the business case for the climate change officer, the American Clean Energy and Secu-



ity Act (ACESA; H.R. 2454<sup>3</sup>) passed by the U.S. House of Representative in June 2009 includes two provisions that point specifically to the need for a designated climate change officer. The first passage reads:

*DESIGNATED REPRESENTATIVES.—The regulations promulgated under section 721(h) shall require that each covered entity, and each entity holding allowances or offset credits or receiving allowances or offset credits from the Administrator under this title, submit to the Administrator a certificate of representation designating a designated representative.*

ACESA later states:

*DESIGNATED REPRESENTATIVE.—The term ‘designated representative’ means, with respect to a covered entity, a reporting entity (as defined in section 713), an offset project developer, or any other entity receiving or holding allowances, offset credits, or term offset credits under this title, an individual authorized, through a certificate of representation submitted to the Administrator by the owners and operators or similar entity official, to represent the owners and operators or similar entity official in all matters pertaining to this title (including the holding, transfer, or disposition of allowances or offset credits), and to make all submissions to the Administrator under this title.*

### **Executive Order to Federal Agencies**

On Oct. 5, 2009, President Obama issued an executive order<sup>4</sup> to all federal agencies mandating that each agency “develop, implement and annually update” an integrated plan that will address, among a plethora of environmental considerations, climate change and greenhouse gas management. Each agency’s Plan and updates are subject to the approval of the Office of Management and Budget Director beginning in 2011 and continuing through fiscal year 2021. The order mandates that the “head of each agency designate from among its senior management officials an officer who shall be accountable for agency conformance with the requirements of [the] order and shall report such designation to the OMB Director and the CEQ [White House Council on Environmental Quality] Chair.”

While the memo applies to the broad range of topics falling under sustainability, the bulk of its direction is specific to the realm of climate change and energy. By way of this order, the scope of responsibilities that would fall under this officer include:

- Establishing a percentage reduction target for agency-wide reductions of scope 1, 2, and 3 greenhouse gas emissions in absolute terms by fiscal year 2020 (relative to FY 2008 baseline of that agency’s scope 1 and 2 emissions). This would include reducing energy intensity in agency buildings, increasing agency use of renewable energy and energy efficiency projects on agency property, reducing the use of fossil fuels in fleet vehicles, pursuing opportunities and implementing standards for vendors and government contractors,

and developing and implementing policies and practices to address scope 3 emissions unique to agency operations.

- Establish and report to CEQ Chair and OMB Director a comprehensive inventory of absolute greenhouse gas emissions for scopes 1, 2, and 3.
- Advance regional and local integrated planning by participating in regional transportation planning, aligning federal policies to increase the effectiveness of local planning for energy choices, and coordinating with regional programs for federal, state, tribal, and local environmental and energy management.
- Implement high-performance federal building design, construction, operation, and management.
- Advance acquisition to ensure that 95 percent of new contract actions for products and services are energy-efficient, non-ozone depleting, etc.

### **Evolution of a New Profession**

The function of this new position, the climate change officer, requires an understanding of financial considerations, the organization’s operations, policy and law, community and government engagement, and energy consumption and application. Responsibilities for this function would likely include:

- Understanding the risks that each organization faces in relation to the impact of global warming on the organization’s operations, knowing which of those risks can be insured and those that cannot, and how to guide the future of the organization in a way that minimizes the negative impacts of those risks;
- Developing and directing greenhouse gas management strategies and coordinating implementation efforts across organizational components;
- Engaging stakeholders and investors to establish and direct partnership, supply chain management, and other programs;
- Participating in the development of public and government affairs strategies and directing efforts specific to climate change;
- Quantifying the value of climate change response mechanisms and programs and the return on investment in those efforts; and
- Serving as the public spokesperson on climate change-related issues.

Because most of the challenges faced by businesses and government in addressing climate change require a combination of perspectives and skills not seen or used before, a climate change officer is not a professional who can likely be found within the existing ranks of any of the organization’s departmental silos (e.g. legal, regulatory affairs, operations, EHS, etc.).

Similar professions have evolved over the past few decades, including ethics and compliance officers, chief information officers, anti-money laundering specialists, etc. In each case, a set of skills was brought together to form this new position. However, the establishment of best practices, standards, and consistency in how organizations should staff these functions took years to develop.

For example, advances in technology and the availability of information in the public domain resulted in the need for privacy professionals whose expertise would encompass a multitude of disciplines related to the conveyance and availability of information. Industry

<sup>3</sup> See [http://energycommerce.house.gov/Press\\_111/20090701/hr2454\\_house.pdf](http://energycommerce.house.gov/Press_111/20090701/hr2454_house.pdf).

<sup>4</sup> See [http://www.whitehouse.gov/assets/documents/2009fedleader\\_eo\\_rel.pdf](http://www.whitehouse.gov/assets/documents/2009fedleader_eo_rel.pdf).

and government responded by developing policies related to information privacy, as well as the knowledge and skills required for privacy professionals to be successful in responding to the challenges before them.

Today, the International Association of Privacy Professionals (IAPP) “represents more than 6,000 members from businesses, governments and academic institutions across 50 countries.”<sup>5</sup> IAPP provides its members with a community in which education and training, as well as networking and other critical member benefit programs, all contribute to the collective response to improving how society addresses information privacy.

Another example has been the development of the trade of anti-money laundering professionals. When the Association of Certified Anti-Money Laundering Specialists (ACAMS) was founded in 2001, the United States had recently passed legislation requiring financial institutions to implement anti-money laundering mechanisms. At the time, there were very few professionals with the knowledge or skills required to be successful in developing and implementing strategies, much less in analyzing operations and finances and using tools appropriately in support of those efforts. “ACAMS is an international membership organization dedicated to enhancing the knowledge and skills of professionals from a wide range of industries [and] serves in excess of 10,000 members in more than 140 countries.”<sup>6</sup>

### **Making the Case for Climate Change Officers**

As has been the case in the examples of privacy professionals and anti-money laundering specialists, the need for climate change officers is clear and present.

Climate change officers develop strategies for their businesses, organizations, or governments that address risk, take into account operational challenges, seize opportunities, and help to establish requirements and strategic plans by providing interdisciplinary solutions to energy, environmental, natural resource, finance, business, and regulatory issues. They develop policies and strategies, influence leadership and middle management, and induce culture change, negotiate partnerships with industry and the community, are intimately involved with operations and facilities management, and oversee greenhouse gas emissions-based projects.

The goal for a climate change officer cannot simply be to reduce greenhouse gas emissions at the cost of impairing an organization’s abilities to operate successfully and thrive. Thus, the essence of a climate change officer’s responsibilities is to develop policies and action plans that reduce greenhouse gas emissions and mitigate risks associated with climate change and related policies while contributing to the business bottom line (whether in business or in government). This means that the climate change officer is a professional who develops and pursues plans with environmental considerations **and** economics in mind.

### **What Industry Leaders Say**

There is growing recognition in corporations, non-profit institutions, and governmental organizations that to be successful in addressing the risks and opportunities associated with climate change, organizational

structures need to be re-examined, cultures changed, and infrastructures developed enabling professionals to be successful in developing and directing climate change strategies. President Obama’s recently issued Executive Order to federal agencies provides insight as to how federal agencies will be addressing organizational response to climate change considerations. Below are some other perspectives from several sectors.

#### *Applied Materials*

Leadership companies have been managing their environmental impacts for quite some time and an understanding of carbon emissions and the implications for climate change are now indispensable to that challenge. Viewed in the context of environmental management systems, a climate change strategy cannot be developed without reliable data collection, careful analysis, sound planning and a robust system that helps implement the discrete elements of the plan. None of those steps can be successfully managed without an organizational structure that mobilizes the right resources and that provides incentives to follow through on the commitments that generally emerge, e.g. a carbon reduction goal or a supply chain initiative. Organizational structures tend to be specific to individual companies and their unique characteristics, but since climate commitments tend to be enterprise-wide, figure 4 is certainly apt (and at times should be re-labeled the “eye of the storm”!)

Bruce Klafter  
Senior Director of EHS and Sustainability

#### *El Paso Corporation*

Climate change touches virtually every discipline in the company. Climate regulations will likely be both expensive and expansive, and will create large new risks and opportunities. Effective management of the risks and opportunities requires developing and nurturing a whole new set of skills and capabilities specific to climate change.

Management of climate change issues encompasses regulatory compliance at the state and federal levels, emissions inventory measurement and reporting, public policy advocacy, communications, public investor disclosures, purchases of greenhouse gas emissions offsets and allowances, contract development, capital projects, process development, and risk management.

Byron Wright  
Vice President, Corporate Development

#### *Illinois Environmental Protection Agency*

Establishing a dedicated professional position charged with leading an organization’s climate change efforts will be critical to tackling the challenges and reaping the benefits of reducing greenhouse gases. To transform the organizational culture to be focused on mitigating climate change risks and deriving value out of these efforts, the Climate Change Officer must help others in the enterprise view their *existing* work as essential to the effort. Be it supply chain management, energy and fuel procurement, vehicle fleet operations, or facility operations, there are ample opportunities for efficiency, cost reduction and optimization that can be achieved

<sup>5</sup> See <https://www.privacyassociation.org>.

<sup>6</sup> See <http://www.ACAMS.org>.

when current roles and responsibilities are also seen as climate change strategies.

Steve Frenkel  
Chief Policy Advisor

#### Trucost

At every major food and beverage company I'm aware of, the C-Suite is keenly concerned that a lack of available fresh water is already impacting their ability to maximize future profit. A looming global price on carbon has experts using phrases like 'retiring assets' when talking about aging coal burning power plants, with an inability to finance new ones. Wal-Mart is pressuring their very extensive supply chain to understand and demonstrate their commitment to sustainability improvement. The game is changing, and this figures to increase the relevance of climate change officers in the months and years to come. This will be true for public and private companies as well as states, cities and local municipalities, not to mention universities.

Cary Krosinsky  
Vice President

#### Banana Peels

Thinking that your existing approach to environmental issues and current infrastructure will support the rigorous and wide-ranging demands (and opportunities) related to climate change is an easy trap. Most organizations will be inclined to appoint someone in a traditional function such as EHS, public affairs, or legal/regulatory.

However, climate change presents unprecedented risks, challenges, and opportunities for all organizations. New challenges and opportunities often can necessitate a new approach. Ask yourself the following questions:

- Is the role assigned to address climate change considerations operating in a silo or vacuum?
- Is the role assigned to address climate change empowered to affect a change in culture across different operating components of the organization?
- Is the person assigned to oversee development and management of climate strategies properly qualified and skilled?
- Does your climate change officer meet regularly with senior management and with leadership and

middle-management across organizational components?

- Does your organization have an action plan for each component of your climate change strategy (and for each division)? Have members of each division of the organization provided input into this plan and are they accountable for the areas of the plan that are their responsibility? How involved is the climate change leader(s) in the development (or review) of each of the action plans?
- Do employee reviews across all components of your organization take into account individual contributions to the organization's climate strategies?

The answers to these questions will reveal whether your organization is heading in a direction to meet the challenges and opportunities related to climate change and greenhouse gas management.

#### Conclusion

As the general public, industry, and government come together to build comprehensive solutions to address climate change risks, the role of the climate change officer will be a significant leadership component that will enable success in responding to climate change considerations while enhancing the quality of operations/activities and the bottom line of industry and government in all sectors and geographic regions.

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*Daniel M. Kreeger is cofounder and executive director of the Association of Climate Change Officers, a professional development society for executives in the public and private sectors whose responsibilities include developing and directing climate change strategies. While leading the association, Daniel has created a forum that enables the exchange and enhancement of best practices, industry standards, and innovation in the area of climate change strategies. He has focused intently on educating industry and government on the importance of employing qualified professionals, developing sound organizational structures and change management programs, and establishing incentives to encourage innovation and successful response to climate change considerations.*

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*The opinions expressed here do not represent those of BNA, which welcomes other points of view.*