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Trends in Corporate Climate Change Governance

Executive Summary

Climate change governance is an increasingly important issue as more organizations are becoming mature in their climate change strategies. While best practices in some areas have emerged, there is little consensus on the most effective way to govern climate change within an organization. This report examines data publicly reported to the Carbon Disclosure Project (CDP) from the Investor CDP Questionnaire to determine trends in climate change governance and uncover relationships between governance and performance.

The CDP data shows that there is a relationship between industry sector and climate change governance. Sectors exhibit differences in the amount of incentives given and the highest organizational level that is directly responsible for climate change. Organizations that are better known or have larger revenue also showed a relationship with climate change governance. Fortune 500 and high visibility brand organizations had more climate change governance than other organizations. Finally, both total revenue and disclosure scores for companies were related to their climate change governance. Generally, more climate change governance was related both to higher revenue and a higher disclosure score.

These results indicate a hopeful trend for the future of climate change governance. Large, established companies which are leaders in their fields are taking climate change governance seriously and investing. Other organizations will likely look to emulate the practices of these leaders and implement more climate change governance. More research is needed in future years to track the progress of the adoption of climate change governance and determine which best practices and trends emerge.

Introduction

Twenty years ago, few companies in the United States were monitoring or acting to reduce greenhouse gas. Now, you would be hard pressed to find a major corporation that doesn't at least mention climate change efforts on its website or within its corporate responsibility report. With increased awareness have come concrete actions taken by corporations such as investments in energy efficiency and renewable energy projects and policies designed to reduce waste of all types. A recent survey by BSR and Globescan of over 500 organizations found large percentages of respondents reporting "a great deal of progress" in their businesses with respect to sustainability and climate change over the past 20 years.ⁱ

ⁱ https://www.bsr.org/reports/BSR_GlobeScan_State_of_Sustainable_Business_Survey_2012.pdf

Another consequence of the larger role of climate change in business today has been the change and growth of corporate governance related to climate change and sustainability issues.

To understand, plan for, and manage climate change issues, corporations have appointed or hired individuals and created entities which have direct responsibility for sustainability or climate change issues. Also, many corporations incentivize their employees to take initiative for climate change within their own realms and integrate it into their decision making.ⁱⁱ Therefore, climate change can be complicated to govern as it requires centralized oversight and authority but also is integrated into the thinking and decision making of an entire organization. Because climate change is a relatively young issue, the structure and function of governance varies greatly between organizations.

For organizations trying to emulate the actions of leaders, governance practices may be the most instructive to study. Individual actions may be specific to organizations, which make them difficult to imitate. Implemented climate change or sustainability projects are the symptoms of an organization's climate change progress, while the true cause of that progress comes from how a company made the decision to approve and fund the project in the first place. For that reason, it is very instructive for organizations to understand which types of climate change governance are being used by corporations that are leaders in this arena.

Methods

The companies examined in this report were part of a data set of companies participating in the CDP in 2012. The CDP is a global non-profit organization with offices around the world, which has used market forces to incentivize thousands of companies and cities worldwide to measure and disclose their greenhouse gas emission and other climate change relevant information based on a standardized system. Companies self-report their climate change information to CDP and are evaluated both on their disclosure of information and their performance on climate change.ⁱⁱⁱ The CDP has been successful in gathering the largest collection globally of self reported climate change data.

The data set includes 361 corporations based in the United States. Broadly classifying the companies, the most common sector in the data set was Information Technology, followed by Consumer Discretionary and Financials. Of the companies, 68% are part of the Fortune 500, signifying their being some of the highest revenue corporations in the United States. The average disclosure score for the companies was 72 out of 100, while the most common grade received for performance was a "B."

In some instances in this report, the revenue of corporations is examined. The revenue figures come from Item 6 of the 10-K filing submitted to the U.S. Securities and Exchange Commission (SEC), which is available publicly online. There were some corporations for which revenue could not be found, and these were not included in the revenue analysis. For information on what companies are regarded as top brands, this report utilizes the Brand Finance Global 500 list, an international ranking of companies based on their transparent valuation of their brand and intangible assets.

ⁱⁱ <https://www.cdproject.net/CDPResults/CDP-Global-500-Climate-Change-Report-2012.pdf>

ⁱⁱⁱ <https://www.cdproject.net/en-US/Pages/guidance.aspx#methodology>

In many instances in this report, companies are rated on a Climate Change Governance Index. This index quantifies how an organization replied to CDP governance questions. In this report, the index is used to approximate “how much” or “the amount of” climate change governance an organization has. The highest an organization can score on the index is six, while the lowest is zero. The average index score in this analysis was 3.69. In analyses where the index is compared to the total disclosure score, there is a small amount of inherent correlation between the two metrics because the disclosure score and the index both add a point for answering one of the questions. Although this might make it seem like an analysis of these two variables is flawed, the connection could only amount to less than one half of one percent of the total disclosure score, any correlation we see between the two variables are over 99.5% related to other factors.

Table 1: Explanation of how Climate Change Governance Index is determined from CDP responses. Each response to the governance questions receives the number of points indicated in the rightmost column, and those are summed to get the final index score.

CDP Question	Response	Index Points
Where is the highest level of direct responsibility for climate change within your company? (must choose single response)	Individual/Sub-set of the Board or other committee appointed by the Board	2
	Senior Manager/Officer	2
	Other Manager/Officer	1
	No individual or committee with overall responsibility for climate change	0
	No Response	0
Do you provide incentives for the management of climate change issues, including the attainment of targets?	Yes	1
	No	0
Type of Incentive (can select multiple)	Monetary Reward	1
	Recognition (non-monetary)	1
	Other non-monetary award	1

Climate Change Governance Trends

Industry Type and Climate Change Governance

One of the things the CDP data allows us to investigate is whether industries are managing climate change differently. We analyzed climate change governance across the broadest sector classifications, and the distribution of companies in those sectors is detailed. The most common sectors listed were Information Technology (17%) and Consumer Discretionary (15%), while the least common were Telecommunication Services (<1%) and Energy (4%).

The CDP asked companies to answer where the “highest level of direct responsibility for climate change” was in their organization by selecting one of four options, including an option indicating there was no one directly responsible. The most common response was “Individual/Sub-set of the Board or other

committee appointed by the Board” (55%). Only eight total companies (less than one half percent) either did not respond or responded that there was no individual or committee responsible for climate change. There were no descriptions for those that indicated there was not someone responsible for climate change.

Table 2: Industry sectors of the 361 companies in the CDP data set. These sectors were self-reported by organizations.

Sector	Respondents	Percentage	Example Organization
Consumer Discretionary	53	15%	Abercrombie & Fitch Co.
Consumer Staples	41	11%	General Mills Inc.
Energy	15	4%	Exxon Mobil Corporation
Financials	49	14%	Wells Fargo & Company
Health Care	29	8%	Pfizer Inc.
Industrials	50	14%	Boeing Company
Information Technology	60	17%	Cisco Systems, Inc.
Materials	26	7%	Dow Chemical Company
Telecommunications	5	<1%	Sprint Nextel Corporation
Utilities	31	9%	Duke Energy Corporation

Table 3: Example descriptions of positions that companies categorized into one of three options on CDP questionnaire.

Response	Position Description
Individual/Sub-set of the Board or other committee appointed by the Board	“The Corporate Environmental Health and Safety Committee is responsible for all final decisions on climate change strategy and GHG emissions.”
	“Chairman of the Board”
	“Senior Vice President, HR and Corporate Responsibility”
Senior Manager/Officer	“Head of Environmental Programs - the Senior Director of Facilities who is also the Director of Sustainable Strategies reporting to the Chief Financial Officer.”
	“The Vice President of Sustainability, Regulatory and Research & Development”
Other Manager/Officer	“Sustainability Manager”
	“Corporate Manager of Environmental Health and Safety”

There were some differences in the way companies in different sectors listed the highest responsibility for climate change within their organization, although the small number of organizations in some sectors makes it difficult to analyze statistically. The sectors with the greatest percentage of companies reporting climate change decision making at the Individual/Sub-set of the Board level were Energy (67%)

and Utility (77%), while the sectors with the lowest portion were Financial (49%) and Information Technology (33%). It appears as if whatever organizations do not have an Individual/Sub-set of the Board responsible for climate change largely compensate by having a Senior Manager/Officer responsible. Only one sector, Information Technology, had less than 90% of respondents indicate that an Individual/Sub-set of the Board or Senior Manager/Officer was responsible for climate change.

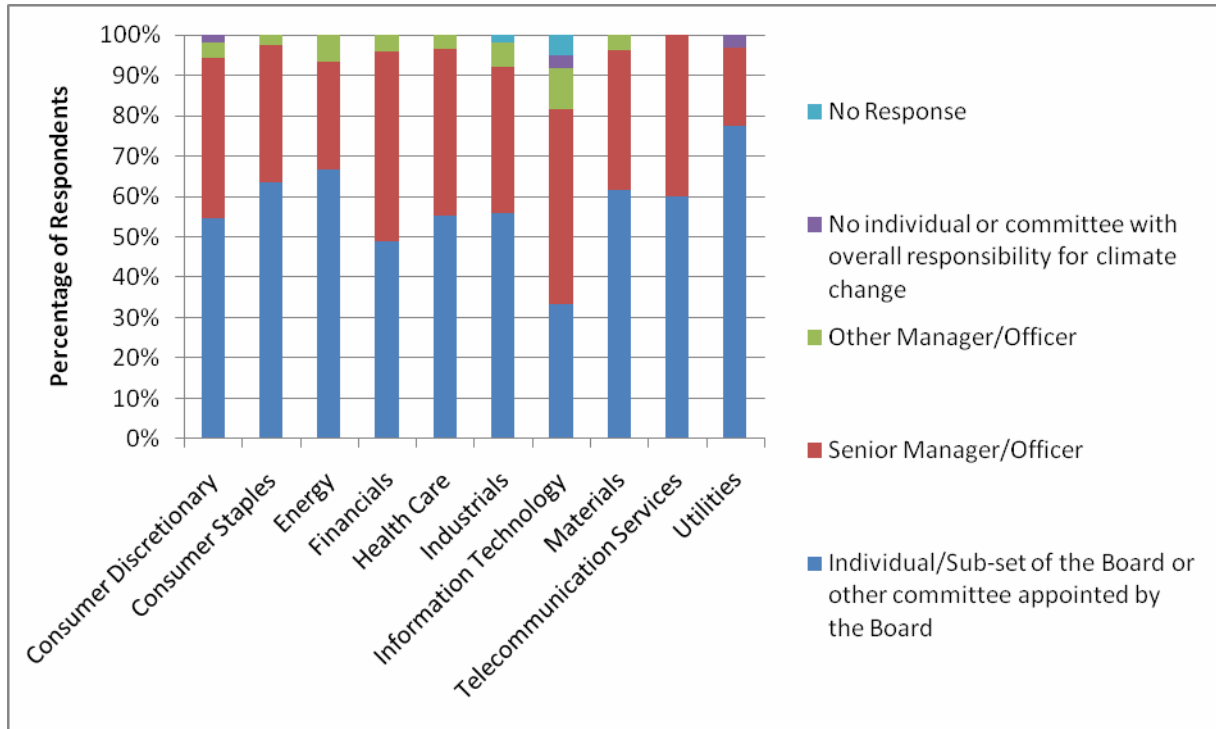


Figure 1: Highest level of management responsible for climate change for organizations in the ten different industry sectors reported in the CDP data set.

The CDP also had companies provide information about incentives given to employees related to climate change. With regard to the types of incentives given, there appears to be little difference between sectors. Of the companies that indicated that they gave incentives, in each sector they gave approximately the same proportion of each incentive, with monetary being the most common, and only a few organizations offering incentives in the “other” category. However, some industries appear to be more likely to give incentives than others. Only 55% of companies in the Utilities sector reported giving incentives for climate change action, while over 92% of companies in the Materials sector did.

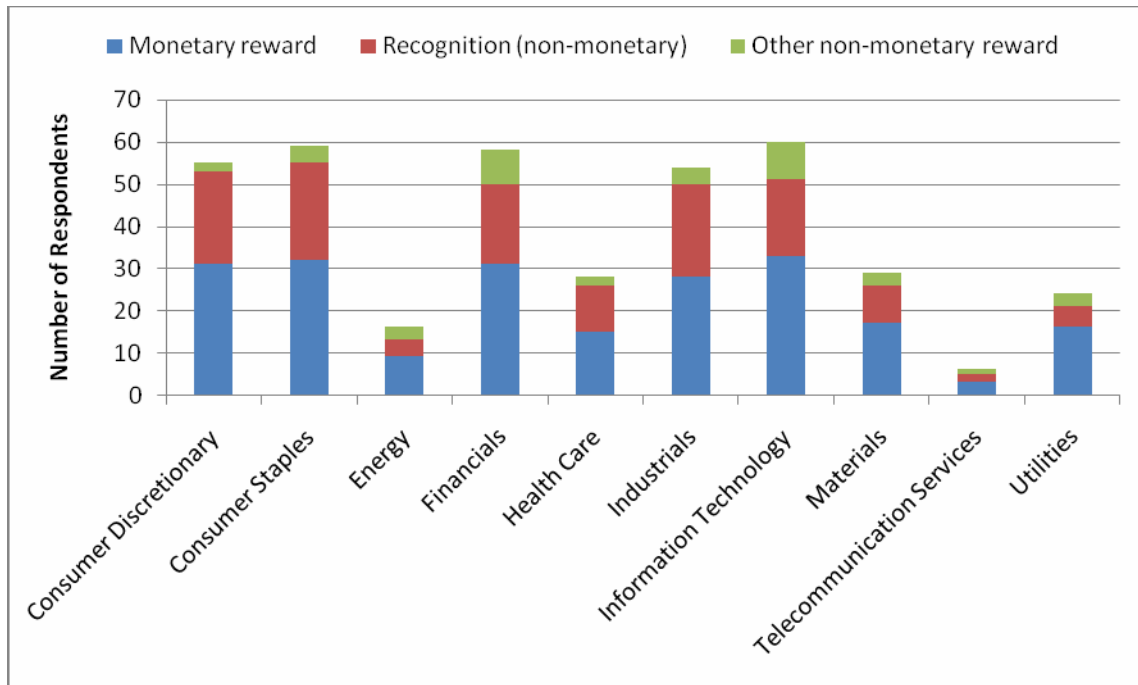


Figure 2: Number of respondents in each industry group reporting the presence of each of the three types of incentives present in the CDP questionnaire. Organizations were able to report the presence of more than one type of incentive, so the totals for each column may equal more than the total number of organizations in each sector.

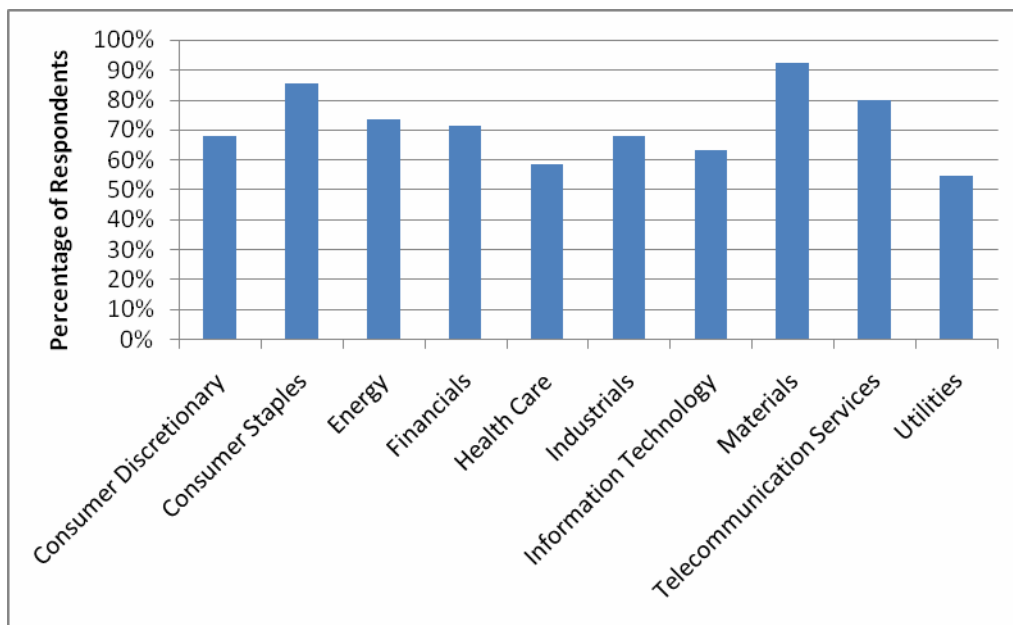


Figure 3: Percentage of companies in each sector reporting the presence of any incentive.

We combined responses for highest level of management, type of incentives, and presence of incentives into an index giving responses values based on how favorable they are for climate change governance. Ranging from an average score of 3.26 for the Utilities sector to 4.27 for the Consumer Staples sector the data indicate that some sectors are exhibiting significantly more climate change governance than others.^{iv} However, there is no apparent relationship between the sectors exhibiting high index scores and the sectors using certain types of governance. For example, the two sectors with the lowest index scores, Utilities (3.25) and Information Technology (3.37), are the sectors with the highest and lowest percentages of companies reporting an Individual/Sub-set of the Board as their highest climate change leadership, respectively.

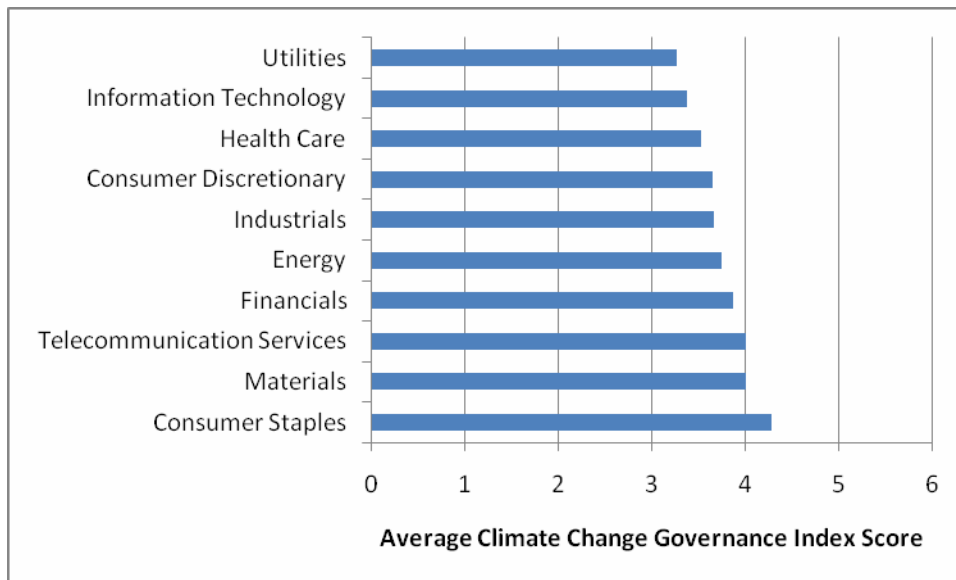


Figure 4: Average Climate Change Governance Index score for organizations in each of the ten sectors reported by organizations in the CDP data set.

Organization Status and Climate Change Governance

It is important to determine what types of companies are leaders in climate change governance. Often in business, the larger, better known organizations are looked to for leadership.^v To test whether this is also the case in climate change governance, we analyzed the effect that being high revenue (Fortune 500) or high visibility (Brand Directory’s Global 500) company had on the governance index score. Overall, we saw that there was no significant effect on the governance index score of either being a Fortune 500 company or being a Global 500 Brand ranked company. However, this is likely due to the extremely small sample size of companies that were in the Fortune 500 but not in the Global 500 Brand (only three companies). When we exclude that category from comparisons, we see that the governance index score was significantly higher for Global 500 Brand companies in the Fortune 500 than it was for

^{iv} Oneway ANOVA (F (4,291)=9.89, p<.0001)

^v http://www.pwc.com/en_US/us/private-company-services/publications/assets/pwc-trendsetter-barometer-business-outlook-summer-2012.pdf

non-Global 500 Brand companies in the Fortune 500.^{vi} Also, the companies that were in the Fortune 500 but not the Global 500 had significantly higher index scores than companies that were in neither ranking.^{vii} There was no interaction between the two rankings, as Fortune 500 company index scores were approximately the same amount higher than non-Fortune 500 companies regardless of whether they were brand ranked or not, and visa versa. The data set indicates that being a high revenue company or having a higher visibility brand have some impact on climate change governance.

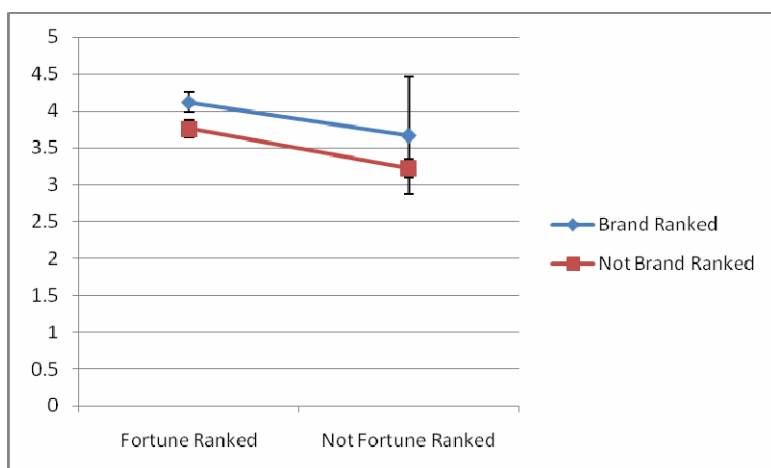


Figure 5: Climate Change Governance Index average values for companies listed in the Fortune 500, Global Brand 500, neither, or both. Bars represent standard error.

Highest Level of Climate Change Management Trends

Using data from the SEC and the CDP, we looked at the relationship between the highest level of climate change leadership at an organization and that organization’s revenue. Though there appears to be a trend that companies with Individual/Sub-set of the Board or Senior Manager/Officer as their highest climate change leader had higher revenue than other organizations, the differences were not statistically significant, most likely due to very small sample sizes for the No Response and No Individual Responsible categories. Somewhat surprisingly, companies that did not respond to the CDP question on climate change leadership also had relatively high revenues, although there were only four of these companies as part of the data set so again, the data may not be very representative.

Consistent with the trend seen in revenue, companies listing an Individual/Sub-set of the Board or Senior Manager/Officer as the highest level responsible for climate change receive significantly higher disclosure scores than the others.^{viii} Additionally, the organizations that list *anyone* with overall responsibility for climate change score significantly better than the others.^{ix} This suggests that organizations with someone in charge of climate change are better at reporting on climate change, and

^{vi} Oneway ANOVA Orthogonal Contrast (F(1,357)=4.02,p=.045)

^{vii} Oneway ANOVA Orthogonal Contrast (F(1,357)=9.59,p=.002)

^{viii} Oneway ANOVA Orthogonal Contrast (F(1,291)=25.62,p<0.0001)

^{ix} Oneway ANOVA Orthogonal Contrast (F(1,291)=21.56,p<0.0001)

therefore probably better at tracking and monitoring climate change related risks and opportunities. Also, it is interesting to see that average reporting scores have a relationship with the status of the person responsible for climate change, with Individuals/Sub-sets of the Board (76.2) companies having the highest scores, Senior Manager/Officer (70.2) companies having the second highest scores, and Other Manager/Officer (65.4) companies having the third highest scores.

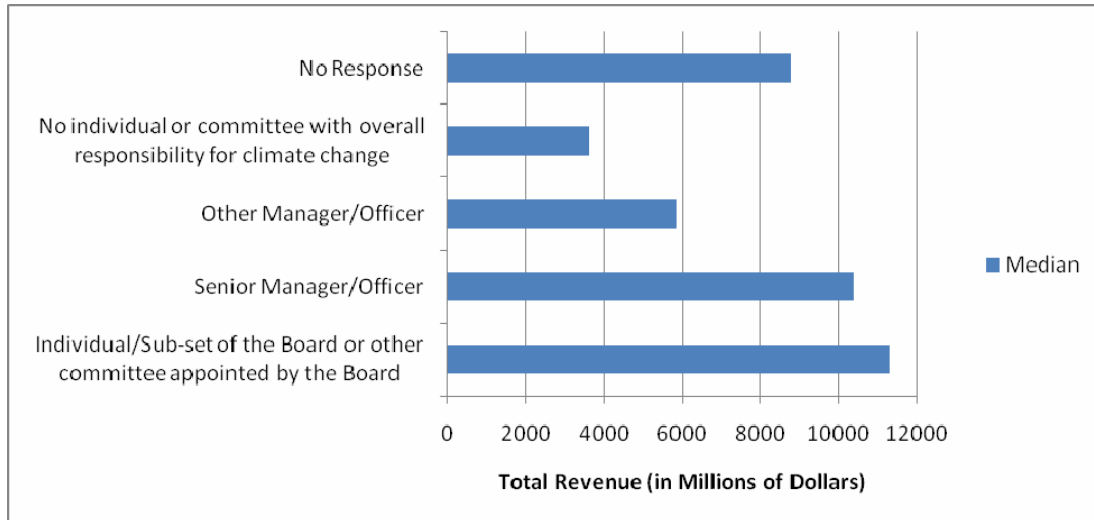


Figure 6: Median revenue of organizations reporting their highest level of climate change management in the categories listed in the figure. Median is displayed instead of average because average was affected somewhat by a few outliers.

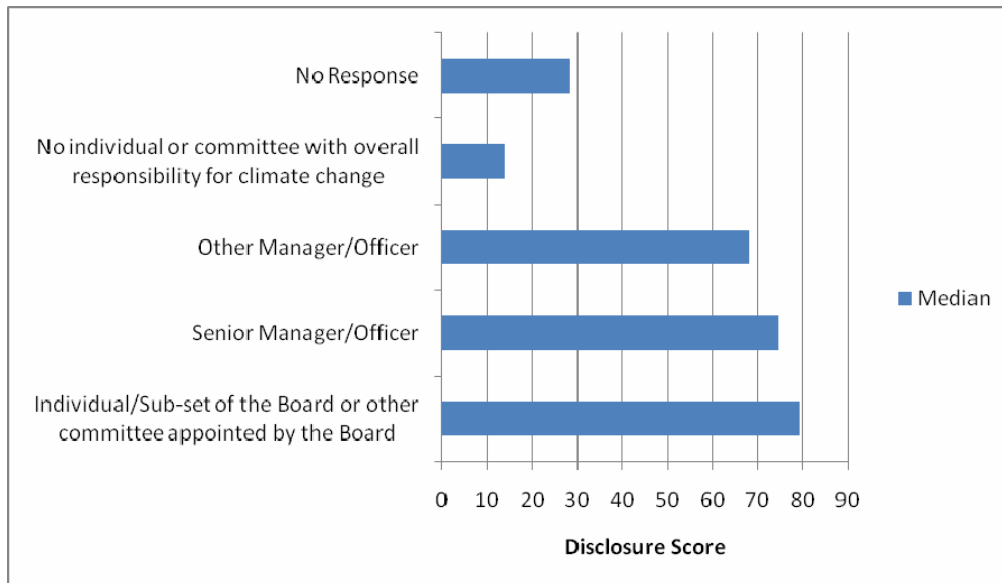


Figure 7: Median CDP reporting score of organizations reporting their highest level of climate change management in the categories listed in the figure. Median is displayed instead of average because average was affected somewhat by a few outliers.

Relationship Between Governance Index, Revenue and Carbon Disclosure

Using the governance index as a predictor for revenue, there is strong statistically significant relationship between the two metrics.^x High revenue companies tended to receive higher index scores, while almost all of the lowest index score companies were also low revenue. This suggests that large, high revenue companies tend to have more climate change governance in place than lower revenue organizations.

There also exists a significant relationship between index score and the total disclosure score, with companies with higher index scores also receiving higher disclosure scores.^{xi} This relationship is to be expected, as it is logical that companies that have dedicated personnel for climate change and offer incentives to employees will be better at disclosing climate change metrics than those that do not.

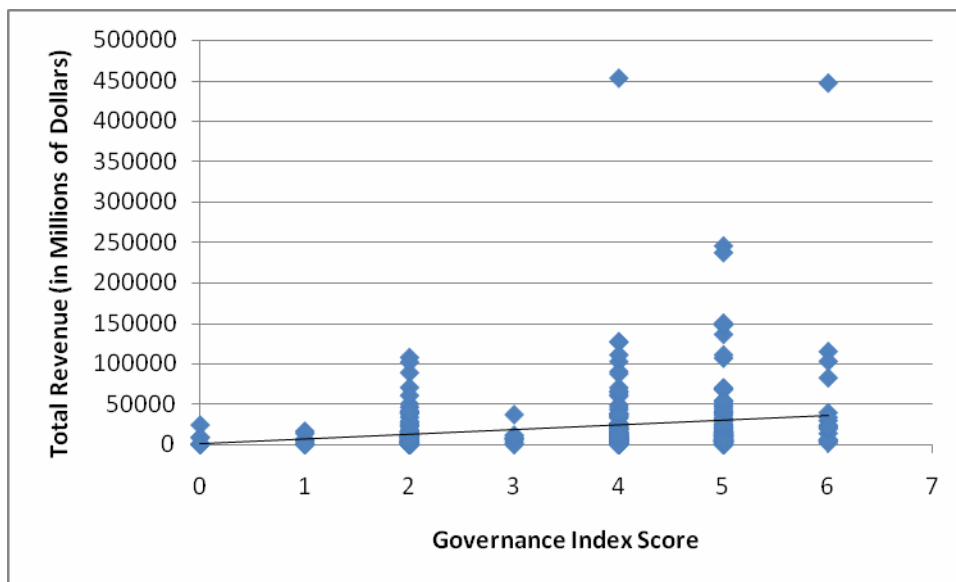


Figure 8: Climate Change Governance Index versus total revenue of companies.

^x Simple Linear Regression ($r^2=0.028$, $df=326$, $p=0.002$)

^{xi} Simple Linear Regression ($r^2=0.28$, $df=294$, $p<.0001$)



Figure 9: Climate Change Governance Index versus total disclosure score of companies.

Discussion

The most important trend illustrated in this analysis is that the largest companies, the leaders in their sectors, are investing in climate change governance. The larger, better known companies scored higher on the Climate Change Governance Index than the rest. This, perhaps, is to be expected. Larger companies have resources to effectively handle more issues than smaller companies, increasing the likelihood that they will have an entity or individual concerned with any given issue. Therefore, it should be expected that these companies would also be more likely to have governance related to the specific issue of climate change. Additionally, due to public perception of climate change as a problem, it makes sense that the companies with more public exposure would be more concerned with having overt mechanisms of addressing climate change.^{xii} Nevertheless, it is encouraging for climate change governance that these large companies are taking the issue seriously. The experience gained by these large organizations can provide lessons learned to later adopters of climate change governance and provide evidence of its effectiveness. Also, simply the fact that the perceived leaders have climate change governance will spur other organizations to adopt governance of their own. Hopefully, this trend predicts an increase in climate change governance in years to come as more and more companies follow the leaders.

Also encouraging is the fact that many successful companies are incorporating climate change at the highest organizational levels. Companies with climate change governance at the board level or senior executive level had higher revenue and disclosure scores than companies with climate change leaders at lower levels or those lacking climate change leadership altogether. This indicates that large, successful companies are doing more than paying lip service to climate change and considering it as an important

^{xii} <http://environment.yale.edu/climate/files/Extreme-Weather-Public-Opinion-September-2012.pdf>

business issue. The investment in climate change governance is also creating benefits by allowing companies to better understand and disclose issues.

Although the data illustrate differences in how economic sectors are addressing climate change governance, there are no clear trends that emerge. All that can be said with confidence is that there are, in fact, differences. There does not appear to be any connection between the industries that exhibit the most climate change governance, or climate change leadership at the highest levels, or the most incentives given. Further research is needed to uncover trends in climate change governance occurring with different economic sectors.

As with any analysis, there are certain caveats that limit the inference for the trends observed. First, this analysis looks at only 361 organizations in the United States which were not randomly selected. These organizations were primarily high revenue organizations, and thus are not representative of businesses as a whole. Also, within the 361 organizations, some categories were underrepresented, which made revealing statistical analysis on some important trends difficult. Secondly, the governance data provided by these companies is limited, consisting only of a handful of questions about what positions deal with climate change and whether incentives are given. Although the organizational position and incentives for climate change are important parts of climate change governance, they do not necessarily represent governance as a whole. Finally, it is important to remember in all cases in this analysis correlation does not imply causation. Nothing in this analysis is suggesting, for example, that having more climate change governance is causing companies to have higher revenues. Merely, this analysis shows that often revenue and climate change governance are related.

Going forward, the results of this analysis are hopeful for the future of climate change governance in private industry. If climate change governance follows the same pattern as many other issues, we will see other companies follow the examples of the leaders and incorporate climate change governance at high organizational levels. It will be important, therefore, to continue to track these issues to see how these trends are changing and how climate change governance is advancing.

Contributions By

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Carbon Disclosure Project

About ACCO

The Association of Climate Change Officers is a 501(c)(3) non-profit membership organization for executives and officials worldwide in industry, government, academia and the non-profit community. ACCO's mission is to advance the knowledge and skills of those dedicated to developing and directing climate change strategies in the public and private sectors, and to establish a flexible and robust forum for collaboration between climate change officers. For more information about ACCO, please visit www.ACCOonline.org.

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