COOL RESPONSE: THE SEC & CORPORATE CLIMATE CHANGE REPORTING

SEC Climate Guidance & S&P 500 Reporting—2010 to 2013

February 2014

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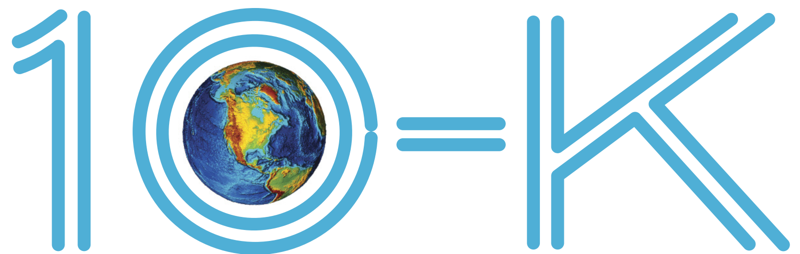

ABOUT CERES

Ceres is a nonprofit organization mobilizing business and investor leadership on climate change, water scarcity and other sustainability challenges. Ceres directs the Investor Network on Climate Risk (INCR), a network of over 100 institutional investors with collective assets totaling more than $11 trillion.

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Table Of Contents

EXECUTIVE SUMMARY 4

INTRODUCTION 6
- Investor calls for improved climate disclosure in SEC filings
- Rationale for SEC disclosure of climate change issues
- Recent climate change developments
- SEC comment letters
- Importance of SEC staff attention to climate risk disclosure

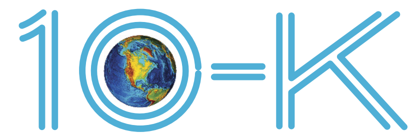
CLIMATE DISCLOSURE IN SEC FILINGS BY S&P 500 COMPANIES: 2009-2013 11
- Methodology
- Five year trends in S&P 500 climate disclosures: 10-Ks filed 2009-2013
- Climate disclosures in 10-K filings vs. responses to CDP questionnaire: 2010-2013

SEC COMMENT LETTERS ON CLIMATE CHANGE: 2010-2013 20
- Companies that received climate-related comment letters
- Requests made in climate-related comment letters
- Responses to climate-related comment letters
- Summary: SEC's approach to climate risk in comment letters

RECOMMENDATIONS 28
- SEC: Strategies for better implementation of Interpretive Guidance on climate change disclosure
- COMPANIES: Developing a climate change strategy & disclosing risks and opportunities in SEC filings

CONCLUSION 36

APPENDICES
- S&P 500 Climate Disclosure Rate by Industry (2009-2013): 10-K vs. CDP 37
- Corporations that received SEC climate-related comment letters 38
- SEC comment letter requests and corporate responses 39
- Asset managers: SEC comment letter requests and responses 41
- Response of Companhia de Saneamento Basico do Estado de Sao Paulo Sabesp (SBS) to SEC comment letter 43



Executive Summary

Climate change and its regulation pose significant risks and opportunities to investors and corporations. The nearly $30 billion in insured losses from Hurricane Sandy alone dramatically underscore this reality. New climate-related federal and state regulations in recent years also present risks and opportunities to companies in the electric power, coal, oil & gas, transportation and insurance sectors. Investors seek greater transparency and disclosure on the business risks of climate change as a means to protect and increase shareholder value.

The key regulator that leads federal efforts to provide investors with information about corporate risks and opportunities is the U.S. Securities and Exchange Commission (SEC). At the heart of the SEC's mission is the protection of investors through meaningful corporate reporting:

> *The laws and rules that govern the securities industry in the United States derive from a simple and straightforward concept: all investors, whether large institutions or private individuals, should have access to certain basic facts about an investment prior to buying it, and so long as they hold it. To achieve this, the SEC requires public companies to disclose meaningful financial and other information to the public.... Only through the steady flow of timely, comprehensive, and accurate information can people make sound investment decisions.*[1]

The SEC recognized the financial impacts of climate change when it issued Interpretive Guidance on climate disclosure in February 2010, responding to over 100 institutional investors representing $7 trillion who supported the Guidance. The Guidance outlines expectations from companies in reporting on "material" regulatory, physical, and indirect risks and opportunities related to climate change.

This report examines the state of such corporate reporting and associated SEC comment letters on climate change. It also provides recommendations for the SEC and companies on improving the quality of reporting. The report examines (1) the state of S&P 500 reporting on climate disclosure and (2) SEC comment letters addressing climate disclosure from 2010 to the end of 2013.

Among our key findings:

- **The SEC is not prioritizing the financial risks and opportunities of climate change as an important disclosure issue.** Based on the low number and content of SEC comment letters in the last four years; the small number of letters to high carbon emitters and insurance companies; the SEC's decision not to convene a planned 2010 roundtable on climate disclosure; and the lack of SEC public statements, trainings, or supplemental guidance for registrants, it is clear that the SEC has not prioritized improving climate disclosure in financial filings.

1 Securities and Exchange Commission, *The Investor's Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation*, available at http://www.sec.gov/about/whatwedo.shtml.

2 Commission Guidance Regarding Disclosure Related to Climate Change (Feb. 2, 2010), available at http://www.sec.gov/rules/interp/2010/33-9106.pdf.

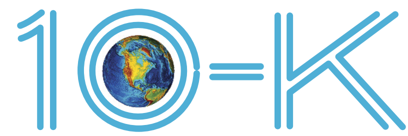
- **The SEC issued 49 comment letters that addressed the adequacy of climate change disclosure in 2010 and 2011, but only 3 comment letters in 2012 and none in 2013.** Most comment letters—38—were issued in 2010 following the release of the interpretive guidance. Since then, there has been a significant fall-off in SEC attention to this area.
- **Most S&P 500 climate disclosures in 10-Ks are very brief, provide little discussion of material issues, and do not quantify impacts or risks.** Based on this report's 0-100 scoring scale, electric power companies received an average score of 16.7 for the quality of their SEC reporting—by far the highest industry average. Even within this group there was high variability in the quality of reporting.
- **Most S&P 500 companies that disclose via the CDP provide significantly more detailed information in voluntary climate reporting compared to mandatory 10-K filings.** Seventy percent of the 332 S&P 500 companies that responded to the 2013 Carbon Disclosure Project questionnaire scored 70 or above on a CDP 0-100 scale designed to evaluate the quality of reporting in response to the questionnaire. Only 14% of the 488 S&P 500 companies that filed 10-Ks in 2013 scored above 5 on this report's 0-100 scoring scale for their SEC climate reporting. A score of 5 amounts to about one short paragraph or a couple of lines focused on climate-related risks or opportunities.
- **A large number of companies fail to say anything about climate change in their annual filings with the SEC.** Forty one percent of S&P 500 companies did not include any climate related disclosure at all in their 10-K filings in 2013.

As this report shows, over the last four years the state of corporate climate reporting in response to the SEC's Guidance has improved—at best—marginally. Still, the vast majority of financial reporting on climate change does not meet SEC requirements.

Most companies are not discussing company specific material information and are not quantifying risks or past impacts. Most are briefly discussing climate change using boilerplate language of minimal utility to investors, providing few materials details about climate risks and opportunities facing them.

We believe Commission staff could make better use of the staff disclosure review and comment letter process to implement the Guidance and, most importantly, improve the quality of climate risk disclosure in mandatory filings. We recommend that SEC staff:

- **Issue more comment letters to companies with inadequate disclosure of material climate risks**
- **Focus on companies in sectors facing significant climate risks and opportunities when reviewing corporate filings.**
- **Focus on the adequacy of disclosures concerning recent, major regulatory developments when reviewing corporate filings.**
- **Where reporting appears inadequate, compare SEC filings with a company's voluntary disclosures.**
- **Create a federal interagency working group focused on climate risks and opportunities to businesses, and an SEC task force focused on reviewing climate change disclosures.**



Introduction

The Securities and Exchange Commission's 2010 Interpretive Guidance[3] on disclosing climate change issues is an important milestone on the path towards better corporate reporting of material climate issues. The SEC was the first securities regulator worldwide to provide guidance of this type, rewarding the persistence of investors who had advocated for it, via formal petitions, since 2003.

Today, the Guidance is more relevant than ever. Not only have the physical impacts of climate change worsened significantly since 2010, but additional government standards addressing climate issues have also been issued. Also, uncertainty about physical and regulatory risks has increased, which makes capital deployment more difficult. These changes affect business strategies and long-term shareholder value creation. For many investors, disclosure on climate risks is becoming a business factor that is material to investment decision making.

Another emerging concern for investors is potential carbon asset risks for fossil fuel companies.[4] The International Energy Agency (IEA) estimates that no more than one-third of coal, oil and gas companies' reserves can be burned without causing dangerous global warming of 2 degrees Celsius or more.[5] If publicly traded fossil fuel companies cannot use significant amounts of fossil fuel resources currently booked as reserves, this could pose a major risk for investors owning those companies. Also, if governments do not keep climate change below 2 degrees of warming, dangerous physical risks threaten companies' assets and operations, regional economies and investors. This carbon asset risk issue, the focus of investor letters sent to 45 of the world's leading oil, coal and electric power companies in September 2013,[6] requires improved monitoring by the SEC and reporting by corporations.

The SEC was the first securities regulator worldwide to provide climate disclosure guidance, rewarding the persistence of investors who had advocated for it, via formal petitions, since 2003.

The SEC has many tools at its disposal to address company-specific and systemic climate risks. Perhaps the most important is SEC monitoring of registrants' disclosures to ensure that the Guidance has a meaningful impact on the quality of reporting.

This report examines the quality of S&P 500 companies' climate reporting, and analyzes how the SEC has addressed climate risk reporting as reflected in Division of Corporation Finance comment letters to registrants. In short, the report discusses:

- The rate and quality of climate reporting by S&P 500 companies, by voluntary and mandatory means;
- SEC comment letters addressing climate risk, the nature of the requests in the letters, and companies' responses to them;
- Whether the comment letters reflect a commitment by the SEC to implement the Guidance;
- Recommendations for the SEC and companies for improving climate disclosure.

3 Commission Guidance Regarding Disclosure Related to Climate Change (Feb. 2, 2010), available at http://www.sec.gov/rules/interp/2010/33-9106.pdf; 75 Fed. Reg. at 6797 ("SEC climate disclosure guidance").

4 See, e.g., Carbon Tracker Initiative & ACCA, "Carbon Avoidance? Accounting for the Emissions Hidden in Reserves", available at http://www.carbontracker.org/carbon_avoidance

5 International Energy Agency, "World Energy Outlook 2012". See also Carbon Tracker and The Grantham Research Institute, Unburnable Carbon 2013: Wasted Capital and Stranded Assets (2013).

6 See Investors ask fossil fuel companies to assess how business plans fare in low-carbon future, http://www.ceres.org/press/press-releases/investors-ask-fossil-fuel-companies-to-assess-how-business-plans-fare-in-low-carbon-future.

INVESTOR CALLS FOR IMPROVED CLIMATE DISCLOSURE IN SEC FILINGS

Over 100 institutional investors worldwide representing $7.6 trillion in assets have formally supported the SEC's issuance of guidance on climate risk disclosure.[7] Last year, the public pension fund CalPERS provided recommendations to the SEC for how to address near-term financial market reform priorities,

- commending the Commission "for issuing interpretive guidance on climate",
- urging the SEC "to continue to issue comment letters addressing inadequate disclosure of material climate change issues", and
- urging the SEC "to collaborate with other federal agencies to analyze the material sustainability risks and opportunities."[8]

In February 2012, 14 American, Australian and European public pension funds, plan sponsors and other investors asked the SEC to "clarify and ensure compliance with the Commission's interpretive guidance on climate risk disclosures" and ensure that relevant sustainability issues are integrated into financial reporting frameworks.[9] Previously, in March 2010, 56 state treasurers, comptrollers, controllers, institutional investors and asset managers wrote the SEC in strong support of the Guidance.[10]

Finally, over 1,200 asset owners, investment managers and others representing over $34 trillion in assets under management are committed to seeking improved sustainability disclosure by corporations in mainstream reporting through the UN-Principles for Responsible Investment, Sustainability Accounting Standards Board and International Integrated Reporting Council initiatives.[11]

Investors support improved SEC climate reporting because it has the potential to provide consistent, comparable information on the material risks and opportunities that their portfolio companies face from climate change.

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RATIONALE FOR SEC DISCLOSURE OF CLIMATE CHANGE ISSUES

Sophisticated systems for voluntarily reporting corporate climate change information have become widely used in recent years, with significant support from investors. Some are specifically focused on climate change, such as CDP, the Climate Registry, and the GHG Protocol. Others, such as the Global Reporting Initiative and stock exchange sustainability listing standards, are focused on broader sustainability issues but also result in valuable climate reporting.

Voluntary reporting is invaluable to stakeholders and investors and will always remain an important tool. However, mandatory reporting is also critical, especially given the prominent attention investors give to reviewing mandatory 10-Ks as opposed to voluntary company reports.

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7 See Note 3; February 8, 2008 letter to SEC from Institutional Investors Group on Climate Change (IIGCC), comprising over 40 members with AUM over $5.5trillion, re: petition for climate disclosure guidance; see public comments re: 4-547, Sep. 18, 2007, Request for interpretive guidance on Climate Risk Disclosure, available at http://www.sec.gov/rules/petitions.shtml.

8 CalPERS Priorities for the U.S. Securities and Exchange Commission, available at http://www.calpers.ca.gov/eip-docs/about/committee-meetings/agendas/invest/201308/item07a-04.pdf.

9 See CalPERS press release, *Institutional Investors Call on U.S. Securities and Exchange Commission to Implement Financial Market Reforms*, February 13, 2012, available at http://www.calpers.ca.gov/index.jsp?bc=/about/press/pr-2012/feb/financial-reforms.xml.

10 Investor Network on Climate Risk (INCR) letter to SEC Chair, March 3, 2010, available at http://www.ceres.org/files/INCR_SEC_LETTER_March_2010.pdf/view.

11 See, e.g., Principles for Responsible Investment (PRI) Initiative, Principle 6 at http://www.unpri.org/about-pri/the-six-principles/; number of signatories as of April 2013: http://www.unpri.org/about-pri/about-pri/.

SEC climate disclosure can improve mainstream investors' awareness and use of climate change information by providing relevant information from more companies. It can result in better and more concise disclosure of material information, helping investors focus on the most important issues for each company and each industry. And it can result in comparable information, so that investors can examine companies' risks, opportunities and performance on climate issues in a systematic fashion, within and across sectors.

The SEC guidance on climate disclosure has the potential to fill each of these gaps. Properly implemented by the SEC, it will result in concise disclosures by more companies of material information, improving the quality of investment decisions and impacting long-term shareholder value.

TABLE 1: SEC INTERPRETIVE GUIDANCE ON CLIMATE CHANGE DISCLOSURE

Section of Guidance	Examples of Potential Disclosure Items
Impact of Legislation & Regulation **International Accords**	• Cost to purchase credits in a cap and trade system • Costs to improve facilities to comply with regulatory limits of a cap and trade system • Changes to profit/loss from changed demand for goods and services
Indirect Consequences of Regulation or Business Trends	• Decreased demands for goods with significant GHG emissions, or increased demand for those with lower emissions • Increased demand for energy from alternative energy sources • Decreased demand for services related to fossil fuels, such as drilling services or equipment maintenance
Physical Impacts	• Disruption of manufacturing or transport for registrants with operations on coastlines • Indirect impacts to major customers or suppliers from severe weather, such as hurricanes or floods • Increased claims and liabilities for insurance & reinsurance companies • Decreased agricultural production due to drought or other weather changes

RECENT CLIMATE CHANGE DEVELOPMENTS

Recent extreme weather events have had significant financial impacts on corporations in multiple sectors. Looking forward, increasing weather impacts and a stronger U.S. and global regulatory response to climate change pose material risks to companies in a variety of industries.

Climate change has already increased the frequency or intensity of four types of extreme weather events: heat waves, heavy precipitation events, droughts, and wildfires. Recently, the Mississippi River experienced its worst drought in 50 years, drastically reducing transport and putting more than $7 billion worth of goods at risk of not reaching their destination. The drought came one year after historic 2011 flooding that caused $2.8 billion in damages.[12]

Climate change drives drought through changes in precipitation and temperatures, and water supply availability is already decreasing in many parts of the U.S. The 2012 drought in the Midwest, Great Plains and South impacted companies' earnings due to widespread crop failure and caused $11 billion in insured losses.[13] The historic drought conditions led to significantly

12 See Adrian Sainz, AP, *$2.8B damages in 2011 Mississippi River flood*, Feb. 25, 2013, available at http://bigstory.ap.org/article/28b-damages-2011-mississippi-river-flood

13 See Swiss Re's sigma on natural catastrophes and man-made disasters in 2012 reports USD 77 billion in insured losses and economic losses of USD 186 billion, March 27, 2013, http://www.swissre.com/media/news_releases/nr_20130327_sigma_natcat_2012.html

lower corn and soybean production, with additional effects on the livestock sectors and food prices at the retail level.[14] Wildfires associated with droughts and high temperatures are becoming more frequent and severe due to the changing climate. 2010 was the third-worst fire year in U.S. history, and the annual U.S. fire season now lasts about 75 days longer than it did 40 years ago.

Like physical impacts, risks and opportunities from existing and proposed regulations are becoming more important. In the U.S., major stationary sources of GHG emissions, including power plants, were required to report their GHG emissions to the EPA beginning January 1, 2010.

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In March 2012, the EPA released its proposed New Source Performance Standard (NSPS) limiting GHG emissions from new fossil fuel-fired power plants. This proposal has been succeeded by the release, in January 2014 of a proposed rule for a carbon pollution standard for new power plants, which includes the NSPS of the previous proposal as well as the collaborative development of standards for existing power plants.

This represents the first uniform national limit on the amount of carbon pollution that future power plants can emit. The standards are aligned with investments in clean energy technologies that power companies are already making, and they aim for a mix of energy sources, including natural gas, developing clean coal technologies, nuclear power, wind, and solar.

In the area of transportation, new Corporate Average Fuel Economy (CAFE) standards, enacted in 2012, are projected to reduce GHG emissions from U.S. cars and light trucks by 50 percent by 2025. EPA and the Department of Transportation also finalized GHG emissions standards for new light-duty motor vehicles in 2010, and for medium- and heavy-duty vehicles in 2011.

Initiatives in the states and other countries have also been important. California—the world's ninth largest economy—adopted a cap-and-trade program in 2011. The initial cap on GHG emissions took effect in January 2012, and the first auction of GHG emission allowances was held in December 2012. The program covers major sources of GHG emissions including refineries, transportation fuels, industrial facilities and power plants, and includes an enforceable, declining GHG cap. The California Low Carbon Fuel Standard (LCFS) mandates a 10 percent reduction in the carbon intensity of fuels by 2020.

Thirty-eight states have a renewable portfolio standard, alternative energy portfolio standard, or a renewable or alternative energy goal in place. These initiatives generally require that electric utilities deliver a certain amount of electricity from alternative or renewable energy sources such as hydropower, solar, or wind.

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Finally, the European Union Emissions Trading Scheme (EU ETS), launched in 2005, is the largest multi-sector greenhouse gas emissions trading system in the world, operating in 31 countries. It includes around 11,000 factories, power stations and other industrial sources of GHG emissions, accounting for about 45 percent of EU carbon dioxide (CO2) emissions, as well as airlines.

14 See Crop Production Down in 2012 Due to Drought, USDA Reports, Jan 11, 2013, http://www.nass.usda.gov/Newsroom/2013/01_11_2013.asp; U.S. Drought 2012: Farm and Food Impacts, July 26, 2013, http://www.ers.usda.gov/topics/in-the-news/us-drought-2012-farm-and-food-impacts.aspx#.UoPbJo2oXNs.

SEC COMMENT LETTERS

With climate-related financial risks as with other matters, SEC staff's review of companies' mandated filings is a vital way to ensure that legal disclosure requirements are complied with, providing the SEC-required disclosure that is material from the perspective of investors. Comment letters are a principal means by which the Commission staff can promote compliance with the SEC's mandated disclosure requirements. "When the staff identifies instances where it believes a company can improve its disclosure or enhance its compliance with the applicable disclosure requirements, it provides the company with comments," initiating a "dialogue with the company about its disclosure."[15] SEC comment letters are publicly available,[16] and serve as an important source of guidance not only for the companies to which the letters are directed, but also for other companies and the public.

IMPORTANCE OF SEC STAFF ATTENTION TO CLIMATE RISK DISCLOSURE

Close, systematic SEC staff review of companies' disclosure is especially important now, given the increasing instances of material physical and regulatory impacts and risks from climate change. Furthermore, investors increasingly seek from companies information on their climate mitigation and adaptation efforts in global operations as a means to protect shareholder value and ensure business continuity.

Given the relative novelty of the Guidance and rapid evolution of the climate risk issue, companies and investors are interested in how Commission staff are applying the Guidance. The degree of attention to climate risk disclosure in comment letters will be regarded as a measure of the importance the Commission attaches to climate risk disclosure, and will provide important signals to registrants about what is expected of them.

The SEC has announced its intention to "monitor the impact of this interpretive release on company filings as part of our ongoing disclosure review program."

The Commission has noted the role of its review of companies' disclosures in ensuring adequate climate risk disclosure. The SEC has announced its intention to "monitor the impact of this interpretive release on company filings as part of our ongoing disclosure review program."[17] Diligent SEC review of the adequacy of disclosure is especially important given that the SEC has not implemented the two other strategies it described in the Guidance.

The Guidance stated that the SEC's Investor Advisory Committee would consider climate change disclosure and provide advice to the Commission, and the Commission would hold a public roundtable on climate change disclosure in the spring of 2010.[18] After the Investor Advisory Committee was disbanded in 2010, a new advisory committee was established in April, 2012, but it has not yet provided any recommendations related to climate change disclosure to the SEC. The Commission also did not hold the promised climate change disclosure roundtable.

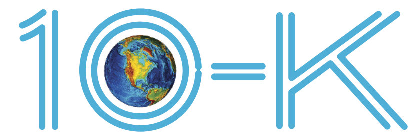
SEC staff review of disclosures and the active use of comment letters to identify inadequate reporting would signal the importance of climate risk disclosure and are therefore especially vital tools.

15 SEC Division of Corporation Finance Filing Review Process, available at http://www.sec.gov/divisions/corpfin/cffilingreview.htm.

16 See SEC website, How to Search for EDGAR Correspondence, available at http://www.sec.gov/answers/edgarletters.htm.

17 SEC climate disclosure guidance at 6797.

18 *Id.*



S&P 500 Climate Disclosure: Analysis of 10-Ks filed 2009-2013

This report analyzes the quality of SEC climate disclosure over the last five years, focusing on disclosures made in 10-K filings by S&P 500 corporations, and compares these disclosures with voluntary reporting by the same companies over the past four years.

Large companies such as those in the S&P 500 face both the greatest risks as well as the greatest opportunities from climate change and its regulation. Strong reporting by these companies can help investors better evaluate climate issues in their portfolios. While different industries in the S&P 500 face different climate risks and opportunities, companies in many industries have provided high quality voluntary climate disclosure, which discusses significant risks and opportunities.

Large companies such as those in the S&P 500 face both the greatest risks as well as the greatest opportunities from climate change and its regulation.

This section covers both SEC reporting and voluntary reporting by S&P 500 companies. Voluntary reporting occurs primarily on corporate websites, in sustainability reports and through responses to questionnaires. In this report, we focus on voluntary responses to the CDP's climate change questionnaire because of the detailed nature of the survey, the quality of information provided by companies, the strong response rates, and CDP's system for rating the quality of reporting on a scale of 0 to 100.

Below, we discuss our analysis of climate disclosure by S&P 500 companies in 10-Ks filed from 2009 to 2013. The key findings are:

1. While more companies started making climate-related disclosures in 2010 after the SEC's interpretive guidance was issued, there does not appear to be much improvement since 2010.
2. A large number of companies fail to say anything about climate change in their annual filings with the SEC.
3. Climate-related disclosures made in 10-K filings to the SEC are highly variable in length and quality.

METHODOLOGY

We surveyed S&P 500 companies' 10-K disclosures over five years from 2009 to December 2013 to discern trends in disclosure rate and quality. Additionally, we compared S&P 500 10-K disclosure trends with CDP disclosure trends during the four year period 2010-2013.

Of the S&P 500 constituents in each year, 498, 491, 492, 492 and 488 companies submitted 10-K filings during the calendar years 2009, 2010, 2011, 2012 and 2013, respectively. Aggregate numbers therefore reflect year of filing, not the financial year to which the report applies. 10-Ks must be filed with the SEC within 90 days of the financial year end. The composition of the S&P 500 changes from year to year, yet it only changed by an average of 4% from one year to the next from 2009 to 2013, thereby allowing for inferences of longitudinal trends.

The survey of 10-K disclosures looked at whether climate-related disclosures were made and, for those disclosures that were made, assessed their quality.

A climate-related disclosure was considered to be present in a particular 10-K report where just a single mention is made of, for instance, climate change, increasingly severe weather conditions, changing precipitation patterns, regulation or disclosure of GHG emissions as actual or potential risk factors applicable to the company. The mere mention, for instance, of Hurricane Katrina, EPA's Clean Air Act, renewable fuels, solar energy and so forth was not considered to be contributing to a discussion of climate change risks and opportunities unless these references were found within the context of such a discussion (for example, opportunities for renewable fuels given restrictions on the carbon intensity of transportation fuels).

If climate disclosures were identified in various parts of a 10-K filing, the full set of disclosures was assigned a score. Scores range from 0 to 100, with the best disclosure over the study period—AES Corporation (AES), filed Feb. 26, 2010, for the year ending Dec. 31, 2009—receiving a score of 100 and all other scores being normalized against this standard. Failure to provide any climate-related disclosure received a score of 0.

Each score is a function of:

- the amount of text addressing climate change,
- the relevance of that text to the issue of climate change, and
- the specificity of climate-related language used to address climate change.

CDP captures the quality of a response to its Investor Questionnaire on Climate Change with a score which also uses a 0 to 100 point scale. The methodology, developed in conjunction with PricewaterhouseCoopers (PwC), provides a disclosure score that analyzes the level of detail and comprehensiveness in a company's response to the CDP questionnaire. The 2013 disclosure score has three components—management, risks and opportunities, and emissions—which are broken down into 15 total sub-components.[19] Management represents 18% of the score, risk and opportunities 30%, and emissions 52%.

The SEC and CDP scores have been compared to discern disclosure trends in each of the two disclosure regimes. Although the two sets of scores overlap in some areas, such as risks and opportunities, they are significantly different. Besides being based on different computational formulae, the underlying disclosures also differ, for example, in the area of greenhouse gas emissions, where the CDP incorporates responses to specific emissions disclosure requests in its score, whereas the SEC's guidance does not reference specific emissions disclosure requirements. Therefore, SEC and CDP disclosure scores cannot be compared directly for a particular company. Accordingly, we have limited the comparison to trends in disclosure quality and quantity.

FIVE YEAR TRENDS IN S&P 500 10-K CLIMATE DISCLOSURES: 10-Ks FILED 2009-2013

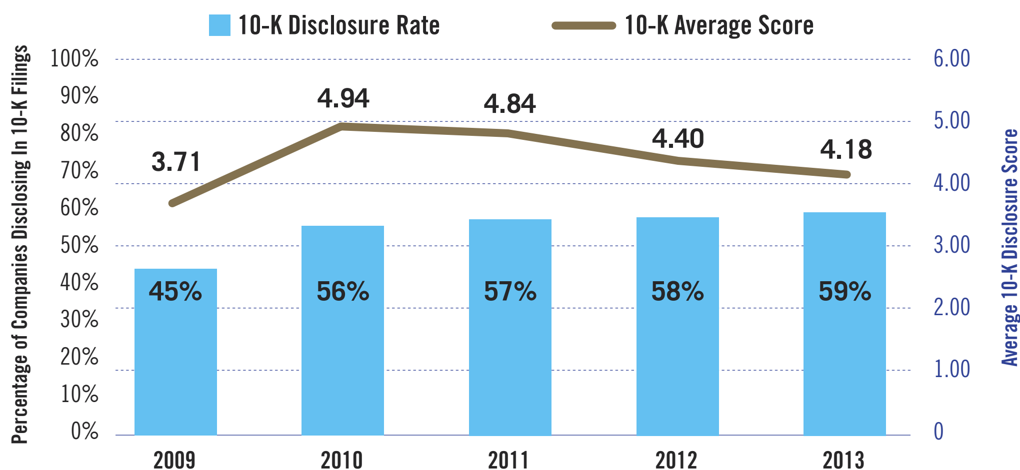
Results show that more companies are saying something about climate in their 10-K filings but, of those that are disclosing something, they are not reporting more useful information. In fact, their disclosures appear to be getting briefer and less specific.

Figure 1 (page 13) shows that in 2009 only 45% of S&P 500 companies made any climate related disclosure in their 10-K filings. This increased more than 10% to 56% in 2010, quite likely in response to the 2010 SEC guidance, and then inched up to 59% by 2013. However, the average score assigned to 10-K climate-related disclosures has dropped off since 2010 showing that, while more companies are saying something about climate change, they are devoting fewer words and being less specific in disclosures filed in 2013 compared with those filed in 2010.

19 See CDP 2013 scoring methodology, available at https://www.cdproject.net/en-US/Pages/guidance-climate-change.aspx#scoring.

FIGURE 1: CLIMATE DISCLOSURE BY S&P 500 COMPANIES: 10-Ks FILED 2009-2013

(Note: 10-K disclosure scores range from 0-100)



The 10-K disclosures of Chevron (CVX), a large oil and gas company, and NextEra (NEE), a large energy company, provide illustrative examples of the drop-off in the quantity and quality of climate disclosure. Chevron's 10-Ks filed in 2012 and 2013 contain only half the amount of climate disclosure compared to its 10-K report filed in 2011. Where the 2011 report contains considerable detail on the impact of EPA regulations and California's Global Warming Solutions Act, the 2012 report only mentions these briefly.

Likewise, NextEra devoted less than half the amount of the text in its 10-K report filed in 2013 to climate disclosures, compared with its 2011 filing. The report filed in 2011 contains considerably more detail about EPA regulations, including discussion of the EPA's light duty vehicle emission regulations, requirements for Best Available Control Technology reviews and potential New Source Performance Standards for high emitting facilities, and mandatory GHG reporting requirements—all of which are completely absent from its 10-K report filed in 2013.

This is especially problematic given that companies in both industries face increasing physical and regulatory risks from climate change. Attenuated discussion of EPA emissions regulations in the case of NextEra contrasts with recently released EPA regulations imposing emission restrictions on new power plants (see Introduction). In the case of oil and gas companies, the true value of fossil fuel reserves in a future low-carbon economy, the impact of increasingly severe weather events on offshore drilling and coastal refineries, and a number of other factors are clear concerns to investors.

The modest increase in the rate of 10-K disclosure over the five-year study period reflects a trend towards simply mentioning climate change in the risk factors section of reports, usually taking the form of a statement in which climate change is referenced alongside a list of other potential risks. Two such examples are:

- **Lockheed Martin (LMT), 2012 10-K report filed February 28, 2013:** "In addition, we could be affected by future regulations imposed in response to concerns over climate change, other aspects of the environment, or natural resources, and by other actions commonly referred to as 'green initiatives'."
- **American International Group Inc. (AIG), 2012 10-K report filed February 21, 2013:** "Natural disasters, such as hurricanes, earthquakes and other catastrophes, have the potential to adversely affect our operating results.… The majority of policies exposed to catastrophic events are one-year contracts allowing us to quickly adjust our exposure to catastrophic events if climate changes or other events increase the frequency or severity of catastrophes."

The modest increase in the rate of 10-K disclosure over the five-year study period reflects a trend towards simply mentioning climate change in the risk factors section of reports.

These brief mentions of climate change-related risks do not fulfill the SEC's expectation, per the Guidance, for meaningful discussion of the material risks presented by climate related regulatory developments, physical impacts, the opportunities presented by renewable energy technologies or fuel and energy efficiencies, or indirect consequences of regulation or business trends.

CLIMATE DISCLOSURES IN 10-K FILINGS VS. RESPONSES TO CDP QUESTIONNAIRE: 2010-2013

We compared the rate of disclosure by S&P 500 companies via the CDP's Investor Questionnaire on Climate Change and CDP's scores for responses to the questionnaire to 10-K climate disclosure rates and climate disclosure scores for the period 2010 to 2013. We also considered how these scores were distributed across the whole set of companies surveyed as well as across industry groups.

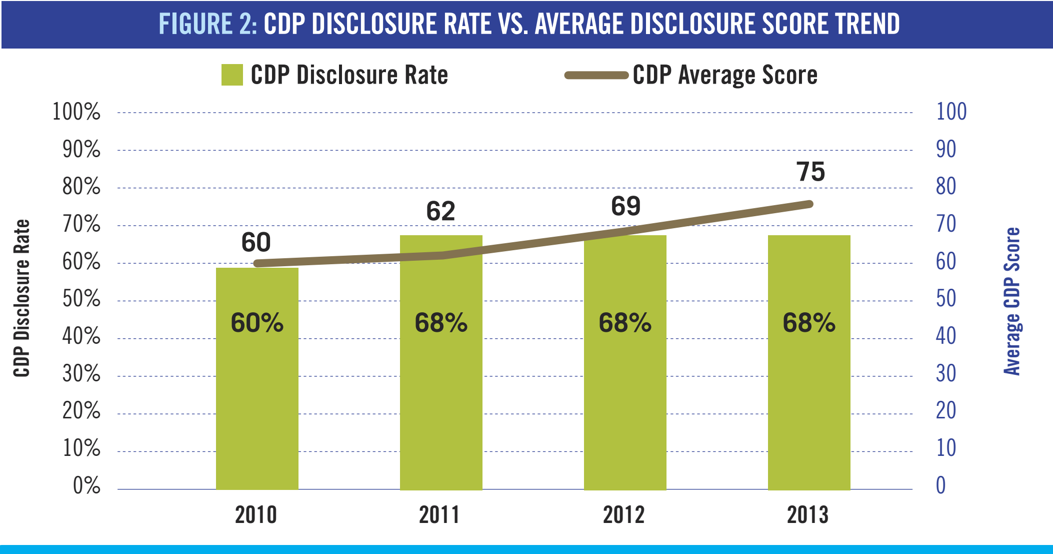
The comparison shows that:

- More S&P 500 companies have responded to the CDP questionnaire than have included climate-related information in their 10-K filings.
- The quality of information provided voluntarily appears to be following an upward trend, in contrast to that provided via SEC filings.
- S&P 500 disclosures via the CDP are less variable from company to company.
- The rate of disclosure by large companies to both CDP and to the SEC has increased since 2010, although not to any significant extent since 2010 in the case of 10-K disclosures.

Figure 2 below shows how the quality of responses to the CDP climate questionnaire has improved in aggregate over the four-year period since 2010. The response rate initially jumped from 2010 to 2011 and has since leveled off. This trend contrasts with that shown in Figure 1 (page 13), where the 10-K annual disclosure rate jumped from 2009 to 2010, following the issuance of the SEC's interpretive guidance, but leveled off for reports filed since 2010. Furthermore, the quality of disclosure has actually decreased, in aggregate, since filings made in 2010.

The improvement in CDP disclosures likely reflects changes made to the CDP investor questionnaire in 2010. Those changes include more structured questions, a clearer scoring methodology, and increased corporate familiarity with the questionnaire. Nevertheless, the voluntary disclosure regime appears to elicit more detailed information than companies typically provide under the SEC's disclosure regime.

FIGURE 2: CDP DISCLOSURE RATE VS. AVERAGE DISCLOSURE SCORE TREND

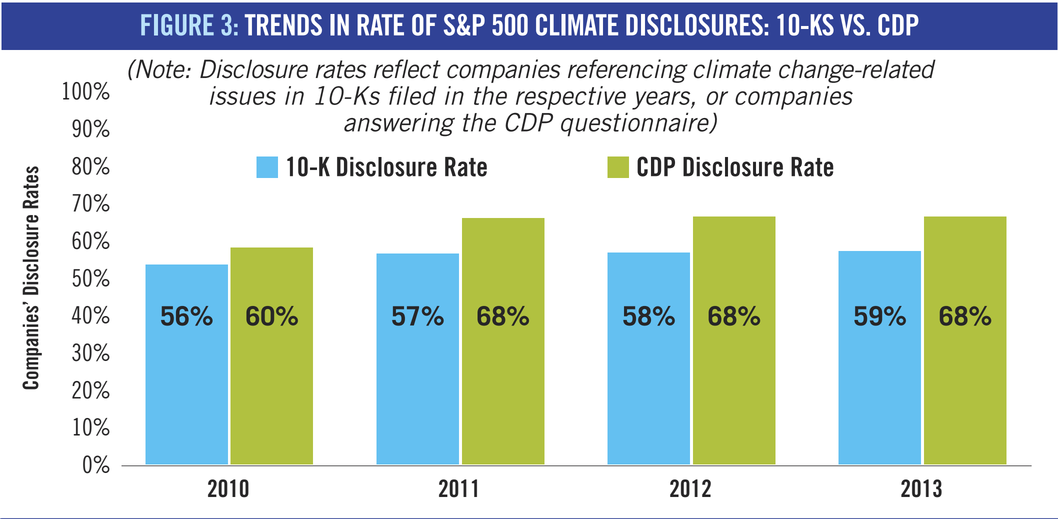


While the SEC definition of materiality does not restrict what companies report to CDP, it likely limits the climate-related information they report in SEC filings. Yet it is also reasonable to expect that more of what is disclosed via voluntary mechanisms should be included in SEC filings.

As SEC Commissioner Elisse Walter remarked before the Guidance was released in 2010: "While all of the information provided voluntarily by companies through [voluntary] mechanisms undoubtedly is not required to be disclosed under our rules, I do not believe that public companies today are doing the best job they possibly can do with respect to their current mandated disclosures."[20] The Guidance itself states, "registrants should be aware that some of the information they may be reporting pursuant to these mechanisms [CDP; Global Reporting Initiative; The Climate Registry] also may be required to be disclosed in filings made with the Commission pursuant to existing disclosure requirements."[21]

In 2010, 56% of S&P 500 companies filed 10-Ks which included some climate-related disclosure, compared to a 60% response rate to the CDP's questionnaire. The disclosure rate for 10-Ks filed in 2012 had increased by only 2% to 58%, whereas the CDP disclosure rate had increased by 9% to 68%.

FIGURE 3: TRENDS IN RATE OF S&P 500 CLIMATE DISCLOSURES: 10-KS VS. CDP



CDP scores, based on the quality of disclosure in response to its climate questionnaire, show a year-on-year improvement in disclosure quality, from an average score of 60 in 2010 to 62 in 2011. In 2012, the quality of reporting jumped to an average of 69, and was 75 in 2013 (see Figure 2, page 14).

However, no such trend is reflected after 2010 in a score designed to assess the quality of disclosure in 10-K reports (see Figure 1, page 13). In fact, by this scoring method, the quality of 10-K climate disclosure peaked in 2010 and has followed a gradual but steady decline up to 2013. This comparison suggests that, in aggregate, large companies have more to say about climate change in 2013 than they did in 2010 (according to aggregated CDP responses), but that they are not sharing this information with investors via their 10-Ks.

Whereas CDP climate-related disclosures are voluntary, 10-K climate-related disclosures are required, according to SEC regulations, when those issues are material. CDP disclosures are made according to a structured questionnaire which covers climate change governance and strategy; greenhouse gas reduction targets; regulatory, physical and other risks and opportunities; greenhouse gas emissions; external verification and other topics.

20 See Speech: Opening Remarks Regarding Interpretive Guidance Regarding Climate Change, Commissioner Elisse B. Walter, U.S. Securities and Exchange Commission, January 27, 2010, available at http://www.sec.gov/news/speech/2010/spch012710ebw-climate.htm.

21 Guidance at http://www.sec.gov/rules/interp/2010/33-9106.pdf

The SEC's climate disclosure guidance is markedly different. It covers regulatory risks, physical risks, and indirect consequences of regulation or business trends, and it discusses, but does not prescribe, disclosure in several areas of SEC filings: description of business, legal proceedings, risk factors, and Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A).

As a result, we found no statistical correlation between 10-K and CDP disclosures. We also found a wide variation in the quality of 10-K disclosures, with very different distribution of scores compared to that of CDP disclosures.

For any particular filing year, the distribution of 10-K disclosure scores across the S&P 500 index has a very long tail. Specifically, around 74% of the 286 S&P 500 companies that provided any climate-related disclosure in 10-Ks filed in 2012 fell below 5 on a scale of 0-100, or approximately one short paragraph of text devoted to climate change issues. A few electric power companies devoted pages of text in their 10-Ks to discussing the impact of climate and GHG regulation on their business. Oil and gas companies typically devoted a few paragraphs. After that there is a sharp drop-off to those 10-Ks that included just a mention of climate-related regulation or weather-related changes as one amongst a range of potential risks to the business.

By contrast, 2012 CDP scores are more evenly spread across the 0-100 scoring range, with about 57% of the companies providing disclosures scored as "high", or above 70 points which, according to CDP, indicates that "Senior management understand the business issues related to climate change and are building climate related risks and opportunities into core business."[22] **Figures 4** and **5** below compare the 10-K and CDP climate disclosure score distributions for disclosures made in 2012.

FIGURE 4: S&P 500 CLIMATE DISCLOSURE SCORE DISTRIBUTION: 10-Ks FILED IN 2012

(Note: Scores range from 0-100)

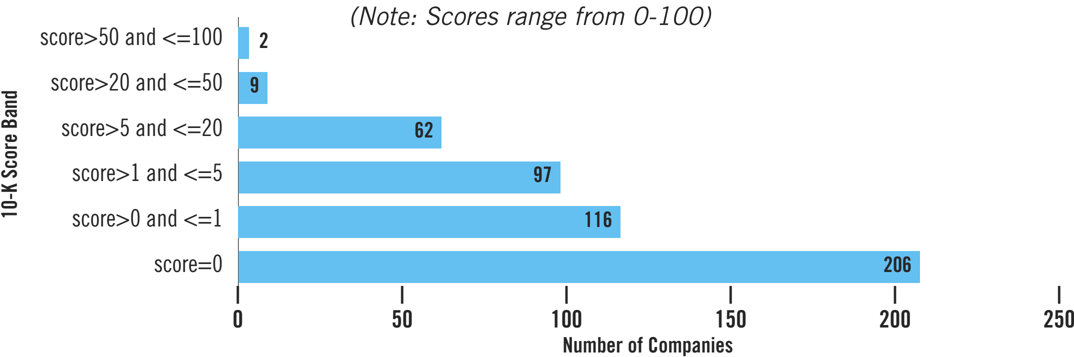
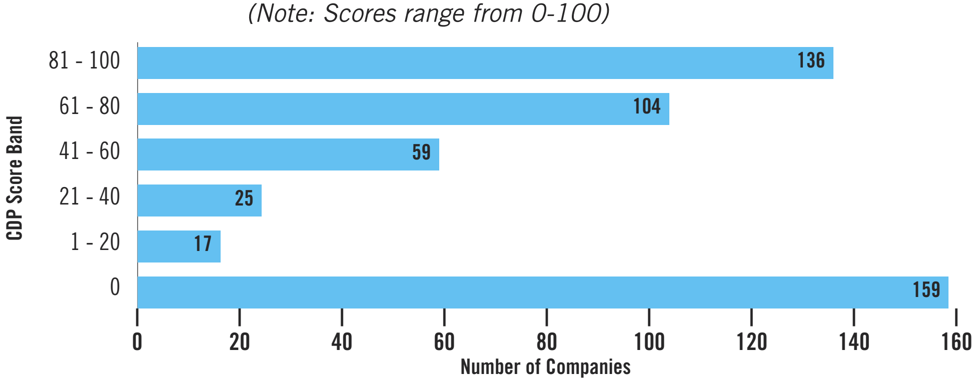


FIGURE 5: S&P 500 CLIMATE DISCLOSURE SCORE DISTRIBUTION: CDP RESPONSES IN 2012

(Note: Scores range from 0-100)



22 https://www.cdproject.net/en-US/Results/Pages/CDP-2013-disclosure-scores.aspx

Interestingly, while almost all companies in high emitting industries say something about climate change in their 10-Ks, many of the same companies have failed to respond to the CDP climate questionnaire. In 2013, twelve of 35 electrical power and gas utility companies in the S&P 500 failed to respond to CDP whereas all made climate-related disclosure in 10-Ks filed in the same year.

In 2012 Microsoft (MSFT) and United Parcel Service (UPS) earned CDP disclosure scores of 99—the two highest for that period among U.S. companies. Yet Microsoft only devoted three sentences of its 10-K filed July 26, 2012 to climate disclosure, and UPS devoted one paragraph under the Risk Factors section of its 10-K filed February 27, 2012.

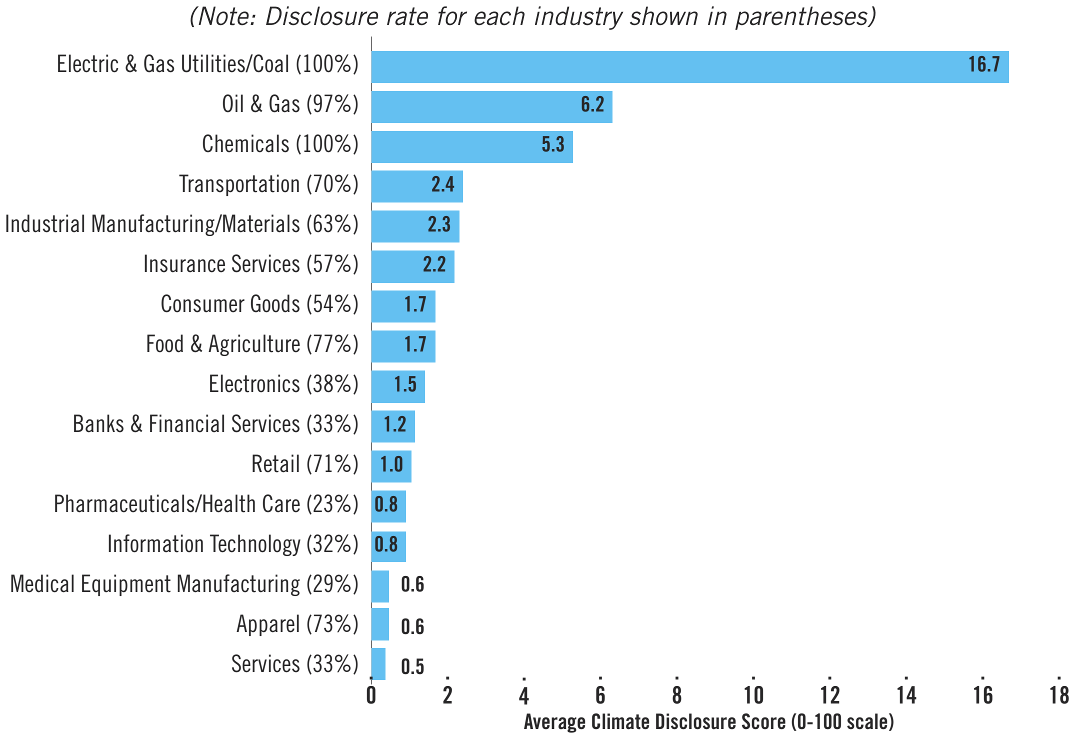
Climate-related disclosure in 10-K filings is also highly variable across industry groupings,[23] much more so than is the case with CDP disclosures. An industry group breakdown of disclosure rates via 10-K reports and the CDP questionnaire for the five year survey period is provided in Appendix 1.

Variability between industries in 10-K disclosures appears be related primarily to levels of carbon emissions and therefore the differing degrees of impact of climate- and GHG-related regulation. All electric utility companies included some climate-related disclosure in 10-K filings each year of the survey period, whereas less than 30% of healthcare and pharmaceutical companies made any 10-K climate related disclosures.[24]

Inter-industry variability in 10-K disclosure appears to be secondarily related to the physical risks and impacts of climate change. Water availability, precipitation patterns and damage from extreme weather events are all concerns for insurers, large manufacturers, chemical companies, and food and agriculture companies. These industry groupings all had higher rates of disclosure than, for instance, telecommunications or IT, and marginally higher average levels of disclosure quality scores. **Figure 6** below shows the average disclosure quality scores for 10-K filings made in 2012, broken down by industry group. The graph shows only industry groups in which there were ten or more companies in the S&P 500.

FIGURE 6: AVERAGE CLIMATE DISCLOSURE SCORE BY INDUSTRY GROUP: 10-Ks FILED IN 2012

(Note: Disclosure rate for each industry shown in parentheses)



23 The industry groupings used in this analysis correspond to industry groupings used in previous Ceres reports and to the distinctions between companies' operations judged to be relevant to an understanding of their relative risks and opportunities related climate change.

24 Compared to more than 70% CDP response rate by healthcare and pharmaceutical companies and only 60% response rate by electric utilities

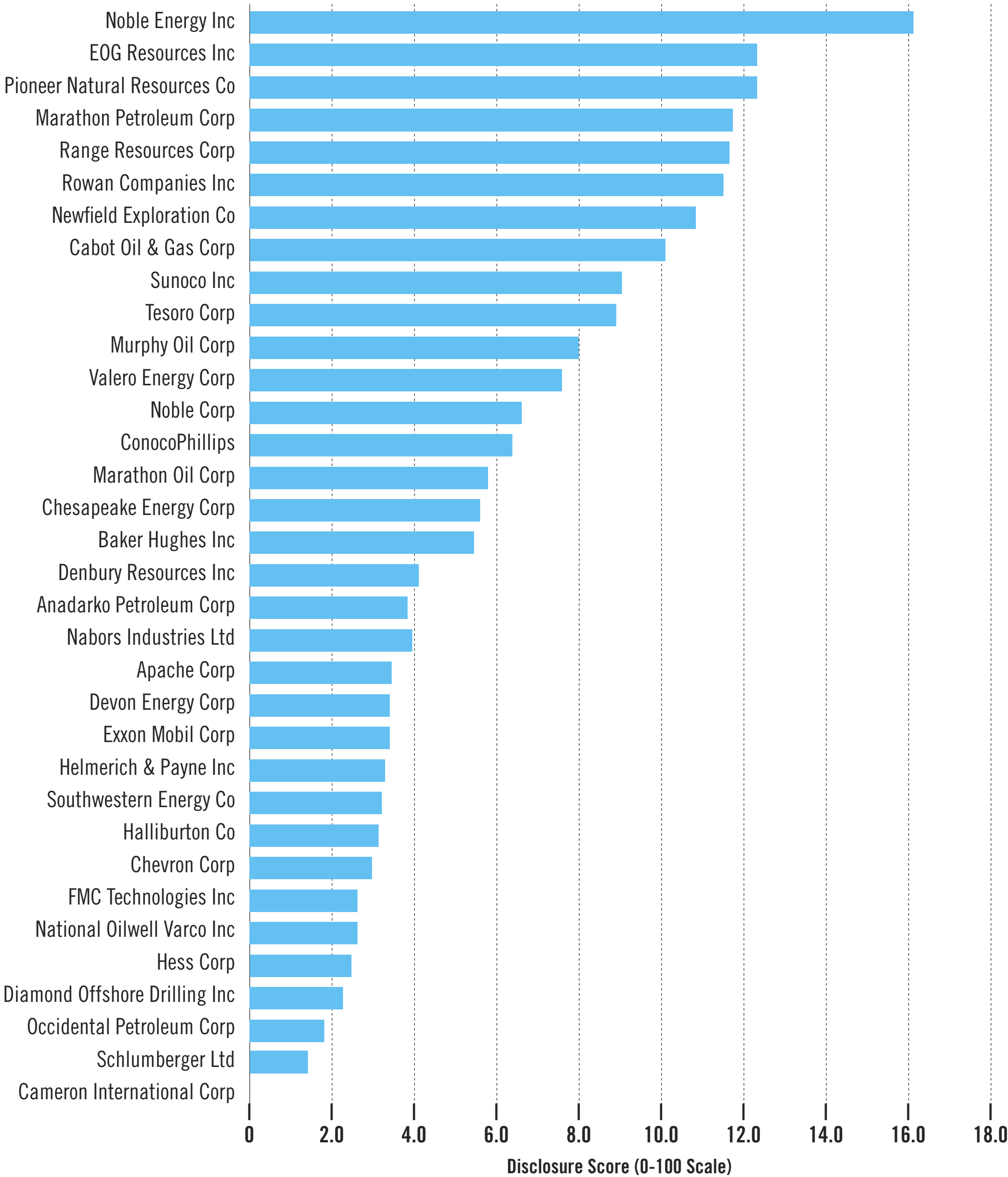
Even among companies in the electric power and oil and gas industries, there is a high degree of variability in the quality of disclosure.

Figure 7 below shows the variation in scores assigned to climate disclosures made by oil and gas companies in 10-Ks filed in 2012. Noble Energy provided the strongest climate-related disclosure and Cameron International provided no disclosure.

Apart from Cameron International, every energy company (oil and gas companies as well as electric and gas utilities) made some climate-related disclosure in their 10-K filings from 2010 onwards. This stands to reason: companies in both industries are, to a greater extent

FIGURE 7: OIL & GAS COMPANY CLIMATE DISCLOSURE SCORES: 10-Ks FILED IN 2012

(Note: Scores range from 0-100)



Even among companies in the electric power and oil and gas industries, there is a high degree of variability in the quality of disclosure.

than other industry groupings, subject to environmental regulations in the U.S.; are highly vulnerable to the physical impacts of climate change; and are more directly linked with GHG emissions than companies further down the energy chain.

In both industries there is a wide variation in the amount and quality of disclosure. For example, reporting by Occidental Petroleum (OXY) and Noble Energy (NBL), both international oil and natural gas exploration and production companies, varied significantly. Occidental had a market capitalization several times that Noble Energy throughout 2012. Yet Noble Energy includes about ten times as much climate disclosure in its 10-K filed Feb. 9, 2012, compared with Occidental's Feb. 23, 2012 filing, including separate sub-sections in both the risk factors and the MD&A sections of the report. Furthermore, it makes specific mention of legislation, EPA regulations, and a range of possible physical impacts.

Companies in both of these industry groupings focused mainly on regulatory risks and neglected discussion of physical risks. For instance, while a number of large international oil and gas companies referenced sea level rise amongst physical risks in their CDP disclosures, only ConocoPhillips (COP) mentioned sea level rise as a risk in its 10-K filing on Feburary 21, 2012.This is surprising, given that coastal refineries (oil refineries are usually located at the coast for ease of access to terminals for ocean transport), pipelines and oil and gas ocean transport could be affected by sea level rise. Besides the direct impact on infrastructure are the potential remediation costs of cleanup in the event of contamination due to rising water levels or pipeline damage.

Companies dependent on a predictable climate for agriculture, such as those in the apparel, food and agricultural industries, face significant threats from changes in weather patterns or severe weather events.

Companies dependent on a predictable climate for agriculture, such as those in the apparel, food and agricultural industries, face significant threats from changes in weather patterns or severe weather events. Also, transportation, telecommunications, manufacturing and other commercial activities can be severely disrupted by extreme weather conditions. It is surprising therefore that less than 50% of all companies in these industries address climate change in their 10-K filings.

Barely half of all insurance companies addressed climate change, yet their exposure to recent natural disasters such as Hurricane Katrina, Hurricane Sandy and the Texas and Midwest Droughts draws a concrete link between climate change, the increased incidence of what were once rare weather events, and financial impact.

Even more concerning is that barely half of all insurance companies addressed climate change, yet their exposure to recent natural disasters such as Hurricane Katrina, Hurricane Sandy and the Texas and Midwest Droughts draws a concrete link between climate change, the increased incidence of what were once rare weather events, and financial impact.[25] Travelers Companies (TRV) provided the best available example of a review of liability exposures posed by climate change for insurers. Besides the direct impact of physical weather events, the indirect impact of regulation on the company and its customers and the impact of climate-related changes in water availability and hurricane intensity on the creditworthiness of customers is discussed in Traveler's 10-K filed February 16, 2012.

The following list represents a summary of the causes for concern regarding climate disclosure in SEC filings:

- a wide variation in disclosures by companies within same industry group, many of which face a similar set of risks and opportunities;
- a decline, from 2010, in average quality and amount of disclosure in 10-K reports by large U.S. companies;
- a leveling off in the number of disclosing companies since 2010;
- a large number of companies in affected industries not making any climate-related disclosure in their 10-K reports; and
- a significant difference, for many companies, between the amount and quality of reporting they provide in CDP responses compared to 10-K filings.

25 Hurricane Sandy cost the insurance industry US$ 35bn in 2012 ("Insurance Industry Weathers Historic 2012 Disaster Losses", *Bloomberg*, March 28, 2013). Hurricane Katrina cost the insurance industry $71bn (Great Claims: Insurance losses from catastrophes, *Economist*, March 16, 2010). Crop Insurance losses from drought damage across the US in 2012 reached almost US$12bn (U.S. Crop-Insurance Claims Rise to Record After 2012 Drought, *Bloomberg*, January 15, 2013).

SEC Comment Letters On Climate Change: 2010-2013

As discussed earlier, SEC review of companies' filings is a vital way to ensure that the SEC's climate change disclosure guidance is followed. Comment letters are a principal method for Commission staff to promote compliance with the SEC's material reporting requirements and the Guidance.

A search of the SEC's EDGAR database was conducted in order to identify all comment letters sent by SEC staff between February 2, 2010 (the date the Guidance was published in the Federal Register) and the end of 2013 that mentioned climate change issues related to the Guidance. The search entailed keyword queries using terms such as "climate change", "climate mitigation", "greenhouse gas", "GHG", "global warming", "carbon emission", "weather conditions", "Kyoto Protocol", "SEC Release No. 33-9106" and others.

From February 2, 2010 to December 31, 2013 this study counted 25 letters that were sent to 23 companies (two companies received two letters as a result of back-and-forth correspondence) and 27 communications directed at asset managers belonging to 14 individual fund groups, out of more than 45,000 SEC comment letters sent to registrants.[26] Appendix 2 lists the comment letters sent to companies and provides additional information about the company, the filing that was reviewed, the section of the filing that was referenced in the comment letter and the main issue raised in the letter. Appendices 3 and 4 provide the text of the requests made in SEC comment letters to companies and asset managers, respectively. They also review and summarize the responses by companies and asset managers.

SEC review of companies' filings is a vital way to ensure that the SEC's climate change disclosure guidance is followed.

Twelve companies received requests for substantiation of claims relating to greenhouse gas emissions or GHG regulations or for further information on pending climate change-related litigation concerning lawsuits related to Hurricane Katrina Lawsuit and warming in Alaska. These were not included in the review of comment letters as the requests were for substantiation of claims or for disclosure of damages sought in the cases, not for disclosure of climate-related risks and opportunities. These comment letters were not directed at improving climate-related disclosure, but were instead focused on specific claims or omissions. Additionally, one letter on physical climate risks was sent to a foreign government with a U.S. securities listing (Republic of the Philippines), which was not counted since this survey covers only corporate disclosures.

Of the comment letters sent to companies, 20 instances of correspondence from the company back to the SEC were identified and analyzed. Not all communications with asset managers took the form of comment letters. Seven comment letters were identified. Twenty items of correspondence from an asset manager to the SEC reflected on communications from the SEC entailing requests for climate related disclosure where a letter was *not* located via the EDGAR system. In these cases, telephonic communication or paper correspondence was inferred. In total 27 items of correspondence from 24 asset managers belonging to 14 separate fund families are included in this analysis.

26 According to the EDGAR comment letter database, more than 45,000 SEC comment letters were sent to registrants during this period, a large portion of which were extensive comment letters. During the course of a review, the Commission staff may send multiple comment letters to an individual company, and at the end of the process staff will send a letter indicating that they have no further comments.

10-K

TABLE 2: SEC COMMENT LETTERS ON CLIMATE CHANGE: 2010-2013

Industry	Number of Letters Sent to Companies & Asset Managers			
Year	**2010**	**2011**	**2012**	**2013**
Total Comment Letters for Year	**38**	**11**	**3**	**0**
Asset Manager	21	6		
'Blank Check' Company	1			
Electric & Gas Utilities	3			
Insurance Services	3	1	1	
Manufacturing	1	1		
Mining	2			
Oil & Gas	2			
Real Estate Finance/Property Development	1	1	2	
Renewable Fuels	2	1		
Services (Personal Services)	2			
Services (Water Utility)		1		

Most of the comment letters and communications were issued in 2010, shortly after the publication of the SEC's Interpretive Guidance, with less than half this number issued in 2011 and 2012 combined. No comment letters or correspondence specifically addressing requests for improved or further climate-related disclosures have been identified in 2013. Given the three comment letters in 2012 and none in 2013, it is clear that the SEC has devoted minimal attention to climate-related disclosure over the last two years.

Of the 23 lines of correspondence between the SEC and companies, 13 addressed disclosure in 10-K filings, three addressed disclosure in 20-F filings and seven addressed disclosures in Registration Statements (forms 10-12 or S-1).

Where specific sections of the filing were referenced in the SEC comment letters, the Risk Factors section was identified most frequently. Comment letters also reference disclosures in the Business Description and MD&A sections. This roughly corresponds to the general distribution of climate disclosures across S&P 500 companies, where climate disclosures are most frequently made under 'Risk Factors'.

In communications with asset managers, SEC staff comments addressed disclosures made in registration statements, or as amendments to registration statements (forms N-1A and N-2). Seven SEC staff comment letters directed at asset managers were located, five of which were directed to investment companies within the same family of funds and constitute a single comment applicable to each of the funds. Twenty-six items of correspondence from asset managers to the SEC were located via EDGAR. Each of these quoted an SEC comment or communication before making a response and therefore allow for an analysis of the SEC's requests.

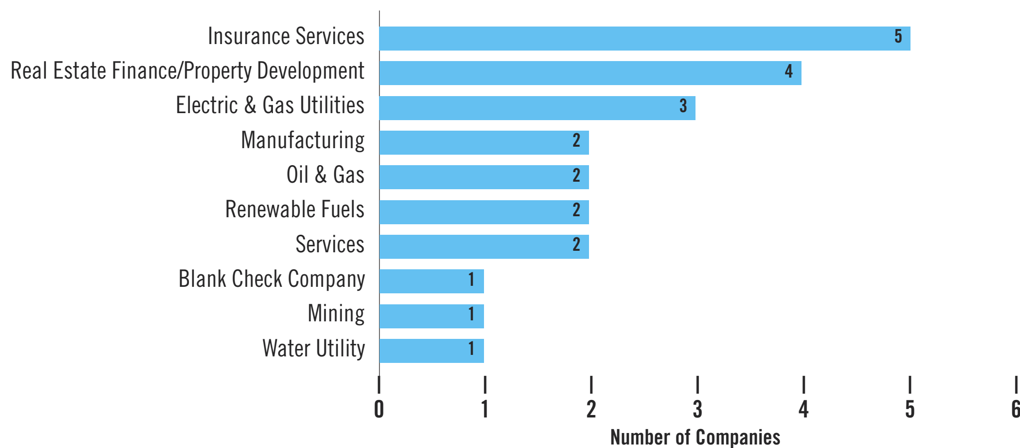
Given the three comment letters in 2012 and none in 2013, it is clear that the SEC has devoted minimal attention to climate-related disclosure over the last two years.

COMPANIES THAT RECEIVED CLIMATE-RELATED COMMENT LETTERS

Asset managers were the largest single category of recipients of SEC requests for further climate-related disclosures.

Of companies that received comment letters, three were electric and gas utilities, five were insurers, and four were in the business of property development or financing property development. Only two were oil and gas companies, and two were industrial manufacturers. Two companies were renewable fuels manufacturers or refiners, who were asked "[t]o the extent you believe that they are material to your proposed business, please also address any environmental issues associated with your process (e.g., generation of waste products, water usage and contamination, production of greenhouse gases, etc.)."

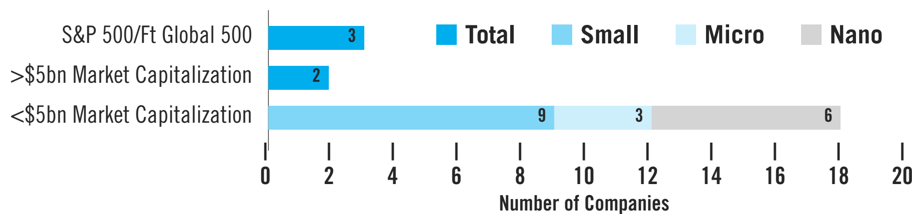
FIGURE 8: SEC COMMENT LETTER RECIPIENTS BY INDUSTRY (2010-2013)



The corporations that received comment letters were predominantly small companies in a number of different industries. Only five had a market capitalization of above $5bn during the study period. Only three of the 23 corporations belonged to either the S&P 500 or the FT Global 500 at any point during the study period (**Figure 9**).

More than half (14) of the companies had a market capitalization of less than $1bn at the time that the comment letter was sent. Three of these were micro caps (market capitalization of between $50 million and $300 million) and six, or one quarter, were nano caps (market capitalization of less than $50 million). Of these, one company has since delisted (PanAm Terra) and another was bought by a development-stage corporation (Krossbow Holdings was purchased by Scio Diamond Technology (SCIO)).

FIGURE 9: SEC COMMENT LETTER RECIPIENTS BY SIZE (2010-2013)



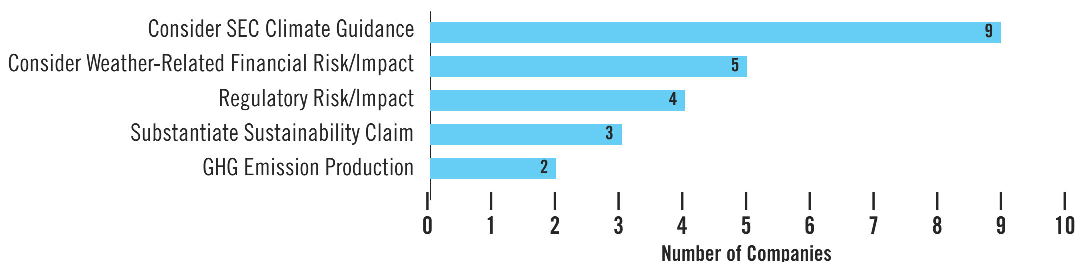
Four of the companies are foreign companies: National Grid (NGG), Companhia De Saneamento Basico Do Estado De Sao Paulo Sabesp (SBS), Ecopetrol SA (EC) and Turnpoint Global.

This breakdown shows that the SEC's Division of Corporation Finance did not focus on larger companies in industries facing higher risks and opportunities related to climate change, further indicating that the SEC has not prioritized the implementation of the Guidance.

REQUESTS MADE IN CLIMATE-RELATED COMMENT LETTERS

Most of the comment letters and SEC communications made only very brief mention of climate change or greenhouse gas emissions as one of multiple points raised.

FIGURE 10: REQUESTS MADE TO COMPANIES IN SEC COMMENT LETTERS (2010-2013)



Nine comment letters specifically requested the consideration of the Commission's Guidance Regarding Disclosure Related to Climate Change.[27] Five of these letters were issued in 2010, two in 2011 and two in 2012. These letters were directed at three real estate finance companies, two oil & gas companies, one building materials retailer, a water utility, a manufacturer, and an insurance company.

The requests mostly took the form: *"Please tell us what consideration you gave to SEC Release No. 33-9106 in regards to providing disclosures regarding climate change matters."* In only one case where this request was made, directed at an insurance company, were specific sections of the report referenced as possible locations for climate disclosure (including Risk Factors and MD&A).

In seven cases companies responded that no further disclosure was necessary. Three of the seven indicated that they would continue to consider the relevance of climate-related disclosure for future filings. Only two of the nine undertook revisions to the named filing.

Four insurance companies and one manufacturer were asked to consider disclosure on financial risk related to weather or climate. Two insurers responded that climate did not pose a financial risk and the other two insurers amended their filings to reflect that climate change was considered a risk factor to the extent that it impacts weather. Likewise, the manufacturer indicated that it had amended its filing to explain that weather affects demand and therefore financial results.

Of the four comment letters that referred to regulatory impacts, two companies were asked to provide more general disclosure of the impact of climate change legislation and GHG regulation on the business and two requested further information relating to specific references in prior disclosures. One request said, *"Please revise your disclosure here and in the risk factor on page 13 to indicate how climate change legislation and greenhouse gas regulation impact your business."*

27 SEC Guidance Reference

WWA Group (WWAG), a small company with a market capitalization of less than $10m, engaging in the trading and auctioning of transportation and industrial equipment, received a comment for a risk factor pertinent to a wide range of commercial activity. WWA Group responded by changing its 2011 10-K text from: *"Greenhouse gas legislation and regulation could have a material adverse effect on our business, financial condition, and results of operations" to "… even in the event climate legislation or regulation is effected, we do not believe that developments would have a material adverse effect on our business, financial condition, and results of operations"*.

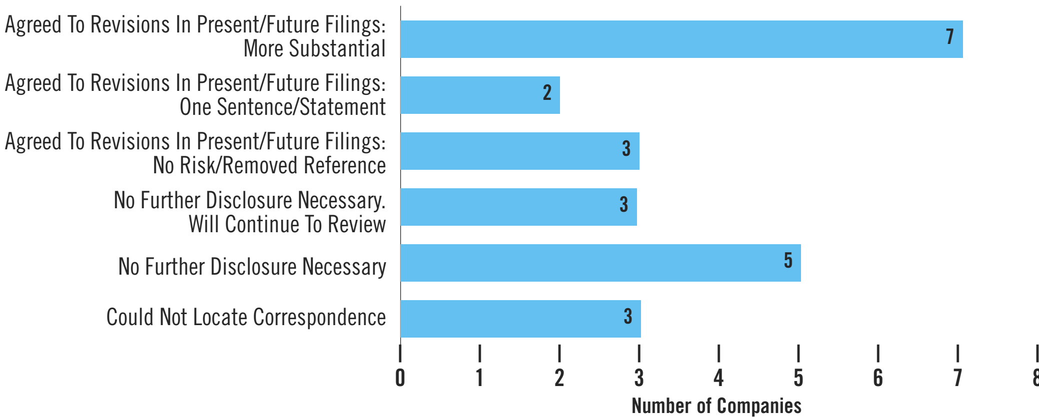
Two renewable fuels companies were asked "[t]o the extent you believe that they are material to your proposed business, please also address any environmental issues associated with your process (e.g., generation of waste products, water usage and contamination, production of greenhouse gases, etc.)." One of the companies expanded its MD&A section while the other indicated that it did not need to make further disclosure.

Three requests were for more information or further substantiation of claims or of a specific policy, and required further disclosure of climate-related information. The requests referenced disclosures relating to climate mitigation impacts of the business, sustainability contributions and how the business would "reduce the impact of climate change" and to claims of a comparative advantage in wind energy production. In two of the three cases, it was not possible to locate the company's response back to the SEC, and in one case, OGE Energy (OGE), a small electric utility, the company undertook to provide further disclosures in future filings, including a discussion of predictions for future increases in renewal portfolio standards and an explanation of how it is well positioned to exploit wind energy generation.

RESPONSES TO CLIMATE-RELATED COMMENT LETTERS

The small number of SEC comment letters mentioning climate issues and the limited scope of most of the inquiries preclude drawing broad conclusions from companies' responses to the letters. But it is worth briefly summarizing the responses that were located: 20 responses by companies and 26 responses by asset managers—which are outlined in Appendices 3 and 4, respectively. Companies' responses are summarized in **Figure 11** below.

FIGURE 11: BREAKDOWN OF CORPORATE RESPONSES TO SEC COMMENT LETTERS (2010-2013)



Out of the 20 companies for which response letters to SEC comments were found, eight indicated that they saw no need for revisions or changes and 12 made revisions or undertook to make future revisions. Of the 8 companies that did not make revisions, some simply indicated that no further disclosure was necessary, while others undertook to continue to review whether climate-related considerations were relevant and should therefore be included in the future filings.

Of the 12 companies agreeing to make revisions, one involved removing text mentioned in the SEC's comment letter, and two revisions were statements to the effect that climate did not pose a material risk to the company. Of the remaining 9 responses, three included a commitment to include climate-related discussion in future filings.

Three responses are singled out as examples of diligent consideration of the SEC's request for further climate-related disclosure: The most comprehensive response was made by Companhia de Saneamento Basico do Estado de Sao Paulo SABESP (SBS), a Brazilian water utility with a 7.4BN market capitalization as at the end of October 2013 (see Appendix 5). National Grid (NGG) provided a detailed response to the SEC explaining the difficulties of addressing its request for projected expenditures on GHG emission reduction programs. OGE Energy (OGE) provided a detailed explanation of why its geographic position gave it an advantage in wind generation given climate change, the environmental impact of coal-fired power generation, and renewable portfolio standards.

Companhia de Saneamento Basico do Estado de Sao Paulo SABESP's (SBS) response stands out for the level of detail included in its review of both regulatory and physical risks to its business. The disclosure demonstrates that climate change poses a serious risk for this water utility.

Of the 26 responses from asset managers reviewed, ten agreed to make revisions, ten indicated that additional disclosures were not necessary and six (those belonging to the Prudential family of funds) responded ambiguously that they had "...reviewed and considered the staff's guidance regarding disclosure relating to climate change in Release No. 33-9106."

SUMMARY: SEC's Approach to Climate Risk in Comment Letters

We found that comment letters over the last four years show minimal attention by the SEC to climate risk as a disclosure issue and do not reveal an ongoing SEC commitment to implement the Guidance. During the period in question, the SEC did not place a high priority on using the disclosure review process to improve the quality of material climate disclosures. Six key observations support this conclusion:

1. The number of comment letters mentioning climate risk is very small.

The small number of comment letters that addressed climate change, and the limited scope of the discussion in those letters, suggest the SEC staff did not make a substantial effort to address instances of inadequate material risk disclosure. Given the thousands of companies that filed 10-Ks or foreign equivalents, and the thousands of comment letters that SEC staff issued during this period, the handful of comment letters addressing climate risk indicates that this issue was not a high priority for reviewers.

2. Firms in high-risk sectors were not well represented among companies that received comment letters.

Several industries face greater climate risks and opportunities than others. Some—like electric power generation, mining, oil and gas, and transportation—face risks principally because of high greenhouse gas emissions, combined with the existence or likelihood of direct regulation of those emissions. Others—like real estate and manufacturing—face risks because they are highly dependent on high-emissions energy sources. Still other industries—such as insurance, agriculture and apparel—face serious physical risks from climate change and resulting changing weather patterns. It is especially important that firms in these high-risk fields provide adequate climate risk disclosure. A filing review strategy aimed at achieving improvements in material climate disclosure would pay special attention to these sectors.

Given the small sample size, it is impossible to draw meaningful conclusions concerning Commission staff's selection of the firms that received comment letters mentioning climate change. While a few utilities and energy firms received letters, the allocation of letters across industries does not reflect the relative risks that they face. We found no comment letters directed to any company in other high risk industries, including chemicals, basic materials, transport, food, and agriculture.

A number of large manufacturers, such as Illinois Tool Works and Caterpillar, and aerospace and defense companies, such as Boeing and General Dynamics, failed to mention climate change legislation and greenhouse gas regulation in recent years' 10-Ks. Yet none had received a comment letter addressing climate disclosures as of the end of 2013.

3. Small firms were over-represented among companies that received comment letters.

A striking feature of the group of 23 companies that received comment letters on climate change is the preponderance of smaller companies. Only three of the 23 were constituents of the S&P 500 or FT Global 500 during the study period. More than a third were micro or nano-sized companies. If comment letters are to have an impact on the general level of disclosure by issuers, beyond the specific companies which receive them, SEC staff need to address disclosure concerns at larger companies. Analysis of climate related disclosure practices among S&P 500 companies shows unequivocally that the under-representation of larger companies in the group that received SEC comment letters is not because larger companies provided adequate disclosure. Most large companies have very little, if any, discussion of climate risks and opportunities in their 10-K filings and the general quality of this disclosure appears to be dropping off in recent years.

4. Some comments may deter climate-related discussion in 10-Ks

Also notable were the several instances in which the SEC comment letters sought substantiation for "green" claims concerning climate benefits certain companies had made in their filings (Krossbow Holding Corp., OGE Energy, Turnpoint Global). This appears to reflect a valid concern on the part of SEC reviewers that statements concerning alleged climate-related opportunities, like any other opportunities, should be supported not by generalized assertions or promotional claims, but by specific information that will be useful to investors. While this is an entirely appropriate reason for SEC oversight, against a background of extremely few letters finding climate disclosures inadequately detailed, letters criticizing registrants for unwarranted climate-related discussion could send the message that registrants are more likely to attract the attention of SEC staff by mentioning climate-related issues than by omitting them.

5. SEC's comments on climate risk disclosure were limited in scope.

Another indication of the SEC's lack of attention to climate risk lies in the absence, in the comment letters, of much discussion of the nature of good climate risk disclosure, or of questions reflecting an appreciation of the kinds of risks typically faced by companies in various sectors.

Many of the letters were so general that they offered little advice to companies about what aspect of the Guidance might be significant to a particular company or industry. "Did you consider the Guidance?" letters are potentially helpful when a company appears not to have considered climate change at all. However, such general requests are of limited utility in promoting adequate disclosure. If comment letters are heavily weighted toward this kind of simple inquiry, registrants could be led to conclude that all that is required of them is some perfunctory mention of climate risk.

Several of the comment letters do address important dimensions of climate risk disclosure—and by asking for further disclosure concerning specific issues, serve as a useful reminder to other companies. For example, the letter to insurance service company Fortegra Financial asked for more information on potential climate change dimensions of the company's exposure to financial risks from natural disasters. The letter to National Grid (NGG) seeks quantified information on spending on emissions reductions targets, in the context of seeking substantiation for specific targets the company had included in its 20-F filing. Overall, however, the few comment letters during this time period do not reflect a consistent and systematic effort to focus on the specific climate risks faced by registrants.

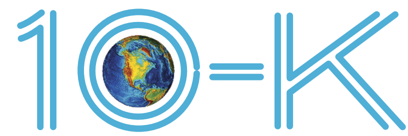
6. Most company responses to SEC comment letters resulted in minimal or no improvements in reporting.

Less than a third of companies committed to making changes to their disclosures that would appear in line with the types of disclosure encouraged by the SEC's 2010 guidance in present or future filings. Ten investment companies made the requested changes to their disclosures. In most cases, since the initial request was non-specific, companies were not compelled to respond at length or with any specificity. In all but two cases there was no follow-up to companies' initial responses to the letters.

Comment letters will be more effective when there is follow-up to company responses that do not fully or adequately respond to the SEC's inquiry, or that raise further questions. State Auto Financial Corp. (STFC) is a noteworthy case in our sample. State Auto received one of the more extensive requests from the SEC relating to climate risk disclosure—asking the company to consider potentially material impacts of rising global temperatures and related "atmospheric effects," as well as impacts of climate legislation. The company responded by adding a few generalized mentions of climate change, such as language noting that climate change "could impact the frequency or severity of weather events."

In this case, further comment from the SEC would have been helpful. Many leading insurers, regulators, and industry groups have expressed the view that climate change poses significant risks for insurers, flowing from such factors as more frequent severe weather events that generate costly claims, rising sea levels that cause property damage, and costly heat waves and droughts. In this context, the response from State Auto—which insures a wide range of business and residential real property—can reasonably be judged as inadequate.

Investors in this company would benefit from information about the nature and magnitude of its weather risks—likely including discussion of the magnitude of the risks it faces from changing weather patterns—and how the company is addressing them. If State Auto's position is that climate change does not significantly affect the likelihood of expensive natural disasters that would affect the company, that information is also likely to be material.



Recommendations

RECOMMENDATIONS FOR THE SEC: Strategies for better implementation of Interpretive Guidance on climate change disclosure

Overall, we recommend that the SEC devote increased attention to climate risk disclosure by issuing additional comment letters in response to inadequate disclosures, and educate registrants about how to comply with the Guidance.

Outlined below are four specific recommendations for how the Commission could make use of staff disclosure review and comment letters to implement the Guidance and, ultimately, improve the quality of material climate disclosure in registrants' mandatory filings.

1. Issue more comment letters to companies with inadequate disclosure of material climate risks

Although corporate climate risks and opportunities have expanded in the last two years, SEC staff sent only a handful of climate-related comment letters to registrants. The most effective way for the SEC to protect investors is to issue comment letters to companies that do not disclose material climate risks. Below we discuss three strategies the SEC can use to examine inadequate reporting: focus on sectors facing the greatest climate risks, focus on disclosure concerning regulatory developments, and create a task force for reviewing climate disclosures.

2. Focus on companies in sectors facing significant climate risks and opportunities

In marshaling its scarce resources, the Commission should devote special attention to disclosures by firms in sectors that are most pervasively affected by climate change or greenhouse gas regulation. These include firms in high-emitting sectors that are already subject to regulation, firms whose financial performance is tied to global climatic changes, in particular the insurance sector, and firms whose business operations and operational infrastructures are most likely to be disrupted by changing weather patterns.

The highest risk/highest emissions categories include fossil fuel-powered electric power generation companies. By most measures, fossil-fueled electricity generation is the United States' single largest source of GHG emissions. Within that sector, companies that depend heavily upon coal have the highest emissions and are likely to be most affected by regulatory controls. Regulatory activity in this area has been substantial. Companies whose business depends heavily upon fossil fuel generation—particularly coal—are also likely to be significantly affected by greenhouse gas regulation.

Fossil fuel components of the energy sector—including coal and oil and gas—merit priority treatment in the Commission's review for many of the same reasons. Firms in these sectors are likely to be affected by regulations that affect demand for their products. GHG regulations, together with tighter regulations on conventional pollutants, and related initiatives such as renewable fuel and renewable portfolio standards, directly affect fossil fuel companies. Furthermore, coal, oil and gas companies are most likely to be exposed in their operations to the risks of severe weather patterns.

As the Commission's guidance recognizes, climate change has wide-ranging consequences for the insurance sector as well. Changing weather patterns associated with climate change, and increasing incidence of events such as major hurricanes, floods, and wildfires, pose new challenges and opportunities for insurers.

By many measures, transportation is second only to electricity generation in terms of greenhouse gas emissions. It is also a sector facing important regulatory developments, such as EPA emissions standards for light-, medium- and heavy-duty motor vehicles and engines. Vehicle manufacturers and suppliers are also vulnerable to indirect risks and opportunities resulting from the impacts of regulation and climate change-related physical risks on fuel prices.

SEC staff should carefully examine filings from companies in these industries to examine their treatment of climate risks and opportunities that may be material.

3. Focus on the adequacy of disclosures concerning recent, major regulatory developments

The expansion of federal greenhouse gas regulation over the last two years is a good example of the material impacts of regulatory developments, and provides an appropriate focal point for SEC staff review of companies' disclosures concerning climate risks and opportunities.

The Guidance itself comments on the variety of greenhouse gas regulations adopted or under development at the international, federal, regional, and state levels. Since the Guidance was issued, various important forms of greenhouse gas regulation have come into effect at the federal and state level. EPA has taken a variety of steps to effectuate greenhouse gas regulation under the Clean Air Act, including issuance of an "endangerment finding" documenting that climate change caused by greenhouse gas emissions poses the kinds of threats to public health and welfare that require controls under the Clean Air Act; greenhouse gas emissions standards for passenger cars and light trucks (such as SUVs) beginning with Model Year 2012; regulations providing for the phasing in (beginning in January 2011) of greenhouse gas controls and permit requirements for new and "modified" large stationary sources of GHGs such as power plants and factories; GHG emissions standards for medium and heavy duty trucks; proposed New Source Performance Standards for electric generating units and planned greenhouse gas emissions standards for existing power plants.[28] California's comprehensive climate regulation program has continued to develop, including a cap-and-trade program for greenhouse gases. Other states, such as Massachusetts, have adopted GHG emission reduction programs. Important greenhouse gas regulations continue to be adopted or extended overseas, such as the European Union's decision to regulate GHG emissions from aircraft, that will materially affect some U.S. multinational firms.

These important new laws and regulations, and others that have been adopted or will soon be, have a material effect on many companies, and should therefore be the subject of mandatory disclosure.

4. Where reporting appears inadequate, compare a company's SEC filing with its voluntary reporting

The Guidance notes that "registrants should be aware that some of the information they may be reporting pursuant to [voluntary reporting] mechanisms also may be required to be

28 One measure of the significance of the EPA's endangerment finding for greenhouse gases, and the agency's related actions, is that the U.S. Chamber of Commerce and a broad range of leading trade associations and major companies called EPA's actions "assuredly the most burdensome, costly, precedent-setting, and far-reaching set of regulations ever adopted by the U.S. Environmental Protection Agency." Joint Opening Brief of Non-State Petitioners and Supporting Intervenors, *Coalition for Responsible Regulation*, et al. v. EPA, at 1 (D.C Cir. No. 09-1322 filed May 20, 2011). See also Joint Reply Brief of Non-State Petitioners and Supporting Intervenors, *Coalition for Responsible Regulation*, et al. v. EPA, at 15 (D.C. Cir. No. 10-1092 filed Oct. 31, 2011) (broad coalition of major trade associations and companies refers to EPA's greenhouse gas regulations as "the most significant, far-reaching, and burdensome regulatory program ever devised by an agency").

disclosed in filings made with the Commission pursuant to existing disclosure requirements."[29] Specifically, the Commission discusses sustainability reports using the Global Reporting Initiative guidelines and responses to the Carbon Disclosure Project (CDP).[30] Voluntary disclosures often include "much more information" than is disclosed in SEC filings.[31] These disclosures are usually available to the public.

Comparing elements of a registrant's voluntary disclosures to its mandatory SEC filings is an extremely efficient way for Commission staff to assess the adequacy of a registrant's treatment of climate risk. While broadly examining voluntary disclosures is outside of the Commission's mission, reviewing voluntary climate-focused disclosures, such as CDP responses, in instances where particular companies' SEC filings appear inadequate upon initial scrutiny, is consistent with the Guidance and can be a useful source of material risk disclosure from the companies themselves.

Where a company's voluntary disclosure has emphasized the importance of information relating to climate change, and the company has not disclosed this information in its SEC filings, there may well be a basis for Commission staff to request disclosure of material information by means of a comment letter. Where it is not clear why the company concluded that information provided in its voluntary disclosure was not deemed material for purposes of mandatory disclosure obligations, Commission staff should request an explanation. Comment letters that can refer to specific issues and statements made in voluntary disclosures allow for a focused approach to particular disclosure problems, and will likely lead to more useful responses from registrants.

5. Create a federal interagency working group focused on climate risks and opportunities to businesses, and a SEC task force focused on reviewing climate change disclosures.

The SEC could create an interagency working group focused on examining and improving corporate reporting on climate change risks and opportunities for various industries. Generally, most SEC staff does not have significant training on these issues, but other federal agencies, like the Department of Energy and the Pentagon, have studied them in depth. For example, a July 2013 DOE report examines current and potential future impacts of climate change and extreme weather on the energy sector.[32] The defense department is conducting strategic planning and scenario-based modeling that increasingly involves contingencies related to energy security and climate change.[33] The defense industry has been affected, as the defense department encourages both small-scale innovations and better efficiencies out of jet engines, ship turbines, ground vehicle diesels and other hardware from big, traditional defense contractors.[34] And agencies like EPA are collecting a great deal of information about climate change and greenhouse gas emissions that could be formally shared with the SEC.

The public pension fund CalPERS, in its brief on its SEC priorities for 2013, notes the importance of SEC climate risk disclosure, developing standards for industry focused sustainability reporting, and SEC collaboration with federal agencies:

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29 *SEC Guidance at 9*

30 75 Fed. Reg. at 6292.

31 *Id.*

32 DOE, U.S. Energy Sector Vulnerabilities to Climate Change and Extreme Weather, July 16, 2013, available at http://energy.gov/downloads/us-energy-sector-vulnerabilities-climate-change-and-extreme-weather.

33 Jacob Glass, DOD's Daniel Chiu: Climate, Energy Concerns Emblematic of Future Security Challenges, NewSecurityBeat.org, August 30, 2013, available at http://www.newsecuritybeat.org/2013/08/dods-daniel-chiu-climate-energy-concerns-emblematic-future-security-challenges/#.UoTzvY2oXNt.

34 Sydney J. Freedberg Jr., Pentagon Keeps Pressing For Energy Savings, BreakingDefense.com, September 09, 2013, available at http://breakingdefense.com/2013/09/pentagon-keeps-pressing-for-energy-savings/.

> *CalPERS supports the Sustainability Accounting Standards Board (SASB) and we encourage the Commission to continue its dialogue with SASB as they develop industry-specific sustainability accounting standards for publicly listed companies. We urge the Commission to use the SASB standards in review of sector filings, to continue to issue comment letters addressing inadequate disclosure of material climate change issues, and collaborate with other federal agencies to analyze the material sustainability risks and opportunities.* [35]

CalPERS also notes that it expects "fair, accurate and timely reporting on how financial, human, and physical capital are employed to generate sustainable economic returns", a core issue for long-term value creation.[36]

The SEC could also form an internal task force focused on climate disclosure. In some instances when the SEC has adopted new disclosure rules, Commission staff created a task force of reviewers trained in a substantive topic area who focused their review on that area. A recent example of this approach was when the SEC adopted changes to the rules governing executive compensation disclosure in 2006.[37] In this case, the Commission staff reviewed the executive compensation and related disclosures of 350 public companies representing a broad range of industries. In addition to providing guidance on disclosure issues to the specific companies selected for this review, the comment letters from this review were publicly available on EDGAR. Also, the Commission staff published a report outlining its general observations regarding disclosures made in response to the new and revised rules governing executive compensation disclosure.

Now that issuers have had sufficient time to understand the Guidance and put in place systems to collect climate-related information, we believe that the Commission staff could undertake a similar task force review approach to help promote better disclosure of climate risks and opportunities. The Commission staff could select companies based on the criteria that we have outlined above, and then issue comment letters regarding specific issues with respect to the disclosures of those companies. Thereafter, the Commission staff could prepare a summary of the most frequent issues which came up in the course of the review process, which would provide useful direction for companies seeking to comply with the Guidance.

Finally, there are other strategies SEC staff could implement immediately to improve climate reporting. Staff and commissioners could engage in dialogues with market actors about climate risk at various conferences they attend. Currently, SEC staff and commissioners rarely bring this issue up in speeches and other forums, after some efforts to do so in 2010 and 2011. SEC leadership could also explain, in their annual reports, what efforts the SEC is making to improve reporting on climate risks.

RECOMMENDATIONS FOR COMPANIES: Developing a climate change strategy and disclosing risks and opportunities in SEC filings

The SEC guidance constitutes a major step forward towards improving and beginning to standardize climate risk disclosure. It underlines that disclosure of material climate related risks and opportunities is required under current U.S. securities laws. The Guidance provides important and needed advice on how corporations should assess materiality and provide timely reporting to investors.

35 CalPERS, Priorities for the U.S. Securities and Exchange Commission at 3, available at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCsQFjAA&url=http%3A%2F%2Fwww.calpers.ca.gov%2Feip-docs%2Fabout%2Fpress%2Fnews%2Finvest-corp%2Fexchange-commission.pdf&ei=a_aEUq7-Ke2w4AOvy4GIAQ&usg=AFQjCNGYzgiRxhXpBLUuLt4tsm4zyuRyJw&bvm.

36 *Id.* at 1, 2.

37 See Division of Corporation Finance, Staff Observations in the Review of Executive Compensation Disclosure, http://www.sec.gov/divisions/corpfin/guidance/execcompdisclosure.htm.

The Guidance, appropriately, does not provide advice about how companies can approach climate change as a strategic business issue. Here we provide some practical advice for companies to (1) identify and comprehensively address climate risks and opportunities throughout the enterprise and (2) satisfy their SEC disclosure obligations. For more detailed guidance on developing systems to address and disclose sustainability and climate change issues, companies should examine reports such as the *21st Century Corporation: The Ceres Roadmap to Sustainability*.

Creating Governance Structures and Systems to Comprehensively Address Climate Issues

1. **Integrate consideration of climate risk and opportunity throughout the firm.** Addressing climate risks and opportunities should be an important part of a company's overall sustainability governance strategy. Ceres' *The 21st Century Corporation: The Ceres Roadmap for Sustainability*,[38] lays out five expectations for sustainable governance that are applicable to climate change, board oversight, management accountability, executive compensation, policies and management systems, and public policy.

   To ensure management accountability, Managers and employees specially charged with evaluating and addressing climate risk and dealing with climate change issues should consult regularly with all relevant components of the firm, usually including the legal, financial, environmental, risk management, operations and investor relations business units. Similarly, personnel responsible for preparing sustainability strategy and voluntary climate disclosures should be in close communication with those responsible for assessing financial risk and preparing and approving mandatory securities disclosures.

2. **Create a climate management team.** For most firms, climate change presents a host of novel and rapidly developing issues. Responding effectively to these challenges requires having a team in place that has the expertise and specific mission to recognize and address how climate change presents business risks and also provides opportunities. Having dedicated teams at the senior management level is critical for ensuring that climate change is taken seriously at the top and integrated throughout the company's operations., to ensure management accountability, key performance indicators should be a component of the evaluation of senior executive performance and compensation packages.

3. **Create a board oversight committee or expand the role of an existing committee to include climate issues.** Proper board oversight is important because climate change issues, in addition to being managerial and operational matters, affect corporate strategy, reputation and capital investments, which are important concerns for boards. Companies should designate a committee of the board to assume specific responsibility for climate change oversight within their charters. Companies should establish a dedicated climate committee or expand the role of an existing committee to include climate issues. The committee should ensure that sustainability performance results are a core component of compensation packages, and that the company clearly states their position on relevant sustainability public policy issues.

4. **Develop internal controls and procedures for gathering GHG emissions data and other climate change-related information.** Systems, processes and controls to gather reliable information on firm emissions, physical risks, enacted and proposed regulations, and climate-related initiatives will determine the quality of management analysis, decision-making and disclosure to investors. For many companies, these systems are essential, because the process of gathering emissions data poses complex questions related to setting organizational and operations boundaries, tracking emissions over time, managing inventory quality and other issues.

38 See *The Ceres Roadmap for Sustainability*, available at https://www.ceres.org/company-network/ceres-roadmap.

Recording Emissions and Calculating Emissions Trends

5. **Measure, inventory and benchmark current GHG emissions from operations, electricity use, and products.** As stated in the Global Framework on Climate Risk Disclosure, calculating emissions is an "important first step in addressing climate risk." Whether or not greenhouse gas emissions are material and subject to mandatory disclosure under the securities laws will depend upon the magnitude of a company's emissions weighed against the content of existing or proposed regulations. But a firm cannot identify the potential impact of regulations without knowing what its emissions are and are likely to be in the future. As the SEC guidance explains, management "should ensure that it has sufficient information regarding the registrant's greenhouse gas emissions and other operational matters to evaluate the likelihood of a material effect arising" from enacted or proposed legislation or regulations.
6. **Calculate projected and past emissions.** The Global Framework notes that analysis of past emissions, where feasible, and projected, future GHG emissions is necessary for a firm to understand its emissions trends and assess future regulatory or competitiveness risks. Such information helps to put disclosures concerning current emissions in context for investors.
7. **Create specific emissions reduction targets and regularly report on progress.** For many companies, setting goals for reducing greenhouse gas emissions is invaluable for focusing the firm on achieving greater energy efficiency. Setting goals also sends an important signal to investors and other stakeholders that a firm is committed to addressing climate change. Goal setting is especially valuable to investors when specific GHG emissions reduction targets and deadlines are set, and when reliable and transparent mechanisms are put in place, such as verification by third party auditors, that allow the firm and its investors to track progress toward achieving such goals.

Identifying and Analyzing Risks and Opportunities Arising From Climate Change

8. **Identify risks and opportunities; then assess materiality.** The heart of effective disclosure in SEC filings is management's systematic analysis of potential risks and opportunities relating to climate change, and its exercise of judgment on which risks and opportunities are material and therefore require disclosure. Doing this effectively—and providing investors the information they seek—requires expanded forms of collaboration between the investor relations, legal, corporate social responsibility and environmental, health and safety teams. The materiality of risks or opportunities ultimately depends upon a careful, contextual examination of the particular risk or opportunity and its significance for the registrant.

   Consideration of climate risks and opportunities requires a broad review of the numerous ways in which climate factors may materially affect the company operations and financial prospects—including energy use, supply chain, transportation and logistics, markets for products and services.

   Climate-related risks and opportunities can be classified in several broad categories:

   - ***Physical risks.*** Identifying physical risks requires an understanding of the varied ways in which climate change can affect the environment and a company's operations—from the effect of increased temperatures on air conditioning or equipment cooling, to increased risk of strong storms, to effects on water availability or quality. Companies should assess physical climate risks by examining how changes in climate affect the business and its operations, including its supply chain.

- ***Financing and underwriting risks and opportunities.*** Climate change imposes an increased risk of harm to companies that finance, insure, reinsure, or indemnify against losses to properties or operations. For example, coastal properties or industrial facilities may face new or increased risks from intensified storms, but also new opportunities in the form of increased demand for insurance products.
- ***Regulatory risks and opportunities.*** Firms should identify existing regulations that affect their financial position and operations, as well as proposed measures that are reasonably likely to be enacted. Because regulations that affect a company's operations may be adopted at all levels of government, assessing regulatory risk requires a thorough and ongoing review of the legal landscape. Companies should be aware of developments at the international, national, state and municipal levels, as well as the regional entities that are working to reduce emissions.

  Once the relevant regulatory measures are identified, companies need to inquire how they would affect the company's financial condition and results of operations—e.g., are regulatory compliance costs likely to increase or decrease with time? As noted, the SEC Guidance contains specific advice on how companies should decide what to disclose regarding proposed regulations when their enactment into law is uncertain.

  For some companies, enacted or proposed statutes or regulations may provide important opportunities—e.g., a state's enactment of a renewable portfolio standard may provide a competitive advantage to a company that sells electricity generated from renewable resources; a new energy efficiency tax credit may provide opportunities for firms offering weatherization services or products.
- ***Litigation risks.*** Litigation relating to climate change that may materially affect a company's financial position must be disclosed under certain SEC regulations, like any other form of litigation. The SEC's regulations (Item 103 of Regulation S-K) contain specific quantitative benchmarks for determining whether particular litigation must be disclosed, but management should independently assess the materiality of pending court or administrative proceedings.
- ***Indirect risks and opportunities.*** Even when a company is not directly subject to greenhouse gas regulations or affected by physical risks, climate change can affect a company's financial position in many ways, such as increasing the costs of energy or by changing supply chain risks. As the SEC Guidance explains, risks and opportunities may arise from a wide variety of developments that can affect demand for goods and services or increase competition. Management should consider whether, in light of known trends associated with climate change, climate change is likely to cause the company to gain or lose market share, and whether it is situated to enter emerging climate change-related markets. Material risks and opportunities related to this should be disclosed.
- ***Reputational risks.*** Public perceptions about climate change can be an important factor in stakeholders' opinions of companies, and demand for particular products. Companies should review the effect of their operations and policy positions concerning climate change on public perception of their business as a whole and on the perception of their products and services. Companies should also consider the public perception of their industrial sector in general and how that perception may affect their reputation as a company or create an implicit requirement to act. Where such effects may be material, they should be disclosed, along with management's analysis of how it plans to address these reputational issues.

- ***Emissions.*** Companies' GHG emissions profiles are critical factors in their climate risk strategies, and companies that calculate their GHG emissions should include emissions data in their SEC filings. Disclosure of quantitative GHG emissions is especially important to investors because it provides concrete and specific information that allows for valid comparisons among firms. Data focused on wholly owned or equity share operations, and including geographic breakdowns, is also useful to investors.

Disclosing Climate Risks and Opportunities in SEC Filings

9. **Quantify emissions, risks and opportunities whenever possible.** Quantitative information concerning climate risk is helpful to investors and allows for comparisons among firms. Whenever specific numbers are reasonably attainable, they are preferred over general statements. For forward-looking disclosure for operations in regions where a carbon price is in place or anticipated, carbon price assumptions should be stated.

10. **Be specific: Provide a particularized discussion of climate risks and opportunities with respect to specific company assets and operations.** The risks that climate change may pose for companies—whether financial or physical, direct or indirect—are dependent upon a firm's particular line of business and the geographic location of its facilities; these risks cannot be adequately analyzed and disclosed in an abstract or generic manner. Climate change may affect a single company in different ways: For example, many energy firms have investments in both fossil fuel-based generation facilities with high greenhouse case emissions and technologies such as wind and solar generation facilities with no or relatively low greenhouse gas emissions. Such firms may face risks as well as opportunities from a regulatory regime disfavoring high-emissions operations or from consumer attitudes favoring renewable energy.

    Investors interested in how firms will fare in a transitioning to a carbon-constrained world will want particularized, company specific disclosure of both risks and opportunities, so companies should avoid generic "boilerplate" disclosure. Investors will also want to hear management's explanation of its strategic approach with specific reference to its discrete operations. For disclosing climate change information in SEC filings, we recommend companies use the Climate Disclosure Standards Board's (CDSB) Climate Change Reporting Framework[39] to supplement the SEC's Guidance. The Framework, which was designed to elicit climate change-related information of value to investors in mainstream financial reports, is focused on reporting how climate change affects a company's financial performance.

11. **Consider investors' needs when assessing materiality.** The materiality standard that determines what information public companies must disclose ultimately turns on the needs of the reasonable investor. With climate risk disclosure, as with other matters, investors' perspective should inform management's judgments about which information to disclose. This requires an understanding of the evolving disclosure landscape, including recent, broadly supported statements of investors' needs, shareholder resolutions, and recent corporate-investor dialogues.

    It is also important for management to be mindful of voluntary climate change disclosure standards, frameworks developed by standard setting bodies and standards set by foreign securities regulators. Materiality judgments ultimately depend upon the particular facts and circumstances, but investors' strongly and repeatedly stated demands for thorough disclosure of information on climate risks and opportunities demonstrate that climate risk is now a major concern of the "reasonable investor" who is the measure of disclosure obligations under the securities laws.

39 Available at http://www.cdsb.net/climate-change-reporting-framework.

Conclusion

Since the February 2010 issuance of the Guidance through December 2013, SEC comment letters addressing climate risk were few in number; were mainly directed to smaller companies; generally made brief references to climate change issues; and demonstrated a lack of SEC commitment to ensuring adequate climate disclosures in filings. As a result, these letters are unlikely to provide useful guidance to other companies or result in significantly better information for investors—a key benefit of the SEC's comment letter processes.

We believe Commission staff should make better use of the staff disclosure review and comment letter process to implement the Guidance and, most importantly, improve the quality of climate risk disclosure in mandatory filings. We recommend that SEC staff:

- **Issue more comment letters to companies with inadequate disclosure of material climate risks.**
- **Focus on companies in sectors facing significant climate risks and opportunities when reviewing corporate filings.**
- **Focus on the adequacy of disclosures concerning recent, major regulatory developments when reviewing corporate filings.**
- **Where reporting appears inadequate, compare SEC filings with a company's voluntary disclosures.**
- **Create a federal interagency working group focused on climate risks and opportunities to businesses, and an SEC task force focused on reviewing climate change disclosures.**

We also recommend that companies re-examine their strategy and disclosure related to climate change, in order to (1) identify and comprehensively address climate risks and opportunities throughout the enterprise and (2) satisfy their SEC disclosure obligations. Specifically:

- **Create governance structures and systems to comprehensively address climate issues.**
- **Record emissions and calculate emissions trends.**
- **Identify and analyze risks and opportunities arising from climate change.**
- **Disclose material climate risks and opportunities in SEC filings.**

S&P 500 Climate Disclosure Rate by Industry (Year Filed/Submitted: 2009-2013): 10-K vs. CDP

	2009			2010			2011			2012			2013		
Industry:	Num COS	CDP	10-K	Num COS	CDP	10-K	Num COS	CDP	10-K	Num COS	CDP	10-K	Num COS	CDP	10-K
Aerospace & Defense	9		44%	9	78%	56%	9	78%	44%	9	78%	44%	8	88%	50%
Apparel	10		50%	10	50%	50%	11	55%	55%	11	55%	73%	11	55%	73%
Banks & Financial Services	58		16%	56	54%	30%	56	59%	34%	54	63%	33%	54	65%	33%
Chemicals	11		82%	11	82%	91%	11	82%	100%	12	83%	100%	13	77%	100%
Consumer Goods	27		37%	27	74%	52%	27	78%	56%	26	77%	54%	26	81%	58%
Electric & Gas Utilities/Coal	40		100%	40	60%	100%	41	66%	100%	39	62%	100%	35	66%	100%
Electronics	32		19%	31	74%	39%	31	81%	39%	29	86%	38%	26	88%	42%
Food & Agriculture	30		80%	31	87%	81%	29	93%	79%	31	87%	77%	29	86%	72%
Hospitality & Tourism	4		75%	4	50%	75%	4	75%	75%	4	75%	75%	4	75%	75%
Industrial Manufacturing/Materials	44		50%	41	51%	68%	41	68%	66%	41	68%	63%	42	62%	64%
Information Technology	38		18%	38	61%	34%	38	71%	32%	37	73%	32%	36	75%	36%
Insurance Services	27		37%	26	69%	54%	28	79%	57%	28	79%	57%	28	79%	57%
Media	7		29%	8	50%	38%	9	56%	44%	9	56%	44%	9	44%	44%
Medical Equipment Manufacturing	16		25%	16	44%	31%	15	60%	33%	17	59%	29%	17	65%	41%
Mining	3		100%	4	50%	100%	4	50%	100%	5	60%	100%	5	60%	100%
Oil & Gas	33		97%	32	47%	97%	32	47%	97%	34	41%	97%	36	39%	97%
Pharmaceuticals/Health Care	30		13%	28	68%	18%	27	74%	26%	26	73%	23%	25	72%	24%
Real Estate Finance/Property Development	8		63%	6	33%	83%	6	33%	83%	6	67%	100%	6	50%	100%
Retail	22		64%	23	57%	78%	23	70%	70%	24	67%	71%	25	60%	68%
Services	18		6%	20	50%	25%	21	62%	29%	21	62%	33%	22	59%	36%
Telecommunications	10		20%	10	40%	30%	10	60%	30%	9	78%	33%	10	70%	30%
Transportation	11		45%	11	64%	55%	10	90%	70%	10	90%	70%	10	100%	70%
Waste Management	3		67%	2	0%	50%	2	0%	50%	2	0%	50%	3	33%	33%
Wholesale	7		29%	7	29%	43%	7	29%	57%	8	50%	63%	8	63%	75%

Corporations that Received SEC Climate-Related Comment Letters

Company	Industry	Year	Jurisdiction	Asst Dir. Office	Filing	Section	Issue
Amtrust Financial Services Inc (AFSI)	Insurance Services	2010	U.S.	1	10-K	Risk Factors; MD&A	Consider SEC Climate Guidance
Annaly Capital Management Inc (NLY)#	Real Estate Finance/ Property Development	2012	U.S.	8	10-K	Risk Factors	Consider SEC Climate Guidance
Anworth Mortgage Asset Corp (ANH)	Real Estate Finance/ Property Development	2012	U.S.	8	10-K	Risk Factors	Consider SEC Climate Guidance
Atlantic Power Corp (AT)	Electric Utility	2010	U.S.	2	Reg. Statement	Risk Factors	Regulatory Risk/Impact
Chart Industries Inc (GTLS)	Manufacturing	2010	U.S.	6	10-K	General	Consider SEC Climate Guidance
Companhia de Saneamento Basico do Estado de Sao Paulo Sabesp (SBS)	Water Utility	2011	Foreign	2	20-F	General	Consider SEC Climate Guidance
Ecopetrol S A (ECP)	Oil & Gas	2010	Foreign	4	20-F	General	Consider SEC Climate Guidance
EMC Insurance Group Inc (EMCI)	Insurance Services	2012	U.S.	1	10-K	Risk Factors	Consider Weather-Related Financial Risk/Impact
Far East Energy Corp (FEEC)	Oil & Gas	2010	U.S.	4	10-K	Description of Business	Consider SEC Climate Guidance
Fortegra Financial Corp (FRF)	Insurance Services	2010	U.S.	1	Reg. Statement	Risk Factors	Consider Weather-Related Financial Risk/Impact
Green Endeavors Inc (GRNE)	Services	2010	U.S.	11	10-K	Description of Business	Regulatory Risk/Impact
Ja Energy (Jaen)	Renewable Fuels	2010	U.S.	6	Reg. Statement	Description of Business	GHG Emission Production
Krossbow Holding Corp (SCIO Diamond Technology Corp From 2011-08-02) (SCIO)	Mining	2010	U.S.	5	Reg. Statement	Description of Business	Substantiate Claim—Mitigation Efforts
National Grid PLC (NGG)#*	Electric & Gas Utilities	2010	Foreign	2	20-F	Annual Report & Accounts	Regulatory Risk/Impact
OGE Energy Corp (OGE)#	Electric Utility	2010	U.S.	2	10-K	MD&A	Substantiate Claim—Comparative Advantage In Wind Energy Production
Originoil Inc (OOIL)	Renewable Fuels	2010	U.S.	6	10-K	Description of Business	GHG Emission Production
Panam Terra Inc	Real Estate Finance/ Property Development	2011	U.S.	8	Reg. Statement	Risk Factors	Consider SEC Climate Guidance
Sherwin Williams Co (SHW)#*	Real Estate Finance/ Property Development	2010	U.S.	6	10-K	General	Consider SEC Climate Guidance
State Auto Financial Corp (STFC)	Insurance Services	2010	U.S.	1	10-K	Risk Factors; MD&A	Consider Weather-Related Financial Risk/Impact
Turnpoint Global Inc	"Blank Check" Company	2010	Foreign	2	Reg. Statement	Business Summary	Substantiate Claim—Sustainable Contribution
United Insurance Holdings Corp (UIHC)	Insurance Services	2011	U.S.	1	10-K	Risk Factors	Consider Weather-Related Financial Risk/Impact
WWA Group Inc (WWAG)	Services	2011	U.S.	11	10-K	Risk Factors	Regulatory Risk/Impact
Xylem Inc (XYL)#*	Manufacturing	2011	U.S.	10	Reg. Statement	Risk Factors	Consider Weather-Related Financial Risk/Impact

Market Capitalization > $5bn During 2009-2013

* Member Of S&P 500 Or Ft Global 500 During 2009-2013

SEC Comment Letter Requests & Corporate Responses

Company	Comment Letter Excerpt	Response
Amtrust Financial Services Inc (AFSI)	Please refer to SEC release 34-61469 (Feb. 8, 2010) regarding climate change matters. If you considered the release and determined that information regarding the impact of climate change on your business was not necessary to your disclosure, please tell us why you determined it was not necessary. Please consider revising to include a risk factor and/or MD&A disclosure discussing how climate changes may impact your company's business. If you considered the release and determined that information regarding the impact of climate change on your business was not necessary to your disclosure, please tell us why you determined it was not necessary.	No further disclosure necessary.
Annaly Capital Management Inc (NLY)	We note your disclosure related to the potential impact of federal loan modification programs. In preparing future exchange act reports, please consider the requirements of item 503(c) and item 303 of regulation S-K with respect to disclosure requirements regarding pending legislation. the commission has provided interpretive guidance with respect to assessing the disclosure requirements triggered by a known uncertainty, such as pending legislation or regulation, in Securities Act Release Nos. 33-6835 (May 18, 1989), 33-8350 (December 19, 2003), and 33-9106 (February 2, 2010). If you determine disclosure is required based on the analytical framework discussed in these releases, please describe, to the extent reasonably practicable, the impact the legislation or regulation is reasonably likely to have on your particular portfolio.	No further disclosure necessary. Will continue to review.
Anworth Mortgage Asset Corp (ANH)	We note your disclosure related to the potential impact of federal loan modification programs. In preparing future exchange act reports, please consider the requirements of item 503(c) and item 303 of regulation S-K with respect to disclosure requirements regarding pending legislation. The commission has provided interpretive guidance with respect to assessing the disclosure requirements triggered by a known uncertainty, such as pending legislation or regulation, in Securities Act Release Nos. 33-6835 (May 18, 1989), 33-8350 (December 19, 2003), and 33-9106 (February 2, 2010). If you determine disclosure is required based on the analytical framework discussed in these releases, please describe, to the extent reasonably practicable, the impact the legislation or regulation is reasonably likely to have on your particular portfolio.	No further disclosure necessary. Will continue to review.
Atlantic Power Corp (AT)	In this risk factor you discuss both general environmental regulations and CO_2 and GHG regulations. please break out in a separate risk factor with an appropriate risk factor title, the risk associated with regulation of CO_2 and GHGs.	Could not locate correspondence
Chart Industries Inc (GTLS)	Please tell us what consideration you gave to SEC Release No. 33-9106 in regards to providing disclosures regarding climate change matters.	No further disclosure necessary.
Companhia de Saneamento Basico do Estado de Sao Paulo Sabesp (SBS)	Please tell us what consideration you gave to SEC Release No. 33-9106 in regards to providing disclosures regarding climate change matters. If, upon further consideration, you believe that additional disclosure may be required in future filings, please show us what that disclosure will look like.	Agreed to revisions in present/future filings: more substantial
Ecopetrol S A (ECP)	Please tell us what consideration you have given to providing disclosure regarding climate change matters. See SEC Release No. 33-9106, commission guidance regarding disclosure related to climate change.	No further disclosure necessary.
EMC Insurance Group Inc (EMCI)	Please tell us your consideration of the extent to which the increase in weather-related catastrophes and other losses incurred by the industry in recent years may be indicative of changing weather patterns. If the change in weather patterns could lead to higher overall losses or to legal, regulatory and social responses that could negatively affect your results of operations and/or your financial condition, please provide us proposed revised disclosures to be included in future filings that include an appropriate risk factor that describes the potential effect of climate change. Alternatively, provide an analysis as to why the suggested risk factor is not appropriate.	Agreed to revisions in present/future filings: one sentence/statement
Far East Energy Corp (FEEC)	Please tell us what consideration you gave to SEC Release No. 33-9106 (February 2, 2010) in providing disclosures regarding climate change matters.	No further disclosure necessary.
Fortegra Financial Corp (FRF)	We note your disclosure that the company's profit commissions may be affected by the occurrence and severity of catastrophes including natural disasters. Please consider including a discussion of risks related to the potential intensifying effects climate change may have on such events. Alternatively, tell us why you have determined that such disclosure is not necessary.	Agreed to revisions in present/future filings: no risk/removed reference
Green Endeavors Inc (GRNE)	We note your discussion of climate change legislation and greenhouse gas regulation. Please advise why these legislative initiatives are relevant to your business. In addition, we note that your website references how your businesses are operated in an environmentally-friendly manner and that the company prides itself on operating in a "green" manner. Please explain how your company operates in a "green" manner.	Agreed to revisions in present/future filings: no risk/removed reference
Ja Energy (JAEN)	To the extent you believe that they are material to your proposed business, please also address any environmental issues associated with your process (e.g., generation of waste products, water usage and contamination, production of greenhouse gases, etc.).	Agreed to revisions in present/future filings: more substantial

Company	Comment Letter Excerpt	Response
Krossbow Holding Corp (SCIO Diamond Technology Corp From 2011-08-02) (SCIO)	Please provide additional information regarding the relationships you are establishing with corporations committed to climate mitigation. On page 16, you state that "you will remain committed to establishing relationships with large and credible ethical organizations and corporations that are committed to climate mitigation." Describe your marketing efforts and any other efforts you have used or plan to use to establish these relationships. Describe the organizations and corporations you are targeting or plan to target.	Could not locate correspondence
National Grid PLC (NGG)	Please revise your disclosure to clarify the amounts you have spent and anticipate spending, by relevant time periods, in furtherance of your "45% by 2020 and 80% by 2050 greenhouse gas emissions reductions targets," with a review to providing a more complete description of the material effects of government regulations on your business. Refer to Item 4.B.8 of Form 20-F.	Agreed to revisions in present/future filings: more substantial
OGE Energy Corp (OGE)	*Management's Discussion and Analysis of Financial Condition and Results of Operations*, page 50. *Recent Developments and Regulatory Matters*, page 53. *Global Climate Change and Environmental Concerns*, page 54 1. Please clarify the disclosure to describe why your geographic position is so unique as to allow you to leverage such position to develop renewable energy resources for wind that competitors who are not in your geographic position cannot leverage.	Agreed to revisions in present/future filings: more substantial
OriginOil Inc (OOIL)	To the extent you believe that they are material to your proposed business, please also address any environmental issues associated with your process (e.g., generation of waste products, water usage and contamination, production of greenhouse gases, etc.).	No further disclosure necessary.
Panam Terra Inc	To the extent that you believe your business may be vulnerable to climate related events, please revise your disclosure to describe these risks. See the *Commission's Guidance Regarding Disclosure Related to Climate Change*, Interpretive Release No. 33-9106 (February 8, 2010).	Agreed to revisions in present/future filings: more substantial
Sherwin Williams Co (SHW)	Please tell us what consideration you gave to SEC Release No. 33-9106 in regards to providing disclosures regarding climate change matters.	No further disclosure necessary. Will continue to review.
State Auto Financial Corp (STFC)	Please consider including a risk factor in your disclosure highlighting any material risks to your operations presented by possible increases in global temperatures widely attributed to climate change, as well as the atmospheric effects that have also been linked to this phenomenon. In your evaluation, please also consider the possible impact that proposed legislation in the United States intended to mitigate the effects of climate change might have on your operations. If you believe that climate change and any legislation that might be adopted to alleviate it does not currently materially affect you, please provide us with an analysis supporting this opinion.	Agreed to revisions in present/future filings: more substantial
Turnpoint Global Inc	Please describe how your intended line of business will allow you to create an advantage to society by focusing on solutions that contribute to a sustainable development for the public health and environment and create new solutions that more efficiently protect the environment and reduce the impact of climate change.	Could not locate correspondence
United Insurance Holdings Corp (UIHC)	Please provide proposed revised risk factor disclosure that addresses the issue of climate change and the company's belief as to whether the issue presents any increased risk to your operations and financial results.	Agreed to revisions in present/future filings: more substantial
WWA Group Inc (WWAG)	*Climate Change Legislation and Greenhouse Gas Regulation,* page 11 7. Please revise your disclosure here and in the risk factor on page 13 to indicate how climate change legislation and greenhouse gas regulation impact your business.	Agreed to revisions in present/future filings: no risk/removed reference
Xylem Inc (XYL)	Please clarify how the weather patterns you note impact demand and your financial results.	Agreed to revisions in present/future filings: one sentence/ statement

Asset Managers: SEC Comment Letter Requests & Responses

Asset Manager	Year	SEC Request	Asset Manager Response
Alternative Investment Partners Absolute Return Fund	2010	Consider whether it is necessary to add any disclosure to each Fund's registration statement to address the impact of SEC Release No. 33-9106, *Commission Guidance Regarding Disclosure Related to Climate Change*.	We acknowledge the comment and have concluded that additional disclosure is not required to be added to each Fund's registration statement to comply with the guidance set forth in the above release.
Consulting Group Capital Markets Funds	2010	In addition to the disclosure requested in comment 14 above, the Staff questioned if the "events" contemplated by the event linked bonds included climate related "triggers" and if so, requested that climate change be added as a risk of the Fund pursuant to the *Commissions Guidance Regarding Disclosure Related to Climate Change*; Final Rule dated February 8, 2010.	The Trust has reviewed the Fund's risk disclosure and believes that the disclosure is accurate and appropriate based on how the Sub-adviser intends to manage the Fund's portfolio.
Fiduciary Claymore MLP Opportunity Fund	2010	Consider whether additional disclosure regarding climate change is appropriate in the Registration Statement.	The Fund has added disclosure regarding risks related to climate change under Risks Energy Sector Risks. 4.
FMI Funds Inc	2010	Please review the prospectus to add disclosure, if applicable, on the markets' overall volatility and climate change risk. Also, please review the prospectus to ensure that any disclosure related to derivatives complies with the guidelines set forth in the Staff's letter on Derivatives-Related Disclosures by Investment Companies dated July 30, 2010 (which provides that a fund should identify any derivatives that the fund uses to a significant extent, and describe the purpose that the derivatives are intended to serve in the portfolio, to enable investors to distinguish which derivatives are encompassed in the principal investment strategies of the fund).	As requested, the Fund has reviewed the prospectus and determined that climate change risk is not a principal or non-principal risk of the Fund, and has determined that the use of derivatives is not a principal investment strategy of the Fund.
Gottex Multi Alternatives Fund I	2010	At an appropriate location in the filing provide the disclosure that may be appropriate under the Commission's recent interpretive release regarding climate change, including regulatory or physical impacts of global warming on companies.	The requested disclosure has been added.
Gottex Multi Alternatives Master Fund	2010	At an appropriate location in the filing provide the disclosure that may be appropriate under the Commission's recent interpretive release regarding climate change, including regulatory or physical impacts of global warming on companies.	The requested disclosure has been added.
Gottex Multi Asset Endowment Fund I	2010	At an appropriate location in the filing provide the disclosure that may be appropriate under the Commission's recent interpretive release regarding climate change, including regulatory or physical impacts of global warming on companies.	The requested disclosure has been added.
Gottex Multi Asset Endowment Fund II	2010	At an appropriate location in the filing provide the disclosure that may be appropriate under the Commission's recent interpretive release regarding climate change, including regulatory or physical impacts of global warming on companies.	The requested disclosure has been added.
Gottex Multi Asset Endowment Master Fund	2010	At an appropriate location in the filing provide the disclosure that may be appropriate under the Commission's recent interpretive release regarding climate change, including regulatory or physical impacts of global warming on companies.	The requested disclosure has been added.
Janus Investment Fund	2011	The Staff asked that the Registrant review the Staff's climate change letter and make any necessary disclosure changes.	The Registrant confirms that it has reviewed the climate change letter, has not made additional changes, but will continue to consider appropriate disclosure as necessary.
Marsico Investment Fund	2010	Consider whether it is necessary to add any disclosure to the Registration Statement to address the impact of SEC Release No. 33-9106, Commission *Guidance Regarding Disclosure Related to Climate Change*.	The Registrant acknowledges the comment, has evaluated its applicability here, and has concluded that additional disclosure is not required to be added to the Registration Statement to comply with the guidance set forth in the above release.

APPENDIX 4

Asset Manager	Year	SEC Request	Asset Manager Response
Morgan Stanley Institutional Fund Inc	2010	Please consider adding risk disclosure regarding the impact of climate change, if applicable, as it pertains to the securities in which the Portfolio invests.	We respectfully acknowledge your comment; however, we believe that the current risk disclosure is adequate.
Prospect Capital Corp	2010	If applicable, please revise this section of the prospectus to address the Commission's recent release providing interpretive guidance on disclosure related to business or legal developments regarding climate change. Indicate to the staff whether the deletion reflects a change in actual policy.	Could not locate relevant correspondence.
Prudential Investment Portfolios 3	2010	Consider recent guidance by the staff of the SEC regarding disclosure relating to climate change.	The Trust reviewed and considered the staff's guidance regarding disclosure relating to climate change in Release No. 33-9106.
Prudential Investment Portfolios 9	2011	Consider recent guidance by the staff of the SEC regarding disclosure relating to climate change	Registrant reviewed and considered the staff's guidance regarding disclosure relating to climate change in Release No. 33-9106.
Prudential Investment Portfolios Inc 14	2011	Consider recent guidance by the staff of the SEC regarding disclosure relating to climate change.	Registrant reviewed and considered the staff's guidance regarding disclosure relating to climate change in Release No. 33-9106.
Prudential Jennison 20 20 Focus Fund	2011	Consider recent guidance by the staff of the SEC regarding disclosure relating to climate change.	The Fund reviewed and considered the staff's guidance regarding disclosure relating to climate change in Release No. 33-9106.
Prudential Jennison Small Co Fund Inc	2010	Please consider whether any disclosure pertaining to the risks posed by climate change are appropriate for the Fund's prospectus or SAI.	We will consider whether any climate change-related disclosure is appropriate, and if so, we will include relevant language.
Prudential World Fund Inc	2011	Consider recent guidance by the staff of the SEC regarding disclosure relating to climate change.	The World Fund reviewed and considered the staff's guidance regarding disclosure relating to climate change in Release No. 33-9106.
Selected Capital Preservation Trust	2010	Expand the discussion of insurance company risks to include long-term climate change.	Agreed
Selected Special Shares Inc	2010	Expand the discussion of insurance company risks to include long-term climate change.	Agreed
TCW Funds Inc	2010	The Fund should consider whether climate change risk disclosure should be added.	The Fund does not believe that climate change will have any material impact on the Fund or its investment portfolio in the foreseeable future and such risk disclosure will not be added.
Tortoise North American Energy Corp	2010	At an appropriate location in the filing provide the disclosure that may be appropriate under the Commission's recent interpretive release regarding climate change including regulatory or physical impacts of global warming on companies. See, Securities Act of 1933 Release No. 9106 (December 16, 2009).	The Fund has added disclosure consistent with the referenced interpretive release.
WorldCommodity Funds Inc	2011	If there is material risk related to climate change, consider adding appropriate disclosure. [SEC Release No. 33-9106, *Commission Guidance Regarding Disclosure Related to Climate Change*] Part B. Item 16 Description of the Fund and its Investments and Risks	Page 5 of the SAI, section captioned "Description of the Fund and its Investments and Risks", sub-caption "Futures", paragraph 5, added new disclosure discussing climate change as below: "The Fund's investments in the energy, agriculture, and metals commodity sectors are subject to risks related to climate change. Climate change affecting weather patterns, if disruptive, may increase the incidence of hurricanes, floods, and droughts. This in turn may disrupt production areas and global consumption patterns causing the fluctuation in prices of commodities in general."

Response of Companhia de Saneamento Basico do Estado de Sao Paulo Sabesp (SBS) to SEC Comment Letter

SEC REQUEST:[1]

"Please tell us what consideration you gave to SEC Release No. 33-9106 in regards to providing disclosures regarding climate change matters. If, upon further consideration, you believe that additional disclosure may be required in future filings, please show us what that disclosure will look like."

COMPANY RESPONSE:[2]

'The Company currently has a risk factor in its Form 20-F entitled "We are subject to cost increases to comply with environmental law requirements and potential environmental liability that could have a material adverse effect on us," addressing, in a general manner, the impact of changes in environmental law.

The Company notes the Staff's comment and, upon further consideration, agrees to revise its disclosure in future filings to address climate changes more specifically by including an additional risk factor in item 3.D. and by providing additional disclosure in item 4.B. of its Form 20-F.

In its future filings, the Company will include the following risk factor in item 3.D.:

"The enactment of new laws and regulations relating to climate change and changes in existing regulation, as well as the physical effects of climate change, may result in increased liabilities and increased capital expenditures, which could have a material adverse effect on us.

As new laws and regulations relating to climate change, including carbon controls, become applicable to us, and as existing environmental regulations relating to climate change become more stringent, it is possible that our capital expenditure for compliance with these laws and regulations will increase substantially in the future. If we increase capital expenditure to comply with these laws and regulations, we may be required to reduce expenditure on other strategic investments.

In addition, if climate change leads to significant physical effects, such as variations in the intensity of droughts and rain, our services may be affected and we may be required, among other things, to: (i) make significant investments in seeking new hydric sources located further from major consumer centers and (ii) make significant investments in new technologies.

The Company does not adopt any method for calculating the investments that would be necessary in the event of a significant physical effect from climate change. Any substantial increase in expenditure related to climate change, whether for compliance with environmental regulations or for preventing or remedying the physical effects of climate change, may have a material adverse effect on us."

1 http://www.sec.gov/Archives/edgar/data/1170858/000000000011005343/filename1.pdf

2 http://www.sec.gov/Archives/edgar/data/1170858/000094787111000038/filename1.htm

and the following disclosure in Item 4.B., in sub item "Environmental Matters":

"Climate Change Regulations: Reduction of Greenhouse Gases (GHG)

We are required to comply with laws and regulations related to climate change, including international agreements and treaties to which Brazil is a signatory.

The São Paulo State Climate Change Policy (Law No. 13,798), enacted on November 9, 2009, seeks to reduce global emissions of carbon dioxide by 20.0% by 2020 compared with 2005 levels. Brazil's Climate Change Policy (Law No. 12,187), enacted on December 29, 2009, establishes a voluntary national commitment to reduce Brazil's currently projected GHG emissions for 2020 by a percentage between 36.1% and 38.9%. If legislation requires us to reduce our emissions, we may do so by transforming biogas from the treatment of sewage into energy, for example, which may lead to potential economic gains.

We have begun significant initiatives, such as the corporate program for water loss reduction and the implementation of small hydroelectric power plants, to reduce GHG emissions during the coming years. We recently launched the Aquapolo project, the fifth largest project in the world to use reclaimed water production for industrial purposes, which uses treated sewage as input. This project, capable of producing 1,000 liters per second (l/s) of reclaimed water, will increase the supply of treated water for the São Paulo metropolitan region and may potentially reduce GHG emissions. Our investments in the Aquapolo project amounted to approximately R$252 million. We are also in the process of hiring consultants to develop a management program for GHG emissions. The project also includes studies of impacts and risks related to climate change and the study of potential scenarios based on our emissions of GHG.

At this point, it is still not possible to predict if climate change policies will provide opportunities or generate new costs for us. Reducing our emissions of carbon dioxide will involve costs and expenses in implementing more stringent control mechanisms, adopting pollution prevention measures and actions to minimize the generation of GHGs. We may not receive financial incentives to offset all or part of these costs. In addition, if limitations in GHG emissions affect our supply chain, we may need to pass on the costs for reducing these emissions to our end consumers.

Regulation of GHG emissions could also benefit us in the short term, since we may be able to obtain subsidies, financial investments and tax incentives for projects to protect and restore water sources, conserve water, treat sewage, conserve energy, increase energy efficiency, and promote self-generated energy, among other projects that seek to reduce the impact of climate change.

On December 2010, the Company adhered to the Carbon Disclosure Project—CDP Supply Chain 2011. The project seeks to encourage the adoption of a standard methodology by our main suppliers of goods and services to measure risks related to climate change and GHG emissions.

Physical Effects of Climate Change

Since our financial performance is closely linked to climate patterns, extreme weather conditions may adversely affect our business and operations. If long-term climate change causes significant alterations in environmental conditions, such as an increase in the frequency of extreme weather conditions, this could affect the quality and quantity of water available for abstraction, treatment and supply, affecting the costs of services and tariffs.

An increase in heavy rainfall can impact water quality and the regular operation of water sources, including abstraction of water from our dams, through increased soil erosion, silting, pollution and eutrophication of aquatic ecosystems. In addition, increased flows of rainwater

into sewage systems may overwhelm the capacity of sewage treatment plants. We may need to build larger reservoirs, since it is not feasible to increase the size of our existing reservoirs, or increase operational capacity by further automating our existing equipment. To increase automation, we would need to purchase and operate tools to measure dam levels and volumes, river output and the rain in hydrographic basins, create mathematical models for real time operations, and train technicians to operate these systems. As an alternative, we may be able to implement new production systems.

In the case of prolonged periods of drought, for example, reduced water levels in dams can cause an increase in the concentration of plant matter by increasing eutrophication and, consequently, increasing water treatment costs and operational complexity. In addition, prolonged periods of drought in watersheds such as the São Paulo metropolitan region, where most of our production is concentrated, may result in the growth of vegetation in the reservoir flooding areas, which can impact water quality due to the accumulation of organic matter. In such cases our production costs may increase, affecting our financial margins and the quality of water we produce. Droughts also lower reservoir levels available for hydroelectric plants, which may lead to power shortages, particularly since hydroelectric power accounts for most of Brazil's electric energy supply. A lack of rainwater could lead to instability in domestic water supplies and in sewage collection and treatment services, which could damage our reputation. In addition, because we are one of the largest consumers of electricity in the State of São Paulo, a potential increase in electricity tariffs due to a shortage of hydroelectric power could have a significant economic impact on us.

We are also the concessionaire for water and sewage services for all the coastal municipalities of the State of São Paulo. A rise in the sea level would result in increased salinity of water supplies further inland, which may affect water treatment in these areas. Rising sea levels may also increase infiltration rates and alter the runoff regime of the sewage systems, which may affect the sanitary system.

Extreme climate changes may also affect the extraction, production and transportation of the materials necessary for our operations, such as treatment materials, and may lead to an increase in the cost of these materials. A rise in air temperature could also increase consumer demand for water, increasing the need to expand both water supply and sewage treatment.

See "Item 3.D. Risk Factors—Risks Relating to Our Business—The enactment of new laws and regulations relating to climate change and the change in existing regulation, as well as the physical effects of climate change, may result in increased liabilities and increased capital expenditures, which could have a material adverse effect on us."'

ABOUT THE AUTHORS

Jim Coburn is an attorney and senior manager at Ceres, where he directs efforts to improve mandatory corporate disclosure of sustainability risks and opportunities. He has collaborated with investors since 2003 to improve climate risk disclosure in financial filings, leading to SEC interpretive guidance on the subject in February 2010. He has managed a number of reports evaluating companies' governance, performance and reporting related to climate change. He is co-author of *Disclosing Climate Risks & Opportunities in SEC Filings: A Guide for Corporate Executives, Attorneys & Directors* and *Sustainable Extraction? An Analysis of SEC Disclosure by Major Oil & Gas Companies on Climate Risk and Deepwater Drilling Risk*, and is a member of the Sustainability Accounting Standards Board's Standards Council.

Jackie Cook is a specialist in corporate ESG disclosure analysis and author of research reports and academic articles on shareholder activism, corporate governance and mutuality. As a Senior Research Associate for The Corporate Library (now GMI) she co-invented the Director Interlocks Tool. She founded the Fund Votes project which holds the largest and most current indexed repository of institutional investor proxy voting. Operating as CookESG Research, Jackie developed proprietary tools for analyzing and representing large volumes of narrative corporate disclosures in various ESG domains, including climate change. Jackie has worked for governmental, academic, advocacy and commercial organizations in delivering ESG-related research and analytical data solutions.

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