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2016 Annual Meeting & Conference
June 7-8, 2016
Washington, DC
PROGRAM AGENDA

The Energy Bar Association Environmental Regulation committee presents a program on climate risks.

With the probe into whether corporate executives have misled investors on climate risks, this panel will address Board room due diligence and the requirements for informing stockholders on climate change and climate risks in business activities.

Moderator:
Thomas Mounteer, Environmental and Energy Practice, Paul Hastings

Panelists:
Elizabeth Lewis, Sustainable Investment Lead, World Resource Institute
Kevin Ewing, Partner, Bracewell & Giuliani
Leah Dundon, Of Counsel, Beveridge & Diamond

This was approved for 1.0 hours in VA, CA and NY.
Refresher on Environmental Disclosure Basics

The 1933 and 1934 Acts that followed the 1929 crash require honest and fair disclosure by public companies. Sarbanes-Oxley requires corporate controls and procedures to ensure disclosure integrity. Disclosure rules that apply to environmental issues fit within a framework of rules covering all subjects.

- SEC Regulation S-K addresses:
  - Compliance and investment affecting the business (Item 101)
  - Legal proceedings (Item 103)
  - Known trends and uncertainties that could reasonably prove material (Item 303)
  - Risk factors that make an offering speculative or risky (Item 503)

- Item 101 requires a description of the overall business
  - Must recognize the material effects that complying with environmental laws may have on the expenditures, earnings or competitive position of the company or its subsidiaries
  - Must disclose material estimated capital expenditures for environmental control facilities, for the current and following years and for further years as the company deems material

- Item 103 requires discussing material pending legal proceedings, but not ordinary routine litigation
  - A proceeding under environmental law is not ordinary routine litigation and must be described if the government is a party and it involves potential monetary sanctions, unless the company reasonably believes monetary sanctions will be less than $100,000

- Item 303 requires a narrative discussion of historical results and future prospects
  - Emphasis on management’s view of the company’s current position in relation to past and anticipated future performance
  - Must discuss trends, demands, commitments, events and uncertainties materially affecting liquidity, capital resources or results of operations; SEC requires a two-part test:
    - Is the trend or uncertainty likely to come to pass?
    - If yes or unknown, the company must discuss it, unless management concludes that a material effect is not reasonably likely if it did indeed come to pass

- Sarbanes-Oxley requires controls and procedures designed to prevent a misstatement of the company’s position. CEOs and CFOs must periodically certify that they are in place.

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1 This page is by no means comprehensive, nor is it intended to provide any legal advice.
Understanding Climate Change Risks and Disclosure Obligations in an Age of Uncertainty

Energy Bar Association
March 17, 2016
Washington, D.C.

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Table of Contents

I.  Introduction .................................................................................................................................................. 1
II. Disclosure of Climate Risks and Opportunities .......................................................................................... 3
    A.  Climate Change Risk as a Business Issue .............................................................................................. 3
    B.  Interpretative Guidance on Disclosure Related to Climate Change ...................................................... 4
        1.  Background ........................................................................................................................................... 4
        2.  Commission Guidance ........................................................................................................................ 4
    C.  Trends in Reporting and Enforcement .................................................................................................... 5
        1.  Enforcement ........................................................................................................................................... 5
            a.  SEC .................................................................................................................................................... 5
            b.  Shareholder Proposals and State Enforcement ............................................................................. 7
            c.  SEC Rule 10b-5 and Section 18(a) of the 1934 Act .................................................................. 10
        2.  Examples of Climate Risk Disclosures on Form 10-K and 10-Q .................................................... 11
III. The SEC’s Guidance with respect to the physical risks of climate change may be problematic .......... 12
IV.  Practical Tips ............................................................................................................................................... 15
SUMMARY

In 2010 the Securities and Exchange Commission (“SEC”) issued interpretive guidance regarding required disclosures by companies of their climate change related risks. The Guidance identified four Items under Regulation S-K that may require climate-risk disclosure and four areas companies should evaluate that are most likely to trigger reporting of climate-related risks under those Items. Since 2010, some investor groups and members of Congress have criticized the SEC for failing to “enforce” the guidance, but there are strong indications that the SEC has no current plans to prioritize climate risk disclosure or take additional steps with respect to the guidance. However, the New York State Attorney General has taken a leading role in climate risk disclosure enforcement and has obtained settlements from major energy companies that require increased climate risk disclosure, without imposing fines or penalties. Companies should continue to watch developments in this area, particularly with respect to domestic and international laws that may impact their businesses in the wake of the Paris climate-change agreement. Additionally, because companies now make statements regarding climate risk across many channels, they should carefully assess the consistency of such disclosures. This paper presents an overview of the SEC’s guidance, recent developments, and tips for companies considering disclosures related to climate risks and opportunities.

DISCUSSION

I. INTRODUCTION

It can be argued that there are few other topics in science that have as many concerted efforts directed to better understanding it than the issue of climate change. Despite this, or maybe because of it, there is such a plethora of misinformation, pseudo-science, and even well-meaning and honest misunderstandings regarding what the climate science tells us, that it is not surprising that the average person – even a sophisticated investor or company – has difficulty obtaining, understanding, and using meaningful climate data when faced with making decisions regarding climate risks. Major cities and governments around the world are currently diligently grappling with understanding what plausible risks are posed by climate change and assessing vulnerabilities. Some risks posed by climate change, or laws addressing climate change, are certainly real and can and will affect the bottom line of many companies (some positively and some negatively), but other climate risks are much less well understood. Assessing and evaluating those risks in a way that is meaningful to investors, in the context of time scales that are linked -- in the world of the Securities and Exchange Commission and stock market performance – to quarterly financial statements can be more than challenging.

Obligations to disclose “material”1 environmental risks and liabilities in annual and quarterly reporting forms submitted to the SEC, while often complex, are not new, and are found

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1 A fact is “material” and must be disclosed “if there is a substantial likelihood that a reasonable shareholder would consider it important... Put another way, there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of information made available.” TSC Industries, Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976). “[I]f something has a material impact on a company then it is something
primarily in Regulation S-K. This regulation requires companies to report on numerous environmental risk factors, including the costs of complying with environmental laws, certain pending legal proceedings, certain significant risk factors, and prospects for the future, including “known trends, events, demands, commitments and uncertainties that are reasonably likely to have a material effect on financial condition or operating performance.”

Despite the established environmental disclosure framework, certain investor groups, various state comptrollers and treasurers, the New York State Attorney General (“NYAG”), and some members of Congress have called on the SEC to issue additional guidance specific to disclosure of climate change risks. After mounting pressure, in 2010 the SEC issued Commission Guidance Regarding Disclosure Related to Climate Change to “provide clarity and enhance consistency” on disclosure requirements “as they relate to business or legislative events on the issue of climate change.” The Guidance identified four areas of climate change risk that may trigger reporting under the existing requirements in Regulation S-K:

(1) the impact of legislation or regulations,
(2) the impact of international accords,
(3) the indirect consequences of regulation or business trends, and
(4) the physical impacts of climate change.

Importantly, the SEC clarified that the Guidance did not impose new disclosure obligations and that disclosure of climate change risks or opportunities falls comfortably within existing standards for determining which risks or opportunities must be disclosed.

Since issuing the guidance, the SEC has not taken an aggressive stance on seeking more from reporting companies, despite many calls from some investor groups for it to do so. There are also strong indications that the SEC will not be changing this approach any time soon. However, the New York Attorney General, using a very broad state anti-fraud statute, has pursued investigations into companies it believes may have failed to adequately disclose the risks posed by climate change and has secured settlements from major energy companies requiring modified disclosures but imposing no fines or penalties.

This paper outlines the major disclosure obligations related to climate risk, discusses the state of the science and its ability to support climate change risk analyses by corporations, and

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that needs to be disclosed — that has always been the case.” (Speech by SEC Chairman: Statement Before the Open Commission meeting on Disclosure Related to Business or Legislative Events on the Issue of Climate Change, January 27, 2010).

1 17 C.F.R. § 229

2 17 C.F.R. § 229


5 Speech by SEC Chairman: Statement Before the Open Commission meeting on Disclosure Related to Business or Legislative Events on the Issue of Climate Change, January 27, 2010.
provides some suggestions for companies considering climate related disclosure in both voluntary and mandatory filings.

II. DISCLOSURE OF CLIMATE RISKS AND OPPORTUNITIES

A. Climate Change Risk as a Business Issue

Companies face a number of regulatory, economic, and competitive risks from climate change. Regulatory risks include new laws aimed at mitigating the impact of climate change, such as those that seek to curb greenhouse gas (“GHG”) emissions and which are likely to impose new costs or compliance obligations on companies. EPA’s Clean Power Plan (“CPP”), implementation of which was recently stayed by the United States Supreme Court pending outcomes in the lower court, is an example of a climate related law that could have substantial impacts – both risks and opportunities – for many companies. Laws that target GHG emissions are likely to have the largest impacts on the largest emitters. Laws or regulations also may place indirect pressure on a company through increased fuel or electricity costs, shifts in product demands, or impacts on supply chains. A shift to a lower carbon economy will almost certainly create opportunities for renewable energy companies and will create more risks for fossil-fuel dependent companies. This has already played out in the market with the massive drop in the stock prices of many coal companies and numerous bankruptcies.6

Economic risks include the physical risks from climate change, such as impacts from an extreme weather event to operations, major assets, support infrastructure, or critical labor shortages. Drought, floods, or changing precipitation patterns that impact supply chains or critical inputs, such as fresh water or crop viability can also have substantial impacts on a company’s operations. Melting permafrost is a particular challenge to energy companies with pipelines in some areas of the Northern Hemisphere. Permafrost melt is a risk with potential to severely impact pipelines – warping and ultimately breaking them.7

A world with a changing climate may also see increased competition for resources which become scarcer. Companies that are better positioned to adapt to the impacts – regulatory, physical, or otherwise – are more likely to succeed and even thrive in a changing world. Finally, many companies will want to leverage their management of climate-related risks and opportunities to enhance, not damage, their reputations.

Risk is traditionally viewed as the likelihood of an impact times its consequences.8 Determining which risks are “material” and must be disclosed in SEC annual or quarterly filings can be a challenging task, perhaps most especially with respect to the physical impacts of climate change on a company’s operations.

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6 “Mining’s $1.4 Trillion Plunge Like Losing Apple, Google, Exxon,” Thomas Biesheuvel, January 7, 2016, BloombergBusiness. Importantly, low prices of natural gas have also played a large role in coal’s price drop.
B. Interpretative Guidance on Disclosure Related to Climate Change

1. Background

The Securities Act of 1933 and the Securities and Exchange Act of 1934 require that publicly traded companies disclose certain information to the public on periodic reports submitted to the Securities and Exchange Commission (SEC), notably annual reports on form 10-K and quarterly reports on form 10-Q. Required disclosures associated with environmental risks are primarily found in Regulation S-K and have a long history dating back to the 1970’s.\(^9\) Since approximately 2005, Ceres, a non-profit investor advocacy group for sustainable business, has spearheaded an effort aimed at increasing disclosure of climate related risks in SEC filings. In 2007, Ceres, along with a coalition of twenty-two major investor groups, pension fund managers, various state treasurers and comptrollers, NGO’s, and the New York Attorney General, petitioned the SEC seeking interpretative guidance on climate change risk disclosure in SEC filings.\(^10\) Also in 2007, numerous climate change bills were introduced in Congress, all of which contained provisions requiring the SEC to issues rules related to disclosure of climate risk.\(^11\)

In the same year, the New York State Attorney General (“NYAG”) issued subpoenas to five companies (four fossil fuel companies and one utility provider) under a broad state anti-fraud law to investigate the adequacy of the companies’ disclosures regarding the risk of climate change. The NYAG has since settled with four of these companies, requiring modifications to disclosures but not imposing any fines or penalties. Importantly, two of the companies had made statements in forums outside of SEC filings that were specifically referenced by the NYAG in the Assurance of Discontinuance, the instrument through which the NYAG resolves the investigation. In November 2015, the NYAG issued a similar subpoena to another major global oil company, which investigation is still ongoing.

In 2008 Congress became involved when the U.S. Senate Appropriation Committee issued a report “encouraging” the SEC to consider the 2007 Ceres petition and issue climate-risk disclosure guidance. In 2010, the Commission did so, by a 3-2 vote.

2. Commission Guidance

The 2010 Guidance, and statements made by SEC Chair Mary Schapiro, clarify that the guidance was not intended to impose new requirements or modify existing laws. The SEC Chair explained that the substance of the guidance was not surprising or new: “if something has a


material impact on a company, then it is something that needs to be disclosed, that has always been the case."\textsuperscript{12}

The Guidance identified the “most-pertinent” non-financial disclosure rules that may require disclosure of climate related risks: Item 101, Item 103, Item 303, and Item 503(c) of Regulation S-K.\textsuperscript{13} The Guidance then lists four areas where a company’s reporting obligations may be triggered by these rules.\textsuperscript{14} These are:

1. **The impact of legislation or regulation**
   The SEC advised registrants to consider specific risks faced as a result of climate change legislation or regulations and avoid generic risks. In the case of “known uncertainties,” the guidance sets forth a two-step process to assessing disclosure obligations, set forth in Figure 2 below.

2. **The impact of international accords**;
   The SEC included treaties or international accords, and specifically referenced the European Union’s Emissions Trading System (EUETS) and the Kyoto Protocol and “other international activities.” The Guidance went further to state that companies “reasonably likely” to be affected by international accords “should” monitor international law developments and assess possible impacts.

3. **The indirect consequences of Regulation of Business Trends**;
   The SEC highlighted change in demand for existing or new products, such as products that produce significant GHG emissions, increased demand for renewable resources, and decreased demand for fossil fuel support services (such as drilling equipment); and

4. **Physical Impacts of Climate Change**
   These risks include extreme weather events with the “potential to affect” a company’s operations and bottom line. Companies with operations in vulnerable areas (such as in floodplains or on coasts) or companies whose insurance premiums may see a material increase as a result of climate change may consider disclosure of these risks.

C. Trends in Reporting and Enforcement

1. Enforcement

   a. SEC

   Since the issuance of the Guidance, the SEC has been criticized by some investor groups and members of Congress for “lax” review and enforcement of climate related disclosures in


\textsuperscript{13} Additionally, Rule 10b-5 prohibits fraud in securities transactions and applies to transactions involving private securities as well.

\textsuperscript{14} 75 Fed. Reg. 25, 6295-96.
SEC filings.¹⁵ Ceres has been reviewing and evaluating company climate-change related disclosures and continues to press the SEC for greater review and enforcement and is urging its investor groups and other affiliates to do the same.¹⁶ The organization “scores” climate-risk disclosures and takes the view that both the quantity and quality of climate risk disclosures by publicly traded companies is steadily decreasing, after a brief uptick in 2010 after the SEC’s Guidance.¹⁷

Despite this continued pressure, there is good evidence that the SEC will not be increasing review of climate related disclosures or doing more than it is doing now. A recent United States Government Accountability Office (“GAO”) examination concluded as much, citing SEC staff comments regarding changing circumstances and changing SEC priorities since issuing the 2010 Guidance: “the agency has no plans to specifically determine if additional actions related to disclosure of climate-related risks are necessary or appropriate . . . .”¹⁸

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¹⁵ In 2015, thirty-five members of congress wrote to SEC Chair Mary Jo White seeking greater enforcement of the 2010 guidance. See Letter from Congress to SEC Chair May Jo White, October 29, 2015 (“[w]e are concerned about the level of scrutiny the SEC is utilizing to robustly and effectively enforce this guidance.”). The New York State Comptroller and New York City Comptroller wrote a similar letter in April, 2015, urging SEC action with respect to fossil fuel company disclosures. See Letter from New York State and New York City Comptroller to SEC Chair Mary Jo White, April 17, 2015. On the same day, acting through Ceres, a group of institutional investors representing over $1.9 trillion in assets asked the SEC to “closely scrutinize oil and gas companies’ reporting on carbon asset risks under existing SEC rules” and argued that current disclosures by particular oil and gas companies were inadequate. See Letter from Ceres to SEC Chair Mary Jo White, April 17, 2015.

¹⁶ Section 408 of the 2002 Sarbanes-Oxley Act requires the SEC’s Division of Corporate Finance to review every company’s filings at least once every three years; review of some company filings occur more frequently and more thoroughly through the selective review process, and the scope and depth of the review depends on many factors. See Filing Review Process, United States Securities and Exchange Commission, Division of Corporate Finance, available at https://www.sec.gov/corpfin/Article/filing-review-process---corp-fin.html. If the SEC determines that a company “can improve its disclosure or enhance its compliance,” it may issue a “Comment Letter” to the company, to which the company generally responds by letter, and if appropriate, modifies its filings. Id. Although SEC staff have stated that the agency does not track comment letters, Ceres has reported that the SEC issued 38 climate change related comment letters in 2010, 11 in 2011, 3 in 2012, and none in 2013. See Reducing Systemic Risks: The Securities & Exchange Commission and Climate Change, Ceres, February 2014, available at http://www.ceres.org/files/investor-files/sec-guidance-fact-sheet. Additionally, reviews are completed through eleven separate offices that have expertise in reviewing specific industries, and have “developed expertise with regard to expected disclosure items in a particular industry, including climate-related disclosure.” USGAO Report: “Supply Chain Risks: SEC’s Plans to Determine if Additional Action is Needed on Climate-Related Disclosures Have Evolved,” p.17, January 2016.


¹⁸ United States Government Accountability Office Report to the Honorable Matthew Cartwright, House of Representatives, Supply Chain Risks: SEC’s Plans to Determine if Additional Action Is Needed on Climate-Related Disclosure Have Evolved (“GAO Report”), p.22, January 2016. The GAO reported SEC staff comments that climate-related risk disclosure could be raised in its on-going “disclosure effectiveness project” or from the Office of the Investor Advocate which proposes changes to the SEC to
Indeed, of the three planned agency actions set forth in the 2010 Guidance ((1) monitor the impact of the release on company filings through the regular review process, (2) consider climate-change disclosure through the Investor Advisory Committee, and (3) hold a public roundtable discussion on climate change disclosure), the SEC only acted on the first, and action on the other two is unlikely.

In response to Congressional requests, the SEC completed the first task through two reviews in 2012 and 2014 respectively. According to the GAO Report, the SEC reviewed the filings of approximately 60 companies and found that most of these companies included some level of risk factor disclosure in their annual reports concerning climate change-related matters or greenhouse gas regulations. Furthermore, SEC staff did not find significant year-to-year changes in the disclosure of companies from the year before the 2010 Guidance and the year after.

This lack of significant change after the 2010 Guidance could be interpreted as evidence that companies were already appropriately applying the materiality standard to determine what risks or opportunities required disclosure.

The second and third tasks identified in the 2010 Guidance have not been initiated and it is doubtful they will be. SEC staff cited the fact that climate-related legislation is no longer being considered and SEC priorities have shifted to addressing mandates under the 2010 Dodd-Frank Wall Street Reform Act and the 2012 Jumpstart Our Business Startup (JOBS) Act. The Investor Advisory Committee slated to undertake the third task was disbanded soon after issuance of the 2010 Guidance and with new membership in a newly formed committee, “the issue of climate change disclosure has not risen to the level of importance in the committee that other issues have . . . .”

b. Shareholder Proposals and State Enforcement

Although increased SEC activity is unlikely in the near term, companies are addressing pressure from other channels, in particular shareholder proposals and investigations by the NYAG.

“promote the interests of investors,” but neither the SEC nor the Investor Advocate currently has plans to focus on climate-related risks. Id. at 22-23.
21 Id., note 18.
22 “SEC Staff are not aware of any current plants to take action on the remaining two items . . . .” GAO Report at 21.
23 GAO Report at 21 (as of November 2015, “SEC has finalized 63 rules of the 94 total rulemaking requirements for the SEC in the [Dodd-Frank] act.)
24 GAO Report at 22.
Shareholder proposals on climate related issues in general, and those focused on disclosure, are increasing. In a move surprising some, BP and Shell recently recommended approval of shareholder proposals seeking increased climate risk disclosure. Shareholders withdrew similar proposals to Exxon-Mobil in exchange for Exxon’s issuance in March 2014 of two climate risk reports: “Energy and Carbon – Managing the Risks” and “Energy and Climate” addressing the risk of “stranded assets” in a carbon constrained world as well as opportunities from its natural gas production. Ceres criticized Exxon’s analysis in its April 2015 letter to the SEC, and Exxon currently is facing new shareholder proposals aimed at requiring Exxon to publish annual evaluations of long term impacts to the value of its reserves from climate change policies aimed at achieving a less than 2°C global temperature rise.


27 The reports are available at http://cdn.exxonmobil.com/~/media/global/files/energy-and-environment/report---energy-and-carbon---managing-the-risks.pdf and http://cdn.exxonmobil.com/~/media/global/files/energy-and-environment/report---energy-and-climate.pdf. The issue of “stranded assets,” refers to assets that substantially impact a company’s value that may become devalued or worthless if laws are passed which prevent the company from utilizing those assets. The term was used shortly after the IPCC issued its report recommending climate stabilization goals of a maximum 2°C rise to avoid the most catastrophic consequences of global warming. To have any chance of reaching this goal, the total amount of CO₂ that can be released into the atmosphere must be limited given CO₂’s exceptionally long atmospheric lifetime. The International Energy Agency has estimated that approximately $304 billion in assets across the power, oil and gas, and (to a lesser extent) coal industries could be “stranded” if policies cap CO₂ concentrations at 450ppm in support of achieving a less than 2°C rise, with a larger risk if polices are not clear and even more investment is made in assets that ultimately cannot be used. See International Energy Agency, Special Report on World Energy Investment Outlook, p.43, 2014, available at http://www.iea.org/publications/freepublications/publication/WEIO2014.pdf.


29 See Letter of intent to exclude shareholder proposal from proxy materials from Louis Goldberg to Securities and Exchange Commission, January 22, 2016. On a related note, the Department of Justice recently forwarded to the FBI for initial fact finding and a potential investigation an earlier request from two Congressman that Exxon be investigated to determine if it engaged in deceptive practices with respect to its knowledge of climate change. See “Justice Department Refers Exxon Investigation Request to FBI” by D. Hasemyer, Inside Climate News, March 2, 2016.
Some states are also looking at ways to increase climate risk disclosure, especially by major energy companies. Using a broad state law known as the Martin Act, the NYAG has issued six subpoenas to major companies in the energy sector to investigate the adequacy of their climate risk disclosures in SEC filings -- five in 2007 and one in November 2015. Settlements were reached with all but two of the companies to date, requiring the companies to modify disclosures but imposing no fines or other penalties.

The settlements reached by the NYAG are important because they highlight the broad reach of the Martin Act, but also the importance of consistency between what is stated in SEC filings and the many other forums in which companies voluntarily or otherwise make disclosures. The Martin Act is a broad securities and investment anti-fraud law providing for very limited judicial review of the AG’s discretion and requires no showing of intent to defraud. Accordingly, it gives significant power to the NYAG to initiate and pursue investigations, and gives New York a driver’s seat among state efforts to act on climate risk disclosure.

Companies today are making a myriad of disclosures through many forums in addition to SEC filings. Companies need to take note of the many areas where information related to climate change (or other) risks are being communicated and assure that statements made in SEC filings are not omitting material information. Companies now often make disclosures with respect to climate change risks and opportunities on their web-sites, in sustainability reports, on social media, in statements to foundations, in permit applications, marketing materials, in internal newsletters, to the numerous voluntary reporting agencies that seek climate-related data from corporations (such as the Carbon Disclosure Project (“CDP”)), Ceres, or the Global Reporting Initiative (“GRI”), or to satisfy other mandatory reporting requirements (such as pursuant to EPA’s GHG reporting rule or laws in other countries such as the EUETS, the EU

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32 The 2007 subpoena was issued to Xcel Energy, Dynegy, AES, Dominion Energy, and Peabody Coal. Only Dominion has not yet finalized a settlement agreement. ExxonMobil received the 2015 subpoena.

33 For example, the Carbon Disclosure Project issues an annual survey on climate change risk to companies on February 1 and survey responses are due by June 30. Companies can choose to have their responses made public or keep it private for CDP use. One of the questions companies are asked to respond to is “Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? (Tick all that apply): Risks driven by changes in regulation; Risks drive by changes in physical climate parameters; Risks Driven by changes in other climate related developments.” CDP’s 2016 Climate Change Information Request, available at [https://www.cdp.net/CDP%20Questionnaire%20Documents/CDP-Climate-Change-Information-request-2016.pdf](https://www.cdp.net/CDP%20Questionnaire%20Documents/CDP-Climate-Change-Information-request-2016.pdf). Although the definition of “materiality” drives needed climate risk disclosure in SEC filings, it may be difficult to argue that a climate risk identified in response to a CDP survey as likely to generate a “substantive change” to the business is not material for purposes of SEC reporting.

34 In its settlement with Xcel, the NYAG specifically referenced Xcel’s disclosures made in response to the CDP survey.
Transparency Directive, or the U.K’s 2008 Climate Change Act.\(^{35}\) Consistency is important so that a statement or omission made in SEC filings is not materially misleading in light of these additional statements. Indeed, inconsistency between statements made by companies in SEC filings and other forums appears to be the primary issues motivating many of the NYAG’s investigations.\(^{36}\)

Finally, the vast jurisdictional reach that the NYAG is assuming under the Martin Act is highlighted by its investigation of Xcel Energy. Xcel is not a New York Company and does not conduct business in New York; the disclosures targeted by the NYAG related primarily to a coal-fired power plant Xcel was constructing in Colorado. The NYAG premised jurisdiction on the New York State Common Retirement Fund’s holdings in Xcel and Xcel’s issuance of securities on the New York Stock Exchange, a stance that would presumably give the NYAG jurisdiction over thousands of companies.\(^{37}\)

c. SEC Rule 10b-5 and Section 18(a) of the 1934 Act.

Although there have not yet been private lawsuits related to disclosure of climate change risks, companies should be aware of the potential for liability under Section 18(a) of the 1934 Act and SEC Rule 10b-5. Section 18(a) is a relatively infrequently invoked provision that provides a private cause of action to a person who purchases or sells a security in actual reliance on a materially false or misleading statement made in certain documents filed with the SEC where the misleading statements affected the security’s price.\(^{38}\) In part because Section 18 does not require a showing of any intent to deceive, it is possible that this section may be tested in the climate risk disclosure context, in particular by institutional investors. However, an affirmative defense to any such claim is that the defendant “acted in good faith and had no knowledge that such statement was false or misleading.”\(^{39}\) The content of the many disclosures made outside SEC filings could therefore become relevant in efforts to avoid Section 18 liability.

SEC Rule 10b-5 issued pursuant to Section 10(b) of the 1934 Act provides liability for material misstatements or omissions in securities transactions made with intent and on which the plaintiff relied.\(^{40}\) Again, voluntarily disclosures and statements made in SEC filings should be consistent to avoid the possibility of 10b-5 liability. Companies in the private sector are not immune, as Rule 10b-5 governs fraud in both public and private securities transactions.

\(^{35}\) Directive 2004/109/EC.
\(^{37}\) See e.g., “Climate Change Risk Disclosure Current Practices and Possible Changes Briefing Paper,” University of North Carolina, School of Law, Center for Law, Environment, Adaptation and Resources.
\(^{40}\) 15 U.S.C. § 78j(b); 17 C.F.R. § 240.10b-5.
Climate risk disclosure presents a unique and potentially difficult challenge to strike the right balance between highlighting climate change opportunities and identifying material risks while avoiding misleading statements or omissions.

2. Examples of Climate Risk Disclosures on Form 10-K and 10-Q

Climate changes laws or regulations, domestic or international, are no different from other environmental regulations or statutes that regulated companies routinely need to monitor. A cursory review of the disclosures made in some SEC annual or quarterly reports by major energy sector companies reveals various approaches to addressing climate related legislation or rule-makings. For example, near the end of the 2000s when several climate change bills were pending in congress, many companies with high GHG emissions identified these bills in their annual reports, indicated their inability to predict the chances of their enactment, but described how emissions limits could impact business by requiring substantial capital investments in control technologies, restrict production of their product, limit demand, or otherwise impact the price of critical supplies. Some companies also identified ways in which their businesses may be more competitive in a carbon constrained regime, such as by emitting less CO\textsubscript{2} than is permitted under a CO\textsubscript{2} emission allowance pursuant to the EU’s ETS (enabling the company to profit from the sale of additional allowances or save money by not having to purchase additional allowances).

EPA’s Clean Power Plan is probably the most recent proposed regulation that could substantially impact many companies in the U.S. Some high GHG emitting companies describe the plan in detail in SEC filings, indicate there will likely be an increase in operating costs to comply, but state they are unable to estimate the costs. At least one utility provider disclosed in SEC filings that it had selected and uses the Climate Registry’s standards for calculating GHG emissions, and identified as a risk that future laws may not provide credit for already substantial investment in GHG reductions.

With respect to physical risks from climate change, some companies provide more general statements of risk, such as indicating that operations may be at risk from events such as floods, hurricanes, sea level rise or severe weather but noting that the company cannot predict the severity or timing of such events. Some manufacturing companies have identified commodities critical to their product that could be negatively impacted by climate change, such as fresh water.

The most recent settlement with Peabody Energy Corporation is instructive regarding company statements with respect to uncertainty in projecting impacts and company decisions to project impacts from various scenarios. Peabody stated in SEC annual reports that demand for coal may be restricted by climate-related laws or rules but that it could not reasonably predict the impact to the company. By contrast, the NYAG argued that Peabody had made internal projections of “severe negative impact” based on aggressive scenarios of potential regulation.\textsuperscript{41}

The NYAG also accused Peabody of potentially misleading investors by relying on more favorable scenarios for future coal demand issued by the International Energy Agency, and not disclosing other less favorable scenarios.\textsuperscript{42}

\section*{III. THE SEC’S GUIDANCE WITH RESPECT TO THE PHYSICAL RISKS OF CLIMATE CHANGE MAY BE PROBLEMATIC}

Substantial work by many scientists all over the world has resulted in a strong, well-developed body of research uncovering multiple sources of supporting evidence that the earth’s climate is warming and that the warming is caused by human factors, notably the release of carbon dioxide into the air from burning fossil fuel, but also from changing land use patterns such as deforestation.\textsuperscript{43} Major U.S. and international oil and gas companies have publicly stated their agreement with these basic facts, and some have even shown support for a carbon-tax as a means to reduce emissions.

The evidence for a projected increase in global average temperatures is very strong. There is also very strong evidence that extreme heatwaves are increasing in both frequency and intensity, that the cause of this increase is human-induced climate change, and that the future will see an increase in both the frequency and intensity of heat waves.\textsuperscript{44} However, with respect to virtually all other types of extreme weather events the evidence becomes much less conclusive, raising important implications for the SEC’s guidance that companies disclose material risks from the physical impacts of climate change.

Even with respect to extreme events which we know are likely to increase, such as heat waves, global climate models and their projections are most accurate on a global or hemispheric scale. As one “downscales” to more regional and local areas the reliability of any climate projections become increasingly suspect. From the perspective of a company trying to better understand potential impacts from climate change, this is perhaps one of the most difficult aspects of assessing whether a risk exists at all, let alone whether it is a material risk. This gap between the scale of reliable climate data and the needs of companies, planners, risk managers and others impacted by extreme weather events on a local scale is one that still needs bridging. Indeed, the seriousness of this gap with respect to infrastructure design prompted the American Society of Civil Engineers (ASCE) to issue a paper in 2015, stating “even though the scientific community agrees that climate is changing, there is significant uncertainty about the location, timing and magnitude of the changes over the lifetime of infrastructure.”\textsuperscript{45}

\begin{flushleft}
\textsuperscript{42} Id.
\end{flushleft}

\begin{flushleft}
\textsuperscript{43} Perception of Climate Change, James Hansen, Makiko Sato, and Reto Ruedy, Proceedings of the National Academy of Sciences, March 29, 2012; Climate Change 2014, Synthesis Report, IPCC 5\textsuperscript{th} Assessment Report, Summary for Policy Makers. Deforestation releases the stored carbon in the trees and removes a carbon dioxide “sink.”
\end{flushleft}

\begin{flushleft}
\textsuperscript{44} Special Report of the Intergovernmental Panel on Climate Change: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation, Summary for Policy Makers, IPCC 2012 (“IPCC SREX”).
\end{flushleft}

\begin{flushleft}
\textsuperscript{45} Adapting Infrastructure and Civil Engineering Practice to a Changing Climate, American Society of Civil Engineers (ASCE), 2015, Committee on Adapting to a Changing Climate.
\end{flushleft}
The table below sets forth a simplified view of the strength of the evidence with respect to our understanding of observed changes in extreme weather events and projected changes in these events to the end of the century (specifically the types of events listed in the 2010 Guidance), taken from the IPCC’s Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (IPCC SREX), considered the foremost scientific authority on climate change:

<table>
<thead>
<tr>
<th>Extreme Weather Event</th>
<th>Observed Changes and Degree of Certainty</th>
<th>Projected changes (up to 2100).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat waves</td>
<td>Very Likely (&gt;90% probability) that they are increasing in frequency and intensity; and that this change is linked to anthropogenic climate change.</td>
<td>Virtually certain (&gt;99% probability) of increase in frequency and magnitude of unusually warm days and nights on global scale; very likely (&gt;90% probability) increase in length, frequency and intensity of heat waves.</td>
</tr>
<tr>
<td>Extreme precipitation</td>
<td>Likely (&gt;66% probability) increased extreme events (95th percentile events) frequency, but strong regional and subregional variation; attribution to climate change likely, but evidence not as strong as for heat waves.</td>
<td>Likely (&gt;66% probability) increase in frequency of extreme events in many areas.</td>
</tr>
<tr>
<td>Extreme High Water and Coastal Impacts from Sea Level Rise</td>
<td>Likely (&gt;66% probability) increase in coastal high water related to increases in sea level (virtually certain that sea level rise has accelerated) and changes are likely due to anthropogenic climate change.</td>
<td>Very likely that increased sea level rise will contribute to increases in extreme coastal water events (erosion and inundation).</td>
</tr>
<tr>
<td>Drought</td>
<td>Medium confidence(^{46}) that some regions are experiencing droughts of more intensity and duration, but in some regions droughts have become less frequent or intense. Because of the variability, difficult to generalize.</td>
<td>Medium confidence in increase in duration and intensity of droughts in some areas, low confidence of an increase in other areas.</td>
</tr>
<tr>
<td>Floods</td>
<td>Low confidence at the global scale “regarding even the sign of” changes; limited to medium confidence on a regional scale</td>
<td>Low confidence in changes in magnitude and frequency on global scale; medium confidence (based on physical reasoning) that the projected increases in extreme precipitation.</td>
</tr>
</tbody>
</table>

\(^{46}\) Likelihoods of the assessment quantified as a probability are only provided where a “high confidence,” level is given. Medium confidence means “we have some confidence in the tools and evidence available to us, but there remain substantial doubts about some aspects of the quality of these tools.” IPCC SREX at 120. Low confidence reflects “low confidence in the ability to detect or project any such changes.” Id.
regarding changes in flood patterns (frequency or severity) events could lead to local flooding in some areas; very likely earlier spring snow and glacier melt (rivers full earlier).

| Tropical cyclone/hurricane | Low confidence in any observed long term trends (re frequency or intensity) and low confidence in attribution to climate change. | Likely (>66% probability) decrease or no change in frequency and likely increase in average wind speeds but not in all areas. |

Despite these facts, a cursory review of most non-scientific literature and media reports makes it appear nearly axiomatic that all or most extreme weather events are increasing in both severity and intensity, that the increases are occurring everywhere, and that these changes are due to human-induced climate change. For example, Ceres’ guide to companies regarding disclosure of the physical risks of climate change states that “the science shows that extreme weather events are becoming more frequent and intense” and names events such as hurricanes, storms, and floods as examples of changing climate risks that companies should assess and disclose if material. The SEC’s 2010 Guidance similarly states that “[s]ignificant physical effects of climate change, such as effects on the severity of weather (for example, floods or hurricanes) . . . have the potential to affect” a company.

Hurricanes are a good example of the misunderstanding because they have the potential to cause tremendous damage and most people can recall recent devastating hurricanes such as Katrina and Sandy. However, the evidence is simply not there to make judgments about any increase in hurricane intensity or frequency at all, let alone attributed to climate change. As one noted scientist put it:

Research on possible future changes in hurricane frequency due to global warming is ambiguous, with most studies suggesting that future changes will be regionally dependent, and showing a lack of consistency in projecting an increase or decrease in the total global number of storms. These studies give such contradictory results as to suggest that the state of understanding of tropical cyclogenesis provides too poor a foundation to base any projections about the future.

This confusion outside the scientific realm may be based in part on the fact that the economic impact of extreme weather events is increasing in some areas; but for many of these events (such as hurricanes and floods) the impact is more readily attributed to increases in

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wealth, populations, and the location of expensive infrastructure in vulnerable areas (e.g., coastal) than to climate change.50

As a result, the guidance to disclose material risks from the physical impacts of climate change, in particular from extreme weather events other than temperature increases and heat waves, may be the most suspect aspect of the SEC Guidance. Reliability of climate projections or changing trends in most extreme weather events at the level of corporate assets or operations generally will be too speculative to meaningfully inform investors as to a particular company’s real risks from climate change over near or long terms.

This of course does not mean it is permissible to ignore currently understood risks regarding weather and climate (e.g., risks to assets or resources in vulnerable coastal areas, tornado prone areas, etc.); if such risks are material, they need to be disclosed. This state of affairs has the potential to put companies in somewhat of a bind: the Guidance suggests that companies evaluate material risks from extreme weather events due to climate change, but under Rule 10b-5 disclosures that are too speculative may be deemed misleading.

As governments grapple with addressing climate related risks numerous new tools are being developed to help assess physical risks at the local level. This includes the Federal Highways Administration’s CMIP Climate Data Processing tool, being used now by many states, which provides projections for both temperature and precipitation for mid-century and end of century, downscaled to as small as a 12 x 12 kilometer grid throughout the U.S. The National Oceanic and Atmospheric Administration (NOAA) has existing tools to assess risk from sea level rise in coastal areas. Both the National Center for Atmospheric Research and the Oak Ridge National Laboratory are currently working on tools to help assess climate and extreme weather related risks and impacts. While many of these tools are currently being directed at municipal or state governments, planners, policy makers, and the insurance industry, they may prove useful in other contexts. In the future, a clear set of climate risk disclosures standards and tools to implement them may evolve, but we are not there yet.

IV. PRACTICAL TIPS

Whether a particular risk or opportunity is a “material” one that needs to be disclosed will depend on the particular circumstances of each company and is an inquiry that should be conducted with the advice of counsel. However, there are some practical tips to consider:

- Companies should continue to monitor legal developments domestically and internationally. Some notable trends to watch include: EPA’s Clean Power Plan,51 state laws (e.g., California’s efforts to enact climate disclosure laws), and laws in countries implementing the Paris COP21 Agreements. Note that the insurance industry has been pointedly targeted with requirements to disclose climate-related risks (e.g., Europe’s

50 Id. at 1573.
51 EPA’s Clean Power Plan (“CPP”) is the seminal U.S. rule aimed at curbing U.S. GHG emissions and meeting international expectations agreed to in Paris in November 2015 by the Conference of the Parties. The Supreme Court stayed implementation of the CPP in February pending ongoing challenges to the rule in a lower court. The CPP will have the most impact on major GHG emitters, and may present considerable opportunities for renewable energy and other industries.
Solvency II and California’s Insurance Commission), a fact noted in the SEC Guidance, and organizations such as Ceres are asking the SEC to focus similarly on fossil-fuel companies. The SEC provided a two-step process companies must take to make determinations with respect to “known uncertainties” such as pending laws or regulations, which is diagramed in Figure 1 below.

- Companies should be careful with respect to statements regarding inability to project certain climate related impacts to business if they have made similar projections in other forums. The NYAG investigated a company for this reason; however, it is likely that not all company deliberations regarding projections of all possible impacts would be material information, and careful assessment of what, if any, internal projections of risk are required to be disclosed should be undertaken on a case by case basis with the advice of counsel.

- Be careful that what is disclosed in other forums (in voluntary reporting, sustainability reports, EPA’s GHG reporting rule, through the CDP survey, internal projections, in mandatory international or other reporting obligations, phone calls, presentations, etc.) is consistent with what is stated in SEC filings. Most climate change risk is currently being communicated in forums outside SEC filings and may impact what must be included in SEC-required filings. Where voluntary disclosures are being made by non-legal personnel, such as marketing or sustainability teams, consider adopting a collaborative approach with legal counsel to spot potential risks.

- There is a confusing patchwork of voluntary reporting and climate-risk disclosure standard-setting organizations. Understand the major players and the major risks and benefits to your company of participation in any of these frameworks. Understand which if any organizations your competitors are participating in or adopting. These include ASTM International, the Sustainability Accounting Standards Board, the Climate Disclosure Standard Board (which operates through the Carbon Disclosure Project (“CDP”), and the Global Reporting Initiative.

- When disclosing material information, do not present only a “best case” scenario view cherry-picked from relevant data if that data provides other scenarios that should, in light of the data and circumstances, also be relevant to a reasonable investor. In some circumstances, it may be prudent to disclose key assumptions or methodologies used to evaluate information.

- The magnitude and location of certain extreme weather events from climate change may be very difficult to project and any disclosures regarding the physical impacts of climate change, particularly at local or regional scales, should be carefully evaluated and decisions regarding disclosure should be made with the advice of counsel. General statements of risk may be necessary, but as the SEC has stated “avoid generic risk factor disclosure that could apply to any company.”\textsuperscript{52} Particularly with respect to physical impacts, this could be a difficult balance.

\textsuperscript{52} 75 Fed. Reg. 6296.
Companies should be aware of the increasing role that disclosure is playing as a quasi-regulatory tool to drive corporate action. Requiring disclosure does not demand substantial resources of regulators, and a significant amount of disclosure is being undertaken voluntarily. Disclosures can prompt pressure from shareholders, NGO’s, the public, and others, resulting in market forces that have the potential to change corporate behavior. This “approach” has already played out in the areas such as use of conflict minerals and labor and trafficking in the supply chain; managing climate risks may be next on the list.

Remember that disclosures remain in the public realm. Investor groups and others are already monitoring, scoring, and ranking companies based on these disclosures. Consider brand or reputational impacts from these types of “scoring” in relation to peers and competitors, and whether engagement with certain groups regarding expectations or otherwise would be beneficial.

Where appropriate, challenge governmental over reach to avoid setting undesirable precedent in this newly emerging area.
Figure 1: SEC’s “two step” approach to determine if disclosure of “known uncertainties,” such as pending legislation or regulations, is required in MD&A

Known uncertainty: legislation or regulation

Is it “reasonably likely” to be enacted?

Yes or unsure

If enacted, is it likely to have a material effect?

Yes or unsure

Disclosure required in MD&A of (1) potential effect and (2) if material, the difficulties assessing timing and effect of the pending law or rule

No or not reasonably likely

No disclosure required

No or not reasonably likely

No disclosure required