

Corporate Disclosure Considerations Related to Climate Change

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Introduction

Rapid and disjointed developments in the law and the marketplace are combining to create substantial securities and financial disclosure issues, particularly for publicly traded, U.S.-based (and in some cases multinational) corporations with operations and products that emit significant volumes of greenhouse gases (GHGs), such as utilities, upstream and downstream oil and gas companies, heavy manufacturers, and other energy-intensive industries. These developments include fragmented GHG emission regulatory regimes in the United States; the potential for a federal regulatory scheme for GHGs; the divide between countries that have and have not taken on obligations under the Kyoto Protocol and uncertainty around successor agreements; proliferating GHG-emission-trading markets; and trends in climate-related litigation. At the same time, stakeholder activism on climate change issues continues to rapidly develop. Shareholders are demanding transparency, or at least substantive disclosure, on matters ranging from financial estimates of the possible consequences of climate change to a company's positioning on pending legislative initiatives and political developments. More generally, consumer demand and regulatory initiatives are expanding marketplaces for sustainable and other climate-friendly products and services, which in turn has increased pressure both in the marketplace and in regulatory enforcement around public corporate disclosure and green marketing.

This chapter examines the basic legal principles governing corporate disclosure obligations as they relate to climate change in a variety of contexts. In particular, the topics discussed include securities laws requirements and the recent guidance issued by the Securities Exchange Commission (SEC); disclosure in financial statements under relevant accounting standards and SEC guidance; the rapidly burgeoning

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phenomenon of voluntary disclosure; the mandatory GHG reporting rule (Reporting Rule) promulgated by the U.S. Environmental Protection Agency (EPA); and green-washing concerns relating to environmentally friendly marketing claims, including the updated and expanded Green Guides issued by the Federal Trade Commission (FTC) in 2012.

Disclosure Obligations under U.S. Securities Laws

The Legal Framework and SEC Guidance

The Securities Act of 1933 ('33 Act) governs the registration and sale of securities and related disclosure requirements.¹ The Securities and Exchange Act of 1934 ('34 Act) requires publicly traded companies to report certain information to the public periodically.² The mandate of these federal securities laws is to promote full and complete disclosure of material facts necessary for informed decision making by investors and potential investors.³ The U.S. Supreme Court has often reaffirmed that the '34 Act was designed to protect investors against the manipulation of stock prices by those with undisclosed, inside information.⁴ Underlying the adoption of extensive disclosure requirements was a legislative philosophy articulated with axiomatic clarity: "There cannot be honest markets without honest publicity. Manipulation and dishonest practices of the market place thrive upon mystery and secrecy."⁵ The Supreme Court repeatedly has described the "fundamental purpose" of the '34 Act as implementing a "philosophy of full disclosure."⁶

The regulations promulgated under the '33 and '34 Acts by SEC—amended, consolidated, and recodified over time and now commonly referred to as Regulation S-K—further these disclosure goals.⁷ Regulation S-K prescribes areas of disclosure for registration statements and periodic reporting filed under the '33 and '34 Acts.⁸ In particular, Regulation S-K requires the disclosure of environmental liabilities on at least a quarterly basis, including a description of material legal proceedings (Item 103, discussed *infra*) and management's discussion and analysis (MD&A) of the filing company's financial condition and results of operations (Item 303, discussed *infra*).⁹ These items must be included in both the Form 10-Q, filed quarterly, and the Form 10-K, filed annually.¹⁰ Regulation S-K also requires the disclosure of capital expenditure relating to environmental compliance (Item 101, discussed *infra*). These costs must be reported on an annual basis in Form 10-K.¹¹ This information also must be included in certain registration statements filed under the '33 and '34 Acts.¹²

The basic precepts of the disclosure requirements under these two statutes have not changed substantially with respect to the disclosure of environmental matters since they became effective in the early 1980s. Although the potential applicability of existing Regulation S-K requirements to climate change concerns is relatively apparent on their face, SEC did not issue specific directives or regulatory amendments addressing such applicability, creating uncertainty in the marketplace regarding the interpretation and implementation of disclosure obligations, as well as inconsistency in public disclosures.

In 2010, SEC eliminated this uncertainty by issuing an interpretive release on disclosure requirements relating to climate change (the Climate Disclosure Release).¹³ The decision put climate change squarely into the mainstream of disclosure issues. The Climate Disclosure Release highlights four possible sources of climate change impacts that may require disclosure by registrants:

1. Existing and pending legislation and regulation in the United States, such as the costs to purchase allowances under a “cap-and-trade” system or for facility improvements to reduce emissions;
2. International climate change accords and agreements;
3. The indirect consequences of climate change regulation and resulting business trends, such as decreased consumer demand for carbon-intensive goods or the impact on a registrant’s reputation; and
4. The physical consequences of climate change, such as the direct impacts on a registrant’s facilities, for example, on coastal sites as a result of rising sea levels; and the indirect operational and financial impacts on its operations, for example, as a result of drought and shifts in weather patterns.

It is noteworthy that, in September 2007, the investor group Ceres, in conjunction with a coalition of U.S. institutional investors, the New York Attorney General, various state treasurers, comptrollers and chief financial officers, and several asset management firms, filed a petition asking that SEC issue formal guidance on the circumstances when public companies should disclose risks related to climate change under existing law.¹⁴ That the petition sought guidance, rather than a rule, from the agency turned out to be significant, both procedurally and substantively. Procedurally, it allowed SEC to issue the Climate Disclosure Release without engaging in notice-and-comment rulemaking. This in turn led to a comparatively accelerated effective date once the Climate Disclosure Release had been published in the *Federal Register*. Substantively, it allowed SEC to position the Climate Disclosure Release as a clarification of long-standing case law and regulations that establish well-recognized standards for materiality, while confirming that some elements of Regulation S-K, which establishes the general framework for disclosure of both financial and nonfinancial information, could be applicable to the climate change arena.

The Climate Disclosure Release specifies four items of Regulation S-K that set forth most of the potential scope of climate change disclosure: Items 101, 103, 303, and 503, discussed next.¹⁵

Item 101—Disclosure of Capital Expenditures

Under Item 101 of Regulation S-K,¹⁶ the Description of Business, a company must disclose any material effects that environmental matters may have on the financial condition of the registrant, including material expenditures for environmental control facilities for the remainder of the current reporting year and the succeeding year, as well as for any further periods as the registrant deems material.¹⁷ This provision requires the disclosure of both contingent effects and those that are known or certain.

SEC also has emphasized that information involving decisions and expenditures beyond the required time period may be necessary to prevent the disclosure from being misleading.¹⁸ In times of major regulatory initiatives, or when a company is responding strategically to a range of regulatory options, the resulting capital expenditures may be a company's most significant environmental disclosure.

In the climate change context, Item 101 requires ongoing attention to both legislative developments and to the possible technical and financial consequences of various regulatory outcomes. In a simple case, a company may be required to disclose that it plans to spend \$60 million over the next two years to retrofit the boilers in order to meet its own voluntary commitment to reduce CO₂ emissions as well as expected regional requirements for GHG emission reductions over the next seven years.

The disclosure analysis becomes more complex, however, in the developing regulatory context of GHG emissions and climate change. For example, a multinational company with facilities in both the United States and Europe is currently required to determine whether disclosure is necessary concerning capital expenditures undertaken as an alternative to purchasing credits in the European Union (EU) emissions-trading scheme.¹⁹ The element of the Climate Disclosure Release dealing with international treaties and compacts reinforces this practice and requirement, both within the borders of a country with a well-developed climate regulatory scheme and in geographic regions in which treaties or regional compacts establish operating rules and carbon emission limits. The logic of the Climate Disclosure Release also strongly suggests that similar analysis—and disclosure for each region in which the results are material—are required, if differing state and regional regulatory regimes remain the dominant source of GHG emission reduction mandates in the United States for some companies.

In addition, the emergence of a clear federal legislative or regulatory mandate governing GHG emissions (either as a comprehensive piece of legislation, or as a combination of steps), such as the Reporting Rule and GHG emission standards under the Clean Air Act (CAA) and regional or local requirements applicable to operations in a particular jurisdiction (e.g., the California Global Warming Solutions Act of 2006, commonly known as AB 32), may trigger disclosure obligations under Item 101, in light of SEC's stated preference for "whole picture" capital expenditure disclosure,²⁰ on a company-wide basis. If these expenditures are going to be significant, the best posture for the company may be one in which it previously has signaled such a contingent risk to the market qualitatively, if not quantitatively. Management likely would want to avoid having complex and expensive calculations in its back pocket—and undisclosed—if the risk that the contingency will occur is more than notional, even though it may be otherwise technically compliant. The market generally reacts badly to both surprises and perceived lack of transparency.

Item 103—Disclosure of Legal Proceedings

There is a long and ongoing history of litigation under the CAA²¹ challenging, enforcing, and/or leading to changes to regulation. This litigation has involved citizen suits brought to compel EPA to take regulatory action, enforcement actions by EPA against

one or more individual companies and challenges to EPA rulemakings. Often the stakes in this litigation have been enormous—material, under any definition, for all the companies involved and for the affected industry as a whole. As concerns regarding the impacts of and absence of regulation relating to climate change have grown, we have seen legal challenges relating to climate change rapidly join the mainstream of environmental litigation. Some claims have challenged the scope of the CAA and EPA’s authority to regulate.²² Other cases have sought to impose liability for climate change impacts directly on a targeted set of defendants.²³

Litigation relating to climate change regulation under the CAA is discussed in detail in chapter 4 and common law claims stemming from climate change impacts in chapter 8. Such litigation likely will continue to have both direct and derivative consequences for the U.S.-based operations of all companies with operations or products emitting GHGs. The landscape can change quickly, posing difficult disclosure challenges.

The Climate Disclosure Release makes clear that important cases concerning climate change will need to be analyzed and disclosed in accordance with Item 103 of Regulation S-K. Under Item 103, a company must disclose material pending legal proceedings to which the registrant or its subsidiaries is a party or to which any of their property is subject, including such proceedings “known to be contemplated” by governmental authorities.²⁴ The instructions to Item 103 clarify that an administrative or judicial proceeding arising under environmental laws must be disclosed if (1) it is material to its business or financial condition; (2) it includes a claim for damages or costs in excess of 10 percent of current consolidated assets; or (3) a governmental authority is a party to the proceeding, or is known to be contemplating such proceedings, unless any sanctions are reasonably expected to be less than \$100,000.²⁵ This black-letter financial threshold, which is otherwise well below traditional materiality for most reporting companies, combined with the burden that the regulation places on the reporting company to prove a negative (i.e., that a pending proceeding could not lead to a fine in excess of \$100,000), makes this the least understood, and most often ignored, SEC disclosure mandate.²⁶ Although Item 103 does not specifically require a company to predict the effects of litigation, it has become increasingly common to disclose whether management believes that the results of litigation will be material. In addition, aggregation of sanctions is required for purposes of Instructions 5(A) and (B) in proceedings “which present in large degree the same issues.”²⁷

Although climate litigation to date has not resulted in significantly costly verdicts for defendants, these proceedings have obvious implications for significant GHG emitters should these or similar causes of action prove successful. They also may have indirect consequences for nondefendant, but similarly situated, companies both in terms of costs and disclosure obligations. For example, a favorable holding for plaintiffs in *American Electric Power v. Connecticut* could have resulted in material monetary and operational consequences for both the utility defendants and, arguably, other utilities and GHG-intensive companies as a result of being named in, or taking steps to avoid, future similar litigation. As a result, in the face of such proceedings, disclosure

obligations may arise both for defendant and nondefendant companies as the threat of legal or regulatory consequences becomes more real or foreseeable.

Item 303—Management Discussion and Analysis (MD&A)

To supplement the numerically driven mandates of Items 101 and 103,²⁸ SEC casts a broader, more subjective net through its requirements for MD&A disclosure under Item 303. SEC views MD&A disclosure²⁹ as an opportunity to give investors “a look at the company through the eyes of management.”³⁰ This is particularly significant and complex in the rapidly changing, multifaceted regulatory environment surrounding climate change. To that end, the Climate Disclosure Release highlights the need for registrants to assess any related disclosure obligations regularly.³¹ Thus, the interplay between these disclosure requirements and the evolution of climate regulations appears to be a dynamic area for many issuers and, consequently, a potentially important subject for MD&A.

In practice, disclosure under Item 303 historically has required the company to disclose “currently known trends, events, and uncertainties that are reasonably expected to have material effects.”³² It has been interpreted to require two distinct inquiries. First, management must determine whether an uncertainty is reasonably likely to occur.³³ Unless management can conclude that the event is not reasonably likely to occur, management must assume that it will occur.³⁴ Second, the trend or event must be disclosed unless management can determine that its occurrence is not reasonably likely to have a material effect on the company.³⁵ Disclosure is optional when management is merely anticipating “a future trend or event, or anticipating a less predictable impact of a known trend, event or uncertainty.”³⁶

Item 303 requires the disclosure of “known uncertainties,”³⁷ a term that captures knowable possibilities that are less than trends but that could result in material consequences. SEC historically also has stated that required disclosure is characterized by trends that are “currently known” and “reasonably expected to have material effects.”³⁸ The predictability of the event at issue has as much significance for disclosure purposes as the size of the consequences. For example, a company that has been named a potentially responsible party at a portfolio of contaminated sites will need to consider a variety of factors, such as the nature of the remedy that might be required, the possibility that the company could be responsible for the entire cost of cleanup, the likelihood that it could recover contribution from other parties, and the viability of its insurance.³⁹

The instructions to Item 303 state that the information provided in the MD&A “need only include that which is available to the registrant without undue effort or expense and which does not clearly appear in the registrant’s financial statements.”⁴⁰ SEC has advised in the past that such information must be detailed “to the extent necessary to an understanding of the registrant’s business as a whole.”⁴¹ Item 303(a) also states that if, in the registrant’s judgment, a discussion of subdivisions of the registrant’s business would be appropriate to an understanding of the business, the discussion should focus both on the subdivision and on the company as a whole.⁴² Notwithstanding the latitude implicit in these requirements, in the (albeit scanty)

enforcement history of this provision, SEC has required registrants to state “the amount, or describe the nature or extent of the potential [environmental] liabilities” in their disclosure.⁴³ SEC has further advised that, even when an exact calculation of potential environmental liability is not possible, the effects of such liability should be “quantified to the extent reasonably practicable.”⁴⁴

For disclosure purposes, climate change is ripening from being an “uncertainty” or a “trend” to being an “event.” Just as clearly, however, it is not a single event, because its consequences, real or perceived, will register in both the commercial and financial marketplaces, as well as across geographical boundaries. Additional complexity flows from the profusion of legislative, regulatory, and technical solutions that are in place or under development. The more difficult questions may arise when management must determine whether the accumulation of issues (e.g., changes in regulations, the potential or actual cost of emissions, the need for pollution control upgrades, the physical impacts to facilities and changes in market demands) related to climate change and GHG emission control are, or are likely to become, material for their company. Closely related to this determination is management’s view of the level of diligence, calculation, or reasonable estimation that it will have to undertake in order to make this determination in a manner that passes SEC muster.

In the early 2000s, a fair reading of Item 303 might have justified silence on climate change on the part of most public companies, for several reasons. The scientific view, while coalescing, was far from certain, which allowed dissenters in many quarters, and even at top levels of the government, to publicly dismiss the science as speculative.⁴⁵ Implementation of the Kyoto Protocol was in its early stages. There was no established GHG-emission-trading marketplace with a proven track record. As a consequence, the effects on production, demand for products, and other business metrics translatable into financial data were still generally unquantifiable with any degree of certainty. In fact, any disclosure involving the “math” of climate change (such as the price of a company’s emissions) arguably would have been misleading, in that it would have created an illusion of precision when none was possible. These uncertainties, which were palpable enough for companies immediately affected by climate change risks—such as utilities and automobile makers—were magnified for companies for which GHG emission risks were further attenuated, both in the marketplace and as a result of the regulatory landscape.

Today, doubts on the baseline science continue to diminish,⁴⁶ and several trading marketplaces have been established.⁴⁷ On the regulatory front, the reelection of President Obama means that, at least through the end of his second term in January 2017, EPA is likely to continue to adopt a variety of rules restricting GHG emissions from various sectors.⁴⁸ Some states, led by California and the northeastern states, are adopting their own regulatory programs.⁴⁹ A few giant multinationals, for which materiality, under any available measure, is expressed in the billions of dollars, may still be justified in their view that there is no analysis that can currently be performed in any jurisdiction that would reasonably be expected to translate climate change into a material financial risk. And other companies still removed from the immediate consequences of

climate change may also justifiably remain silent, because market forces creating definable economic effects of GHG emissions on their customers may remain too abstract. As evidence of a countervailing view, however, SEC has at times refused to allow a large public company to exclude shareholder proposals dealing with global warming because SEC was “unable to concur” that exclusion was proper under the Securities Exchange Act Rule as dealing with a matter of ordinary business operations.⁵⁰

Nonetheless, overall, it is increasingly clear that for publicly traded companies for which stringent regulation or unfavorable economic trade-offs in even a single country or at a major facility could translate quickly into material economic or strategic consequences, the window for well-founded silence on climate change is closing rapidly. This dynamic may accelerate further following Hurricane Sandy, which struck the New York and New Jersey region in 2012, and during President Obama’s second term, which is focusing greater attention on climate change regulation.⁵¹

Item 503—Risk Factors

Item 503, Risk Factors, mandates disclosure of specific, significant factors that may make an investment in the issuer speculative or risky. Physical risk to facilities or operations is a well-established element of most public companies’ disclosure, irrespective of the cause. A major plant that may have to curtail operations because of a dwindling supply of process water should be the subject of disclosure, irrespective of whether climate change is causally related to the condition. The Ceres petition noted above asked that SEC require registrants to evaluate the physical impacts of climate change on their operations, as well as on their supply chain, distribution chain, and personnel; and to disclose the physical risks of climate change for entities other than the registrant itself, if they are material to financial performance.⁵² The petition posed the example of increased credit risks for banks with borrowers located in at-risk areas or the effect of physical damage to suppliers’ infrastructure or disruption of deliveries as a result of the deleterious effects of climate change, such as the impact of changed weather patterns; the effects of climate change upon land; damage to facilities or decreased efficiency of equipment; and the effects of changes of temperature on the health of the workforce.

Broad-based risk analyses are a familiar protocol for most companies with equity or debt that is traded in the public markets. Despite the fact that the Climate Disclosure Release reiterates that registrants should avoid “generic risk factor disclosure that could apply to any company,”⁵³ this aspect of the Climate Disclosure Release may prompt detailed, self-protective disclosure of conditions that obscures, rather than illuminates, important consequences of climate change. SEC Commissioner Paredes emphasized this potential outcome in his remarks in support of his vote against issuing the Climate Disclosure Release.⁵⁴ For instance, Commissioner Paredes pointed out that disclosure of harm to a registrant’s reputation (among other “indirect risks”) and physical effects of climate change can be “quite speculative” and that, to the extent the Climate Disclosure Release encourages disclosure that is unlikely to improve investor decision making, such disclosure may “distract investors from focusing on more important information.”⁵⁵

It also is worth noting that the two commissioners who voted against issuing the Climate Disclosure Release also found it significant that SEC staff had not attempted to demonstrate that climate change disclosure to date had been inadequate. They noted that disclosure on matters such as the physical effects of climate change might either lead to investor uncertainty, because there are no ready benchmarks for evaluating the likelihood or severity of the actual consequences, or risk flooding the market with trivial, nonmaterial information that, at best, would be of no real assistance to investors. They also noted that several other areas of disclosure discussed in the Climate Disclosure Release, such as reputational harm, might foster speculation rather than provide useful information to investors.⁵⁶

Materiality

The concept of “materiality”—a much-debated (and litigated) standard—is woven into disclosure obligations under Regulation S-K. Its importance as a gatekeeper to disclosure, including avoiding unnecessary detail that might obscure material information, is recognized by the Climate Disclosure Release.⁵⁷ The Supreme Court, in an oft-quoted formulation, has determined that materiality refers to something that has “significantly altered” the “total mix” of information available to an investor.⁵⁸ Material information is defined under the ’34 Act as information “to which there is a substantial likelihood that a reasonable investor would attach importance in deciding to buy or sell the securities registered.”⁵⁹ Accounting literature informs the “reasonable person” standard for investors, providing that, “in the light of surrounding circumstances, the magnitude of the item is such that it is probable that the judgment of a reasonable person relying upon the report would have been changed or influenced by the inclusion or correction of the item.”⁶⁰ One of the purposes of this threshold is to provide a workable filter on disclosed information, allowing investors to see major trends and significant events without being blinded by a blizzard of detail.

Notwithstanding these guideposts, there is no bright-line test of materiality. SEC has explicitly warned issuers against using numerical formulas or rule-of-thumb percentages, such as 5 percent of assets,⁶¹ and stated that both “qualitative” and “quantitative” factors must be used in arriving at a materiality determination. When the qualitative analysis called for in a materiality determination is coupled with the subjective view of trends called for in MD&A disclosure, it can fairly be argued that a company’s position and prospects relating to climate change should be among the pre-eminent issues considered for disclosure by management of a company whose operations are GHG emissions-intensive, or whose facilities or real estate are particularly vulnerable to climate-related hazards.

Practical Implications of the Climate Disclosure Release

In addition to assessing the effects of climate change on a company’s operations, the Ceres petitioners asked SEC to require a company to estimate its own effect on climate change.⁶² This assessment would have required issuers to determine, among other things, their current and projected emissions levels, tabulating both direct emissions

from operations as well as indirect emissions from purchased electricity and purchased products and services.⁶³ The petitioners also asked that companies be required to estimate their past GHG emissions, as well as significant trends in these levels over time. The stated rationale for this position was that such an assessment would help an issuer estimate the possible costs of potential future GHG emission regulation. Petitioners contended that Item 101 is broad enough to require this type of numerical disclosure, both prospectively and retroactively. The current significance of such disclosure to investors is difficult to determine, however, particularly in the absence of an established or commoditized unit cost of CO₂ emissions in the United States.

Although the Climate Disclosure Release did not adopt the notion that a registrant must disclose its carbon footprint as an independent matter, several aspects of disclosure in other areas, such as business trends under Item 303 or strategic planning under Item 101, strongly suggest that emissions calculation may provide some of the numerical underpinning for that disclosure, whether or not the emissions themselves are disclosed. In addition, since the Climate Disclosure Release, the U.S. EPA has issued a mandatory reporting rule (discussed *infra*) that will require many facilities to disclose their emissions.

The most immediate and lasting consequences of the Climate Disclosure Release may be to bring climate change disclosures directly under the main umbrella of SEC's integrated disclosure requirements in Regulation S-K. Most notably, the Climate Disclosure Release reaffirmed that disclosure control procedures—including, where appropriate, correct accounting for GHG emissions—will be necessary in order to substantiate disclosure of matters such as the potential effects of GHG emission regulations. The petitioners had asked SEC to increase the scope and detail of the disclosure made by issuers on these matters; those same groups had also been demanding more information from issuers in various other ways. Issuers are now acting prudently if they consider whether to include in their SEC filings at least some elements of the disclosures they may have already been making for some time on a voluntary basis in other formats and through other vehicles (such as sustainability or similar voluntary reports). In doing so, they may need to more rigorously analyze the basis for this disclosure than has been customary, consistent with sound disclosure control procedures. Other issuers, after examining the new landscape for climate change disclosure, may be well advised to leave their SEC disclosure practices mostly unchanged and simply say less in other formats, or make that disclosure in a manner, and after an internal review process, that can pass SEC muster.

Some trends in the wake of the Climate Disclosure Release are noteworthy, particularly within the electric power sector. In some cases, utilities have limited or removed detailed descriptions regarding federal climate legislation in their SEC filings. This is likely due in part, however, to the failure of certain proposals, such as the American Security and Clean Energy Act of 2009 (Waxman-Markey)⁶⁴ and what many perceive to be the dim prospects for similar legislation in the foreseeable future.⁶⁵ Over the short to medium term, CAA regulations appear likely to be the most significant source of federal GHG directives, particularly in GHG-intensive industries.⁶⁶ At the same time, there

appears to be an increase in the number of companies generally disclosing potential physical risks⁶⁷ (which is an area of risk highlighted in the Climate Disclosure Release) and, in 2009 10Ks immediately following the Climate Disclosure Release, an increase in disclosure of climate-related litigation, especially after the Second Circuit reversed the dismissal of *Connecticut v. AEP*, until the Supreme Court reversed the Second Circuit.⁶⁸

Nonetheless, although climate change disclosure has improved in these or other limited areas, some nongovernmental organizations and other commentators remain critical of its adequacy.⁶⁹ At a minimum, as climate-related matters continue to develop on political, regulatory, and litigation fronts, the Climate Disclosure Release is an important step in ensuring that companies properly assess such matters in their disclosure analysis. SEC stated in the Climate Disclosure Release that it would monitor the impact of the Climate Disclosure Release on company filings as part of its ongoing disclosure review program. Although it was expected at the time of the Climate Disclosure Release that disclosure in this area would receive significant attention from the staff in the division of Corporation Finance, issuers appear to have received only a small number of comments to date. In a handful of instances, the staff has commented generally that the registrant should clarify the extent to which it considered the Climate Disclosure Release in drafting its disclosure; or that the registrant should add disclosure to address the Climate Disclosure Release if appropriate/applicable; or to clarify existing disclosure to indicate how climate change impacts the issuer's particular business.⁷⁰ Staff comments also have included requests to clarify

- how climate change contributes to catastrophic events and severe weather conditions relevant to an insurance business;⁷¹
- the costs incurred and anticipated to meet emission reduction targets disclosed by a utility;⁷²
- why an issuer included general discussion on GHG emission regulation pursuant to the Kyoto Protocol when the issuer also disclosed that GHG regulation would not have "any specific effect" on its operations;⁷³
- statements by an industrial gas company that its product has lower GHG emissions;⁷⁴ and
- the basis for projections by a renewable fuels company that the life-cycle GHGs of its blended fuel product are lower than certain other fuels.⁷⁵

In most instances, issuer responses to general and more specific comments have not resulted in meaningful additional climate change disclosure by the relevant registrant.

Sarbanes-Oxley Requirements

It is now a well-recognized feature of the U.S. corporate landscape that Congress responded to high-profile accounting controversies and public outcries for corporate transparency by enacting the Sarbanes-Oxley Act in 2002 (Sarbanes-Oxley).⁷⁶ Although the Act does not specifically alter environmental disclosure requirements, it clearly has implications for a company's environmental disclosure protocols and practices generally, and may change a company's analysis of climate change issues,

in particular. For example, under Sarbanes-Oxley and its implementing regulations, a corporation's chief executive officer (CEO) and chief financial officer (CFO) must certify, in the company's quarterly and annual reports to SEC (the 10-Q and 10-K reports, respectively), that the company has implemented an internal management system, including "disclosure controls and procedures," that ensures that information that must be disclosed under SEC regulations is accumulated and communicated to corporate management.⁷⁷ These controls and procedures must be evaluated periodically by the CEO and CFO.⁷⁸ Any significant deficiencies must be reported to the company's financial auditors and to the audit committee of the company's board of directors.⁷⁹

In addition to assuring that adequate disclosure controls and procedures have been implemented, under section 302 of the Act, the CEO and CFO must sign a certification statement to be included with the company's 10-K and 10-Q. Specifically, the officers must certify that each report filed with SEC meets all requirements of the Securities Exchange Act, and that the information contained in the report "fairly represents in all material respects" the financial condition and results of operations of the company.⁸⁰ Further, the officers must certify that (1) they have reviewed the report; (2) based on their knowledge, there are no untrue statements of material fact or omissions of material facts necessary to make the report not misleading; and (3) the financial information provided in the report fairly reflects the financial condition and results of operations of the company.⁸¹

A second and potentially more onerous certification requirement is imposed by section 906 of the Act. Under that section, the CEO and CFO must provide an additional certification with each periodic report containing financial statements filed with SEC, stating that the report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act,⁸² and that information contained in the periodic report fairly presents, in all material respects, the financial condition and results of operations of the company. Section 906 imposes criminal liability upon the certifying officers for false certifications.⁸³

Another noteworthy provision of the Act's implementing regulations prohibits improper influence on the conduct of the company's financial audits.⁸⁴ The regulation applies not only to corporate officers and directors, but to any person acting under their direction,⁸⁵ including, presumably, in-house and outside counsel, environmental compliance officers and plant managers, and outside environmental consultants, such as those who might be engaged to perform an analysis of GHG risk exposure. Specifically, the rule prohibits such persons from taking actions that might mislead an independent public accountant engaged in an audit of the corporation.⁸⁶

The certifications required by Sarbanes-Oxley put ongoing pressure on management to account for and disclose, in financial statements or otherwise, any aspect of climate change risk that can fairly be said to be quantifiable. Dexterity will be required in evaluating the financial effects of rapidly evolving regulations, responding to changes in the price of carbon where applicable market prices exist (such as in the EU, California, and several northeastern states) and assuring investors that any litigation risk related to climate change is fairly presented in the company's financials.

In addition, existing and developing environmental management system protocols, which necessarily will include climate change considerations for companies facing GHG regulatory regimes, will be subject to increased scrutiny under the standards imposed by Sarbanes-Oxley. Certification requirements under Sarbanes-Oxley at the management level will, in turn, increase accountability downstream at the plant or operational level and emphasize data gathering and analysis. The responsibilities of corporate environmental compliance officers and other personnel, and their outside advisors, charged with investigating, analyzing, and predicting the outcome of environmental matters, will also be scrutinized more carefully. The nature of the certifications required under Sarbanes-Oxley, coupled with the potentially significant operational and monetary impact of climate change regulation, seem likely to require an increased focus on data-gathering methodologies, accuracy and output, as well as third-party verification. In addition, the cross-functional decision making that is necessary for Sarbanes-Oxley compliance will increase the pressure to coordinate environmental data gathering and related analysis with legal, financial, human resources, and public relations areas, both over the short term and the foreseeable future. All of these factors, played out against a backdrop of an uncertain regulatory climate and complex scientific and technical considerations, seem likely to increase the risk of “material deficiencies” in the climate change context.

Financial Statement Disclosure and Related Accounting Standards

Regulation S-K sets forth the form and content of, and requirements for, financial statements that must be filed as part of various '33 Act and '34 Act filings.⁸⁷ Regulation S-K provides the parameters of what is to be included in financial statements, but does not specify how specific items are to be accounted for and disclosed.⁸⁸ The standards governing such financial matters are established by the accounting profession, often in collaboration or consultation with SEC's professional accounting staff.⁸⁹

The Financial Accounting Standards Board's (FASB) accounting standard pertaining to contingencies, Accounting Standards Codification (ASC) Topic 450 (formerly known as FAS No. 5),⁹⁰ is the most frequently invoked standard in the environmental arena, even though it addresses risks far broader than environmental ones. ASC Topic 450 mandates that a loss contingency be accrued by a charge to income and that the nature of the contingency be described in a footnote to the financial statement if it is probable that a loss has been incurred and the amount of the loss can be reasonably estimated.⁹¹ If a loss contingency is only reasonably possible, or if the loss is probable but the amount cannot be reasonably estimated, then the company is not required to accrue the loss contingency, but its nature must be disclosed in a footnote.⁹²

Staff Accounting Bulletin No. 92 (SAB 92), one of the most detailed pronouncements on environmental issues from SEC, provides additional guidance on the accounting and disclosures relating to contingent environmental liabilities.⁹³ SAB 92 makes clear that contingent environmental losses must be accrued by a charge to income if

it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.⁹⁴ SAB 92 also provides that the gross liability must be recorded in the balance sheets separately from any claim for recovery, such as expected insurance recoveries or third-party indemnification claims.⁹⁵ Although “significant uncertainties” may exist, “management may not delay recognition of a contingent liability until only a single amount can be reasonably estimated.”⁹⁶ When that amount falls within a range of reasonable likely outcomes, the registrant should recognize the minimum amount of the range.⁹⁷ Under ASC Topic 450, the reporting company must disclose the range of reasonably possible outcomes that could have a material effect on its financial condition, results of operations, or liquidity.⁹⁸ Alternatively, if factually correct, the reporting company can disclose that the amount of reasonably possible loss in excess of the accrued amount is not material or cannot be determined.⁹⁹ Companies are cautioned to avoid “boilerplate” disclosures of the possible impact of significant uncertainties.¹⁰⁰

Taken together, these accounting standards and SEC guidance have clear implications for determining whether to disclose, and whether to reserve for, obligations arising out of legal and regulatory requirements surrounding climate change. For example, under the EU emission-trading scheme, for many industries, there is no question of the probability of emission regulation, and the price of a ton of GHG emissions has been established by the market. As a result, financial disclosure quantifies GHG emission risk in these markets where appropriate.¹⁰¹ In the United States, however, with limited exceptions (such as pursuant to certain new source performance standards under the CAA; for CO₂ emissions from power generators operating in member states of the Regional Greenhouse Gas Initiative; or under the new cap-and-trade program under California’s AB 32),¹⁰² neither the regulatory regime nor the cost of emission or compliance has been established, so there is currently no financial statement disclosure driven by climate change.

Furthermore, whether a contingent loss, such as a need to install pollution control equipment in response to pending regulatory requirements, is probable and estimable will vary by industry, company, plant, and jurisdiction. How SEC’s requirements are to be applied in each case is a question to which the answers will continue to change rapidly with GHG regulation, particularly in industrial sectors with significant GHG emission profiles. The inherent limitations of determining probability and estimability, coupled with the complexity of the questions surrounding climate change, have already resulted in a wide variety of disclosure decisions. In most instances, as discussed above, this variety is justified, and will continue.

Sustainability Disclosure: Voluntary Reporting and Emerging Standards

One of the most striking disclosure developments has been the rapid rise in volume, and a comparable improvement in the detail and quality, of voluntary environmental reports provided by many leading companies. While these developments are not exclusively driven by climate change—substantial corporate resources are being devoted to

disclosures not directly related to the environment, such as global labor practices, and to broader issues, such as sustainable development—the high-profile nature of climate change accounts for much of the recent growth in voluntary disclosure.

There is no single strategy behind the proliferation of these voluntary reports or climate change, nor is there a single template or tone for their content.¹⁰³ Some companies have offered a reflexive compromise to their shareholders, in lieu of fighting a protracted proxy and media campaign.¹⁰⁴ Others have tried to seize control of the debate early, to channel shareholders' attention and reap independent public relations rewards.¹⁰⁵ Still others appear to have concluded that there was no harm, and potentially some good, in being at least partially transparent with their shareholders and the public on detailed technical and strategic analyses that they were already performing for internal planning reasons. Elements of some reports appear to take positions on policy issues, thereby becoming part of the ongoing political debate about the nature and timing of GHG emission regulation. Irrespective of the reasons why companies produce climate change reports, the quality (and density) of these reports have increased considerably, and contrast sharply with the glossy pictures and anecdotal fluff that characterized the early days of more general voluntary environmental reports. This is in part due to the complexity of climate change issues, and in part to the maturation and increasing sophistication of the audience for voluntary reporting on all environmental topics.

The comparative complexity of voluntary climate change reports has also created potentially significant subsidiary issues. Such reports may put some companies at risk of a “data clash” with the contents of their SEC reports, particularly where voluntary reports may be incorporated by reference. For example, claims or goals regarding responses to climate change in voluntary reports may not be consistent with risks and/or impacts presented in mandatory SEC filings. It has also spawned a secondary market of stakeholder engagement in the report verification process, as companies have partnered with consultants and independent socially responsible investing groups to add credibility to their conclusions on climate risk and the processes by which they were derived.¹⁰⁶

Although the Climate Disclosure Release does not make new law or impose new disclosure requirements, two of the SEC commissioners who voted with the majority on the Climate Disclosure Release made comments at the open meeting at which the Climate Disclosure Release was adopted, strongly suggesting that some issuers should regularly examine their existing voluntary climate disclosure practices. In particular, one commissioner noted the use of numerous vehicles other than SEC filings for disclosure of climate change information.¹⁰⁷ The Climate Disclosure Release itself described disclosure templates such as the Climate Registry, the Carbon Disclosure Project, and the Global Reporting Initiative at some length.¹⁰⁸ It has long been good practice to reconcile voluntary and mandatory environmental disclosure.¹⁰⁹ The Climate Disclosure Release adds additional weight and wisdom to such a side-by-side review of all disclosure vehicles.

Since 2012, the Sustainability Accounting Standards Board (SASB) has been developing sustainability reporting standards for companies reporting under the '33 and '34 Acts. SASB plans to develop standards specific to more than 80 industries

in ten sectors (health care, technology and communication, financials, nonrenewable resources, transportation, services, resource transformation, consumption, renewable resources, and alternative energy and infrastructure).¹¹⁰ These standards are intended to complement existing FASB accounting standards by developing nonfinancial metrics to account for a company's performance on a number of material sustainability topics.¹¹¹ Final SASB Sustainability Accounting Standards for the Health Care Sector were released in July 2013, with the issuance of standards for other sectors expected through 2015.¹¹² While the adoption of such standards or other metrics may add to the clarity of and accountability for sustainability-related disclosure by companies, they also may create further tension and/or an additional premium on consistency between mandatory reporting forms (such as Form 10-K) and voluntary public statements and reports or other initiatives (such as the Global Reporting Initiative).

Proxy Disclosure

In addition to disclosure requirements triggered by new issuances of securities to the public, periodic-reporting obligations, and extraordinary corporate events such as a merger or sale of a business, proxy disclosure is required in connection with elections at annual shareholder meetings.¹¹³ Under rules established by SEC, shareholders who meet certain requirements and follow certain procedures may present proposals recommending corporate action in connection with that company's solicitation of proxies.¹¹⁴

A company can omit a shareholder proposal for any one of a number of enumerated reasons.¹¹⁵ The content, source, and number of proxy resolutions in recent years reveal a distinct market trend that is likely to continue. Shareholders are not only showing increasing concern about the risk climate change poses to a company's business, but they are also showing an interest in encouraging or compelling disclosure of the real or potential, current or future, effects of this risk in voluntary reporting. Environmental resolutions—including those focusing on global warming, have become commonplace.¹¹⁶

Indeed, it is becoming increasingly common for management to have to address global warming (and other environmental concerns)—perhaps in part due to SEC's 2010 issuance of the Climate Disclosure Release—at annual meetings where severance payments, golden parachutes and other traditional management compensation issues are also on the agenda. In fact, this package of diverse proposals reveals another trend—the confluence of the previously distinct worlds, interests, and tactics of mainstream institutional investors, on the one hand, and socially concerned shareholders, on the other.¹¹⁷ In addition to broad-based concerns about corporate governance and transparency, financial markets are increasingly endorsing the proposition that “environmental and social issues can have significant impacts on the performance and prospects of companies.”¹¹⁸ Labor pension funds, such as those of the New York City police and fire departments, are beginning to serve as a bridge between social investors and the larger institutional funds. State pension and health benefit funds, always concerned with their ability to pay benefits over the long term, have increasingly translated their concerns into activism on sustainability generally and on investment issues with longer arcs of return, of which climate change is rapidly becoming the leading example.

For example, in March 2002, a group of ExxonMobil shareholders owning several million shares of common stock¹¹⁹ submitted a proposal requesting the company to report on its efforts to promote renewable energy sources and incorporate such energy into its practice.¹²⁰ ExxonMobil, in return, sought permission from SEC to exclude the proposal from the company's proxy material.¹²¹ ExxonMobil argued that rule 14a-8(i)(3)—the clause prohibiting materially false or misleading statements—allowed the company to omit the proposal. Among other claims, ExxonMobil said the proposal's statements overstated the current status of the Kyoto Protocol, included opinions rather than fact, and confused renewable energy with clean energy. SEC allowed a small portion of the proposal to be omitted from the proxy,¹²² but agreed with the shareholders on all other points raised, stating, "[S]hareholder value will be enhanced if the Company would look beyond the next quarter and commence planning for a world in which the Kyoto Protocol is in effect almost everywhere outside of the U.S."¹²³ The SEC also stated "[w]hy *any* rational shareholder would be unable to understand the meaning of the term 'pollution-causing fuels' is quite beyond comprehension."¹²⁴

Shareholder advocacy has continued to grow in recent years. Although the number of shareholder resolutions filed on important social and environmental issues was slightly down in 2012 and 2011, votes in 2011 were higher on average than in previous years.¹²⁵ Particular demands vary but generally seek greater transparency on an issuer's position with respect to such issues. Particular emphasis has been placed on requests relating to improving energy efficiency and renewable energy use in operations.¹²⁶ Primary targets for climate-related shareholder proposals have included oil and gas, food, construction, real estate, and utility companies.¹²⁷

For example, an ExxonMobil Definitive Proxy Statement, dated April 11, 2012, included a shareholder proposal seeking adoption of quantitative goals for reducing GHG emissions, which received 27.10 percent of shareholder support.¹²⁸ Similarly, an AT&T Inc. Stockholder Proposal of Calvert Investment Management, Inc. on behalf of the Calvert Enhanced Equity Portfolio, Calvert Social Index Fund, and Calvert Large Cap Value Fund (January 13, 2012), included a proposal to adopt public policy principles on climate change.¹²⁹ In Amazon.com Climate Risk Disclosure 2012, dated May 24, 2012, shareholders sought a report to shareholders describing how Amazon.com is assessing the impact of climate change on the corporation.¹³⁰ This proposal received 18.45 percent of shareholder support.

EPA Mandatory Reporting Rule

Background

Responding to its obligations under the United Nations Framework Convention on Climate Change,¹³¹ the United States called for a national inventory of aggregate emissions of six greenhouse gases in the Energy Policy Act of 1992.¹³² Starting in September 2003, the Energy Information Administration published annual reports estimating greenhouse gas emissions in the United States. The figures mostly consisted of estimated, rather than directly metered, emissions.¹³³ In October 2009, EPA

published a rule requiring large GHG emitters and suppliers across the United States to report their GHG emissions (the Reporting Rule).¹³⁴ The Reporting Rule responds to a congressional mandate contained in FY 2008 Consolidated Appropriations Act, directing EPA to issue regulations for the “mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy.”¹³⁵ In issuing the Reporting Rule, EPA relied on its existing authority under sections 114 and 208 of the CAA, which permit the agency to gather information from regulated stationary sources and manufacturers of mobile sources.¹³⁶ The Reporting Rule is expected to cover approximately 85 percent of GHG emissions in the United States from over 13,000 facilities.¹³⁷ Prior to finalizing the rule, which became effective on December 29, 2009, EPA received almost 17,000 public comments.

The Reporting Rule imposes no limitations on GHG emissions, nor does it require any facilities to make emission reductions. In addition to basic facility information, regulated industry sources must monitor and report their annual GHG emissions for each covered source category (discussed *infra*), in accordance with the Reporting Rule. The Reporting Rule is intended to provide a better understanding of GHG emission sources and to inform policy decision making, and is widely seen as a first step to federal regulations to reduce GHG emissions. Data collection commenced on January 1, 2010. The first annual reports were submitted electronically by September 30, 2011, and, with certain exceptions, annual reports are required every March 31 going forward. EPA also has published the reported data on its website.¹³⁸

Coverage

The Reporting Rule applies both to certain downstream facilities that directly emit GHGs and to certain upstream suppliers of fossil fuels and industrial GHGs, as well as to facilities that inject CO₂ underground for sequestration or other reasons. Owners and operators of facilities and suppliers that are subject to the Reporting Rule are required to report emissions of the following GHGs: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); sulfur hexafluoride (SF₆); and other fluorinated gases. Reporting is required to be conducted at a facility level, except that in the case of suppliers of fossil fuels and industrial GHGs, reporting is at the corporate level. Suppliers are required to report emissions that would result from the combustion or use of the products they supply.¹³⁹

The Reporting Rule requires reporting by 41 industrial categories (29 beginning in calendar year 2010 and an additional 12 beginning in 2000), including the following:¹⁴⁰

- Facilities containing one of the following listed source categories, regardless of the volume of GHG emissions:¹⁴¹
 - Electricity generation units that report CO₂ year round through 40 C.F.R. 75
 - Adipic acid production
 - Aluminum production
 - Ammonia manufacturing
 - Cement production

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- HCFC-22 production
 - HFC-23 destruction processes
 - Lime manufacturing
 - Nitric acid production
 - Petrochemical production
 - Petroleum refineries
 - Phosphoric acid production
 - Silicon carbide production
 - Soda ash production
 - Titanium dioxide production
 - Municipal solid waste landfills (if CH₄ generation > 25,000 metric tons CO₂e)
 - Manure management systems (if combined CH₄ and N₂O > 25,000 metric tons CO₂e per year)
 - Electrical transmission and distribution equipment use at facilities (if total nameplate capacity of SF₆ and PFC containing equipment > 17,820 lbs) (starting 2011)
 - Underground coal mines (liberating > 36,500,000 actual cubic feet of CH₄ per year) (starting 2011)
 - Geologic sequestration of CO₂ (starting 2011)
 - Electrical transmission and distribution equipment manufacture or refurbishment (starting 2011)
 - Injection of CO₂ (starting 2011)
 - Facilities containing one of the following source categories that emits 25,000 tons or more of CO₂e per year of combined emissions from listed sources (including stationary fuel combustion units):¹⁴²
 - Ferroalloy production
 - Glass production
 - Hydrogen production
 - Iron and steel production
 - Lead production
 - Pulp and paper manufacturing
 - Zinc production
 - Electronics manufacturing (starting 2011)
 - Fluorinated gas production (starting 2011)
 - Magnesium production (starting 2011)
 - Petroleum and natural gas systems (starting 2011)
 - Industrial wastewater treatment (starting 2011)
 - Industrial waste landfills (starting 2011)
 - Facilities not covered above but for which (1) combined annual emissions from all stationary fuel sources equal or exceed 25,000 metric tons CO₂e and (2) have an aggregate rated heat input of 30mm BTU/hr or greater.
 - Suppliers of listed products, including carbon dioxide, petroleum products, natural gas and natural gas liquids, industrial GHGs, and coal-to-liquid products.¹⁴³

A covered facility may stop reporting its emissions if (1) its emissions are below 25,000 metric tons CO₂e for five consecutive years, (2) its emissions are below 15,000 metric tons CO₂e for three consecutive years, or (3) all sources covered by the Reporting Rule are closed or removed.¹⁴⁴ Certain source categories included in the proposed rule, namely ethanol production, food processing, and suppliers of coal, are not covered under the Reporting Rule. Electronics manufacturing, fluorinated GHG production, magnesium production, oil and natural gas systems, SF₆ from electrical equipment, underground coal mines, industrial landfills, and wastewater treatment also were eliminated during the drafting of the final rule, in most cases pending further analysis and consideration,¹⁴⁵ but were restored in a series of subsequent rulemakings.¹⁴⁶

EPA has acknowledged that certain double counting is inherent in the source categories, but believes that the information being reported is still valuable in assessing facility and regional emissions.¹⁴⁷ For example, a petroleum refinery is required to report both its direct emissions and those from the eventual downstream combustion of the fuel it produces and supplies. At the same time, the downstream consumer that combusts that fuel supply also may be required to report its direct emissions.

Beginning with model year 2011, the Greenhouse Gas Reporting Program also requires manufacturers of engines, including highway heavy-duty, nonroad diesel, marine diesel, locomotive, snowmobile, and motorcycle engines,¹⁴⁸ to report emission rates of GHGs from their engines.¹⁴⁹ Although engine manufacturers may already measure CO₂ emission rates as part of normal business practices, the results have not been consistently reported to EPA.¹⁵⁰ The GHG reporting requirement requires that manufacturers report their CO₂ emissions, as well as N₂O and CH₄. While the CO₂ testing began starting with model year 2011, testing for N₂O and CH₄ was given an extended lead time in order to reduce the burden of obtaining and installing the necessary monitoring equipment.¹⁵¹ For CH₄, reporting began with model year 2012 and for N₂O, reporting begins in 2013, or when the manufacturer introduces NO_x after-treatment technology, whichever is later.¹⁵²

Monitoring, Records, and Verification

Entities covered by the reporting program are required to report a variety of information including annual emissions of each GHG; annual emissions in CO₂e aggregated from all applicable source categories; annual emissions from each source category of each GHG; any other data specified in the “data reporting requirements” section of each applicable subpart; and a brief description of each best available monitoring method used.¹⁵³

The monitoring requirements specified in subparts of the Reporting Rule governing each source category include facility-specific methods for estimating emissions.¹⁵⁴ Facilities that are already required to monitor and report emissions data, however, such as power generation plants subject to the acid rain program under the CAA,¹⁵⁵ are required to directly measure GHG emissions.¹⁵⁶ In addition, facilities were permitted to use “best available” monitoring methods through March 31, 2010.¹⁵⁷

Third-party verification of emissions is not required under the Reporting Rule. Reporting facilities and entities are required to self-certify using a designated

representative.¹⁵⁸ EPA, however, retains the right to independently verify reported emissions data.¹⁵⁹ In general, records must be maintained for three years.¹⁶⁰

EPA has taken the position that inputs to emissions calculations (where emissions are not directly measured) constitute “emission data” that can not be treated as confidential business information (CBI) by reporting entities under section 114 of the CAA. Nonetheless, in response to stakeholder concerns about the public availability of some data that are used as inputs to emissions equations (e.g., raw materials used, production volume, and other potential trade secrets), EPA has deferred the reporting requirements for certain data and is determining through a series of rulemakings which categories of data may be protected as CBI.¹⁶¹ In August 2013, EPA proposed amended record-keeping and reporting requirements and verification procedures for reporters in certain source categories. Under the revisions to the Reporting Rule, in lieu of reporting inputs to equations in certain areas with disclosure concerns, facilities would be required to use an electronic inputs verification tool and be subject to additional record-keeping and other requirements, which would allow EPA to verify compliance.¹⁶²

Enforcement

Any violation of the Reporting Rule shall constitute a violation of the CAA, including section 114.¹⁶³ Potential violations include the failure to do any of the following: report GHG emissions; collect data needed to calculate GHG emissions; continuously monitor and test in accordance with the Reporting Rule; retain records needed to verify the amount of GHG emissions; and calculate emissions following specified methodologies.¹⁶⁴ Each day of a violation constitutes a separate violation.¹⁶⁵

EPA is expected to provide extensive technical assistance to reporting entities. Although EPA may exercise some degree of leniency in initial reporting cycles, the agency has stated that “accurate and timely information on GHG emissions is essential for informing many future climate change policy decisions.”¹⁶⁶ Moreover, reporting entities should be cognizant of potential enforcement relating to potential inaccuracies in other areas of public disclosure in which data reported under the Reporting Rule is incorporated (e.g., if entities decide to report emissions data in voluntary reports or periodic filings) or relating to any inconsistencies between reporting under the Reporting Rule and other public disclosure.

Early Results

January 2012 marked the publication of the first round of data, including figures from the 2011 calendar year.¹⁶⁷ EPA received reports covering more than 6,200 entities and 3.2 billion tons of GHG emissions in CO₂e.¹⁶⁸ Not surprisingly, of the industry sectors reporting 2010 figures, power plants were easily the largest stationary source of direct emissions with 1,562 reporters emitting 2.33 billion metric tons of CO₂e, or about 73 percent of total reported emissions.¹⁶⁹ A distant second were “Refineries” and “Chemicals” facilities.¹⁷⁰ EPA also reported that 60 percent of GHGs were emitted by about 5 percent of facilities and that most emissions were from combustion. All the requested data is available and searchable, by facility, at EPA’s website.¹⁷¹

Green Marketing

Background

Outside the realm of public disclosure and voluntary reporting, many companies increasingly have used green marketing and media campaigns in efforts to fashion an environmentally friendly corporate image and to capture consumer attention and market-share. This trend, in turn, has raised increasing concerns around the green claims that companies make and how they are interpreted by—or, in a worst case, how they may deceive—consumers. This greenwashing issue has already resulted in a number of lawsuits in which regulators have challenged the veracity of marketing claims, such as those touting the recyclable and biodegradable nature of plastic water bottles.¹⁷² Protecting consumers from these kinds of harms has fallen on attorneys general under existing law at both federal and state levels. Private parties have also joined the fray, for example, by filing claims alleging that the consumer failed to receive the claimed green benefit of the product or service¹⁷³ (discussed *infra*).

The FTC first issued its “Guides for the Use of Environmental Marketing Claims”¹⁷⁴—commonly referred to as the Green Guides—in 1992 to help ensure that public claims being made by companies were true and substantiated. The Green Guides were updated in 1996 and again in 1998. In addition to general guidelines on making green claims, the Green Guides provide direction on how consumers are likely to interpret claims and how companies can both substantiate claims and qualify claims to avoid misrepresentation.

FTC initiated its most recent review of the Green Guides in November 2007, seeking comment on a variety of issues, including the continuing need for the guidance, its effect on environmental claims, and claims not addressed by the 1998 version.¹⁷⁵ The agency also commissioned its own studies of consumers’ understanding of certain types of claims in mid-2009.¹⁷⁶ FTC published a Federal Register Notice in October 2010 discussing its review of public comments and consumer perceptions, proposing a number of amendments to the guides and seeking public comment.¹⁷⁷ The amendments included expansion of the guides to address new areas of concern, such as carbon offsets and renewable material and renewable energy claims. In October 2012, FTC published amended Green Guides in final form. Although the guides are not legally binding, the recent activity by FTC nonetheless signals an increase in the agency’s enforcement in this area and an implicit mandate for companies leveraging sustainable business practices to refocus on the environmental benefit claims of their brands.

The FTC Act and Green Guides

The Green Guides, although nonenforceable guidance, are rooted in the standards created by the Federal Trade Commission Act (FTC Act).¹⁷⁸ In effect, the Green Guides are administrative interpretations of the FTC Act¹⁷⁹ that purport to “help marketers avoid making deceptive claims under Section 5 of the FTC Act.”¹⁸⁰ Section 5 of the FTC Act prohibits companies from engaging in unfair and deceptive acts and practices

affecting commerce.¹⁸¹ Unfair and deceptive acts or practices are defined as being a representation, omission, or practice that (1) is likely to mislead consumers acting reasonably under the circumstances and (2) is material to a consumer's decision.¹⁸² To avoid being deceptive, marketers must substantiate their claim with any competent and reliable scientific evidence that supports a reasonable basis for the claims.¹⁸³ Marketers must substantiate every express and implied benefit that consumers reasonably could take from such a claim.¹⁸⁴ They may choose any substantiation method in accordance with the FTC Act.¹⁸⁵

The Green Guides cover statements regarding the environmental attributes of a product, packaging, or service and apply to all claims asserted "through words, symbols, logos, depictions, product brand names, or any other names."¹⁸⁶ They are intended to ensure that "all reasonable interpretations of [marketers'] claims are truthful, not misleading, and supported by a reasonable basis."¹⁸⁷ "A reasonable basis often requires competent and reliable scientific evidence" consisting of "tests, analyses, research, or studies that have been conducted and evaluated in an objective manner by qualified persons and are generally accepted in the profession to yield accurate and reliable results."¹⁸⁸ The evidence "should be sufficient in quality and quantity based on standards generally accepted in the relevant scientific fields, when considered in light of the entire body of relevant and reliable scientific evidence."¹⁸⁹

Thus, it may not be enough that marketers substantiate their claims with their own studies, if such studies run against the weight of evidence in the field. To prevent deceptive claims, qualifications should be clear and prominent. To that end, "marketers should use plain language and sufficiently large type, should place disclosures in close proximity to the qualified claim, and should avoid making inconsistent statements or using distracting elements that could undercut or contradict the disclosure."¹⁹⁰ The Green Guides apply to both business-to-consumer and business-to-business marketing claims.

The most recent Green Guides include a number of general requirements¹⁹¹ and address the following claims in particular:

- General environmental benefit claims
- Carbon offsets
- Certifications and seals of approval
- Compostable
- Degradable
- "Free of . . ."
- Nontoxic
- Ozone-safe and ozone-friendly
- Recyclable
- Recycled content
- Refillable
- Renewable energy
- Renewable materials
- Source reduction

Many of the above claims, some of which are discussed in greater detail below, have relevance to potential claims associated with climate change, for example, claims regarding GHG reduction or offsets or other climate-related benefits.

General Environmental Benefit Claims

Unqualified general claims of environmental benefit, such as the terms “green” and “eco-friendly,” and earth-shaped icons, are considered difficult to interpret.¹⁹² Such unqualified claims typically cannot be substantiated and, thus, should not be made.¹⁹³ Any such claims should use clear and prominent language to clarify or qualify the claimed environmental benefit.¹⁹⁴

Certifications and Seals of Approval

It is deceptive to misrepresent a third-party endorsement, including through the use of the name, logo, or seal of approval of a third-party certifier or organization.¹⁹⁵ The basis for the certification or seal should be conveyed; otherwise, its use “likely conveys” a general environmental benefit claim.¹⁹⁶ If the product has been self-certified, that must be disclosed. Third-party certification does not eliminate the marketer’s obligation to possess substantiation for all claims made.¹⁹⁷

Carbon Offsets

Sellers should properly quantify emission reductions using reliable scientific and accounting methods.¹⁹⁸ It is deceptive to misrepresent that a carbon offset represents emission reductions that have already occurred or will occur in the immediate future. If the proceeds from the offset fund future projects that will not reduce emissions for two years, the advertisement is deceptive.¹⁹⁹ It is deceptive to claim that a carbon offset represents an emission reduction if the reduction was required by law, since the reduction would have occurred regardless of whether the consumer had purchased the offsets.²⁰⁰

Renewable Energy Claims

It is deceptive to misrepresent that a product or package is made with renewable energy or that a service uses renewable energy.²⁰¹ A marketer should not make an unqualified renewable energy claim if any part of the advertised item is made with, or if any part of an advertised service is powered by, fossil fuel or electricity derived from fossil fuel, unless such marketer has matched such nonrenewable energy use with renewable energy certificates.²⁰² The FTC has found that consumers may interpret renewable energy claims differently than marketers intend. Thus, such claims should include clear and prominent qualifying language, unless the marketer has substantiated all express and reasonably implied claims.²⁰³

For example, marketers can mitigate the risk of deception by specifying the source of renewable energy, such as wind or solar energy.²⁰⁴ It also is deceptive to make unqualified “made with renewable energy” claims unless all or virtually all of the significant manufacturing processes involved in making the advertised item are powered

by renewable energy or by nonrenewable energy matched by renewable energy certificates.²⁰⁵ If a seller generates renewable electricity but sells renewable energy certificates for that electricity, it is deceptive to represent that it uses renewable energy.²⁰⁶

Claims Not Addressed

Although the final Green Guides do not include advice on “natural,” “organic” or “sustainable” claims, they remain subject to section 5 of the FTC Act. Marketers must still qualify claims appropriately to avoid consumer deception and substantiate any reasonable interpretation of their claims in the context of the entire advertisement.²⁰⁷

Trends in Litigation and Enforcement

Although the revised Green Guidelines were not finalized until October 2012, the FTC has pursued a trend of increasing enforcement over several years. For example, in 2009, the FTC sued four clothing manufacturers to bar them from claiming their rayon garments were made from bamboo in an eco-friendly way and contained antimicrobial properties.²⁰⁸ In early 2010, the agency warned 78 retailers, including Walmart, Costco, Kmart, QVC, and Target, against selling similarly marketed products.²⁰⁹

In July 2009, in *In re Kmart Corp.*, the FTC alleged that Kmart violated section 5 of the FTC Act by advertising their “American Fare” paper plates as biodegradable even though the plates would not decompose in a reasonably short period of time after customary disposal.²¹⁰ The resulting consent order with Kmart requires that all future products make accurate claims based on scientific evidence and that for five years Kmart make available all advertisements claiming a biodegradability claim as well as the relevant scientific backing including tests, reports, studies, or evidence.

In October of 2012, two paint companies, the Sherwin-Williams Company and PPG Architectural Finishes, agreed to settlements with the FTC after allegedly making deceptive claims that their paints contained “zero” volatile organic compounds.²¹¹ In February 2012, five window manufacturers were sued for making deceptive claims about the energy efficiency of their windows. The companies’ unsupported claims included how much money consumers could save on heating and cooling. The five separate consent orders²¹² prohibit the companies from making similar deceptive claims.

Separate from FTC proceedings, private civil actions recently have been brought against alleged greenwashers, claiming that the products failed to meet claimed environmental benefits. For example, in one case, claimants argue that the “green” symbol on the defendant’s household product is misleading because it is not a third-party seal of approval but rather a promotional claim by the marketer.²¹³ In addition, multiple class actions and/or individual claims have included alleged false or misleading statements regarding the performance of hybrid cars, such as failure to achieve advertised gas mileage under normal driving conditions and misleading statements regarding an electric car’s battery capacity and driving range.²¹⁴

Government and consumer focus in this area will continue to grow. Marketers to consumers and business should consider renewed attention to their environmental

claims, particularly in areas expanded under the most recent Green Guides, such as renewable energy and material claims. Unqualified environmental benefit claims should be avoided, and marketers should evaluate consumer perceptions when making claims, including consideration of all express and implied claims conveyed. In short, where possible, marketers should be specific. A review of commercial general liability coverage in place or available in the market may also be appropriate.

Notes

1. MARK A. STACH, *DISCLOSING ENVIRONMENTAL LIABILITIES UNDER SECURITIES LAW* 1-7 (1997).

2. *Id.*

3. See STACH, *supra* note 1, at 1-1 & 1-7.

4. See *Basic Inc. v. Levinson*, 485 U.S. 224, 230 (1998).

5. *Basic*, 485 U.S. at 230 (quoting H.R. REP. NO. 1383, 73d Cong. Sess., 11 (1934)); see STACH, *supra* note 1, at 1-7.

6. *Basic*, 485 U.S. at 230 (citations omitted).

7. See STACH, *supra* note 1, at 1-7.

8. *Id.*

9. *Id.*

10. STACH, *supra* note 1, at 1-7 to 1-8 (citing 17 C.F.R. §§ 240.13a-13, 240.15d-13 (concerning Form 10-K)).

11. STACH, *supra* note 1, at 1-8 (citing 17 C.F.R. §§ 240.13a-1, 240.15d-1 (concerning Form 10-K)).

12. STACH, *supra* note 1, at 1-8 (citing, *e.g.*, Form S-3 under the '33 Act).

13. Sec. & Exch. Comm'n, Commission Guidance Regarding Disclosure Related to Climate Change, Release Nos. 33-9106, 34-61469, 75 Fed. Reg. 6290 (Feb. 8, 2010), <http://www.sec.gov/rules/interp/2010/33-9106.pdf> [hereinafter Climate Disclosure Release].

14. Petition for Interpretive Guidance on Climate Risk Disclosure, Sept. 18, 2007, *available at* <http://www.sec.gov/rules/petitions/2007/petn4-547.pdf>. In November 2009, the group filed a supplemental petition citing new developments, including the mandatory EPA greenhouse gas reporting requirement and the introduction of climate legislation in the U.S. Congress. Supplemental Petition for Interpretive Guidance on Climate Risk Disclosure, Nov. 23, 2009, *available at* <http://www.sec.gov/rules/petitions/2009/petn4-547-supp.pdf> [hereinafter Climate Disclosure Petition]. The group had also filed an earlier supplemental petition to update the Commission on then-current developments. Request for Interpretive Guidance on Climate Risk Disclosure, June 12, 2008, *available at* <http://www.sec.gov/rules/petitions/2008/petn4-547-supp.pdf>.

15. As noted in the Climate Disclosure Release, the Securities Act and Exchange Act disclosure obligations of foreign private issuers are governed principally by Form 20-F and not by Regulation S-K. At the same time, SEC notes in the Climate Disclosure Release that the Regulation S-K items that pertain to climate change have parallels under Form 20-F, although the requirements are not exactly the same, and 20-F is not as prescriptive in some respects as the provisions applicable to U.S. domestic issuers.

16. 17 C.F.R. § 229.101 (2005).

17. See 17 C.F.R. § 229.101 (2005).

18. See *In re U.S. Steel Corp.*, Exchange Act Release No. 16,223, [1979-1980 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶ 82,319, at 82,383 (Sept. 27, 1979) (interpreting precursor to Item 101(c)(xii)); Environmental Disclosure, Securities Act Release No. 6130, Exchange Act Release No. 16,224 (Sept. 27, 1979).

19. The SEC had previously determined that “to the extent any foreign [environmental] provisions may have a material impact upon the company’s financial condition or business, . . . such matters should be disclosed.” *Arthur M. Wharton Air Prods. and Chems., Inc.*, 1973 WL 11973 (S.E.C. No-Action Letter July 11, 1973) (interpreting precursor to Item 101(c)(xii)).

20. See *U.S. Steel*, Exchange Act Release No. 16,223 at 82,383.

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21. 42 U.S.C. §§ 7401 *et seq.* (1970).
 22. *See, e.g.,* Massachusetts v. EPA, 549 U.S. 497 (2007).
 23. *See* Am. Elec. Power Co. v. Connecticut, 131 S. Ct. 2527 (2011); California v. Gen. Motors Corp., No. 3:06 CV 5755 MJJ (N.D. Cal. 2007).
 24. 17 C.F.R. § 229.103 (2005).
 25. 17 C.F.R. § 229.103 (Instruction No. 5) (2005).
 26. *See* U.S. EPA, Guidance on Distributing the Notice of SEC Registrants' Duty to Disclose Environmental Legal Proceedings in EPA Enforcement Actions, Presentation to the American Bar Ass'n Conference on Environmental Law (Mar. 2001).
 27. 17 C.F.R. § 229.103 (Instruction No. 5) (2005).
 28. A discussion of certain applicable accounting rules pertinent to financial statement disclosure can be found in the subsequent section of this chapter.
 29. 17 C.F.R. § 229.303 (2005).
 30. Richard Y. Roberts, Address at the Colorado Bar Association: Update on Environmental Disclosure (Sept. 28, 1991).
 31. Release, *supra* note 13, at 19, 24 (reiterating the need for registrants to assess their potential disclosure regularly).
 32. Concept Release on Management's Discussion and Analysis of Financial Condition and Operations, Exchange Act Release No. 6211, 52 Fed. Reg. 13,715, 13,717 (Apr. 26, 1987).
 33. Securities Act Release No. 6835, 54 Fed. Reg. 22,427, 22,430 (May 4, 1989).
 34. Securities Act Release No. 6835, 54 Fed. Reg. 22,427, 22,430 (May 4, 1989).
 35. *See* Management Discussion and Analysis of Financial Condition and Results of Operations: Certain Investment Company Disclosures, Securities Act Release No. 6835, 54 Fed. Reg. 22,427, at 22,430 (May 24, 1989).
 36. *See id.* The SEC has expressly rejected as "inapposite to Item 303 disclosure" the probability/magnitude balancing test for disclosure of contingent events set forth by the Supreme Court in *Basic v. Levinson*. *See* Securities Act Release No. 6835, 54 Fed. Reg. 22,427, at 22,430 n.27.
 37. 17 C.F.R. § 229.303(a)(1) (2005).
 38. Securities Act Release No. 6711, Fed. Sec. L. Rep. (CCH) ¶ 84,118, at 88,624 (Apr. 20, 1987).
 39. *See* Management's Discussion and Analysis of Financial Condition and Results of Operations: Certain Investment Company Disclosures, Securities Act Release No. 33-6835 (May 18, 1989), 54 Fed. Reg. 22,247.
 40. 17 C.F.R. § 229.303 (2005) (Instruction 2). *See also* Securities Act Release No. 6835, 54 Fed. Reg. 22,427, at 22,430 (stating that MD&A requires quantification of potential liability "to the extent reasonably practicable").
 41. *See* Securities Act Release No. 6231, 20 S.E.C. Docket 1059, 1072 (Sept. 2, 1980).
 42. 17 C.F.R. § 229.303(a) (2005).
 43. *In re* Occidental Petroleum, 57 S.E.C. Docket 330, 571 (July 2, 1980) (discussing precursor to Item 303).
 44. Securities Act Release No. 6835, 54 Fed. Reg. 22,427, 22,430 (May 24, 1989).
 45. *See* James Glanz, *The Nation: Blue Sky; Sure, It's Rocket Science, But Who Needs Scientists?*, N.Y. TIMES, June 17, 2001, at D1 (quoting various administration sources as "dismissive" of climate change science).
 46. *See, e.g.,* WORLD BANK, TURN DOWN THE HEAT: WHY A 4°C WARMER WORLD MUST BE AVOIDED (Nov. 2011), http://climatechange.worldbank.org/sites/default/files/Turn_Down_the_heat_Why_a_4_degree_centrigrade_warmer_world_must_be_avoided.pdf.
 47. *See, e.g.,* CARB, Cap-and-Trade Program, <http://www.arb.ca.gov/cc/capandtrade/capandtrade.htm> (California), European Comm'n, Climate Action: The EU Emissions Trading System, http://ec.europa.eu/clima/policies/ets/index_en.htm (Europe), and Reg'l Greenhouse Gas Initiative, <http://www.rggi.org/> (several northeast and mid-Atlantic states). *See also* chapters 9 and 10 (discussing state and regional climate change initiatives).
 48. *See* The President's Climate Action Plan, June 2013, <http://www.whitehouse.gov/sites/default/files/image/president27climateactionplan.pdf> [hereinafter President Obama's Action Plan]. *See also* chapter 4.

49. See chapter 10.

50. See SEC No-Action Letter (Mar. 15, 2005) (dealing with the company's views on available global warming science); SEC No-Action Letter (Mar. 23, 2005) (dealing with the company's plans for meeting GHG emission reduction targets in Kyoto-signatory countries).

51. See President Obama's Action Plan, *supra* note 48, at 4–5.

52. Petition, *supra* note 14, at 51–53.

53. Release, *supra* note 13, at 22.

54. Statements at SEC Open Meeting—Disclosure Related to Climate Change by Commissioner Paredes, <http://www.sec.gov/news/speech/2010/spch012710tap-climate.htm>.

55. *Id.*

56. *Id.*, Statements by Commissioners Paredes and Casey.

57. See Release, *supra* note 13, at 18.

58. TSC Indus. Inc. v. Northway, Inc. 426 U.S. 438, 448 (1976).

59. 17 C.F.R. § 240.12b-2 (2005) (Exchange Act); see also 17 C.F.R. § 230.405 (2005) (Securities Act); SEC, Materiality, SEC Staff Accounting Bulletin Release No. 99, 64 Fed. Reg. 45,150 (Aug. 12, 1999) [hereinafter SAB 99] (emphasizing that materiality should be measured by a “reasonable investor” standard; i.e., without reference to numerical rules of thumb).

60. Fin. Accounting Standards Bd., Statement of Financial Accounting Concepts No 2, Qualitative Characteristics of Accounting Information (May 1980).

61. See SAB 99, *supra* note 59, 64 Fed. Reg. at 45,151:

The staff is aware that certain registrants, over time, have developed quantitative thresholds as “rules of thumb” to assist in the preparation of their financial statements, and that auditors also have used these thresholds in their evaluation of whether items might be considered material to users of a registrant’s financial statements. One rule of thumb in particular suggests that the misstatement or omission of an item that falls under a 5% threshold is not material in the absence of particularly egregious circumstances, such as self-dealing or misappropriation by senior management. The staff reminds registrants and the auditors of their financial statements that exclusive reliance on this or any percentage or numerical threshold has no basis in the accounting literature or the law. The use of a percentage as a numerical threshold, such as 5%, may provide the basis for a preliminary assumption that—without considering all relevant circumstances—a deviation of less than the specified percentage with respect to a particular item on the registrant’s financial statements is unlikely to be material. The staff has no objection to such a ‘rule of thumb’ as an initial step in assessing materiality. But quantifying, in percentage terms, the magnitude of a misstatement is only the beginning of an analysis of materiality; it cannot appropriately be used as a substitute for a full analysis of all relevant considerations. Materiality concerns the significance of an item to users of a registrant’s financial statements. A matter is “material” if there is a substantial likelihood that a reasonable person would consider it important.

62. Petition, *supra* note 14, at 53 & app. G-3.

63. *Id.*

64. American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong.

65. Senators McCain and Lieberman introduced unsuccessful cap-and-trade bills in the Senate in 2003, 2005, and 2007. See Climate Stewardship Act of 2003, S. 139, 108th Cong.; Climate Stewardship and Innovation Act of 2005, S. 1151, 109th Cong.; Climate Stewardship and Innovation Act of 2007, S. 280, 110th Cong.

66. See chapter 4 (discussing Clean Air Act regulation). See also President Obama’s Action Plan, *supra* note 48.

67. Compare, e.g., Am. Elec. Power Co. Annual Report on Form 10K for the fiscal year ended December 31, 2008 (no disclosure describing physical risks), with Am. Elec. Power Co. Annual Report on Form 10K for the fiscal year ended December 31, 2009 (“Global warming creates the potential for physical and financial risk. The materiality of the risks depends on whether any physical changes occur quickly or over several decades and the extent and

nature of those changes. Physical risks from climate change could include changes in weather conditions. Our customers' energy needs currently vary with weather conditions, primarily temperature and humidity. For residential customers, heating and cooling today represent their largest energy use. To the extent weather patterns change significantly, customers' energy use could increase or decrease depending on the duration and magnitude of any changes. Increased energy use due to weather changes could require us to invest in more generating assets, transmission and other infrastructure to serve increased load, driving the overall cost of electricity up. Decreased energy use due to weather changes could affect our financial condition through lower sales and decreased revenues. Extreme weather conditions in general require more system backup, adding to costs, and can contribute to increased system stresses, including service interruptions and increased storm restoration costs. We may not recover all costs related to mitigating these physical and financial risks. Weather conditions outside of our service territory could also have an impact on our revenues, either directly through changes in the patterns of our offsystem power purchases and sales or indirectly through demographic changes as people adapt to changing weather. We buy and sell electricity depending upon system needs and market opportunities. Extreme weather conditions that create high energy demand could raise electricity prices, which could increase the cost of energy we provide to our customers and could provide opportunity for increased wholesale sales.”).

68. See chapter 8 (discussing CT versus AEP and other climate-related litigation).

69. See, e.g., CERES, SUSTAINABLE EXTRACTION? (Aug. 2012) (finding SEC disclosure by 10 major oil and gas companies on various climate issues to be generally inadequate to allow investors to fully gauge their exposure to climate risks and opportunities).

70. See, e.g., Letter from Sec. & Exch. Comm'n, Div. of Corporate Fin. to Gesner José De Oliveira Filho, Chief Exec. Officer, dated Dec. 17, 2010, re: Basic Sanitation Co. of the State of Sao Paulo—SABESP, Form 20-F, Filed July 15, 2010, File No. 000-31317, <http://www.sec.gov/Archives/edgar/data/1170858/000000000011005343/filename1.pdf>; Letter from Sec. & Exch. Comm'n, Div. of Corporate Fin. to United Ins. Holdings Corp., dated Sept. 1, 2011, re: United Insurance Holdings Corp., Form 10-K, Filed Mar. 17, 2011, File No. 000-52833, <http://www.sec.gov/Archives/edgar/data/1401521/000000000011052707/filename1.pdf>.

71. Letter from Sec. & Exch. Comm'n, Div. of Corporate Fin. to Fortegra Financial Corp., dated Oct. 21, 2010, re: Fortegra Financial Corp. Registration Statement on Form S-1, Filed Sept. 23, 2010, File No. 333-169550, <http://www.sec.gov/Archives/edgar/data/1495925/000000000010010062091/filename1.pdf>.

72. Letter from Sec. & Exch. Comm'n, Div. of Corporate Fin. to Nat'l Grid PLC, dated Sept. 2, 2010, re: Nat'l Grid PLC Annual Report on Form 20-F for Fiscal Year Ended Mar. 31, 2010, Filed May 25, 2010, File No. 001-14958, <http://www.sec.gov/Archives/edgar/data/1004315/000000000010051122/filename1.pdf>.

73. Letter from Sec. & Exch. Comm'n, Div. of Corporate Fin. to Green Endeavors, Ltd., dated August 13, 2010, re: Green Endeavors, Ltd. Amendment No. 1 to Form 10, Filed Aug. 3, 2010, File No. 000-54018, <http://www.sec.gov/Archives/edgar/data/1487997/000000000010046498/filename1.pdf>.

74. Letter from Sec. & Exch. Comm'n, Div. of Corporate Fin. to MagneGas Corp., dated Feb. 7, 2012, re: MagneGas Corp. Registration Statement on Form S-1, Amendment No. 1 filed Jan. 25, 2012, File No. 333-178643, <http://www.sec.gov/Archives/edgar/data/1353487/000000000012006703/filename1.pdf>.

75. Letter from Sec. & Exch. Comm'n, Div. of Corporate Fin. to KiOR, Inc., dated May 5, 2011 re: KiOR, Inc. Registration Statement on Form S-1, Filed Apr. 11, 2011, File No. 333-173440, <http://www.sec.gov/Archives/edgar/data/1418862/000000000011028271/filename1.pdf>.

76. Pub. L. No. 107-204, 116 Stat. 745.

77. See 17 C.F.R. §§ 232, 240, 249 *et seq.* (2005).

78. See 17 C.F.R. 240.13a-15 (2005).

79. See 17 C.F.R. §§ 232, 240, 249 *et seq.* (2005).

80. See Pub. L. No. 107-204, § 302, 116 Stat. 745.

81. *Id.*

82. 15 U.S.C. § 78m (a) and 78o (d) (reporting requirements governing periodic reports and registered securities).

83. See Pub. L. No. 107-204, § 906, 116 Stat. 745.

84. See 17 C.F.R. §§ 240.13b2-1, 240.13b2-2 (2005).

85. *Id.*

86. See 17 C.F.R. §§ 240.13b2-1, 240.13b2-2 (2005). Other provisions of Sarbanes-Oxley that may be implicated in the broad context of GHG risk analysis include standards of conduct governing attorneys appearing and practicing before SEC. See 17 C.F.R. § 205 (2005). This includes environmental attorneys preparing analyses of climate change risks for inclusion in disclosure narrative, financial statements, or management presentations to substantiate Sarbanes-Oxley certifications.

87. 15 C.F.R. 210.1-01(a) (2005); STACH, *supra* note 1, at 7-2.

88. STACH, *supra* note 1, at 7-2.

89. See General Revision to Regulation S-X, Release No. AS-280 (Sept. 2, 1980), [Accounting Transfer Release Binder] Fed. Sec. L. Rep. ¶ 72, 302 (eliminating rules duplicative with GAAP); STACH, *supra* note 1, at 7-2.

90. ASC Topic 450 codified Statement of Financial Accounting Standards No. 5, Accounting for Contingencies (March 1975) [hereinafter FASB No. 5].

91. *Id.* § 8.

92. *Id.* § 10.

93. SEC Release No. Staff Accounting Bulletin 92, 58 Fed. Reg. 32,843, 32,843 (June 14, 1993) [hereinafter SAB 92]; Richard Y. Roberts, SEC Comm'r, SAB 92 and SEC's Environmental Liability Disclosure Regulatory Approach, delivered at the University of Maryland School of Law, at 3 (April 8, 1994).

94. SAB 92, *supra* note 93, at 32,843, referring to FASB No. 5, *supra* note 90; Richard M. Schwartz, Donna Mussio & Valerie Ford Jacob, *Environmental Due Diligence for Securities Offerings*, 1489 PLI/Corp. 91, at 4 (May 2005).

95. SAB 92, *supra* note 93, at 32,844; Roberts, *supra* note 93, at 4; Schwartz, Mussio & Jacob, *supra* note 94, at 4.

96. SAB 92, *supra* note 93, at 32,844.

97. *Id.* at 32,844.

98. *Id.* at 32,845; see Roberts, *supra* note 93, at 5-6. For example, in the remedial context, "[w]hile the range of costs associated with various alternatives may be broad, the minimum clean-up cost is unlikely to be zero." SAB 92, *supra* note 93, at 32,844.

99. See FASB No. 5, *supra* note 90, at 5; Roberts, *supra* note 93, at 6.

100. *Id.* In addition to avoiding boilerplate, SEC has cautioned against leaving the reader without a clear understanding of the contingency, stating "some disclosures have so much cautionary qualifying language that they are often ambiguous. For example, a common confusing disclosure states that the ultimate amount of the liability cannot be determined, but that this amount is not expected to be material." *Id.* at 7.

101. See, e.g., Sappi LTD Annual Report, Form 20-F, for the Fiscal Year Ended Sept. 26, 2010. ("The countries within which we operate in Europe are all signatories of the Kyoto Protocol and we have developed a GHG strategy in line with this protocol. Our European mills have been set CO₂ emission limits of the allocation period 2005 to 2007. Based upon in depth analysis of our mill production by a Sappi Fine Paper Europe task force it is unlikely that Sappi will exceed their CO₂ emission limits. Consequently in July 2005 Sappi Fine Paper Europe sold 90,000 surplus CO₂ credits to the value of \$2.5 million (euro 2.0 million) on the European Climate Exchange.").

102. See New Source Performance Standards at 40 C.F.R. part 60 and cap-and-trade programs in California and in members of the Regional Greenhouse Gas Initiative, *supra* note 47.

103. Numerous companies from many different countries, however, have agreed to report using the GRI principles. See GRI website, <http://database.globalreporting.org>.

104. For example, in response to shareholder requests, companies such as Duke Energy, Ford, AEP, and Southern Co. have all prepared voluntary reports on climate change. Each of these

reports is available at the company's website. See Duke Energy, Report to Shareholders on Climate Change (2008), <http://www.duke-energy.com/pdfs/Report-to-Shareholders-on-Climate-Change.pdf>; Ford, Climate Change and the Environment (2012), <http://corporate.ford.com/doc/sr11-environment.pdf>; AEP, 2012 Corporate Accountability Report (2012), <http://www.aepsustainability.com/fastfacts/reports/docs/AEP-CARReport12.pdf>; Southern Co., Taking Action: Southern Company and Greenhouse Gases (2012), <http://www.southerncompany.com/planetpower/pdfs/taking-action-2012.pdf>.

105. See, e.g., Duke Energy, Report, *supra* note 104.

106. For example, Southern Company's 2012 report acknowledgement states "Southern Company engaged in a collaborative dialogue with the Interfaith Center on Corporate Responsibility. Our long-standing interaction with the ICCR has been an opportunity for us to understand its concerns and views and to share our thoughts. . . . We value the ICCR's continued guidance." The acknowledgement is available at <http://www.southerncompany.com/planetpower/credits.html>.

107. See Speech by SEC Comm'r Troy A. Paredes, <http://www.sec.gov/news/speech/2010/spch012710tap-climate.htm>.

108. Release, *supra* note 13, at 7–10.

109. For an example where that was not done, see United Paperworkers International Union v. International Paper Co., 801 F. Supp. 1134, 1137 (S.D.N.Y. 1992), *aff'd as modified*, 985 F.2d 1190 (2d Cir. 1993) (contrasting the "corporate happy talk" in the company's annual environmental report with the company's actual annual environmental record, based on violations, fines and pending proceedings).

110. For a list of sectors and the status of standards being developed, see SASB, Key Dates & Status, <http://www.sasb.org/standards/status-standards/>.

111. See SASB, Conceptual Framework, <http://www.sasb.org/wp-content/uploads/2013/10/SASB-Conceptual-Framework-Final-Formatted-10-22-13.pdf>.

112. Standards and other related materials can be downloaded at <http://www.sasb.org>.

113. See Securities Exchange Act of 1934 § 14; Cynthia A. Williams, *The Securities and Exchange Commission and Corporate Social Transparency*, 112 HARV. L. REV. 1197, 1207 (1999).

114. See 17 C.F.R. § 240.14a-8; STACH, *supra* note 1, at 9-2 to 9-3. In order to have a proposal included in a proxy statement, the proponent must have continuously held at least 2 percent or \$2,000 in market value of the securities entitled to be voted at the meeting for at least one year at the time the proposal is submitted, and the proponent must hold those securities through the date of the meeting. 17 C.F.R. § 240.14a-8.

115. 17 C.F.R. § 240.14a-8(g). These include where a company can demonstrate that the proposal is not a proper subject for action by shareholders under the laws of the jurisdiction of the company's organization; would, if implemented, cause the company to violate any state, federal, or foreign law to which it is subject; is contrary to any of SEC's proxy rules, including 17 C.F.R. § 240.14a-9, which prohibits materially false or misleading statements in proxy soliciting materials; relates to operations which account for less than 5 percent of the company's total assets at the end of its most recent fiscal year, and for less than 5 percent of its net earnings and gross sales for its most recent fiscal year, and is not otherwise significantly related to the company's business; is beyond the company's power or authority to implement; deals with a matter relating to the company's ordinary business operations; directly conflicts with one of the company's own proposals to be submitted to shareholders at the same meeting; has already been substantially implemented by the company; or substantially duplicates another proposal previously submitted to the company by another proponent that will be included in the company's proxy materials for the same meeting. Rule 240.14a-8(j) provides the procedures a registrant must follow if it intends to exclude a proposal. 17 C.F.R. § 240.14a-8 (emphasis added); STACH, *supra* note 1, at 9-4.

116. See, e.g., PNC FINANCIAL SERVICES, 2013 ANNUAL MEETING PROXY STATEMENT, <http://phx.corporate-ir.net/phoenix.zhtml?c=107246&p=proxy> (shareholder proposal requesting an assessment of GHG emissions from PNC's lending portfolio and the company's exposure to

climate change risk); Exxon Mobil, Notice of 2013 Annual Meeting and Proxy Statement (Apr. 12, 2013), *available at* http://www.sec.gov/Archives/edgar/data/34088/000119312513152355/d460324ddef14a.htm#toc460324_24 (shareholder proposal requesting goals for reducing GHG emissions and a report on plans to achieve these goals).

117. *See, e.g.*, TED ALLEN ET AL., ISS, 2011 U.S. POSTSEASON REPORT (Sept. 29, 2011), http://www.issgovernance.com/files/private/2011_US_PostSeason_Report_0929.pdf.

118. JULIE DESJARDINS & ALAN WILLIS, CICA, SUSTAINABILITY: ENVIRONMENTAL AND SOCIAL ISSUES BRIEFING, <http://www.cica.ca/focus-on-practice-areas/governance-strategy-and-risk/directors-series/director-briefings/item52853.pdf>.

119. *See* 2002 WL 833567 (SEC No-Action Letter).

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. *Id.*

125. *See* HEIDI WALSH & MICHAEL PASSOFF, PROXY PREVIEW 2012, <http://www.asyousow.org/publications/2012/ProxyPreview2012.pdf>.

126. *Id.*

127. *Id.*

128. The ExxonMobil statement is available at <http://www.sec.gov/Archives/edgar/data/34088/000119312512160085/d277949ddef14a.htm>.

129. The AT&T proposal is available at <http://www.sec.gov/divisions/corpfin/cf-noaction/14a-8/2012/calvertinvestment020912-14a8.pdf>.

130. The Amazon.com disclosure is available at <http://www.ceres.org/incr/engagement/corporate-dialogues/shareholder-resolutions/amazon.com-climate-risk-disclosure-2012>.

131. *See* U.N. Framework Convention on Climate Change, May 29, 1992, S. Treaty Doc. No. 102-38, 1771 U.N.T.S. 107, *available at* <http://unfccc.int/resource/docs/convkp/conveng.pdf>.

132. 42 U.S.C. § 13385(a).

133. U.S. Energy Info. Admin., Emissions of Greenhouse Gases in the United States 2005, <http://www.eia.gov/oiaf/1605/ggrpt/summary/index.html>.

134. *See* Greenhouse Gas Reporting Program, 40 C.F.R. § 98 [hereinafter Reporting Rule].

135. Consolidated Appropriations Act 2008, Pub. L. No. 110-161, at 2128.

136. 42 U.S.C. §§ 7414, 7542.

137. U.S. EPA, Fact Sheet: Mandatory Reporting of Greenhouse Gases (40 C.F.R. pt. 98), <http://www.epa.gov/ghgreporting/documents/pdf/2009/factsheet.pdf>.

138. *See* EPA, GHGRP 2011: Reported Data, <http://www.epa.gov/ghgreporting/ghgdata/reported/index.html>.

139. Reporting Rule, *supra* note 134, at 40 C.F.R. § 98.1(a).

140. Research and development activities are not considered to be a part of source categories under the Reporting Rule. Reporting Rule, *supra* note 134, at 40 C.F.R. § 98.1(a)(5).

141. *Id.* § 98.2(a)(1).

142. *Id.* § 98.2(a)(2).

143. *Id.* § 98.2(a)(3).

144. 40 C.F.R. § 98.2(i).

145. 74 Fed. Reg. 56,269 (2009).

146. Greenhouse Gas Reporting Program related rulemaking is catalogued at <http://www.epa.gov/ghgreporting/reporters/notices/index.html>.

147. *See* 74 Fed. Reg. 56,271 (2009).

148. The requirements do not apply to C3 marine engines or aircraft engines, because their unique characteristics make testing impractical.

149. *See* 40 C.F.R. §§ 86.007-23(n), 86.431-78(e), 87.64(b)-(c), 89.115(d)(9), 89.407(d)(1), 90.107(d)(8), 90.409(c)(1), 94.103(c), 94.104(e), 94.203(d)(10).

150. 74 Fed. Reg. 56,352.

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151. 74 Fed. Reg. 56,354.
152. See 40 C.F.R. §§ 86.007-23(n), 86.431-78(e), 94.103(c), 94.203(d)(10).
153. 74 Fed. Reg. 56,271 (2009).
154. See, e.g., 40 C.F.R. § 98.143, “calculating GHG emissions” for glass production; 40 C.F.R. § 98.253 “calculating GHG emissions” for petroleum refineries.
155. See U.S. EPA, Clean Air Act: Title IV—Acid Deposition Control, <http://www.epa.gov/air/caa/title4.html>.
156. 40 C.F.R. § 98.40.
157. *Id.* at § 98.3(d).
158. *Id.* § 98.4.
159. EPA’s description of the verification process can be found in its e-GGRT FAQ at <http://www.ccdsupport.com/confluence/display/faq/FAQs>.
160. 40 C.F.R. § 98.3(g).
161. EPA’s discussion of the treatment of CBI under the Reporting Rule is available at <http://www.epa.gov/ghgreporting/reporters/cbi/index.html>.
162. The EPA fact sheet on the rulemaking is available at <http://www.epa.gov/ghgreporting/documents/pdf/2013/documents/2013-Inputs-Rule-Fact-Sheet.pdf>.
163. *Id.* § 98.8.
164. *Id.*
165. *Id.*
166. 74 Fed. Reg. 56,265 (2009).
167. See EPA, GHGRP 2010: Reported Data, <http://www.epa.gov/ghgreporting/ghgdata/reported/index.html>.
168. *Id.*
169. *Id.*
170. *Id.*
171. See EPA, Explore Greenhouse Gas Emissions from Large Facilities, <http://ghgdata.epa.gov/ghgp/main.do>.
172. See Devika Kewalramani & Richard J. Sobersohn, “Greenwashing”: Deceptive Business Claims of “Eco-Friendliness,” *FORBES*, Mar. 20, 2012.
173. *Id.*
174. 16 C.F.R. § 260.
175. 72 Fed. Reg. 66,091.
176. FTC, Green Guides Statement of Basis and Purpose, <http://www.ftc.gov/os/fedreg/2012/10/greenguidesstatement.pdf> [hereinafter FTC Statement].
177. 75 Fed. Reg. 63,552.
178. See 15 U.S.C. § 41, available at <http://www.gpo.gov/fdsys/pkg/USCODE-2011-title15/html/USCODE-2011-title15-chap2-subchapI.htm>.
179. FTC Statement, *supra* note 176, at 122.
180. *Id.* at 1.
181. 15 U.S.C. §§ 41–58 (2012).
182. FTC Statement, *supra* note 176, at 24.
183. 16 C.F.R. § 260.1.
184. Substantiation Policy Statement, Thompson Med. Co., 104 F.T.C. 648, 839 (1984), *aff’d*, 791 F.2d 189 (D.C. Cir. 1986).
185. 16 C.F.R. § 260.2.
186. 16 C.F.R. § 260.1.
187. 16 C.F.R. § 260.2.
188. *Id.*
189. *Id.* § 260.2.
190. *Id.* § 260.3.
191. See *id.* § 260.6.
192. *Id.* § 260.4(a).
193. *Id.*

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194. *Id.* § 260.4(c).
 195. *Id.* § 260.6(a).
 196. *Id.* § 260.6(d).
 197. *Id.* § 260.6(c).
 198. *Id.* § 260.5(a).
 199. *Id.* § 260.5(b).
 200. *Id.* § 260.5(c).
 201. *Id.* § 260.15(a).
 202. *Id.*
 203. *Id.* § 260.15(b).
 204. *Id.*
 205. *Id.* § 260.15(c).
 206. *Id.* § 260.15(d).

207. FTC Statement, *supra* note 176, at 259.

208. See Kewalramani, *supra* note 172. The press releases and related settlements are available at <http://www.ftc.gov/opa/2009/12/dynabamboo.shtm> and <http://www.ftc.gov/opa/2009/10/bamboosa.shtm>.

209. FTC, FTC Warns 78 Retailers, Including Wal-Mart, Target, and Kmart, to Stop Labeling and Advertising Rayon Textile Products as “Bamboo” (Feb. 3, 2010), <http://www.ftc.gov/opa/2010/02/bamboo.shtm>.

210. Decision and Order, *In re* Kmart Corp., Docket No. C-4263, <http://www.ftc.gov/caselist/0823186/090717kmartdo.pdf>.

211. FTC argued that although the uncolored base paints may not contain VOCs, tinted paint normally does. Under the resulting consent orders, which terminate 20 years from the most recent U.S. or FTC complaint alleging any violation of the order, Sherwin-Williams and PPG may not claim the paint VOC level is zero unless the paint contains only trace levels of VOCs after tinting. The order also requires the parties to provide certain notice to its deals and distributes regarding VOC content and maintain certain records for 5 years. Agreement Containing Consent Order *In re* Sherwin-Williams Co., File No. 1123198, <http://www.ftc.gov/os/caselist/1123198/121025sherwinwilliamsagree.pdf>; Agreement Containing Consent Order *In re* PPG Architectural Finishes, Inc., File No. 1123160, <http://www.ftc.gov/os/caselist/1123160/121025ppgagree.pdf>.

212. See Agreement Containing Consent Order *In re* Gorell Enterprises, Inc., File No. 1123053, <http://www.ftc.gov/os/caselist/1123053/120222gorellagree.pdf>; Agreement Containing Consent Order *In re* Long Fence & Home, LLLP, File No. 1123005, <http://www.ftc.gov/os/caselist/1123005/120222longagree.pdf>; Agreement Containing Consent Order *In re* Serious Energy, Inc., File No. 1123001, <http://www.ftc.gov/os/caselist/1123001/120222seriousagree.pdf>; Agreement Containing Consent Order *In re* THV Holdings LLC, File No. 1123057, <http://www.ftc.gov/os/caselist/1123057/120222thvagree.pdf>; Agreement Containing Consent Order *In re* Winchester Indus., File No. 1023171, <http://www.ftc.gov/os/caselist/1023171/120222winchesteragree.pdf>.

213. *Koh v. S.C. Johnson & Son, Inc.* No. C09 00927 HRL (N.D. Cal. 2009).

214. *Lockabey v. Am. Honda Motor Co.*, No. 37-2010-00087755-CU-BT-CTL (Cal. Super. Ct. 2012) and *Klee v. Nissan N. Am., Inc.*, No. CV 12-08238 DDPJWx (C.D. Cal. 2012).