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CLIMATE CHANGE DISCLOSURE BY SEC REGISTRANTS: REVISITING THE SEC’S 2010 INTERPRETIVE RELEASE

Rick E. Hansen*

INTRODUCTION

During an open meeting on January 27, 2010, the U.S. Securities and Exchange Commission (SEC) approved an interpretive release (the Interpretive Release) providing guidance to companies, or “registrants,” that are subject to federal securities laws regarding their disclosure obligations in connection with the risks and opportunities of climate change. Approved by a three-to-two vote of the SEC Commissioners, the Interpretive Release came nearly three years after a coalition of large institutional investors submitted a petition to the SEC seeking such guidance. That the SEC waited nearly three years to address the petitioners’ request and did so by a split vote (along perceived party lines) was an indication of the contentious nature of the topics addressed in the Interpretive Release and the SEC’s role in the ongoing climate change debate. While the SEC’s Interpretive Release was careful to emphasize that the SEC was not imposing new disclosure requirements or taking a position on whether climate change has been occurring, it did indicate that the direct and indirect effects of climate change on a registrant’s business may in fact be material to that registrant’s investors and, therefore, require disclosure in the registrant’s SEC filings.

Prior to the 2010 Interpretive Release, it had been almost thirty years since the SEC first issued interpretive guidance on environmental disclosure in registrants’ SEC filings. In 1971, the SEC issued an interpretive release stating that registrants should consider disclosing in their SEC filings the financial impact of compliance with environmental laws, based on the materiality of that information. Since that time, the federal government,

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3. Interpretive Release, supra note 1, at 6,290–91.

4. Id. at 6,292.

many U.S. states, and the international community have taken a number of measures designed to address the perceived and increasingly recognized effects of climate change. International efforts have included, among others, the Kyoto Protocol, the Copenhagen Accords, and the European Union Emissions Trading System. Here in the United States, state and local governments have individually, or in concert with others, enacted various measures to regulate emissions of greenhouse gases. Such emissions are widely understood to be among the chief causes of climate change. California’s Global Warming Solutions Act of 2006 (AB 32) is perhaps the most recognized, but certainly not the only example. Coalition efforts include the Regional Greenhouse Gas Initiative, comprised of states in the Northeast and East; the Western Climate Initiative, comprised of several Western states and Canadian provinces; and the Midwestern Greenhouse Gas Reduction Accord, comprised of several U.S. states and Canadian provinces. In December 2009, the U.S. Environmental Protection Agency (EPA) issued an “Endangerment and Cause or Contribute Finding” for greenhouse gases under the Clean Air Act, allowing the EPA to craft rules targeted at greenhouse gas emission regulation. The EPA began requiring large emitters of greenhouse gases to collect and report data with respect to their greenhouse gas emissions. While the federal government has yet to adopt comprehensive climate change legislation, it may well be only a matter of time before the political stars are realigned sufficiently allowing such legislation to be put in place.

For many companies, including SEC registrants—the focus of this Article—these legislative and regulatory developments could have, as the

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6. Interpretive Release, supra note 1, at 6,290, 6,296.
7. See Global Warming Solutions Act of 2006 (AB 32), CAL. HEALTH & SAFETY CODE §§ 38500–38599, available at http://www.arb.ca.gov/cc/ab32/ab32.htm (last visited Apr. 5, 2012). AB 32’s primary purposes are: (1) to establish a statewide greenhouse gas emissions cap at 1990 levels by the year 2020; and (2) to require the development of mandatory emissions reporting rules to facilitate the management of emissions reduction programs. A ballot initiative in 2010 to suspend AB 32 was defeated at the polls by a wide margin.
8. Other U.S. states have been actively engaged in climate change regulation as well. For a detailed list of regional U.S. local, state and regional actions on climate change, see U.S. States and Regions, PEW CTR. ON GLOBAL CLIMATE CHANGE, http://www.pewclimate.org/states-regions (last visited Apr. 5, 2012).
9. See Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009) (to be codified at 40 C.F.R. ch. 1). The EPA’s authority to enact such rules was recognized by the U.S. Supreme Court. See Mass. v. EPA, 549 U.S. 497 (2007) (rejecting EPA’s refusal to treat greenhouse gases as pollutants and declaring that they are in fact air pollutants under the Clean Air Act).
11. For a list of bills introduced in the current Congressional session, see U.S. Climate and Clean Energy Policy, PEW CTR. ON GLOBAL CLIMATE CHANGE, http://www.pewclimate.org /federal (last visited Apr. 5, 2012).
SEC has opined, “a significant effect on operating and financial decisions.”\textsuperscript{12} Local, state, federal, and international regulation of greenhouse gases may require registrants to increase capital expenditures to reduce greenhouse gas emissions or incur additional expenses to adhere to cap-and-trade schemes such as, among others, the expense of purchasing additional allowances when reduction targets cannot be met.\textsuperscript{13} Registrants that may not be directly affected by such developments “could nonetheless be indirectly affected by changing prices for goods or services provided by companies that are directly affected and that seek to reflect some or all of their changes in costs of goods in the prices they charge.”\textsuperscript{14} 

The potential risks (and opportunities, as the SEC points out) of climate change are not limited to the direct and indirect costs of compliance with climate change legislation and regulation. If the science of climate change is to be believed, and for the purpose of this Article I assume that it is, the physical effects of climate change also pose additional and unique risks for registrants. In its most recent assessment of global climate change, the oft-cited Intergovernmental Panel on Climate Change (IPCC) has observed that “warming of the [Earth’s] climate system is unequivocal” and that “natural systems are being affected by regional climate changes, particularly temperature increases.”\textsuperscript{15} According to the IPCC, most of the observed increases in global atmospheric concentrations of greenhouse gases (i.e., carbon dioxide, methane, and nitrous oxide) and global average temperatures are “very likely” due to human activity, and without changes in climate change mitigation policies, “global [greenhouse gas emissions] will continue to grow over the next few decades.”\textsuperscript{16} In its Fourth

\begin{itemize}
\item \textsuperscript{12} Interpretative Release, \textit{supra} note 1, at 6,291.
\item \textsuperscript{13} Id.
\item \textsuperscript{14} Id.
\item The IPCC is a scientific body. It reviews and assesses the most recent scientific, technical and socio-economic information produced worldwide relevant to the understanding of climate change. . .
\item The IPCC is an intergovernmental body. It is open to all member countries of the United Nations (UN) and WMO. Currently 195 countries are members of the IPCC. Governments participate in the review process and the plenary Sessions, where main decisions about the IPCC work programme are taken and reports are accepted, adopted and approved. . .
\item \textsuperscript{16} SYNTHESIS REPORT, \textit{supra} note 15, at 44.
\end{itemize}
Assessment Report, the IPCC observed that the twelve warmest years globally since 1850—when such records were first kept—was the period 1995–2006.17 Effects warming has had on the Earth’s climate systems, as catalogued by the IPCC, include: melting glaciers and polar ice sheets, rising sea levels and ocean salinity, changes in regional precipitation amounts and wind patterns, and higher incidences of extreme weather—particularly heat waves, droughts, and tropical cyclones.18 It is argued that these changes could, among other things, impact a registrant’s operating costs, physical assets, distribution channels, supply chains, water supplies, financial well-being, creditworthiness, demand chains, and, importantly, investment opportunities.19

Investors’ awareness of the alleged threats climate change may present to the companies they invest in has strengthened considerably in recent years. This is manifest by many of the phenomena discussed in this Article, whether through petitions to regulatory bodies, disclosure studies, position papers, or shareholder proposals. These investors argue, not without some plausible basis, that the effects of climate change and the transition to a carbon constrained or low carbon economy will affect companies’ market values and ability to compete.20 Not coincidentally, many companies have begun to recognize the implications of climate change and its regulation for their long-term success. Describing this intersection of investor and company awareness of the importance of climate change as a “tipping point,” a 2009 study of 800 global companies by Goldman Sachs showed that “60% of those companies have established board or senior management responsibility for climate change performance.”21

A particular challenge for registrants is determining what they should be saying in their SEC filings about the effects of climate change on their businesses. Determining how and when climate change will have a material impact on a company and its businesses is no easy task. To make such determinations, registrants must be adept at understanding, and resolving competing interpretations of, the science of climate change. They must

17. See id.
18. See id.
analyze the potential effects of federal, state, and even international climate regulatory initiatives, understand the direct and indirect effects of legislation, and craft where necessary meaningful disclosure that is responsive to SEC requirements without being so speculative in nature as to be uninformative or, even worse, misleading.

In recognition of these developments, as well as in response to petitions for interpretive guidance, the SEC approved the Interpretive Release that is the subject of this Article. I contend that, since the issuance of the Interpretive Release, registrant disclosures concerning climate change in the registrant’s SEC filings have matured and increased (a term I use with some reservation because it ignores considerations of materiality), though perhaps modestly, and that for the reasons discussed in Part VII of this Article, we can expect to see these disclosures continue to mature and increase over time. Part I discusses the SEC’s rules that explicitly or implicitly require climate change disclosure, all of which were “on the books” long before the Interpretive Release. Part II highlights the concept of materiality in disclosure to inform discussion of a registrant’s climate change related disclosure obligations. Part III examines some of the extant surveys of registrant climate change disclosure prior to the issuance of the Interpretive Release. Part IV reviews the petition for interpretive guidance and the Interpretive Release. Part V provides a survey of registrant climate change disclosure, focusing on post-Interpretive Release disclosures to offer insight into whether the Interpretive Release prompted changes in registrant disclosures. In Part VI, reasons for the assumed lack of registrant climate change disclosure are considered. Finally, in Part VII, I discuss possible trends that I believe will contribute to a maturation or increase in registrant climate change disclosure.

I. SEC RULES REQUIRING DISCLOSURE OF CLIMATE CHANGE ISSUES

The disclosure requirements addressed by the Interpretive Release are the product of decades of SEC development. As early as 1968, the SEC began developing requirements for registrants to discuss and analyze their financial condition and results of operations in their annual and periodic SEC filings.22 In 1971, the SEC issued an interpretive release stating that registrants should consider disclosing, in their periodic and annual reports, the material effects of compliance with environmental laws on the registrant’s finances.23 By 1982, following a number of public hearings and rulemaking efforts, much of the SEC’s current disclosure requirements

23. See Petition, supra note2.
were in place. Meanwhile, the U.S. Supreme Court was refining the concept of “materiality” that pervades many of these disclosure requirements.

In the context of climate change, the SEC’s most relevant disclosure rules are found in Regulation S-K. These are: Item 101—Description of Business; Item 103—Legal Proceedings; Item 303—Management’s Discussion and Analysis of Financial Condition and Results of Operation; and Item 503(c)—Risk Factors. Regulation S-X, particularly Article 3—General Instructions as to Financial Statements, also contains some relevant requirements. Not to be overlooked is Rule 408 under the Securities Act of 1933 (the Securities Act)30 and Rule 12b-20 under the Securities Exchange Act of 1934 (the Exchange Act),31 which require, in addition to the information expressly required by the rules mentioned above, “such further material information, if any, as may be necessary to make the required statements, in the light of the circumstances under which they [were] made not misleading.”32

A company (i.e., registrant) may become subject to these disclosure requirements on a one-time basis by filing a registration statement relating to the offering of securities pursuant to the requirements of the Securities Act.33 Likewise, a registrant may become subject to these disclosure requirements on an ongoing and continual basis by coming within the purview of the registration requirements of the Exchange Act.34 Section 13 of the Exchange Act requires registrants to file with the SEC, and thereby

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24. See Interpretive Release, supra note 1, at 6,292.
25. See infra Part II.
27. Interpretive Release, supra note 1, at 6,293–95.
29. See Interpretive Release, supra note 1, at 6,293.
30. 17 C.F.R. § 230.408.
33. Section 5 of the Securities Act of 1933 provides that all securities offered or sold in the United States by an issuer, underwriter, or dealer in interstate commerce or through the use of the mails must be registered with the SEC, unless an exemption applies. The purpose of this requirement is to provide potential investors with full and fair disclosure and certain legal remedies if the disclosure does not meet the statutory and regulatory standards. To register, an offeror of securities files a registration statement with the SEC. The forms of registration prescribed under this Act generally include requirements for the disclosures called for by Regulation S-K, Items 101, 103, 303, and 503(c), and Regulation S-X. For example, Part I, Item 11 (Information With Respect to the Registrant) of a Registration Statement on Form S-1 requires the registrant to include in the registration statement the information detailed by these items. 15 U.S.C. § 77e (2006).
34. See Securities Exchange Act of 1934 § 12, 15 U.S.C. § 78l (2006). The following are subject to the Exchange Act: (a) any issuer of securities traded on a national securities exchange (§ 12(a)); (b) any issuer with a class of equity securities held by 500 shareholders of record and having more than $10 million in total assets (§ 12(g)(1)); and (c) any issuer not meeting either (a) or (b) but having filed a registration statement subject to the Securities Act of 1933 and having more than 300 shareholders of record. 15 U.S.C. §§ 78l, 78o.
make available to the public, quarterly and annual reports.\(^\text{35}\) Thus, each time a registrant files an annual report on Form 10-K or a quarterly report on Form 10-Q, it does so in compliance with the provisions of § 13 of the Exchange Act. Nonetheless, these reports serve more than just a compliance function; they provide a key source of information to investors and the public.\(^\text{36}\) The SEC has prescribed disclosures that should appear in those quarterly and annual reports in Regulation S-K and Regulation S-X discussed below.\(^\text{37}\) This Article focuses principally on the disclosures required of Exchange Act registrants in their annual reports on Form 10-K.

Item 101 of Regulation S-K—Description of Business—requires a registrant to describe the development of its business during the past five years.\(^\text{38}\) To do so, the registrant must discuss, among other things, its form of organization, its past business and business it intends to do, and the dominant segments of its business (including its principal products produced and services rendered, major customers, its dependence, if any, upon a single customer, and the existence of competitive conditions). In addition, a registrant is required to discuss its research and development initiatives and working capital practices.\(^\text{39}\) More specifically, Item 101 requires “appropriate disclosure” as to the “material effects that compliance with Federal, State and local” environmental laws “may have upon the [registrant’s] capital expenditures, earnings and competitive position.”\(^\text{40}\) Item 101 also requires disclosure of “any material estimated capital expenditures for environmental control facilities for the remainder of [the registrant’s] current fiscal year and its succeeding fiscal year and for such further periods as the registrant may deem material.”\(^\text{41}\) Thus, in the context of climate change, Item 101 may potentially require disclosure and discussion of, among other things, the financial and competitive effects of greenhouse gas emissions regulations, cap and trade systems, and similar regulatory regimes to the extent such effects are material.\(^\text{42}\)

Item 103 of Regulation S-K—Legal Proceedings—requires a registrant to describe “any material pending legal proceedings, other than ordinary routine litigation incidental to the business,” to which the registrant is a

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\(^{35}\) 15 U.S.C. § 78m(a). The SEC’s Form 10-K specifies the information required in annual reports and the SEC’s Form 10-Q specifies the information required in quarterly reports. Form 10-K, 17 C.F.R. § 249.310 (2011); 17 C.F.R. § 249.308A (Form 10-Q).

\(^{36}\) See, e.g., Kenneth F. Fick, *The Value of Good Corporate Disclosure*, CPA J., 40–42 (Oct. 2010) (“For companies with little or no analyst coverage, SEC filings may be the only source investors use to decide whether to buy or sell.”).

\(^{37}\) For example, Part I, Item I on Form 10-K requires the registrant to include information required by Item 101 of Regulation S-K. Form 10-K, *supra* note 35, at 8.


\(^{39}\) 17 C.F.R. § 229.101(a), (c).

\(^{40}\) 17 C.F.R. § 229.101(c)(xii).

\(^{41}\) Id.

\(^{42}\) See Interpretive Release, *supra* note 1, at 6,293, 6,296.
party. 43 “[O]rdinary routine litigation incidental to the business” does not, however, include administrative or judicial proceedings “arising under any Federal, State or local provisions that have been enacted or adopted regulating the discharge of materials into the environment or primary [sic] for the purpose of protecting the environment.” 44 Such proceedings must be described if material to the registrant’s business or financial condition if they involve a claim for damages exceeding 10 percent of the registrant’s current assets, or if a governmental authority is a party to the proceeding and the monetary sanctions sought exceed $100,000. 45 So-called climate change litigation is an example of the type of litigation of which Item 103 might require disclosure and discussion, assuming the materiality thresholds for disclosure are met. 46

Item 303 of Regulation S-K—Management’s Discussion and Analysis of Financial Condition and Results of Operations (MD&A)—requires a registrant to provide a narrative discussion of the material information otherwise found in the financial statements included in the registrant’s quarterly and annual reports. 47 The MD&A should “enhance a reader’s understanding of [the registrant’s] financial condition, changes in financial condition and results of operations.” 48 To that end, the SEC prescribes disclosure concerning, among other things, a company’s liquidity, capital resources, results of operations, off-balance sheet arrangements, if any, and certain contractual obligations. More specifically, a registrant must disclose:

- “[A]ny known trends or any known demands, commitments, events or uncertainties that will result in or that are reasonably likely to result in the registrant’s liquidity increasing or decreasing in any material way;” 49
- “[M]aterial commitments for capital expenditures” and “any known material trends, favorable or unfavorable, in the

43. 17 C.F.R. § 229.103.
44. 17 C.F.R. § 229.103(5).
45. Id.
47. 17 C.F.R. § 229.303.
48. 17 C.F.R. § 229.303(a), at Instruction No. 1.
49. 17 C.F.R. § 229.303(a)(1).
registrant’s capital resources” and “any expected material changes in the mix and relative cost of such resources”\textsuperscript{50}, and

- “[A]ny unusual or infrequent events or transactions or any significant economic changes that materially affected the amount of reported income from continuing operations” and “any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations.”\textsuperscript{51}

The MD&A “shall focus specifically on material events and uncertainties known to management that would cause reported financial information not to be necessarily indicative of future operating results or of future financial condition.”\textsuperscript{52} The SEC has indicated that Item 303 imposes a disclosure duty “where a trend, demand, commitment, event or uncertainty is both [1] presently known to management and [2] reasonably likely to have material effects on the registrant’s financial condition or results of operation.”\textsuperscript{53} With respect to pending legislation or regulation, the SEC has directed that where “regulations have been proposed which, if promulgated, would require the expenditure by the Company” of material capital resources, disclosure is required.\textsuperscript{54}

In crafting its MD&A requirements, the SEC has to a certain extent eschewed specific line item requirements in favor of flexible “principles-based disclosure” and registrants’ judgments about materiality. The SEC has done so in order for its disclosure requirements to “keep pace with the evolving nature of business trends without the need to continuously amend the text of the rule.”\textsuperscript{55} For this reason, crafting an MD&A that is responsive to the SEC’s rules is arguably among the most difficult aspects of preparing a quarterly or annual report and has prompted the SEC to issue MD&A-specific guidance on several occasions.\textsuperscript{56}

Although Item 303 does not specifically mention the environment as do Item 101 and Item 103, the MD&A requirements are a likely, if not the most likely, source of climate change disclosure principally because of their

\textsuperscript{50} 17 C.F.R. § 229.303(a)(2).
\textsuperscript{51} 17 C.F.R. § 229.303(a)(3).
\textsuperscript{52} 17 C.F.R. § 229.303(a), at Instruction No. 3.
\textsuperscript{54} Id. at 5.
\textsuperscript{55} Interpretive Release, supra note 1, at 6,294.
intentionally broad scope. Because MD&A requires disclosure and discussion of known material trends and uncertainties, registrants have no doubt grappled with and will continue to grapple with the necessity of disclosing and discussing the potential regulatory, financial, physical, and other effects of climate change on their businesses. Such disclosures may cover, for example, proposed legislation, the potential costs and effects of compliance with international accords, and underlying regional and national regulations for greenhouse gas reductions, investments in mitigation technology, and competitive pressures resulting from production and distribution of climate friendly or unfriendly products.57

Item 503(c) of Regulation S-K—Risk Factors—requires a company to disclose and discuss “the most significant factors that make [an investment in the registrant’s securities] speculative or risky.”58 For example, a registrant in the beverage sector might identify water quality and scarcity as a risk that, if realized, could negatively impact the registrant’s production costs and capacity. Risk factor disclosure should clearly state the risk and specify how that particular risk affects that particular registrant. In an effort to avoid boilerplate language and inundating readers with every conceivable risk, no matter how improbable, the SEC cautions registrants to avoid presenting risks that could apply generally to all registrants.59 As the science of climate change develops and consensus about its risks mature, Item 503(c) would seemingly require disclosure and discussion of a host of climate related risk factors. Already, some issuers have identified such climate change related risks as: the effects of greenhouse gas emission regulations and limits, natural disasters and geographic and topographic changes, increased energy costs, and dwindling resources.60

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57. See Interpretive Release, supra note 1, at 6,294–95.
58. 17 C.F.R. § 229.503(c) (2011).
59. Id.
60. For example, according to Exxon Mobil’s Annual Report:

Climate change and greenhouse gas restrictions. Due to concern over the risk of climate change, a number of countries have adopted, or are considering the adoption of, regulatory frameworks to reduce greenhouse gas emissions. These include adoption of cap and trade regimes, carbon taxes, restrictive permitting, increased efficiency standards, and incentives or mandates for renewable energy. These requirements could make our products more expensive, lengthen project implementation times, and reduce demand for hydrocarbons, as well as shifting hydrocarbon demand toward relatively lower-carbon sources such as natural gas. Current and pending greenhouse gas regulations may also increase our compliance costs, such as for monitoring or sequestering emissions.

Exxon Mobil Corp., Annual Report (Form 10-K) (Feb. 25, 2011). Further, according to United Parcel Service’s Annual Report:

We may be affected by global climate change or by legal, regulatory or market responses to such potential change.
Finally, Article 3 of Regulation S-X—General Instructions as to Financial Statements—sets forth the requirements for registrants as to the preparation and presentation of financial statements to be included in their annual and quarterly reports.\(^{61}\) Article 3 prescribes the form and content of the balance sheet, statement of income, and statement of cash flows, which comprise the package of financial statements in a registrant’s SEC reports.\(^{62}\) As used in Regulation S-X, “financial statements” include any notes to the statements and all related schedules.\(^{63}\) To promote conformity in presentation, the SEC de facto requires financial statements to be prepared in conformity with generally accepted accounting principles (GAAP); “[f]inancial statements . . . which are not prepared in accordance with [GAAP] will be presumed to be misleading or inaccurate, despite footnote or other disclosures . . . .”\(^{64}\) Thus, by necessity, when preparing their financial statements, registrants must pay particular attention to GAAP conventions and pronouncements of the Financial Accounting Standards Board (FASB).\(^{65}\)

Concern over climate change, including the impact of global warming, has led to significant federal, state, and international legislative and regulatory efforts to limit greenhouse gas (‘GHG’) emissions. For example, in the past several years, the U.S. Congress has considered various bills that would regulate GHG emissions. While these bills have not yet received sufficient Congressional support for enactment, some form of federal climate change legislation is possible in the future. Even in the absence of such legislation, the Environmental Protection Agency, spurred by judicial interpretation of the Clean Air Act, may regulate GHG emissions, especially aircraft or diesel engine emissions, and this could impose substantial costs on us. These costs include an increase in the cost of the fuel and other energy we purchase and capital costs associated with updating or replacing our aircraft or trucks prematurely. Until the timing, scope and extent of any future regulation becomes known, we cannot predict its effect on our cost structure or our operating results. Notwithstanding our widely recognized position as a leader in sustainable business practices, it is reasonably possible, however, that such legislation or regulation could impose material costs on us. Moreover, even without such legislation or regulation, increased awareness and any adverse publicity in the global marketplace about the GHGs emitted by companies in the airline and transportation industries could harm our reputation and reduce customer demand for our services, especially our air services.

62. Id.
63. 17 C.F.R. § 210.1-01(b).
64. 17 C.F.R. § 210.4-01(a)(1).
65. According to the FASB:

Since 1973, the Financial Accounting Standards Board (FASB) has been the designated organization in the private sector for establishing standards of financial accounting that govern the preparation of financial reports by nongovernmental entities. Those standards are officially recognized as authoritative by the Securities and Exchange Commission (SEC) (Financial Reporting Release No. 1, Section 101, and reaffirmed in its April 2003 Policy Statement) and the American Institute of Certified Public Accountants (Rule 203, Rules of Professional Conduct, as amended May 1973 and May 1979). Such standards are important to the efficient functioning of the economy
Important among these pronouncements is FASB Accounting Standards Codification Topic 450 (ASC 450), *Accounting for Contingencies* (formerly Financial Accounting Standard No. 5), which sets forth the standards for accrual and disclosure of loss contingencies in a registrant’s financial statements.\(^{66}\) Examples of loss contingencies include risk of loss or damage of property, actual or possible claims and assessments, and pending or threatened litigation.\(^{67}\) ASC 450 loss contingencies are categorized as “probable” (i.e., likely to occur), “reasonably possible” (i.e., less than likely but more than remote) or “remote” (i.e., slight).\(^{68}\) Under current ASC 450 standards,\(^{69}\) a loss contingency must be accrued as a charge to a registrant’s income if (a) the loss is probable (i.e., “it is probable that an asset [has] been impaired or a liability [has] been incurred at the date of the financial statements”) and (b) “[t]he amount of loss can be reasonably estimated.”\(^{70}\) Footnote disclosure of the nature of the loss contingency and an estimate of the possible loss may be necessary for the financial statements not to be misleading.\(^{71}\) If no accrual is made for a loss contingency because one of these conditions is not met, disclosure in a footnote of the contingency is still required when “there is at least a reasonable possibility that a loss or an additional loss may have been incurred.”\(^{72}\) Given the nature of climate change and its forecast effects, many registrants may need to closely scrutinize the propriety of accruals and disclosures for loss contingencies because decisions about the allocation of resources rely heavily on credible, concise, and understandable financial information.

The SEC has statutory authority to establish financial accounting and reporting standards for publicly held companies under the Securities Exchange Act of 1934. Throughout its history, however, the Commission’s policy has been to rely on the private sector for this function to the extent that the private sector demonstrates ability to fulfill the responsibility in the public interest.

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\(^{67}\) FASB, *Accounting Standards Codification, Contingencies (Topic 450)* (2009) [hereinafter FASB CONTINGENCIES].

\(^{68}\) *Id.* at 05-10.

\(^{69}\) On July 20, 2010, the FASB issued an exposure draft containing proposed amendments to ASC 450 that would require enhanced disclosure of qualitative and quantitative information about loss contingencies. The exposure draft has been mired in controversy since its release and has yet to be adopted. See generally Thomas A. Zaccaro & Adam D. Schneir, *FASB Postpones Changes to Loss Contingency Disclosure Requirements Amid Widespread Criticism*, PAUL HASTINGS LLP (Nov. 29, 2010), http://www.paulhastings.com/publicationdetail.aspx?publicationId=1775.

\(^{70}\) FASB CONTINGENCIES, *supra* note 66, at 25-1.

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\(^{72}\) FASB CONTINGENCIES, *supra* note 66, at 25-2.
arising from these effects. It has been suggested that such disclosures or accruals could be required for

[registrants] that emit significant levels of greenhouse gases and are already subject to direct regulation of those emissions here or abroad, companies considering major capital investments that are affected by new and evolving regulatory treatment of greenhouse gas emissions, and companies whose physical operations are at hazard due to developments such as melting permafrost or storm damage.73

The SEC’s Division of Corporation Finance periodically reviews registrant filings to monitor compliance with the SEC’s disclosure requirements.74 As part of this process, the SEC staff routinely issues comment letters to registrants requesting clarification on disclosures registrants made in prior filings, will make in future filings, and, in some cases, requiring registrants to make amendments to prior filings in order to correct what has been deemed to be a deficient disclosure. Each comment letter gives registrants a timeframe with which to comply, and formal responses must be filed with the SEC, making them publicly available. While a registrant is not technically compelled to respond to a comment letter, failure to do so can create problems. Registrants who fail to respond may be required to disclose unresolved comments, face delayed approval of their registration statements, and, in egregious cases, they may be referred to the SEC’s Division of Enforcement, which has a number of administrative and civil remedies at its disposal.

II. DISCLOSURE AND THE CONCEPT OF MATERIALITY

The concept of materiality is indeed critical to a registrant’s disclosure analysis. Items 101, 103, and 303 of Regulation S-K discussed above explicitly premise disclosure on an evaluation of the materiality of the matters involved.75 Materiality judgments also suffuse the disclosures included in a registrant’s financial statements under Article 3 of Regulation S-X.76 Under Exchange Act Rule 12b-6,

The term “material,” when used to qualify a requirement for the furnishing of information as to any subject, limits the information required to those matters to which there is a substantial likelihood that a reasonable investor

73. See Petition, supra note 2, at 15.
74. This process was given added importance upon passage of The Sarbanes-Oxley Act. Section 408 requires the SEC to review the periodic and annual filings of every registrant at least once every three years. Sarbanes-Oxley Act, Pub. L. No. 107-204, 166 Stat. 745 (2002) (codified at 18 U.S.C. § 1514A (2002)).
75. 17 C.F.R. § 229.101(c)(xii) (2011) (Item 101); 17 C.F.R. § 229.103 (Item 103); 17 CFR § 229.303(a) (Item 303).
76. 17 C.F.R. § 210.1-01.
would attach importance in determining whether to buy or sell the securities registered.\textsuperscript{77}

The SEC adopted this definition of materiality in the wake of the U.S. Supreme Court’s 1976 decision in \textit{TSC Industries, Inc. v. Northway.}\textsuperscript{78} The specific issue before the Court was the materiality of alleged omissions and misstatements in a proxy statement.\textsuperscript{79} Information is material, the Court held, if “there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote.”\textsuperscript{80} This standard, the Court explained

\begin{quote}
\begin{itemize}
\item does not require proof of a substantial likelihood that disclosure of the omitted fact would have caused the reasonable [shareholder] to change his vote.
\item What the standard does contemplate is a showing of a substantial likelihood that, under all the circumstances, the omitted fact would have assumed actual significance in the deliberations of the reasonable shareholder. Put another way, there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable [shareholder] as having significantly altered the “total mix” of information made available.\textsuperscript{81}
\end{itemize}
\end{quote}

In articulating this standard, the Court attempted to balance competing concerns of the disclosure-based system of regulation under federal securities law. On the one hand, the securities laws are intended “to ensure disclosures by corporate management in order to enable the shareholders to make an informed choice.”\textsuperscript{82} On the other hand, the securities laws were not intended to lead to excessive liability or saturate the market with insignificant information.\textsuperscript{83} In this respect, the concept of materiality helps separate important, indeed material, information “from less important information that would be extraneous or irrelevant to investors.”\textsuperscript{84}

\begin{footnotesize}
\textsuperscript{77} 17 C.F.R. § 240.12b-2. Rule 12b-2 is made applicable to registrant disclosures in annual reports on Form 10-Ks, the focus of this Article, by virtue of General Instruction B to Form 10-K. Form 10-K, \textit{supra} note 35, at 1; \textit{see also} Securities Act of 1933, Rule 405, 17 C.F.R. § 230.405 (“The term ‘material,’ when used to qualify a requirement for the furnishing of information as to any subject, limits the information required to those matters to which there is a substantial likelihood that a reasonable investor would attach importance in determining whether to purchase the security registered.”); Regulation S-X, Rule 1-02(o), 17 C.F.R. § 210.1-02(o) (“The term ‘material,’ when used to qualify a requirement for the furnishing of information as to any subject, limits the information required to those matters about which an average prudent investor ought reasonably to be informed.”).
\textsuperscript{78} \textit{TSC Indus., Inc. v. Northway}, 426 U.S. 438 (1976).
\textsuperscript{79} \textit{Id.}
\textsuperscript{80} \textit{Id.} at 449.
\textsuperscript{81} \textit{Id.} at 448 (citing \textit{Mills v. Electric Auto-Lite Co.}, 396 U.S. 375 (1970)).
\textsuperscript{82} \textit{TSC Indus., Inc.}, 426 U.S. at 448.
\textsuperscript{83} \textit{Id.}
\textsuperscript{84} Glenn F. Miller, Comment, \textit{Staff Accounting Bulletin No. 99: Another Ill-Advised Foray Into the Murky World of Qualitative Materiality}, 95 NW. U. L. REV. 361, 368 (2000).
\end{footnotesize}
Although in *TSC Industries* the Court concerned itself with the materiality of alleged omissions and misstatements in a proxy statement, the standard of materiality articulated by the Court has since been applied throughout the securities laws and subsequent judicial opinions and remains the touchstone test of materiality.\(^8\) This is not to say, however, that merely because a standard was articulated that questions regarding its application been or are easily resolved. As the standard itself suggests and as explained by the Court, materiality is an inherently fact specific analysis.\(^8\) Thus, through the years the Court, its subordinate courts,\(^7\) and even the SEC\(^8\) have on numerous occasions addressed various questions regarding the standard’s application.

Notable among these occasions was the U.S. Supreme Court’s seminal 1988 decision in *Basic Inc. v. Levinson*.\(^8\) In *Basic*, the Court took up the question of the materiality of inchoate developments, which for the sake of illustration might include potential mergers, asset sales or acquisitions, litigation, securities offerings, significant legislation or regulation, product developments, and so forth.\(^8\) Specifically, *Basic* involved allegations that a registrant had violated the antifraud provisions of the Exchange Act and rules, § 10(b) and Rule 10b-5, by failing to disclose that it was in fact engaged in negotiations to be acquired by a competitor and all the while making public pronouncements denying the existence of the negotiations.\(^9\) Recognizing that the existence of the merger negotiations alone did not give rise to a duty to disclose but that public denial of negotiations in the face of actual negotiations did give rise to a duty not to mislead, the Court adopted, for purposes of determining the materiality of such negotiations, the so-called “probability/magnitude” test of materiality.\(^2\) Under this test, previously articulated by the Second Circuit Court of Appeals,\(^3\) materiality

\(^8\) See, e.g., Matrixx Initiatives, Inc. v. Siracusano, 131 S. Ct. 1309, 1318 (2011) (quoting materiality standards articulated in *TSC Industries, Inc.*).

\(^8\) Basic Inc. v. Levinson, 485 U.S. 224, 236 (1988).


\(^8\) See, e.g., Selective Disclosure and Insider Trading, Exchange Act Release No. 7881, 2000 WL 1201556 (Aug. 15, 2000) (adopting Regulation Fair Disclosure and setting forth certain types of information or events that are potentially material); SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45150-01 (Aug. 19, 1999) [hereinafter SAB 99] (expressing the views of the SEC’s staff that exclusive reliance on certain quantitative benchmarks to assess materiality in preparing financial statements and performing audits of those financial statements is inappropriate; misstatements are not immaterial simply because they fall beneath a numerical threshold).


\(^1\) Id. at 226.

\(^2\) Id. at 227–28.

\(^3\) Id. at 238–41.

\(^2\) Id. at 238–39, 250 (quoting SEC v. Tex. Gulf Sulphur Co., 401 F.2d 833, 849 (2d Cir. 1968) (en banc), cert. denied, 394 U.S. 976 (1969)).
depends “at any given time upon a balancing of both the indicated probability the event will occur and the anticipated magnitude of the event in the light of the totality of the company activity.”

The materiality standards articulated in *TSC Industries* and *Basic* are an essential part of the lexicon of lawyers whose job it is to counsel registrants on their SEC disclosure obligations. But, as has been aptly observed, “the difficulty lies not in the formulation, but in the application.” Much has been written about the “elusiveness” of the concept of materiality and its application. Even in the Interpretive Release, when addressing the possibility of climate change disclosure as part of a registrant’s MD&A, the SEC acknowledged that “[a]nalyzing the materiality of known trends, events or uncertainties may be particularly challenging for registrants.”

The “elusiveness” or difficulty of application notwithstanding, some general principles regarding materiality can be articulated. First, materiality is premised upon the importance of information to a “reasonable investor.” It is therefore an objective rather than subjective standard. While the exact nature of the so-called “reasonable investor” has been the subject of some dispute, such an investor has been described as knowledgeable—though not necessarily “prudent” or “conservative” or even sophisticated or “savvy,” but as one who “is presumed to have information available in the public domain” and, importantly, one that invests principally to make money. As one court has observed, “a ‘reasonable investor’ is neither an ostrich, hiding her head in the sand from relevant information, nor a child, unable to understand the facts and risks of investing.”

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97. Interpretive Release, supra note 1, at 6,295.
99. See *id.* at 450.
101. Pommer v. Medtest Corp., 961 F.2d 620, 624 (7th Cir. 1992) (“Even savvy investors may recover when a bald lie understates the gravity of a known risk.” (citation omitted)).
102. Whirlpool Fin. Corp. v. GN Holdings, 67 F.3d 605, 610 (7th Cir. 1995).
103. See, e.g., Thomas Joo, *Global Warming and the Management-Centered Corporation*, 44 WAKE FOREST L. REV. 671, 690 (2009) (“While carbon-impact information might be important to the buying and selling decisions of some, even many, environmentally concerned individuals, the legal standard is that of an objective ‘reasonable shareholder,’ who is presumed to invest in order to make money.” (footnote omitted)).
Second, materiality is an “inhomogeneously fact-specific finding.”105 “Whether or not any particular fact is material is a determination which clearly cannot be made in a vacuum.”106 Thus, the analysis must occur in the context of the registrant’s particular facts and circumstances and based upon information available at the time the assessment is made.107 “[M]ateriality judgments can properly be made only by those who have all the facts.”108 It follows then that what may be material for one registrant may not necessarily be material to another. Thus, a lack of disclosure cannot be treated as a prima facie disregard for regulatory requirements or guidance.

Third, “the mere fact that an investor might find information interesting or desirable is not sufficient to satisfy the materiality requirement.”109 To this we might add that simply because one group of investors would like the information does not by itself render the information material.110 Appropriately, there is a necessary distinction between what an investor or shareholder might consider important as opposed to what the investor or shareholder would consider important.111 Further, there must be a “substantial likelihood” that, under all the circumstances, the information

107. See, e.g., Isquith v. Middle S. Utilities, Inc., 847 F.2d 186, 201 n.9 (5th Cir. 1988) (“[I]t is wrong to treat each individual piece of information separately, as if it had no relation to the other pieces which surround it.”).
110. Compare Petition, supra note 2, at 13 (“Under both Supreme Court and Commission precedent, the existence of significant investor demand for information helps to guide the determination of whether that information is material and hence required to be disclosed.”), with Letter to John W. White, Dir. Div. of Corp. Fin., SEC (Sept. 18, 2007), available at http://www.edf.org/sites/default/files/letter-to-SEC-division-of-corporation-finance.pdf (“As documented in detail in our Petition, very extensive and broad-based investor demand for climate risk information underscores the conclusion that this information is material to many corporations’ performance and operations, and critical to investors’ ability to make informed assessments about corporate value.”). Whether climate change information is material simply because some investors may want such information is undermined when results on climate change related shareholder proposals are examined. In recent years, support for such proposals has averaged below 20 percent. See infra Part VII. Ceres reports that among mutual funds that “control a considerable portion of the U.S. securities market,” support for climate change shareholder proposals has actually decreased in recent years “from 27 percent in 2009 to 24 percent in 2010.” See New Ceres Survey Data: U.S. Mutual Funds Backtrack in Supporting Climate Resolutions in 2010, CERES, INC. (Apr. 2011), available at http://www.ceres.org/resources/reports/new-ceres-survey-data-u.s.-mutual-funds-backtrack-in-supporting-climate-resolutions-in-2010/view.
111. See TSC Indus., Inc. v. Northway, 426 U.S. 438, 448–49 (1976) (“The potential liability for a Rule 14a-9 violation can be great indeed, and if the standard of materiality is unnecessarily low, not only may the corporation and its management be subjected to liability for insignificant omissions or misstatements, but also management’s fear of exposing itself to substantial liability may cause it simply to bury the shareholders in an avalanche of trivial information a result that is hardly conducive to informed decisionmaking. We agree with Judge Friendly, speaking for the Court of Appeals in Gerstle [v. Gamble-Skogmo, Inc.], that the ‘might’ formulation is ‘too suggestive of mere possibility, however unlikely.’” (citation omitted)).
would have assumed actual significance in a reasonable investor’s investment decision.112

Fourth, materiality can be described as a predominantly economic-oriented analysis, which is to say that social and moral considerations are secondary, if not irrelevant, to the analysis.113 Important as such considerations may seem, they undermine one of the purposes of materiality: to keep disclosure tied to the purposes of the Securities laws, including the protection of investors from fraudulent practices in the securities markets. Recall that the legal standard is that of a “reasonable shareholder,”114 which, as discussed, is one who, among other things, invests principally to make money.115

Fifth, the materiality of a given fact may be judged by reference to the likely market reaction to that fact and resulting movements in the registrants’ stock price.116 The Staff of the SEC has opined that when management expects that known information “may result in a significant positive or negative market reaction, that expected reaction should be taken into account.”117 Nevertheless, registrants should be cautious here because consideration of potential market reaction is only one of the many factors

112. TSC Industries, Inc., 426 U.S. at 448–49. Stated another way, “‘there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of information made available.’” Basic, Inc. v. Levinson, 485 U.S. 224, 232 (1988) (quoting TSC Industries, Inc., 426 U.S. at 449). With regards to this “total mix” of information, the Supreme Court observed that “[a]ny approach that designates a single fact or occurrence as always determinative of an inherently fact-specific finding such as materiality, must necessarily be overinclusive or underinclusive.” Basic, Inc., 485 U.S. at 232.

113. But see Jeffrey M. McFarland, Warming Up to Climate Change Risk Disclosure, 14 FORDHAM J. CORP. & FIN. L. 281, 292 (2009) (arguing that “there is justification for taking into account the underlying moral issue when determining materiality to investors”).

114. TSC Indus., Inc., 426 U.S. at 449.

115. Joo, supra note 103.

116. See, e.g., No. 84 Emp’r-Teamster Joint Council Pension Trust Fund v. Am. W. Holdings, 320 F.3d 920, 949 (9th Cir. 2003) (“No significant change in the stock price is also strong evidence that the information was immaterial. Conversely, the fact that a firm’s stock price does significantly change is strong evidence of materiality.”); In re Rockefeller Ctr. Properties, Inc., 184 F.3d 280, 289–90 (3d Cir. 1999) (facts immaterial as a matter of law where they “would have had no more than a negligible impact on a reasonable investor’s prediction of the firm’s future earnings”); In re Burlington Coat Factory Sec. Litig., 114 F.3d 1410, 1427 (3d Cir. 1997); In re Burlington Coat Factory Sec. Litig., 114 F.3d at 1425 (information in “efficient” market is material where it “alters the price of the firm’s stock”). See also SAB 99, supra note 88 (“Among other factors, the demonstrated volatility of the price of a registrant’s securities in response to certain types of disclosures may provide guidance as to whether investors regard quantitatively small misstatements as material.”).

117. See also SAB 99, supra note 88.
that ought to be considered. Indeed, a given fact may be judged material even if it has no effect on the registrant’s stock price.

Sixth, there is no generally accepted calculation or formula for determining materiality. Both the SEC and courts have resisted bright-line rules of materiality. In August 1999, SEC Staff issued *Staff Accounting Bulletin No. 99*, and addressed the practice adopted by some registrants and their internal auditors of employing certain “rules of thumb” or thresholds in evaluating whether items “might be considered material to users of a registrant’s financial statements.” For example, one common “rule of thumb” suggested that a misstatement or omission of an item in a registrant’s financial statements that fell below a 5 percent threshold would not be material “in the absence of particularly egregious circumstances, such as self-dealing or misappropriation by senior management.” Still, the SEC reminded registrants, and their auditors, 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

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118. *Id.* (“Consideration of potential market reaction to disclosure of a misstatement is by itself ‘too blunt an instrument to be depended on’ in considering whether a fact is material.” (citation omitted)).

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*
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.124

Thus, the SEC staff stated, registrants should take into account not only quantitative factors of materiality, but also qualitative factors. These qualitative factors might include whether the information, among other things, is “capable of precise measurement or whether it arises from an estimate,” “masks a change in earnings or other trends,” “concerns a segment or other portion of the registrant’s business” that is important to its operations or profitability, or “affects the registrant’s compliance with regulatory requirements.”125

Seventh, for inchoate, contingent, or future events, the probability of the event occurring must be weighed against the magnitude of the event. 126 This, of course, is merely a restatement of the materiality standard articulated by the U.S. Supreme Court in Basic, Inc. and discussed above. Still, the standard bears repeating because, in the context of climate change—particularly with regard to forecasts of physical impacts of continued climate change—we are very much dealing with inchoate and contingent events. To be sure, applying the probability/magnitude test is more art than science. “Assessing magnitude requires some determination of the degree of importance” of the development and assessing “probability essentially requires a look into a crystal ball in an effort to determine the likelihood the development will occur.”127 Registrants have struggled, and will no doubt continue to struggle, with assessing the materiality of developments that may not be probable, but could have a significant impact on the issuer if they occurred (and vice versa).

There is one important caveat to any discussion of the probability/magnitude test, and this is particularly important in the context of registrant assessments of materiality and disclosure of climate change in response to Item 303 of Regulation S-K, the MD&A: the probability/magnitude test is not pertinent to Item 303 disclosure.128 Rather, the SEC has prescribed its own standard to govern the circumstances in which Item 303 requires disclosures. Where a trend, demand, commitment, event or uncertainty is known, a registrant must make two assessments:

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124. Id.
125. Id.
127. BROWN, supra note 95, at 5.05[3][a].
128. See Management’s Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures, Exchange Act Release No. 26831, 1989 WL 1092885, 6 n.27 (May 18, 1989) [hereinafter Exchange Act Release No. 26831]; see also Oran v. Stafford, 226 F.3d 275 (3d Cir. 2000) (“Because the materiality standards for Rule 10b-5 and SK-303 differ significantly, the demonstration of a violation of the disclosure requirements of Item 303 does not lead inevitably to the conclusion that such disclosure would be required under Rule 10b-5. Such a duty to disclose must be separately shown.”) (citations omitted)).
1. Is the known trend, demand, commitment, event or uncertainty likely to come to fruition? If management determines that it is not reasonably likely to occur, no disclosure is required.

2. If management cannot make that determination, it must evaluate objectively the consequences of the known trend, demand, commitment, event or uncertainty, on the assumption that it will come to fruition. Disclosure is then required unless management determines that a material effect on the registrant’s financial condition or results of operations is not reasonably likely to occur.\(^{129}\)

As the Interpretive Release makes clear, in the context of climate change, this standard takes on increased importance as registrants assess the materiality and need to disclose and discuss pending climate change legislation, regulation, and international accords.\(^{130}\) For that purpose, the SEC has articulated the Item 303 disclosure standard as follows:

First, management must evaluate whether the pending legislation or regulation is reasonably likely to be enacted. Unless management determines that it is not reasonably likely to be enacted, it must proceed on the assumption that the legislation or regulation will be enacted. Second, management must determine whether the legislation or regulation, if enacted, is reasonably likely to have a material effect on the registrant, its financial condition or results of operations. Unless management determines that a material effect is not reasonably likely, MD&A disclosure is required.\(^{131}\)

Eighth, information that is expressly required to be disclosed is presumptively material—a concept sometimes called “line-item materiality.”\(^{132}\) For example, as discussed above, Item 103 of Regulation S-K explicitly requires disclosure of administrative or judicial proceedings arising under any federal, state, or local environmental laws, where such proceedings involve a claim for damages exceeding 10 percent of the registrant’s current assets, or a governmental authority is a party to the proceeding and the monetary sanctions sought exceed $100,000.\(^{133}\)

Presumably, then, a registrant’s settlement of claims for violations of environmental standards exceeding $100,000 brought by the EPA would be considered presumptively material and would need to be disclosed.


\(^{130}\) Interpretive Release, supra note 1.

\(^{131}\) Id. at 6,296 (footnotes omitted).

\(^{132}\) See, e.g., In re Craftmatic Sec. Litig. v. Kraftsow, 890 F.2d 628, 641 n.17 (3d Cir. 1989, amended 1990) (“Disclosures mandated by law are presumably material.” (citation omitted)); Victor Brudney, A Note on Materiality and Soft Information Under the Federal Securities Laws, 75 Va. L. Rev. 723, 727 (1989) (“The particular items of information mandated to be disclosed in the schedules under the registration and circular requirements of the 1933 Act or under sections 12, 13, and 14 of the 1934 Act are presumably automatically deemed to be ‘material.’”).

\(^{133}\) 17 C.F.R. § 229.103 (2011).
Similarly, if the SEC were to amend Regulation S-K to specifically require registrants to disclose annual greenhouse gas emissions, such information would also be presumptively material.

Lastly, when in doubt, registrants are cautioned to err on the side of disclosure. In articulating materiality standards, the U.S. Supreme Court recognized that doubts as to the materiality of information would be commonplace.134 Nonetheless, “particularly in view of the prophylactic purpose of the Rule and the fact that the content of the proxy statement is within management’s control, ‘it is appropriate that these doubts be resolved in favor of those the statute is designed to protect.’”135 “Disclosure, and not the paternalistic withholding of accurate information, [was] the policy chosen and expressed by Congress” in adopting the securities laws.136

III. TRENDS IN REGISTRANT CLIMATE CHANGE DISCLOSURE PRIOR TO ISSUANCE OF THE INTERPRETIVE RELEASE

Before the SEC issued the Interpretive Release, several studies of registrant SEC filings suggested that climate change related disclosure was not particularly robust. A World Resources Institute study of 1998 and 1999 SEC filings of “13 leading, publicly listed companies in the U.S. pulp and paper industry,”137 found that few of these companies “disclosed the financial risks or potential competitive impacts arising from their exposures to known environmental uncertainties.”138 In July 2004, the U.S. Government Accountability Office (GAO) assessed (1) “how well the SEC has defined the requirements for environmental disclosure” and (2) “the extent to which companies are disclosing environmental information” in their SEC filings.139 Surveying 2003 SEC filings for “20 U.S. electric utility companies that were among the largest emitters of carbon dioxide,” the GAO found that while only one company made no disclosures “regarding greenhouse gas controls . . . the level of detail varied among the companies”

135. Id. (citing Mills v. Electric Auto-Lite Co., 396 U.S. 375, 622 (1970)).
138. Id. at x.
139. U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-04-808, ENVIRONMENTAL DISCLOSURE: SEC SHOULD EXPLORE WAYS TO IMPROVE TRACKING AND TRANSPARENCY OF INFORMATION 9–16 (2004) [hereinafter ENVIRONMENTAL DISCLOSURE], available at www.gao.gov/new.items/d04808.pdf. The GAO study reviewed, in addition to its own selection of the SEC filings of twenty U.S. electric utility companies, twenty-seven studies of registrant disclosure published from 1995 to 2003. Id. The GAO characterized most of these studies as having “serious limitations” including “small sample sizes and narrow focus.” Id. at 2, 4, 20–23, 39–42.
and that no company “attempted to estimate the dollar value of the impact.”\(^{140}\)

Perhaps the most comprehensive assessment of pre-Interpretive Release disclosure was published in early 2009 by Kevin L. Doran and Elias L. Quinn, policy analysts at the Center for Energy and Environmental Security at the University of Colorado Law School.\(^{141}\) In the 2009 study, Doran and Quinn reviewed the Form 10-K filings of registrants in the S&P 500 for each year between 1995 through 2008 for any mention of “climate change,” “global warming,” and “greenhouse gas.” According to the authors, “despite a growing awareness by corporate leaders regarding the strategic importance of climate change, corporate disclosures of the risks and opportunities created by climate change [were] the exception rather than the norm.”\(^{142}\) In particular, Doran and Quinn observed that in 2008:

\[\ldots\] 76.3% of the S&P 500 failed to provide any mention of climate change in their 10-K filings . . . .

\[\ldots\] Only 5.5% of the S&P 500 identified at least one risk posed by climate change and articulated a strategy for managing and mitigating that risk . . . .

140. Id. at 20–21. The GAO also observed that

[o]f the 19 companies that provided information on the impact of potential controls over greenhouse gas emissions,

- 7 disclosed such information only in the S-K item 101, “Description of Business” section of the company’s 10-K or 10-Q reports;
- 2 disclosed information only in S-K items 301 and 302, “Selected Financial Data” and “Supplementary Financial Information” sections of the company’s 10-K or 10-Q reports;
- 2 disclosed information only in S-K item 303, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of the company’s 10-K or 10-Q reports; and
- 8 disclosed information in multiple sections of the 10-K, 10-Q, or the company’s annual report to shareholders.

Id. at 23. For a complete list of the companies examined, see id., at 45–50.


142. Id. at 725. For the proposition that there is a “growing awareness by corporate leaders regarding the strategic importance of climate change,” the authors cited a survey conducted by the Pew Center on Global Climate Change of U.S. business leaders in which 90 percent of those surveyed indicated that they believed climate change regulation is inevitable and 93 percent considered climate related risks when making investment decisions. Id. at 104. See also ANDREW J. HOFFMAN, PEW CTR. ON GLOBAL CLIMATE CHANGE, GETTING AHEAD OF THE CURVE: CORPORATE STRATEGIES THAT ADDRESS CLIMATE CHANGE (2006) [hereinafter PEW CTR. ON GLOBAL CLIMATE CHANGE], available at http://www.pewclimate.org/publications/report/getting-ahead-curve-corporate-strategies-address-climate-change.
Less than ten percent of companies in the financial sector discussed climate change in 10-K filings.

Only 3.2% of utilities sector companies failed to mention climate change in 10-K filings.

[However], only 25.8% of utility companies met the standard of identifying at least two climate change risks and articulating a management and mitigation strategy for addressing one of those risks.

In addition, a survey sponsored by The Corporate Library (now part of Governance Metrics International (GMI)) and the Coalition for Environmentally Responsible Economies (Ceres) was conducted of 100 global companies in the “electronic utilities, coal, oil and gas, [and] transportation and insurance” sectors. The study evaluated whether companies disclosed climate risks in their SEC filings and reported findings, published in June 2009, similar to those in Doran and Quinn’s report. This survey used the Global Framework for Climate Risk Disclosure, a standardized reporting framework devised by a coalition of large institutional investors, and assessed registrant filings in three main categories: “(1) emissions and climate change position, (2) risk assessment, and (3) actions to address climate risks and opportunities.” Registrant disclosures were described as “None,” “Poor,” “Limited,” or “Fair,” with “None” being the lowest and “Fair” indicating the highest quality disclosure found in the report. Key findings of the report for each of the sectors studied were as follows:

Electric Utilities: Disclosure was widespread but minimal. None of the 26 companies studied achieved a “Fair” rating on disclosure of emissions and climate change position, only 3 out of 26 companies (12%) ranked “Fair” on climate risk assessment, and only 2 out of 26 companies (8%) provided “Fair” disclosure of actions to address climate change. Seven of the companies studied provided no information on actions to address climate

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143. HOFFMAN, supra note 142, at 725 (internal citations omitted).
144. “GMI Ratings offers a specialized corporate governance risk portfolio assessment service covering individual investment funds and internally and externally managed portfolios.” Investment Professionals, GMI RATINGS, http://www3.gmiratings.com/?page_id=103 (last visited Sept. 21, 2011). “The world’s leading investment professionals employ GMI Ratings’ comprehensive governance data and research as part of their suite of analysis solutions.” Id.
145. CERES is “a non-profit organization that leads a national coalition of investors, environmental organizations and other public interest groups working with companies to address sustainability challenges such as global climate change and water scarcity.” About INCR. CERES, http://www.ceres.org/incr/about (last visited Sept. 21, 2011).
147. CLIMATE RISK DISCLOSURE IN SEC FILINGS, supra note 146.
148. Id.
149. Id. at IV–V.
150. Id. at 12–13.
Coal: All six coal companies surveyed included some disclosure of climate change issues in their 10-K filings, though only one achieved a “Fair” score in any of the three categories analyzed. Coal companies’ strongest disclosure was in the area of risk assessment; five of the companies provided disclosure in this category that was rated “Limited” or “Fair.” . . .

Oil and Gas: The majority of the 23 companies studied provided some disclosure on climate risk assessment, but disclosure was weak with none ranking “Fair” and 22 out of 23 (96%) scored as “Limited” or “Poor.” Disclosure in the other two categories was even more limited. Twelve out of 23 companies (52%) provided no disclosure on actions to address climate change, while 17 out of 23 companies (74%) disclosed no information on their emissions or climate change position. . . .

Transportation: Companies in this sector provided minimal disclosure in SEC filings. Only 5 of 19 (26%) disclosed their emissions or their climate change position, and none were ranked as “Fair” for this disclosure. . . . No single company disclosed emissions associated with vehicle use. Transportation companies provided somewhat more informative disclosure on climate risk and actions to address climate change, with 68% providing some disclosure in each of these categories. The disclosure was weak, however, and did not meet investors’ needs. Only 3 companies scored “Fair” on climate risk assessment and 2 scored “Fair” on their actions to address climate risks. . . .

Insurance: Although prudent risk assessment is the basis for a viable insurance industry, the 27 companies studied in this sector provided the least disclosure across the board compared to other sectors. Eighteen out of 27 companies (67%) had no mention of climate change or related risks anywhere in their SEC filings. Twenty-three out of 27 companies (85%) failed to disclose their emissions or a statement on climate change, while 24 out of 27 companies (89%) omitted disclosure on actions to address climate change, despite the wide range of opportunities for new, climate-related insurance products.151

Still, some pre-Interpretive Release studies found modest improvements in climate change related disclosure over time. In October 2006, Friends of the Earth issued its most recent annual survey of climate change disclosure in the SEC filings of 112 registrants in the automobile and energy industries.152 The survey found modest improvements in climate change disclosure. Nevertheless, the electric power sector ranked higher than the other sectors . . . .

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151. Id. at v.
disclosure since the benchmark year of 2000. Specifically, they found an overall climate change disclosure rate of 49 percent compared to a 26 percent disclosure rate in 2000.\textsuperscript{153} Yet, “reporting rates between the various sectors varie[d] substantially.”\textsuperscript{154} The most common types of climate change reporting included “discussion of the Kyoto Protocol and other climate legislation/regulations, the financial impact of these policies on the company’s sector and business, and the firm’s response to these policies.”\textsuperscript{155} The biggest improvements in climate change disclosure were seen in the SEC filings of companies in the oil and gas sector. From 2000 to 2006, oil and gas company climate change disclosure doubled from 37 percent to 78 percent.\textsuperscript{156} Nevertheless, disclosure rates in other sectors, most notably insurance, petrochemical, automotive, and utilities, remained much lower.\textsuperscript{157}

In addition, McGuireWoods LLP reviewed the 2009 SEC filings made by 400 registrants in the S&P 500, S&P MidCap 400, and S&P SmallCap 600 indices. This study found that “the number of companies making disclosures about GHG emissions and climate change in their [Form] 10-Ks increased in 2009 compared to 2008.”\textsuperscript{158} Even so, the McGuireWoods study found that the number of companies that made any disclosure was “still relatively small.”\textsuperscript{159} Of the registrants reviewed, “17.3% made some type of climate change or GHG disclosure in 2009, compared to 12.2% in 2008.”\textsuperscript{160}

For its study, McGuireWoods looked for disclosures addressing any one or more of the following: amount of greenhouse gas emissions; impacts/risks

\begin{itemize}
  \item \textsuperscript{153} Id. at 1.
  \item \textsuperscript{154} Id.
  \item \textsuperscript{155} Id. “Companies are also increasingly disclosing carbon dioxide emissions, and highlighting climate issues by dedicating discrete sections to this topic in SEC filings, or listing climate change as a Key Risk Factor.” Id.
  \item The survey also [found] that companies differ[ed] in their assessment of financial risks posed by climate change. While about 16 percent of reporting companies avoided the “bottom line” question, the remainder of climate reporters tried to address how climate policies could impact them: 9 percent of reporting companies addressed this question by simply saying that it was impossible to predict the financial impact of climate risks. 49 percent of climate reporters admitted that climate-related risks could indeed pose a material adverse impact on the firm or create significant new costs, even though these costs were often difficult to estimate. 15 percent of companies said that climate risks would have mixed results on their firm, while 11 percent concluded that global warming would pose little or no impact.
  \item Id.
  \item \textsuperscript{156} Id.
  \item \textsuperscript{157} Id.
  \item \textsuperscript{159} Id. at 3.
  \item \textsuperscript{160} Id. at 10.
\end{itemize}
Climate Change Disclosure by SEC Registrants

related to current or proposed greenhouse gas regulations; impacts/risks related to the physical effects of climate change; legal proceedings relating to greenhouse gas emissions or climate change; and efforts related to reducing greenhouse gas emissions or climate change. The McGuireWoods study found that:

- 59 (83.1% of the 71 companies making some type of disclosure) addressed impacts/risks related to current or proposed regulation of GHG emissions.
- 25 (35.2%) discussed efforts related to reducing GHG emissions.
- 17 (23.9%) discussed physical impacts/risks related to climate change.
- 12 (16.9%) provided disclosure regarding the amount of their GHG emissions.
- 7 (9.9%) disclosed legal proceedings related to GHG emissions or climate change.

The risk factors section was the most common section in which disclosures appeared. Out of the companies making 10-K disclosures, 54 (76.1%) included risk factors addressing GHG emissions or climate change. Companies also made disclosures in the following sections of their 10-Ks: Item 101 – Business (36), Forward-Looking Statement Safe Harbor disclosures (28), MD&A (22), and Item 103 – Legal Proceedings (4).

Eleven companies made disclosures in other portions of the 10-K, typically in the notes to the financial statements. Some companies also made disclosures regarding the relationship between climate change/GHG initiatives and executive compensation.

As McGuireWoods and others have highlighted, it is likely that pre-Interpretive Release disclosures were propelled by the well-publicized settlement agreements entered into by the New York State Attorney General and several energy companies in 2008. In late 2007, the Attorney General, relying upon New York’s broad anti-fraud statute, the Martin Act, issued subpoenas to five large power companies—AES Corporation, Dominion, Dynegy, Peabody Energy and Xcel Energy—seeking a variety

161. Id. at 2.
162. Id. at 3.
163. See id. at 11.
164. See The Martin Act, N.Y. GEN. BUS. L. §§ 352–353. See generally Nicholas Thompson, The Sword of Spitzer, LEGAL AFF., May-June 2004, http://www.legalaffairs.org/issues/May-June-2004/feature_thompson_mayjun04.msp (“A little-known law called the Martin Act gives New York’s attorney general extraordinary power, yet for 75 years this Excalibur has been left to rust in its scabbard.”) (emphasis omitted)).
of internal documents. In letters accompanying the subpoenas, the Attorney General questioned whether these companies’ investors were receiving adequate information about the financial liabilities of carbon dioxide emissions, stating that “[s]elective disclosure of favorable information or the omission of unfavorable information concerning climate change is misleading.” The investigations resulted in settlement agreements, most notably with Dynegy and Xcel. Under these agreements, both companies agreed to include in their Form 10-K filings detailed disclosures about the “material financial risks to the Company associated with the regulation of greenhouse gas (‘GHG’) emissions in relation to climate change,” and more specifically, an analysis of the financial risks associated with climate change regulation, climate change litigation, and the physical impacts of climate change. These settlement agreements prompted a number of law firms to counsel their clients to reexamine the climate change disclosures in their SEC filings.

IV. THE PETITION FOR INTERPRETIVE GUIDANCE AND THE SEC’S RESPONSE

Given the findings of these and other studies, and the prevalence of the climate change debate, it was not surprising that the SEC was asked to jump into the fray. The GAO report, mentioned above in Part III, highlighted widespread disagreement among “[k]ey stakeholders [as to] how well [the] SEC has defined the requirements for environmental

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166. Id. (quoting NY Attorney General’s Office).


169. See, e.g., DAVID GARDINER ET AL., CERES, CLIMATE RISK DISCLOSURE BY THE S&P 500 (2007), available at http://www.ceres.org/resources/reports/climate-risk-disclosure-by-the-s-p-500/view. This report analyzed the “climate risk disclosure practices among . . . S&P 500 companies” and “was based [upon] company responses to a questionnaire sent to companies in February 2006 by the Carbon Disclosure Project,” rather than SEC filings. Id. at ii. “A total of 228 companies[,] 47 percent of the . . . companies surveyed[,] responded to the . . . questionnaire.” Id. at 1. Nearly a third of respondents did not allow their responses to be made public prompting the authors to conclude that “U.S. companies lag well behind their foreign competitors in climate risk disclosure.” Id.
disclosure”170 and recommended new, albeit limited, procedures “[t]o improve the [SEC’s] tracking and transparency of information on environmental disclosure problems.”171 Calls for enhancements to registrant disclosure obligations came from other quarters and have been well documented elsewhere.172 In September 2007, representatives of several large institutional investors and other investor advocacy groups submitted a petition to the SEC asking it to issue interpretive guidance on registrant disclosure obligations.173 These petitioners included, among others, the California Public Employees’ Retirement System (CalPERS), the California State Teachers’ Retirement System (CalSTRS), F&C Management, the New Jersey State Investment Council, the New York State Common Retirement Fund, and the fiduciaries of numerous other state pension funds, whose investment portfolios are valued in the aggregate at well over $1 trillion.174

Importantly, the petitioners did not ask the SEC to adopt new rules or impose new disclosure obligations on registrants. Rather, they requested that the SEC clarify what “material climate-related information must be included in corporate disclosures under existing law.”175 Specifically, the petitioners sought SEC guidance addressing registrant disclosure of

- Physical risks associated with climate change that are material to a registrant’s operations or financial condition,
- Financial risks and opportunities associated with present or probable greenhouse gas regulation; and
- Legal proceedings relating to climate change.176

In addition,

Notwithstanding the plain terms of Regulation S-K [and Regulation S-X, petitioners argued that] “corporate practice on climate risk disclosure is lagging behind the rapidly evolving economic, legal, and scientific developments related to climate change. The low rate of meaningful climate risk disclosure and the inconsistency of how companies are

170. ENVIRONMENTAL DISCLOSURE, supra note 139, at 39, 36, 9–16.
171. Id. at 36–37.
173. See Petition, supra note 2, at 2–3, 58. The SEC received other petitions concerning climate change disclosure. See also Interpretive Release, supra note 1, at 6,291 n.20.
174. See Petition, supra note 2, app. at A-1 to A-7.
176. Petition, supra note 2, at 52; see also McFarland, supra note 113, at 305.
addressing this subject in their [SEC] filings are denying investors the information they need and demand about climate risk.”

Of course the starting point for this assertion is that climate change is in fact occurring. Assuming this is true, petitioners argued, the rapidly changing regulatory environment for greenhouse gas emissions and the physical effects of climate change pose unique and arguably material risks to, and in some cases opportunities for, registrants. These risks include the costs of complying with, as well as accommodating the registrant’s business and operations to, the growing array of international, national, state, and local measures to reduce emissions of greenhouse gases. In addition, changing temperatures, rising sea levels, more severe weather patterns, changes in precipitation, and abnormal changes in climate patterns “will have economic impacts on businesses, including the continued use of corporate facilities in vulnerable locations and the viability of the other businesses in their supply chain.”

Nearly three years after receiving the petition, the SEC responded. In January 2010, by a vote of three to two, the SEC Commissioners approved an Interpretive Release outlining the SEC’s “views with respect to [the SEC’s] existing disclosure requirements as they apply to climate change matters.” The Interpretive Release did not create new disclosure requirements or modify existing ones; it was “merely intended to provide clarity and enhance consistency.” To that end, the SEC reiterated the current disclosure rules contained in Regulation S-K and Regulation S-X, which may require climate change disclosure, and, within the context of those rules, highlighted four topics that registrants ought to consider: the impact of climate change legislation and regulation, the impact of international climate change accords, the indirect consequences of climate

177. Petition, supra note 2, at 20 (arguing for mandatory disclosure of greenhouse gas emissions) (citation omitted).

178. See id. at 6 (“The empirical evidence that human activities are changing the global climate in significant ways, and at an accelerating pace, is now overwhelming.”).

179. Id. at 6–7.

180. Id. at 28.

181. Id. at 8, 29.

182. Interpretive Release, supra note 1, at 6,290.

change regulation on business trends, and the physical impacts of climate change.\textsuperscript{184}

As to the first of these topics—the impact of climate change legislation—the Interpretive Release discussed the “significant developments in federal and state legislation and regulation regarding climate change.”\textsuperscript{185} Among the developments cited were regional, state, and local efforts to regulate and reduce emissions of greenhouse gases, such as California’s Global Warming Solutions Act of 2006, the Regional Greenhouse Gas Initiative, the Western Climate Initiative, and the Midwestern Greenhouse Gas Reduction Accord.\textsuperscript{186} Also cited were legislative efforts at the federal level\textsuperscript{187} and EPA regulations which, as of January 1, 2010, require large emitters of greenhouse gases to collect and report data concerning their greenhouse gas emissions.\textsuperscript{188}

The Interpretive Release stressed that these developments “may trigger disclosure obligations under [SEC] rules and regulations, such as pursuant to Items 101, 103, 503(c) and 303 of Regulation S-K.”\textsuperscript{189}

Similarly, according to the Interpretive Release, the second of the four topics—the impact of international climate change accords—could implicate the same disclosure obligations mentioned above.\textsuperscript{190} Here, the SEC cited the Kyoto Protocol, the European Union’s Emissions Trading System, and the ongoing efforts of the United Nations Climate Conference, “which may lead to future international treaties focused on remedying environmental damage caused by greenhouse gas emissions” and could therefore ultimately have a “material impact on registrants [who] file disclosure documents with the [SEC].”\textsuperscript{191} The Interpretive Release cautioned that “[r]egistrants ‘whose businesses are reasonably likely to be

\begin{itemize}
\item Costs to purchase, or profits from sales of, allowances or credits under a “cap and trade” system;
\item Costs required to improve facilities and equipment to reduce emissions in order to comply with regulatory limits or to mitigate the financial consequences of a “cap and trade” regime; and
\item Changes to profit or loss arising from increased or decreased demand for goods and services produced by the registrant arising directly from legislation or regulation, and indirectly from changes in costs of goods sold.
\end{itemize}

\textsuperscript{184} See Interpretive Release, \textit{supra} note 1.
\textsuperscript{185} \textit{Id.} at 6,290.
\textsuperscript{186} \textit{Id.} at 6,290 n.7.
\textsuperscript{187} \textit{Id.} at 6,290–91.
\textsuperscript{188} \textit{Id.} at 6,290.
\textsuperscript{189} \textit{Id.} at 6,295.
\textsuperscript{190} \textit{Id.} at 6,290 n.1.
\textsuperscript{191} \textit{Id.} at 6,291.
affected by such agreements should monitor the progress of any potential agreements and consider the possible impact in satisfying their disclosure obligations . . .”\textsuperscript{192}

Next, the Interpretive Release discussed the importance of considering the indirect consequences and opportunities of climate change regulation on business trends.\textsuperscript{193} These indirect consequences could include:

- Decreased demand for goods that produce significant greenhouse gas emissions;
- Increased demand for goods that result in lower emissions than competing products;
- Increased competition to develop innovative new products;
- Increased demand for generation and transmission of energy from alternative energy sources; and
- Decreased demand for services related to carbon-based energy sources, such as drilling services or equipment maintenance services.\textsuperscript{194}

Another indirect consequence of climate change regulation could include any potential adverse consequences to a registrant’s reputation and the effects that such reputational damage could have on that registrant’s financial condition or business operations.\textsuperscript{195} Here, the Interpretive Release encouraged registrants to consider possible risk factor disclosure under Item 503(c) of Regulation S-K if the registrant’s business was particularly sensitive to public opinion and perception.\textsuperscript{196}

Finally, the Interpretive Release encouraged registrants to consider the physical impacts of climate change.\textsuperscript{197} Citing the “[s]ignificant physical effects of climate change,” including “effects on the severity of weather . . . sea levels, the arability of farmland, and water availability and quality,” the SEC reminded companies that their businesses may be facing material risks stemming from these effects.\textsuperscript{198} Such material risks include, for example:

- ... [P]roperty damage and disruptions to operations, including manufacturing operations or the transport of manufactured products;
- Indirect financial and operational impacts from disruptions to the operations of major customers or suppliers from severe weather . . .

\textsuperscript{192} Id. at 6,296.
\textsuperscript{193} Id. at 6,291.
\textsuperscript{194} Id. at 6,296 (footnote omitted).
\textsuperscript{195} Id.
\textsuperscript{196} Id. at 6,294.
\textsuperscript{197} Id. at 6,296–97.
\textsuperscript{198} Id. at 6,296 (footnotes omitted).
• Increased insurance claims and liabilities for insurance and reinsurance companies;
• Decreased agricultural production capacity in areas affected by drought or other weather-related changes; and
• Increased insurance premiums and deductibles, or a decrease in the availability of coverage . . . .199

The Interpretive Release also addressed the reporting of climate change related information by registrants to various voluntary disclosure initiatives such as the Climate Registry,200 the Carbon Disclosure Project,201 and the Global Reporting Initiative.202 Observing that “much more information” relative to registrants’ greenhouse gas emissions and climate change responses is “publicly available outside of [registrants’] disclosure documents filed with the SEC as a result of [these] voluntary disclosure initiatives,” the SEC cautioned that “registrants should be aware that some of the information they may be reporting pursuant to these [voluntary] mechanisms also may be required to be disclosed in filings made with the [SEC] pursuant to existing disclosure requirements.”203

Advocates of enhanced registrant disclosure in SEC filings have criticized voluntary reporting mechanisms as being, although helpful, decentralized and insufficient.204 Presumably, these same advocates would like to see registrants’ SEC filings include the same information heretofore

199. Id. at 6,297.
200. The Climate Registry is a nonprofit collaboration among North American States, provinces, territories, and Native Sovereign Nations that sets consistent and transparent standards to calculate, verify and publicly report greenhouse gas emissions into a single registry. The Registry supports both voluntary and mandatory reporting programs and provides comprehensive, accurate data to reduce greenhouse gas emissions.


201. The Carbon Disclosure Project (CDP) collects and distributes climate change information. Over 3,000 organizations in some sixty countries around the world now measure and disclose their greenhouse gas emissions, water management, and climate change strategies through CDP. This data is made available for use by a wide audience including institutional investors, corporations, policymakers and their advisors, public sector organizations, government bodies, academics, and the public. See generally THE CARBON DISCLOSURE PROJECT, https://www.cdproject.net/en-US/Pages/HomePage.aspx (last visited Sept. 21, 2011).

202. The Global Reporting Initiative sets out the principles and performance indicators that organizations can use “to measure and report their economic, environmental, social and governance performance.” What is GRI?, THE GLOBAL REPORTING INITIATIVE, https://www.globalreporting.org/information/about-gri/what-is-GRI/Pages/default.aspx (last visited Sept. 21, 2011). Sustainability reports based on the GRI framework are used to benchmark performance against climate change accords, laws, and other standards. See id.

203. Interpretive Release, supra note 1, at 6,292.

204. See, e.g., Coburn et al., supra note 19, at 2 (“And while voluntary reporting on climate risks is helpful, it is not sufficient. Investors need information that is standardized and regulated, and they need to be able to find that information in one place.”).
disclosed voluntarily as a means of bolstering the possibility of a registrant’s liability under the antifraud provisions in the federal securities laws, a topic discussed in greater detail in Part VI.

Ultimately, the Interpretive Release attempts, but fails, to walk a fine line between taking sides in the climate change debate and merely reminding registrants of their existing disclosure obligations. Referring to the Interpretive Release, SEC Chairman Mary Shapiro argued that “the Commission is not making any kind of statement regarding the facts as they relate to the topic of ‘climate change’ or ‘global warming.’ . . . Nothing that the Commission does today should be construed as weighing in on those topics.”205 Yet, the Interpretive Release was, and remains, controversial precisely because it seemed the SEC was indeed embracing the science of climate change. This fact did not go unnoticed by two of Chairman Shapiro’s co-commissioners.206

Referencing the 2007 GAO Report

There is undoubtedly a constituency that is interested in, and has long pressed the Commission to require, more extensive disclosures on environmental issues in order to drive particular environmental policy objectives. The issuance of this release, however, at a time when the state of the science, law and policy relating to climate change appear to be increasingly in flux, makes little sense.

... I can only conclude that the purpose of this release is to place the imprimatur of the Commission on the agenda of the social and environmental policy lobby, an agenda that falls outside of our expertise and beyond our fundamental mission of investor protection.

205. See Shapiro, supra note 183.

206. To me, the effect of the discussions is to find the Commission joining the ongoing debate over climate change by lending support to a particular view of climate change. Although the release does not expressly take sides, the release emphasizes the “concerns” and potential harms of climate change and discusses a range of regulatory and legislative developments, along with international efforts, aimed at regulating and otherwise remedying causes of climate change. In particular, the release highlights new EPA regulations, proposed “cap-and-trade” legislation, the Kyoto Protocol (which the U.S. has not ratified), the European Union Emissions Trading System, and recent discussions at the United Nations Climate Conference in Copenhagen. While the release stresses the risks of climate change and ongoing efforts to regulate greenhouse gas emissions in the U.S. and abroad, the release fails to recognize that the climate change debate remains unsettled and that many have questioned the appropriateness of the regulatory, legislative, and other initiatives aimed at reducing emissions that the release features. In short, I am troubled that the release does not strike a more neutral and balanced tone when it comes to climate change — an area far outside this agency’s expertise.

discussed in Part III above, which cited “a number of sources to support the view that severe weather scenarios will increase as a result of climate change brought on by an overabundance of greenhouse gases,” the SEC states matter-of-factly that these “[s]ignificant physical effects of climate change . . . have the potential to have a material effect on a registrant’s business and operations.”207 At least one commissioner expressed concern that the SEC was venturing far beyond its area of expertise.208 For that reason, the Interpretive Release sparked a measure of controversy when it was adopted.209

Controversy aside, the Interpretive Release is important because it put registrants on notice that the SEC would devote greater attention to climate change disclosure. The SEC indicated that it would step up its monitoring of company disclosure, solicit additional advice and recommendations from its Investor Advisory Committee, and hold a public roundtable on climate change disclosure to “determine whether further guidance or rulemaking relating to climate change disclosure is necessary or appropriate in the public interest or for the protection of investors.”210 Whether this greater attention has in fact panned out is debatable, but the possibility of increased SEC scrutiny prompted law firms of all sizes to counsel their clients to revisit their disclosure controls and procedures, and stay up-to-date on legislative and regulatory developments. Following the SEC’s issuance of the Interpretive Release, it is safe to say that registrants have devoted greater resources to the issue of climate change and disclosure, achieving what was no doubt one of the likely purposes of the Interpretive Release.

V. TRENDS IN REGISTRANT CLIMATE CHANGE DISCLOSURE FOLLOWING ISSUANCE OF THE INTERPRETIVE RELEASE

Clearly, petitioners hoped SEC guidance would increase registrant climate change disclosure, and perhaps quickly. This raises several

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207. Interpretive Release, supra note 1, at 6,297, 6,291.
208. See Paredes, supra note 206.
210. Interpretive Release, supra note 1, at 6,297. The SEC’s Investor Advisory Committee was formed on June 3, 2009 to advise the SEC on matters of concern to investors, “provide the [SEC] with investors’ perspectives on current, non-enforcement, regulatory issues and serve as a source of information and recommendations to the [SEC] regarding the [SEC’s] regulatory programs from the point of view of investors.” Id. at 6,297 n.78 (citation omitted). As discussed infra Part VI, the Investor Advisory Committee has since been disbanded and the SEC has not yet organized a replacement though one has been authorized by the Dodd-Frank Act.
questions. Has registrant climate change disclosure increased following the Interpretive Release? Is an increase in disclosure alone an appropriate metric for judging registrant response to the Interpretive Release? Lastly, if climate change disclosure has not in fact increased, why has it not?

Post-Interpretive Release observations suggest that registrant climate change disclosure has indeed increased, albeit modestly. In October 2010, the proxy advisory firm, Institutional Shareholder Services (ISS), published a review of registrant post-Interpretive Release climate change disclosures. ISS reviewed the Form 10-K annual report filings of the 100 largest registrants in the United States—“irrespective of sector” by market capitalization—that had filed their Form 10-K with the SEC in the first quarter of 2010. Like the 2009 Doran and Quinn study discussed in Part III above, ISS’s review involved searching these registrants’ Form 10-Ks for such keywords as “climate change,” “carbon dioxide,” “greenhouse gas,” and “energy use.” The ISS study then noted the following levels of disclosure: any mention of climate risk, mention of regulatory risk, mention of physical risk, and mention of product opportunities. Using this methodology, ISS found that few of the registrants reviewed addressed all the issues outlined in the Interpretive Release, and only 20 percent addressed both regulatory and physical risks from climate change.

Further,

- Just over half (51) of the 100 companies analyzed in this report mention climate change in their 2009 Form 10-K filings and most do not outline company-specific risks.
- Quantification of climate risks and articulation of mitigation strategies are largely absent from 2009 statements.
- 22% of companies discuss ways in which their products and business lines might take advantage of climate change opportunities.

211. See Mallika Paulraja, ISS Corporate Services, Disclosing Climate Risks: How 100 Companies Are Responding to New SEC Guidelines (Oct. 2010) (on file with author) [hereinafter Disclosing Climate Risks].
212. Id. at 8 (“Companies across all sectors were selected to provide the most representative picture of how American industry is responding to growing requests for climate change disclosure. This is in contrast to other disclosure studies that have focused exclusively on companies from carbon-intensive sectors like utilities and energy.”).
213. See Kevin L. Doran & Elias L. Quinn, supra note 141, at 728.
214. Disclosing Climate Risks, supra note 211, at 8.
215. Id. at 9.
216. Id. at 7.
ISS also found, not surprisingly, that “[c]limate risk disclosure varies considerably both within industry sectors and between sectors” and that the energy and utility sectors “lead in climate risk disclosure due to the carbon-intensive nature of their businesses.” 218 In this respect, the ISS study is encouraging because it suggests that the registrants most obviously affected by the Interpretive Release—carbon-intensive sectors like utilities and energy—are actively considering and disclosing the potential effects of climate change on their businesses.

While the ISS review is helpful, two defects preclude it from definitively answering the question of whether registrant climate change disclosure has actually increased following the Interpretive Release. First, the review sample data is too close in time to the date the Interpretive Release was issued, a fact which, in fairness to ISS, it acknowledged. 219 The Form 10-K annual reports reviewed by ISS were all filed during the first quarter of 2010, the same time the Interpretive Release was issued. Since ISS selected the 100 largest registrants by market capitalization, it is presumed that each of these registrants were “large accelerated filers” and that their Form 10-Ks for the preceding fiscal year would have been due to the SEC no later than sixty days after the end of the fiscal year—roughly March 1, 2010. 220 By the time the Interpretive Release was issued, these


No one should be terribly surprised to read the [report], which suggests that the volume of climate change disclosure did not meaningfully increase as a result of the [Interpretive] Release.

We believe the timing of the [Interpretive] Release, coupled with the impossibility of predicting what form of climate change regulation or legislation is reasonably likely to be enacted — let alone the material consequences that could result from all the different forms being proposed in Congress, at the EPA, at the state level, and internationally — made disclosure changes in 2010 nearly impossible. We also believe that public companies in the energy industry for whom these issues are clearly material had an established practice of focusing on them, and their disclosure was largely already solidified in this area (as the release acknowledged).


218. DISCLOSING CLIMATE RISKS, supra note 218, at 7.

219. Id. at 12. (“[W]e recognize that companies had little time to take the February 2010 SEC guidance into account when preparing their 2009 Form 10-K reports. Accordingly, the review presented here is as much a reflection of the state of climate change disclosure before the issuance of the SEC guidelines as it is after.”).

220. See Form 10-K, supra note 35, at 1 (General Instructions A(2)). Deadlines for filing an annual report on Form 10-K are sixty days after the end of the fiscal year covered by the report for large accelerated filers, seventy-five days for accelerated filers, and ninety days for all other filers.
registrants were already well along in preparing their Form 10-Ks for filing, a point which, at least in this author’s experience, is generally not conducive to last minute, unplanned disclosures. At the risk of generalizing, it is doubtful the registrants included in ISS’s study had sufficient time to digest the Interpretive Release in any way that would have led to a quantifiable increase their climate risk disclosure. Second, and equally problematic, ISS’s review did not compare the pre-Interpretive Release disclosures of its sample registrants. As a result, it is difficult to assess with any certainty whether these registrants’ post-Interpretive Release climate change disclosures in fact increased in response to the Interpretive Release.

In January 2011, the law firm Davis Polk & Wardwell LLP published the findings of its review of climate change disclosure in 2010 SEC filings.221 Perhaps more anecdotal than empirical (Davis Polk did not reveal the methodology or sampling for its review), the review uncovered what might be regarded as a mixed bag:

- An increase in generic weather risk factors;
- New disclosures on potential changes in demand for products and services and on increases in fuel prices;
- Relatively little disclosure of actual or potential reputational harm due to climate change; and
- A minimal increase in climate change disclosure in the Management Discussion and Analysis (“MD&A”) section of these SEC filings.

That said, registrants in greenhouse gas intensive industries, notably energy companies, have enhanced their disclosure—including by adding

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*Id.* Rule 12b-2 under the Securities Exchange Act of 1934, 17 C.F.R. § 240.12b-2 (2011), defines a “large accelerated filer” as an issuer after it first meets the following conditions as of the end of its fiscal year:

(i) the issuer had an aggregate worldwide market value of the voting and non-voting common equity held by its non-affiliates of $700 million or more, as of the last business day of the issuer’s most recently completed second fiscal quarter;

(ii) the issuer has been subject to the requirements of section 13(a) or 15(d) of the Act for a period of at least twelve calendar months;

(iii) the issuer has filed at least one annual report pursuant to section 13(a) or 15(d) of the Act; and (iv) the issuer is not eligible to use the requirements for smaller reporting companies in Part 229 of this chapter for its annual and quarterly reports.

17 C.F.R. § 240.12b-2.

more lengthy factual updates of legislative, regulatory and litigation developments.\textsuperscript{222}

The Davis Polk study concluded that the Interpretive Release “has not had as significant an impact on [registrant’s] disclosure as some observers initially expected.”\textsuperscript{223} Yet, like the ISS review, Davis Polk’s review is encouraging in at least one respect: it also suggests that registrants most obviously affected by the Interpretive Release—carbon-intensive sectors like utilities and energy—are responding to the SEC’s guidance. Nonetheless, the study acknowledges that such responses may be attributable to other factors as well, such as electric utility settlements with the New York State Attorney General.\textsuperscript{224}

Davis Polk’s review was followed by the February 2011 publication by Ceres, who conducted its own post-Interpretive Release review of registrant climate change disclosures.\textsuperscript{225} For their review, Ceres, like ISS, assessed the Form 10-K annual report filings of registrants “in a variety of industries” that had filed their Form 10-K with the SEC in the first quarter of 2010.\textsuperscript{226} Thus, Ceres’ review suffers from the same defect as ISS, namely, that the sample data is too close in time to the date the Interpretive Release was issued. Also, Ceres’ review does not disclose the size or makeup of its sample, though Ceres did indicate that registrants “were assessed for possible inclusion . . . because of climate change’s impacts on a broad range of industries” and that it “chose to emphasize large capitalization [registrants], which tend to face a larger array of climate risk and opportunity issues,” particularly electric power and utilities registrants.\textsuperscript{227} Still, Ceres rated registrant disclosures using the terms “poor,” “fair,” “good,” and “excellent,” which Ceres admitted was a “subjective assessment based on the authors’ evaluation of the SEC Guidance and our assessment of reasonable investor expectations for high-quality disclosure.”\textsuperscript{228}

In view of this and Ceres’ well-documented stance on climate change disclosure,\textsuperscript{229} it was not surprising that Ceres found that “improvements in climate risk disclosure have been incremental at best.”\textsuperscript{230} According to Ceres,

A review of SEC filings for the 2009 fiscal year, the most recent year for which [Form] 10-Ks are available, reveals an array of climate change

\begin{itemize}
  \item \textsuperscript{222} Id. at 2.
  \item \textsuperscript{223} Id. at 1.
  \item \textsuperscript{224} Id. at 2.
  \item \textsuperscript{225} See Coburn et al., \textit{supra} note 19.
  \item \textsuperscript{226} Id. at 5, 17.
  \item \textsuperscript{227} Id. at 17.
  \item \textsuperscript{228} Id. at 18.
  \item \textsuperscript{229} See, e.g., id. at 11 n.9.
  \item \textsuperscript{230} Id. at 2.
\end{itemize}
reporting examples reflecting differing levels of comprehensiveness, detail and clarity, and too many companies that fail to address the issues at all. Our report includes examples of reporting that reflect good, fair and poor disclosure. This report does not identify examples of exemplary disclosure because such examples are wanting. The overall level of disclosure, while improving, remains well below where it should be.  

Ceres further states, “For every company we found that had ‘poor’ or ‘fair’ disclosure—or no disclosure at all—dozens of similarly situated companies provided similar reporting. We found that ‘good’ disclosure examples were rare, and we found no instances of disclosure we believed should be rated ‘excellent.’”

Ceres’ study did not confine its methodology and rating system strictly to a review for responsiveness to the Interpretive Release. Ceres’ review also “examine[d] investor statements on the reporting they require, particularly the Global Framework for Climate Risk Disclosure.” For example, Ceres’ review also included registrant Form 10-Ks, disclosure of greenhouse gas emissions, and “Strategic Analysis of Climate Risk and Emissions Management.” Ceres did not disclose the extent to which these “investor statements” and additional factors may have impacted its ratings.

In view of the somewhat limited post-Interpretive Release data on climate change disclosure, this author reviewed the pre- and post-Interpretive Release Form 10-K annual report filings of the following thirty-six registrants in the most recently published Fortune 200.

<table>
<thead>
<tr>
<th>Fortune Rank</th>
<th>Registrant</th>
<th>SIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wal-Mart Stores Inc.</td>
<td>5331, retail variety stores</td>
</tr>
<tr>
<td>2</td>
<td>Exxon Mobil Corp.</td>
<td>2911, petroleum refining</td>
</tr>
<tr>
<td>6</td>
<td>General Electric Co.</td>
<td>3600, electronic and other electrical equipment</td>
</tr>
<tr>
<td>9</td>
<td>Bank of America Corp.</td>
<td>6021, national commercial banks</td>
</tr>
</tbody>
</table>

231. Id. at 5 (citing the ISS review, which is described in Part V of this Article).
232. Id. at 17.
233. Id. at 10. See also supra text accompanying note 152.
234. See Coburn et al., supra note 19, at 6.
<table>
<thead>
<tr>
<th>Fortune Rank</th>
<th>Registrant</th>
<th>SIC</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Ford Motor Co.</td>
<td>3711</td>
<td>motor vehicle and passenger bodies</td>
</tr>
<tr>
<td>11</td>
<td>Hewlett Packard Co.</td>
<td>3570</td>
<td>computer and office equipment</td>
</tr>
<tr>
<td>16</td>
<td>Verizon Communications, Inc.</td>
<td>4813</td>
<td>telephone communications</td>
</tr>
<tr>
<td>17</td>
<td>American International Group. Inc.</td>
<td>6331</td>
<td>fire, marine and casualty insurance</td>
</tr>
<tr>
<td>22</td>
<td>United Health Group Inc.</td>
<td>6324</td>
<td>hospital, and medical service plans</td>
</tr>
<tr>
<td>25</td>
<td>Kroger Co.</td>
<td>5411</td>
<td>retail grocery stores</td>
</tr>
<tr>
<td>30</td>
<td>Home Depot Inc.</td>
<td>5211</td>
<td>retail lumber and other building materials</td>
</tr>
<tr>
<td>36</td>
<td>Boeing Co.</td>
<td>3721</td>
<td>aircraft</td>
</tr>
<tr>
<td>39</td>
<td>Archer Daniels Midland Corp.</td>
<td>2070</td>
<td>fats and oils</td>
</tr>
<tr>
<td>45</td>
<td>Dow Chemical Co.</td>
<td>2821</td>
<td>plastics, materials, and synthetic resins</td>
</tr>
<tr>
<td>48</td>
<td>United Parcel Service Inc.</td>
<td>4210</td>
<td>trucking and courier services</td>
</tr>
<tr>
<td>49</td>
<td>Kraft Foods Inc.</td>
<td>2000</td>
<td>food and kindred products</td>
</tr>
<tr>
<td>58</td>
<td>Caterpillar Inc.</td>
<td>3531</td>
<td>construction machinery and equipment</td>
</tr>
<tr>
<td>68</td>
<td>Sunoco Inc.</td>
<td>2911</td>
<td>petroleum refining</td>
</tr>
<tr>
<td>70</td>
<td>Coca-Cola Co.</td>
<td>2080</td>
<td>beverages</td>
</tr>
<tr>
<td>88</td>
<td>Delta Air Lines Inc.</td>
<td>4512</td>
<td>air transportation, scheduled</td>
</tr>
<tr>
<td>94</td>
<td>Philip Morris International Inc.</td>
<td>2111</td>
<td>cigarettes</td>
</tr>
<tr>
<td>105</td>
<td>International Paper Co.</td>
<td>2621</td>
<td>paper mills</td>
</tr>
<tr>
<td>111</td>
<td>McDonald’s Corp.</td>
<td>5812</td>
<td>retail eating places</td>
</tr>
<tr>
<td>116</td>
<td>Motorola Solutions, Inc.</td>
<td>3663</td>
<td>radio, TV broadcasting communications equipment</td>
</tr>
<tr>
<td>123</td>
<td>Alcoa Inc.</td>
<td>3350</td>
<td>rolling, drawing, and extruding of nonferrous metals</td>
</tr>
<tr>
<td>133</td>
<td>World Fuel Services Corp.</td>
<td>5172</td>
<td>wholesale petroleum and petroleum products</td>
</tr>
<tr>
<td>136</td>
<td>Freeport-McMoRan Copper &amp; Gold Inc.</td>
<td>1000</td>
<td>metal mining</td>
</tr>
<tr>
<td>139</td>
<td>Goodyear Tire &amp; Rubber Co.</td>
<td>3011</td>
<td>tires and inner tubes</td>
</tr>
<tr>
<td>144</td>
<td>Halliburton Co.</td>
<td>1389</td>
<td>oil, gas field services</td>
</tr>
<tr>
<td>153</td>
<td>Union Pacific Corp.</td>
<td>4011</td>
<td>railroads, line haul operating</td>
</tr>
<tr>
<td>157</td>
<td>Nucor Corp.</td>
<td>3312</td>
<td>steel works, blast furnaces, and rolling mills</td>
</tr>
<tr>
<td>162</td>
<td>Dominion Resources Inc.</td>
<td>4911</td>
<td>electric services</td>
</tr>
</tbody>
</table>
 Registrants representing disparate industries and viewed as likely candidates for climate change disclosure were chosen. These registrants’ Form 10-K annual reports covering fiscal years 2008 and 2010, which would have been filed in the Spring immediately following the fiscal year covered (i.e., Spring 2009 and Spring 2011), were reviewed. Like the ISS, Ceres, and 2009 Doran and Quinn studies, these registrants’ annual reports on Form 10-K were reviewed for certain keywords or phrases, including: “climate change,” “global warming,” “greenhouse gas,” “GHG,” “carbon dioxide,” “CO2,” and “emission.” Each registrant’s disclosures in its Form 10-K annual reports covering fiscal year 2008 and fiscal year 2010 were then compared.

The purpose of this review was to compare these registrants’ pre- and post-Interpretive Release climate change disclosures. While this review focused primarily on each registrant’s quantity of disclosure, quality of disclosure was considered when assessing registrant responsiveness to the four topics the SEC suggested registrants consider in connection with climate change disclosure. In general, a trend of increased climate change disclosures among these registrants, and in turn a trend of increased responsiveness to the Interpretive Release, was observed.

Of the thirty-six registrants, the nineteen registrants listed in Table B below included some measure of climate change disclosure in both their pre- and post-Interpretive Release Form 10-K annual reports.238

---

Table A: Registrants

<table>
<thead>
<tr>
<th>Fortune Rank</th>
<th>Registrant</th>
<th>SIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>177</td>
<td>PG&amp;E Corp.</td>
<td>4931, electric and other services, combined</td>
</tr>
<tr>
<td>186</td>
<td>Cummins Inc.</td>
<td>3510, engines and turbines</td>
</tr>
<tr>
<td>196</td>
<td>Waste Management Inc.</td>
<td>4953, refuse systems</td>
</tr>
<tr>
<td>199</td>
<td>Kellogg Co.</td>
<td>2040, grain mill products</td>
</tr>
</tbody>
</table>

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237. See supra Parts III, V.
## Table B: Registrants with Both Pre- and Post-Interpretive Release Disclosure

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Exxon Mobil Corp.</td>
<td>Item 1A, Risk Factors</td>
<td>Item 1, Business; Item 1A, Risk Factors; Item 7, MD&amp;A</td>
</tr>
<tr>
<td>10</td>
<td>Ford Motor Co.</td>
<td>Item 1, Business; Item 1A, Risk Factors; Item 3, Legal Proceedings; Item 7, MD&amp;A</td>
<td>Item 1, Business; Item 1A, Risk Factors; Item 3, Legal Proceedings; Item 7, MD&amp;A</td>
</tr>
<tr>
<td>11</td>
<td>Hewlett Packard Co.</td>
<td>Item 1, Business</td>
<td>Item 1, Business; Item 1A, Risk Factors; Note 18 to Financial Statements</td>
</tr>
<tr>
<td>30</td>
<td>Home Depot Inc.</td>
<td>Item 1, Business</td>
<td>Item 1, Business</td>
</tr>
<tr>
<td>45</td>
<td>Dow Chemical Co.</td>
<td>Item 7, MD&amp;A</td>
<td>Item 7, MD&amp;A</td>
</tr>
<tr>
<td>48</td>
<td>United Parcel Service Inc.</td>
<td>Item 1, Business</td>
<td>Item 1, Business; Item 1A Risk Factors</td>
</tr>
<tr>
<td>68</td>
<td>Sunoco Inc.</td>
<td>Item 1A, Risk Factors; Item 7, MD&amp;A</td>
<td>Item 1A, Risk Factors; Item 7, MD&amp;A</td>
</tr>
<tr>
<td>70</td>
<td>Coca-Cola Co.</td>
<td>Item 1A, Risk Factors; Note 1 to Financial Statements</td>
<td>Item 1A, Risk Factors; Note 1 to Financial Statements</td>
</tr>
<tr>
<td>88</td>
<td>Delta Air Lines Inc.</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
</tr>
<tr>
<td>105</td>
<td>International Paper Co.</td>
<td>Item 1A, Risk Factors; Item 7, MD&amp;A</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
</tr>
<tr>
<td>111</td>
<td>McDonald’s Corp.</td>
<td>Item 1, Business</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
</tr>
</tbody>
</table>

239. The SEC’s Annual Report Form 10-K prescribes the following disclosures: For Item 1, Business registrants are required to “furnish the information required by Item 101 of Regulation S-K [Description of Business]. . . .” Form 10-K, supra note 35, at 8 (citation omitted). For Item 1A, Risk Factors, registrants are required to “[s]et forth, under the caption ‘Risk Factors,’ where appropriate, the risk factors described in Item 503(c) of Regulation S-K [Prospectus Summary, Risk Factors, and Ratio of Earnings to Fixed Charges]. . . .” Id. (citation omitted). For Item 3, Legal Proceedings, registrants are required to “furnish the information required by Item 103 of Regulation S-K [Legal Proceedings]. . . .” Id. (citation omitted). For Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations, registrants are required to “[f]urnish the information required by Item 303 of Regulation S-K [Management’s Discussion and Analysis of Financial Condition and Results of Operations]. . . .” Id. at 9 (citation omitted). Disclosure provided in a registrant’s notes to financial statements would have been provided in connection with Item 8, Financial Statements and Supplementary Data, which requires registrants to “(a) furnish financial statements meeting the requirements of Regulation S-X.” Id. (citation omitted).

240. Id.
### Table B: Registrants with Both Pre- and Post-Interpretive Release Disclosure

<table>
<thead>
<tr>
<th>Fortune Rank</th>
<th>Registrant</th>
<th>2008 Annual Report on Form 10-K&lt;sup&gt;239&lt;/sup&gt;</th>
<th>2010 Annual Report on Form 10-K&lt;sup&gt;240&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>123</td>
<td>Alcoa Inc.</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
</tr>
<tr>
<td>136</td>
<td>Freeport-McMoRan</td>
<td>Item 1A, Risk Factors</td>
<td>Item 1A, Risk Factors</td>
</tr>
<tr>
<td>153</td>
<td>Union Pacific Corp.</td>
<td>Item 1A, Risk Factors; Item 7, MD&amp;A</td>
<td>Item 1A, Risk Factors; Item 7, MD&amp;A</td>
</tr>
<tr>
<td>157</td>
<td>Nucor Corp.</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
<td>Item 1A, Risk Factors</td>
</tr>
<tr>
<td>162</td>
<td>Dominion Resources Inc.</td>
<td>Item 1, Business; Item 1A, Risk Factors; Note 7a to Financial Statements</td>
<td>Item 1, Business; Item 1A, Risk Factors; Note 23 to Financial Statements</td>
</tr>
<tr>
<td>177</td>
<td>PG&amp;E Corp.</td>
<td>Item 1, Business</td>
<td>Item 1, Business</td>
</tr>
<tr>
<td>186</td>
<td>Cummins Inc.</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
</tr>
<tr>
<td>196</td>
<td>Waste Management Inc.</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
</tr>
</tbody>
</table>

Of these registrants, those that increased their climate change disclosure, even if only modestly, were Exxon, Ford, Hewlett-Packard, Home Depot, Dow Chemical, UPS, Sunoco, Delta, Freeport-McMoRan, Dominion, PG&E, and Cummins. Increased disclosure was most often found in Items 1 (Business) and 1A (Risk Factors).<sup>241</sup>

The nine registrants listed in Table C below did not include climate change disclosure in their pre-Interpretive Release Form 10-K annual report, but did include some measure of climate change disclosure in their post-Interpretive Release Form 10-K annual report.<sup>242</sup>

### Table C: Registrants without Pre-Interpretive Release Disclosure but Having Post-Interpretive Release Disclosure

<table>
<thead>
<tr>
<th>Fortune Rank</th>
<th>Registrant</th>
<th>2010 Annual Report on Form 10-K&lt;sup&gt;243&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wal-Mart Stores Inc.</td>
<td>Item 1A, Risk Factors</td>
</tr>
<tr>
<td>17</td>
<td>American International Group Inc.</td>
<td>Item 1, Business</td>
</tr>
<tr>
<td>39</td>
<td>Archer Daniels Midland Corp.</td>
<td>Item 1, Business; Item 1A, Risk Factors</td>
</tr>
<tr>
<td>58</td>
<td>Caterpillar Inc.</td>
<td>Item 1A, Risk Factors</td>
</tr>
<tr>
<td>94</td>
<td>Philip Morris International Inc.</td>
<td>Item 1A, Risk Factors</td>
</tr>
</tbody>
</table>

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<sup>241</sup> Hansen Analysis, supra note 238.
<sup>242</sup> Id.
<sup>243</sup> Id.
In general, at least in terms of the space devoted to climate change, the new disclosures made by these registrants are best described as minimal. Additionally, eight registrants did not include climate change disclosure in either their pre- or post-Interpretive Release Form 10-K annual report: General Electric, Bank of America, Verizon, Kroger, United Health, Boeing, Kraft, and Motorola.244

Of the twenty-eight registrants whose post-Interpretive Release Form 10-K annual report included some measure of climate change disclosure, the disclosures were reviewed specifically for apparent consideration of one or more of the four topics the SEC suggested registrants consider: the impact of climate change legislation and regulation, the impact of international climate change accords, the indirect consequences of climate change regulation on business trends, and the physical impacts of climate change.245 The following registrants appeared to have taken into account at least one or more of the four topics suggested by the SEC.246

---

244. Id.
245. See Interpretive Release, supra note 1.
246. Hansen Analysis, supra note 238.
<table>
<thead>
<tr>
<th>Fortune Rank</th>
<th>Registrant</th>
<th>Impact of Legislation and Regulation</th>
<th>Impact of Int’l Accords</th>
<th>Indirect Consequences of Regulation on Business Trends</th>
<th>Physical Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>American International Group. Inc.</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>30</td>
<td>Home Depot Inc.</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Archer Daniels Midland Corp.</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Dow Chemical Co.</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>48</td>
<td>United Parcel Service Inc.</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>58</td>
<td>Caterpillar Inc.</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>Sunoco Inc.</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Coca-Cola Co.</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>88</td>
<td>Delta Air Lines Inc.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>94</td>
<td>Philip Morris International Inc.</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>105</td>
<td>International Paper Co.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>111</td>
<td>McDonald’s Corp.</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>123</td>
<td>Alcoa Inc.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>133</td>
<td>World Fuel Services Corp.</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>136</td>
<td>Freeport-McMoRan Copper &amp; Gold Inc.</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>139</td>
<td>Goodyear Tire &amp; Rubber Co.</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>144</td>
<td>Halliburton Co.</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>153</td>
<td>Union Pacific Corp.</td>
<td>●</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>157</td>
<td>Nucor Corp.</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table D: Registrant Post-Interpretive Release Climate Change Disclosures

<table>
<thead>
<tr>
<th>Fortune Rank</th>
<th>Registrant</th>
<th>Impact of Legislation and Regulation</th>
<th>Impact of Int’l Accords</th>
<th>Indirect Consequences of Regulation on Business Trends</th>
<th>Physical Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>162</td>
<td>Dominion Resources Inc.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>177</td>
<td>PG&amp;E Corp.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>186</td>
<td>Cummins Inc.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>196</td>
<td>Waste Management Inc.</td>
<td></td>
<td>●</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>199</td>
<td>Kellogg Co.</td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

On the basis of this review, as illustrated in the foregoing tables, and as mentioned above, the data showed a trend of increased climate change disclosures among these registrants. To be sure, for some registrants, the increased disclosure was modest. Still, most registrants who included climate change disclosure in their post-Interpretive Release Form 10-Ks attempted to address multiple topics suggested by the SEC. Although quantification of precise climate risks was largely absent, several registrants, including Ford, Home Depot, Dominion, PG&E, and Cummins, devoted space to climate change disclosures that do not necessarily fit under the categories suggested by the SEC, such as disclosure relating to greenhouse gas emissions mitigation efforts. Also of note, Freeport McMoran, Dominion, and PG&E reported on their past greenhouse gas emissions as part of their disclosure. Otherwise, few if any of the registrants studied here disclosed greenhouse gas emissions levels or targets. It is important, however, to observe that those registrants most affected by the Interpretive Release, specifically those in carbon intensive industries, increased their climate change disclosure in their Form 10-K annual reports. Accordingly, these results suggest, even if somewhat modestly, a trend towards an increase in and maturation of disclosure, especially as registrants become more comfortable with the topic of climate change and the Interpretive Release.

Of course, overreliance on any of these pre- and post-Interpretive Release studies, including this author’s, should be cautioned against because they presume the materiality of climate change for all registrants. Put another way, they erroneously equate disclosure with compliance, or, more pointedly, nondisclosure with noncompliance. These studies tend to assume that registrants who may not include climate change disclosure in their SEC filings (or who may not be disclosing as much as some parties might like) are simply ignoring their disclosure obligations and the
Interpretive Release—“systematic avoidance” as one author put it.247 But such assumptions reflect a misunderstanding of not only the particular rules governing disclosure in this area and the Interpretive Release, but also the process of disclosure.

Climate change disclosure is, to a large degree, predicated upon judgments of materiality and an understanding of the particular facts and circumstances of the particular registrant. It may very well be that a registrant undertook the analysis prescribed by the rules and the Interpretive Release, but nonetheless determined that disclosure in an SEC filing was not appropriate at that time. This highlights another fact about climate change disclosure specifically, and registrant disclosure generally: the process of deciding whether and what to disclose is not transparent, nor is it meant to be, especially in the context of failing to disclose.248 If registrants were required to disclose the processes they undertook for deciding not to disclose something, one of the central purposes of the disclosure rules would be undermined: separating important information “from less important information that would be extraneous or irrelevant to investors.”249 At a very basic level, what matters most is disclosure or the absence of disclosure; investors can draw their own conclusions from there.250

VI. CONSIDERING REASONS FOR THE (ASSUMED) “LACK OF” REGISTRANT CLIMATE DISCLOSURE

Let us assume for present purposes that despite the Interpretive Release registrant climate change disclosure is lacking. What might explain this? Are there plausible reasons? Should we expect this trend to continue? There

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247. Camden D. Burton, Note, An Inconvenient Risk: Climate Change Disclosure and the Burden on Corporations, 62 ADMIN. L. REV. 1287, 1296 (2010) (“Although it has been argued that the lack of detailed oversight and review by the SEC has led to a stronger impression of omission of potential risks or opportunities, the disparity between predicted impacts on companies due to the effect of climate change and the lack of discussion in, for example, MD&As indicates a systemic avoidance of climate change risk disclosure.” (footnotes omitted)).

248. See Gail Henderson, The Materiality of Climate Change and the Role of Voluntary Disclosure (COMP. RESEARCH IN LAW & POL. ECON, Research Paper No. 47, 2009) (“Even if issuers are meeting their current obligations with respect to disclosure of climate change risks, however, the ‘materiality’ threshold for disclosure would likely leave a gap between what issuers are required to disclose under the law and what some investors would like to know about how issuers are responding to the challenges posed by climate change. This is due to the fact that if an issuer has determined that climate change will not have a material impact on its financial results, it is under no obligation to disclose its reasons for reaching this conclusion.”).

249. Miller, supra note 84, at 368.

250. Registrants are required in their annual and periodic reports to affirm the adequacy of their disclosure controls and procedures. See Form 10-K, supra note 35; Form 10-Q, supra note 35 (requiring disclosure required by Item 307 (“Disclosure Controls and Procedures”) of Regulation S-K, 17 C.F.R. § 229.307 (2011)). A registrant’s principal executive officer and principal financial officer are also required to certify the adequacy of these disclosure controls and procedures, which are filed with the foregoing reports. See Form 10-K, supra note 35; Form 10-Q, supra note 35.
are a number of reasons that might be advanced, some more plausible (and palatable) than others, such as: inadequate, incomplete, or speculative disclosure may lead to liability under the anti-fraud provisions of federal securities law; climate change has not reached the level of materiality required for disclosure by many registrants; some registrants lack the expertise and resources to adequately evaluate climate change; and the SEC has not made this issue a priority right now (so why should registrants).

The latter reason is premised upon the notion that until the SEC makes climate change a priority by following through on its promised “next steps” in the Interpretive Release or via its comment letter process, registrants will be slow to increase their climate change disclosure. As discussed in Part IV, the Interpretive Release indicated that the SEC would hold a public climate change disclosure roundtable, solicit further guidance from its then-existing Investor Advisory Committee, and monitor disclosure as part of its disclosure review program. The first two of these initiatives never materialized. In fact, the Investor Advisory Committee was since disbanded and only recently did the SEC organize a replacement. To date, the SEC has issued climate change disclosure comments to only a handful of registrants. Davis Polk, as part of its review of SEC filings made in 2011, “identified only six climate change disclosure comments issued to registrants in a “variety of industries ranging from manufacturing and energy, to less environmentally intensive industries, including insurance and even a beauty salon operation.” In addition, they noted that none of these registrants were what you might call “the usual suspects.” These findings prompted at least one writer to ask: “Does the SEC care if you’re green?”

To be fair, the SEC’s apparent lack of follow-up to the Interpretive Release does not necessarily reflect a lack of SEC interest in climate change disclosure. Rather, it is quite likely that the SEC has been distracted by the extraordinary burdens imposed upon it as a result of the recent financial crisis and related legislation, specifically the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act). The financial crisis and the subsequent passage of the Dodd-Frank Act drowned out the amount of interest in the Interpretive Release. Furthermore,

251. Interpretive Release, supra note 1, at 6,297.
253. ENVIRONMENTAL DISCLOSURE IN SEC FILINGS—2011 UPDATE, supra note 221, at 3.
254. Id.
256. See generally SELLERS ET AL., supra note 158 (“In hindsight, climate change disclosure became a classic hurry up and wait game. While the SEC suggested in the release that it planned
criticism by some members of Congress and “Congress’ diminished interest in adopting federal greenhouse gas reduction legislation” were also likely responsible for any diminished interest in the Interpretive Release. As a result, a danger arises that some registrants have taken the position that unless they get a comment from the SEC, they are not going to change their disclosure practices. By any measure, however, lack of SEC focus is not a valid justification for lack of disclosure, as it obviously ignores the serious analysis required by SEC rules and the Interpretive Release.

The arguable lack of climate change disclosure might also be ascribed to a lack of registrant experience or expertise with the science of climate change. Admittedly, this may not hold true for registrants in the electric, coal, oil and gas, transportation, insurance, and related sectors that have a much more direct interest in the climate change debate and have therefore presumably dedicated more resources to investigating the issue. Still, for many registrants outside of these sectors, devoting the necessary resources—personnel, time, and money—to climate change analysis vis-à-vis their own operations, is a daunting task. The necessary “scope of the evaluation of climate change risk within an organization may be enormous, depending on the nature of the business,” and such an investigation may entail significant costs. Furthermore, it does not help that registrants are essentially left to their own devices in determining whose or which science of climate change is correct and thus worth following. On this score, the Interpretive Release has been justly criticized for “citing an odd grab bag of sources in describing the technical foundations for climate change understanding and regulation” and offering “no suggestions about which

to hold a public roundtable on disclosure regarding climate change matters in the spring of 2010, and would ‘determine whether further guidance or rulemaking relating to climate change disclosure is necessary or appropriate,’ these plans were quickly eclipsed by financial services reform legislation, continuing issues in the financial markets’ performance, and, presumably, by the unavoidable conclusion that new energy legislation was not going to become a reality in the current Congress.”).

257. See ENVIRONMENTAL DISCLOSURE IN SEC FILINGS—2011 UPDATE, supra note 221, at 1, 5.

258. McFarland, supra note 113, at 295; see also Burton, supra note 247, at 1303–04. Burton’s thesis is, however, that “[t]he burden on management is simply not more important than providing complete information to investors.” Id. at 1304.
information [registrants] should consider reliable, nor . . . any guidance on
the treatment of uncertainty by climate change experts.”259

Nevertheless, the analysis required by the SEC’s rules and Interpretive
Release must be done, and by all registrants. As a result, perhaps a more
plausible reason for the arguable lack of disclosure is the fact that for many
registrants, climate change has simply not, in their estimation, reached the
level of materiality required for disclosure. This fact has been conceded by
even the staunchest supporters of increased disclosure.260 This is a reflection
of the pairing of the inherently difficult materiality analysis and the science
of climate change (something with which most registrants have little
expertise). Recall, as discussed in Part III above, that the concept of
materiality is often critical to a registrant’s analysis and obligation to
disclose, and such determinations are rarely as straightforward and clear cut
as might be supposed. Nowhere is this more evident than in the context of
MD&A disclosure required by Item 303 of Regulation S-K, which as
discussed previously, generally requires that registrants disclose “known
trends, events or uncertainties” that may have a material effect on the
registrant’s financial condition.261

Even conceding that there may be a general consensus as to the science
of climate change, there is significant uncertainty as to the degree, scope,
and timing of its forecasted effects and any accompanying legislative or
regulatory responses. This uncertainty will necessarily influence a
registrant’s materiality analysis and the extent of its disclosure. As one
writer has observed, “even those companies that have evaluated the risk
may not fully appreciate its significance, or may have a distorted view of
the risk.”262 Of the ways identified by the SEC that climate change might
trigger disclosure, the most obvious are physical risks and legislative and
regulatory risks. Right now, it is virtually impossible to predict what form
of federal climate change legislation or regulation is likely to be enacted.263

259. BINGHAM MCCUTCHEN LLP, supra note 209, at 3.
260. See Coburn et al., supra note 19, at 13 (“The SEC Guidance applies to all publicly traded
companies required to file financial reports with the SEC. Therefore, [registrants] of all sizes in all
industries need to assess their climate risks and opportunities and disclose any material issues in
their filings. But, this does not necessarily mean that every company will find material climate
issues to disclose. . . . [A registrant] can only answer this question by undertaking a systemic
materiality analysis.”); see also Joo, supra note 103, at 691 (arguing that “for most corporations
[climate change does not yet have] company-specific immediate effect of the type that might
qualify as ‘material’” (alteration in original). Joo does concede that this is not the case for some
industries, such as the insurance industry. Id.
262. McFarland, supra note 113, at 296 (arguing also that “[i]f the current corporate norm is
averse to disclosing climate change risk, it may obscure the true nature of that risk”).
263. See, e.g., Stefanie Lepore, Outlook for Greenhouse Gas Legislation in the 112th Congress,
/VinsonElkinsClimateChangeReportIssue14.aspx (“The 112th Congress will not preempt
regulation of greenhouse gases (GHG) by adopting legislation to displace it; rather, any actions it
takes regarding GHGs will be aimed at preventing, not preemtping, regulation by the United
Although Congress has considered numerous pieces of climate change legislation, the uncertainty of action undermines any argument that coming federal legislation is a “known trend.” Even implementation of California’s Global Warming Solutions Act of 2006 (AB 32) is being slowed, casting doubt on at least the timing of its proposed greenhouse gas reductions programs. Additionally, it is still uncertain when the predicted physical effects of climate change will occur. One writer has observed, “The United Nations Intergovernmental Panel on Climate Change (IPCC) is considered the authoritative voice on climate change.” Although the IPCC’s 2007 Synthesis Report states that evidence that the climate is warming is now “unequivocal,” the effects of global warming are less clear. For instance, over the course of the twenty-first century, the “IPCC has expressed ‘very high confidence’ of increased risk of flood due to the rise in sea level, but only ‘medium confidence’ that global warming will affect crop productivity.”

The uncertainty with respect to the physical impacts of climate change, and their timing in particular, may make it difficult for [registrants] to determine whether they will have a “material” effect on financial results in the future. “Would a ‘reasonable investor’ consider physical risks 50-100 years in the future ‘material’ today?” Even assuming a long-term investor, States Environmental Protection Agency (EPA) under the existing Clean Air Act. The American Power Act, sponsored by Senators Kerry and Lieberman, could not survive even the Democratically controlled 111th Congress. It is difficult to foresee how a bill addressing climate change broadly or greenhouse gas regulation could ever reach the House floor for debate under the current leadership. Similarly, with the divided Congress, it is unlikely that Senate Democrats will expend resources and political capital attempting another comprehensive bill regulating greenhouse gases.

264. See e.g., Joo, supra note 103, 688–89 (“While science is making it increasingly clear that greenhouse-gas emissions are environmentally destructive, and there is a possibility of future regulation, there are as yet no ‘reasonably likely’ material consequences for that destruction (such as tort liability or regulatory fines) that would [in the context of a registrant’s MD&A disclosure obligations] materially affect liquidity, revenues, or costs.”); see also ENVIRONMENTAL DISCLOSURE, supra note 139, at 20–21 (noting the view of “officials at the SEC’s Division of Corporation Finance” in 2004 that “disclosures about the impact of potential greenhouse gas controls are not necessarily required at this time . . . because controls do not appear imminent at the federal level through ratification of the Kyoto Protocol or [other] legislation”).


266. Henderson, supra note 248, at 11–12.


these impacts may be too remote in time to affect a decision made today to buy, sell or hold a security.269

Moreover, uncertainty is not merely a problem for registrants. Investors, particularly large institutional investors, also struggle with the uncertainties of climate change, for example, when constructing models to account for the effects of climate change on their investment portfolios. The following commentary, which appeared in a report considering the implications of climate change for strategic asset allocation prepared by Mercer LLC in 2011, illustrates the problem:

Uncertainty is a key stumbling block in climate change research. Every link in the chain of manmade greenhouse gas emissions, physical changes in the climate system and their socioeconomic impacts is highly uncertain. Therefore, investors cannot simply rely on a best guess as to how the future will unfold when planning their investments. Moreover, because many of these uncertainties emanate from complex systems that are poorly understood and difficult to model, climate change has been called a problem of “deep uncertainty.”

In this context, deep uncertainty implies that probabilities cannot be assigned to future states with high confidence. This calls into question the appropriateness of relying too heavily on quantitative modeling tools, for which investors must specify probability distributions to underpin the parameters of their investment models.

Institutional investors must develop new tools to more effectively model systemic risks such as climate change. These tools require an expansion of the way we think about portfolio risk, looking beyond mere volatility. Describing probable scenarios, identifying the potential sources of risks, and measuring and monitoring them over time are the components of an improved risk management strategy that seeks to protect the long-term assets that institutional investors oversee on behalf of their stakeholders.270

269. See id. at 11 (citations omitted). See also, Deatherage, supra note 172, at 38–39 (“One of the challenges for registered companies that are now subject to the SEC’s guidance on climate risk is that the ability to predict an actual physical effect, and then to quantify the direct and indirect financial and market risks. Numeric calculations would in most cases be inherently speculative. Companies may find it difficult to state with any certainty whether these events will occur, and if they do, what the impact to the registrant might be.”); Paredes, supra note 206 (“The prospect that this guidance will in fact foster confusion and uncertainty about a company’s required disclosures troubles me. What triggers a ‘reputational damage’ or ‘physical effects’ disclosure is far from certain, as is the scope of any such disclosure if and when required. More to the point, reputational damage and the impact on a company of the physical effects of climate change can be quite speculative. There is a notable risk that the interpretive release will encourage disclosures that are unlikely to improve investor decision making and may actually distract investors from focusing on more important information.”). See Troy A. Paredes, Blinded by the Light: Information Overload and Its Consequences for Securities Regulation, 81 WASH. U. L. Q. 417 (2003) (exploring disclosure obligations and the concept of information overload and its effects on investors).

Given these uncertainties, and keeping in mind that materiality analysis is specific to the facts and circumstances of a particular registrant, many registrants may conclude that, at present, climate change is not reasonably likely to have a material effect on their financial condition or results of operations.

Closely related to the matter of deciding whether to disclose, and if so, how much to disclose, is the omnipresent specter of liability or even the allegation of liability for fraud under federal securities law. It is this potential liability that might also help explain the arguable paucity of climate change disclosure. To entirely ignore or “[t]o overstate or speculate [about the effects climate change] may have an adverse effect on prices for [a registrant’s] stock, which in turn could adversely affect shareholders.”

This is often the brew from which the bitter drink of securities litigation springs. The anti-fraud provisions of the federal securities laws prohibit misstatements and omissions of material facts that have the effect of defrauding investors and the securities markets. The most well-known and well-used anti-fraud provision is Rule 10b-5 promulgated under § 10(b) of the Exchange Act. Section 10(b) makes it unlawful for any person to “employ, in connection with the purchase or sale of any security . . . any manipulative or deceptive devise or contrivance in contravention of such rules and regulations as the [SEC] may prescribe as necessary or appropriate in the public interest or for the protection of investors.”

SEC Rule 10b-5 implements this provision by making it unlawful to, among other things, “make any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading.” While the elements of a claim differ in some respects depending upon whether an action for fraud is brought by the government or a private litigant, the essential elements are the same: a misrepresentation or omission, of a material fact, in connection with the purchase or sale of a security, made with scienter. Of course, § 10(b) and Rule 10b-5 “do not create an

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273. 17 C.F.R. § 240.10b-5(b) (2012).
274. See Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 341–42 (2005). In Broudo, the Court set forth the basic elements of a private cause of action under § 10(b) and Rule 10b-5:

(1) a material misrepresentation (or omission); (2) scienter, i.e., a wrongful state of mind; (3) a connection with the purchase or sale of a security; (4) reliance, often referred to in cases involving public securities markets (fraud-on-the-market cases) as “transaction causation;” (5) economic loss; (6) “loss causation,” i.e., a causal connection between the material misrepresentation and the loss . . . .

Id. (citations omitted) (emphasis omitted); see also SEC v. Rana Research, Inc. 8 F.3d 1358, 1363 (9th Cir. 1993) (holding that in an SEC cause of action under § 10(b) and Rule 10b-5, the SEC is not required to show reliance, economic loss, or loss causation). The U.S. Supreme Court has implied a private right of action from the text and purpose of § 10(b) of the Exchange Act. See
affirmative duty to disclose any and all material information.” 275

Additionally, “[s]ilence, absent a duty to disclose, is not misleading under Rule 10b-5.” 276 Nevertheless, once a registrant undertakes to speak or speaks in response to a statutory or regulatory command, it must speak “the full truth.” 277

A fair treatment of the potential for liability under federal securities laws for misstatements or omissions of material facts relating to the effects of climate change on a registrant’s business is beyond the scope of this Article. Still, it is worth noting that courts disagree about whether a misleading disclosure in response to, or a failure to disclose pursuant to, Regulation S-X or S-K—particularly Item 303, the MD&A—may form a sufficient basis for a cause of action under § 10(b) and Rule 10b-5. 278

Commentators have cast doubt on whether liability under § 10(b) and Rule 10b-5 might arise in connection with failure to disclose the effects of climate change on a registrant’s business. 279 Even so, for many registrants,

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277. First Va. Bankshares v. Benson, 559 F.2d 1307, 1317 (5th Cir. 1977) (Rule 10b-5 creates a statutory duty to “speak the full truth [arises] when a defendant undertakes to say anything”).
278. Compare In re Scholastic Corp. Sec. Litig., 252 F.3d 63, 70–71 (2d Cir. 2001) (reversing district court’s dismissal of Rule 10b-5 claim based on defendant’s failure to make disclosures on known trends that were reasonably likely to have a material impact on revenue, based upon a requirement under Regulation S-K, Item 303), with Oran v. Stafford, 226 F.3d 275, 288 (3d Cir. 2000) (“[A] violation of SK-303’s reporting requirements does not automatically give rise to a material omission under Rule 10b-5.”); In re Wells Fargo Sec. Litig., 12 F.3d 922, 930 n.6 (9th Cir. 1993) (declining to reach issue of whether violations of Regulation S-K Item 303 create an independent cause of action for private plaintiffs under 10(b)); Alaska Elec. Pension Fund. v. Adecco S.A., 434 F. Supp. 2d 815, 828 (S.D. Cal. 2006) (“[D]emonstration of a violation of the disclosure requirements of Item 303 does not lead inevitably to the conclusion that such disclosure would be required under Rule 10b-5.” (quoting Alfus v. Pyramid Tech. Corp., 764 F. Supp. 598, 608 (N.D. Cal. 1991))); In re Corning, Inc. Sec. Litig., 349 F. Supp. 2d 698, 715–17 (S.D.N.Y. 2004) (rejecting argument that Regulation S-K Item 303 does not impose any duty under Rule 10b-5, but rather that the “[c]ourt must consider Item 303 in connection with plaintiff’s claim” under 10b-5); In re Campbell Soup Co. Sec. Litig., 145 F. Supp. 2d 574, 590–91 (D.N.J. 2001) (violation of Regulation S-K does not necessarily violate § 10(b)).
279. See, e.g., Joo, supra note 103, at 690 (footnotes omitted).

[I]t is unlikely that existing securities fraud law provides a cause of action against a corporation for failure to disclose information about its carbon impact. As noted above, disclosure about a corporation’s carbon impact is unlikely to be required, and thus the materiality of an omission will be a moot point. Materiality would only be relevant if a corporation were to make an affirmative misrepresentation or were to fail to correct earlier statements that later became misleading. While carbon-impact information might be important to the buying and selling decisions of some, even many, environmentally concerned individuals, the legal standard is that of an objective “reasonable shareholder,” who is presumed to invest in order to make money. Even in such a situation, the omissions or misstatements would have to be made in connection with a
it is not necessarily the prospect of liability so much as the prospect of merely having to defend against a claim of liability that informs the calculus of disclosure. Securities litigation is exceedingly expensive and resource intensive, regardless of whether it results in a determination of liability. Registrants have learned over time that disclosure and the goal of avoiding such litigation go hand in hand. Thus, “[c]are must be taken in deciding what [if anything] to disclose—too little disclosure may not provide a full picture to investors; too much disclosure, particularly of an overly speculative nature, may not provide them with realistic information.”

VII. LOOKING FORWARD: POSSIBLE TRENDS THAT MAY INCREASE REGISTRANT CLIMATE CHANGE DISCLOSURE

Undoubtedly, for proponents of enhanced climate change disclosure in SEC filings, the reasons for the arguable lack of disclosure are unsatisfying. Yet, these and other reasons for nondisclosure are somewhat transitory and will become less important over time for a number of reasons. First, as registrants become more certain of the science and forecast effects of climate change, as well as its regulation, disclosure in SEC filings will likely mature and increase. An evolution of registrant certainty will in time enable registrants to more thoroughly and accurately assess the potentially material effects of climate change as prescribed by SEC rules and the Interpretive Release, and may well lead to increased disclosure. This is, of course, subject to the caveat that registrants determine whether such effects are indeed material and, thus, warrant disclosure. But even though the prospects for comprehensive federal climate change legislation and regulation may be rather dim at the present, this issue is clearly not going to go away. Moreover, as long as a lack of comprehensive federal legislation and regulation exists, individual states and other jurisdictions will continue to be actively engaged with these issues. As a consequence of such engagement, climate change regulation may in fact become more numerous and complex, prompting registrants to engage in additional analysis and disclosure.

purchase or sale of securities, and only a person who actually bought or sold securities in reliance could bring suit.

Id.; Perry E. Wallace, Climate Change, Fiduciary Duty, and Corporate Disclosure: Are Things Heating Up in the Boardroom?, 26 VA. ENVTL. L.J. 293, 314 (2008) (concluding that the pleading and proof requirements of Rule 10b-5 make it unlikely that liability could be imposed at present on the basis of a misstatement or omission of material fact with regard to climate change).

280. Deatherage, supra note 172, at 35; see also W. Brinkley Dickerson, Jr. et al., SEC Publishes Interpretive Guidance on Disclosure Requirements Relating to Climate Change, TROUTMAN SANDERS LLP (Feb. 5, 2010), http://www.troutmansanders.com/sec-publishes-interpretive-guidance-on-disclosure-requirements-relating-to-climate-change-02-05-2010/ (arguing that the Interpretive Release requires registrants to engage in speculative disclosures).

281. See Lepore, supra note 263, at 21–22.
Second, climate change disclosure in SEC filings will likely mature and increase as the paths of voluntary and “mandatory” (i.e., SEC prescribed) continue to merge. Registrants who have historically voluntarily disclosed information about climate change’s contributions to and effects on their businesses, now have, in light of the Interpretive Release, an even greater interest in ensuring that their voluntary and mandatory disclosures are not inconsistent. As discussed in Part IV above, voluntary disclosures, previously regarded as outside the realm of SEC filings, may now merit a second look to determine compliance with existing disclosure requirements. As pressure for registrants to engage in voluntary disclosure continues to grow, pressure will also grow for similar disclosure in SEC filings. This does not mean, however, that voluntary and mandatory disclosures will be one and the same. As has thoughtfully been observed by even advocates of increased disclosure,

[T]his does not mean that voluntary and mandatory disclosures will be identical in content or scope; voluntary disclosures are often more extensive, as they include information that does not necessarily meet SEC materiality standards. However, mandatory disclosures should be factually and conceptually consistent regarding the impact of climate-related risks and opportunities and the [registrant’s] business strategy for addressing those issues.282

Third, climate change disclosure will likely mature and increase as the lines between SEC and other regulatory agencies’ mandated disclosures continue to blur. Consider the potential intersection of certain registrants’ greenhouse gas emissions reporting obligations pursuant to the EPA’s Mandatory Reporting of Greenhouse Gases Rule (the Reporting Rules),283 and the SEC’s guidance. Under the EPA’s Reporting Rules, suppliers of fossil fuels, manufacturers of vehicles and engines, and any facilities that emit 25,000 metric tons or more per year of greenhouse gases must submit annual reports of their emissions to the EPA,284 which the EPA will make publicly available on the Internet. In discussing a registrant’s assessment of

282. Coburn et al., supra note 19, at 10.
283. 40 C.F.R. § 86 (2009); see also Climate Change – Regulatory Initiatives, EPA, http://www.epa.gov/climatechange/initiatives/index.html (last visited Mar. 19, 2012). The Reporting Rules were published in final form in December 2009 and took effect on December 29, 2009. Around the same time, the EPA announced two proposals to regulate and reduce emissions of greenhouse gases: the so-called “tailoring rule,” which would require facilities emitting over 25,000 tons of greenhouse gases per year to obtain permits to do so in the future; and new emissions standards for light-duty vehicles. The EPA issued the final tailoring rule on May 13, 2010 and the final emissions standards for light-duty vehicles on April 1, 2010. Additional EPA regulatory initiatives are pending. Id.
284. For the EPA’s Reporting Rules, see Greenhouse Gas Reporting Program, EPA, http://www.epa.gov/climatechange/emissions/notices.html (last visited Apr. 13, 2012). The EPA estimated that the threshold of 25,000 metric tons would cover about 85 percent of the U.S.’s greenhouse gas emissions and apply to approximately 10,000 facilities. Id. SOC. INV. FORUM FOUND., REPORT ON SOCIALLY RESPONSIBLE INVESTING TRENDS IN THE UNITED STATES (2010).
the materiality of climate change legislation and regulation, the SEC pointedly reminded registrants that “management should ensure that it has sufficient information regarding the registrant’s greenhouse gas emissions and other operational matters to evaluate the likelihood of a material effect arising from the subject legislation or regulation.”

Although the SEC might view a registrant’s actual greenhouse gas emissions only as a relevant data point in the broader context of making a materiality assessment of climate change disclosure, it is worth noting that the disclosure of such information elsewhere (e.g., as part of the EPA’s Reporting Rules) will perhaps only increase pressure on registrants to include similar disclosure in their SEC filings.

Fourth, climate change disclosure will likely mature and increase as large institutional shareholders and other activists continue to exert pressure on registrants to enhance their voluntary and mandatory climate change disclosures. Many large institutional investors “have developed socially responsible investing groups and protocols, and utilized the power of the media and the Internet to launch public campaigns to attempt to convince [registrants] to disclose their activities that affect the environment.”

Research recently published by Julie Cotter and Muftah M. Najah of the Australian Centre for Sustainable Business Development at the University of Southern Queensland has found a “highly significant relationship between institutional investor influence and climate change disclosure” by companies in the Global 500 through responses to the annual Climate Disclosure Project questionnaire and “via primary corporate communication

285. Interpretive Release, supra note 1, at 6,296 n.71. The SEC’s discussion on this point refers to another note in the Interpretive Release that discusses the registrant’s principal executive and financial officers’ required certifications regarding the maintenance of the registrant’s disclosure controls and procedures. Deatherage observes that

[...]

286. See, e.g., Coburn et al., supra note 19, at 7–8. Included is an “11-Point Checklist for Identifying, Disclosing and Addressing Climate Risks and Opportunities.” Id. at 7. Among other things, the checklist counsels that, in disclosure, “[s]pecific [emissions] numbers, when reasonably attainable, are preferred over general statements.” Id. at 8.

287. See also Le Luo et al., Corporate Incentives to Disclose Carbon Information: Evidence from Global 500 (Univ. of W. Sydney, Working Paper Series, Dec. 16, 2010), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1725106. In this paper, the authors examine the factors that motivate large firms to provide climate change information to the Carbon Disclosure Project and make that information public. The authors find that the tendency of firms in the Global 500 to disclose carbon information increases when social, economic, and regulatory pressures related to climate change are brought to bear on these firms. Id.

channels such as annual and sustainability reports and company websites. \(^{289}\)

Accordingly, the SEC’s shareholder proposal rules are a favored tool of such investors and climate change disclosure proponents. \(^{290}\) These rules determine when a registrant “must include a shareholder’s proposal in its proxy statement.”\(^ {291}\) In recent years, record numbers of shareholder proposals relating to climate change have been submitted for inclusion in registrant proxy statements and voted on at registrant annual meetings. \(^ {292}\) This trend has been prompted by not only the increased awareness of climate change issues generally, but the SEC’s growing unwillingness to permit registrants to exclude these types of proposals by relying upon any of the thirteen substantive bases for excluding a proposals, most notably Rule 14a-8(i)(7), the so-called “ordinary business” exclusion.\(^ {293}\)

Under Rule 14a-8(i)(7), a shareholder proposal may be excluded from a registrant’s proxy statement if the proposal “deals with a matter relating to the company’s ordinary business operations.”\(^ {294}\) Historically, the SEC has not read Rule 14a-8(i)(7) as expansively as its plain language might suggest, opting to carve out proposals “that focus on ‘sufficiently significant social policy issues’” from its scope.\(^ {295}\) Even so, registrants could, for a time, rely upon the “ordinary business” exclusion to exclude some climate change and environmental related proposals, particularly proposals seeking corporate disclosure relating to internal assessments of potential climate change risk or liabilities.\(^ {296}\) In 2005, the SEC explained,


\(^{290}\) See e.g., Elise N. Rindfleisch, Shareholder Proposals: A Catalyst for Climate Change-Related Disclosure, Analysis, and Action?, 5 BERKELEY BUS. L.J. 45, 48 (2008) (“Whether or not successfully adopted, these proposals enable shareholders to secure disclosure, deeper analysis, and action from the corporations in the area of climate change.”).


\(^{293}\) 17 C.F.R. § 240.14a-8(i)(7).

\(^{294}\) Id.


\(^{296}\) See, e.g., SEC, Division of Corporate Finance: SEC Staff Legal Bulletin No. 14C (June 28, 2005), http://www.sec.gov/interps/legal/cfslb14c.htm [hereinafter SEC Staff Legal Bulletin No. 14C]. The SEC concurred that Xcel could exclude a proposal requesting that the Board of Directors report . . . on (a) the economic risks associated with the Company’s past, present, and future emissions of carbon dioxide, sulphur dioxide, nitrogen oxide and mercury emissions, and the public stance of the company regarding efforts to reduce these emissions and (b) the economic benefits of committing to a
To the extent that a proposal and supporting statement focus on the company engaging in an internal assessment of the risks or liabilities that the company faces as a result of its operations that may adversely affect the environment or the public’s health, we concur with the company’s view that there is a basis for it to exclude the proposal under rule 14a-8(i)(7) as relating to an evaluation of risk. To the extent that a proposal and supporting statement focus on the company minimizing or eliminating operations that may adversely affect the environment or the public’s health, we do not concur with the company’s view that there is a basis for it to exclude the proposal under rule 14a-8(i)(7).

In 2009, the SEC expressed concern that this analytical framework “may have resulted in the unwarranted exclusion of proposals that relate to the evaluation of risk but that focus on significant policy issues” and changed course. Going forward, the SEC explained, “[t]he fact that a proposal would require an evaluation of risk will not be dispositive of whether the proposal may be excluded under Rule 14a-8(i)(7).” Rather, the SEC will consider “whether the underlying subject matter of the risk evaluation involves a matter of ordinary business to the company.”

In those cases in which a proposal’s underlying subject matter transcends the day-to-day business matters of the company and raises policy issues so significant that it would be appropriate for a shareholder vote, the proposal generally will not be excludable under Rule 14a-8(i)(7) as long as a sufficient nexus exists between the nature of the proposal and the company. Conversely, in those cases in which a proposal’s underlying subject matter involves an ordinary business matter to the company, the proposal generally will be excludable under Rule 14a-8(i)(7). In determining whether the subject matter raises significant policy issues and has a sufficient nexus to the company, as described above, we will apply the same standards that we apply to other types of proposals under Rule 14a-8(i)(7).

Since the adoption of this “more appropriate framework,” registrants have had a somewhat harder time excluding climate change related

\begin{itemize}
  \item Id. (citation omitted).
  \item 297. SEC Staff Legal Bulletin No. 14C, supra note 296.
  \item 299. Id.
  \item 300. Id.
  \item 301. Id. (footnotes omitted).
  \item 302. Id.
\end{itemize}
proposals by relying on Rule 14a-8(i)(7) because the SEC has come to view climate change as a “significant policy issue.”

Recent years have witnessed a substantial increase in the number of climate change related shareholder proposals. ISS, which tracks the submission of and voting results for shareholder proposals annually, reported that during the 2007 to 2011 proxy seasons, seventy climate change related proposals were submitted to registrants in the S&P 500. Many of these proposals requested registrant disclosures and reports regarding the impacts of climate change on the registrant’s business. During that same period, the number increased modestly to seventy-nine such proposals for registrants in the Russell 3000. While these numbers may not seem large—there are, after all, thousands of registrants in the United States—they are telling when compared to data covering the 1997 to 2006 proxy seasons. According to ISS, during this much longer period, only fourteen shareholder proposals were submitted to registrants in the S&P 500 and sixteen in the Russell 3000. Additionally, the average votes in support of these proposals have also increased. Proposals submitted to the S&P 500 registrants during the 2007 to 2011 proxy seasons averaged just

303. See, e.g., Letter from Gregory S. Belliston, Special Counsel, SEC, to Erron W. Smith, Assistant Gen. Counsel, Wal-Mart Stores, Inc. (Mar. 28, 2011) (attaching prior correspondence with the SEC regarding this matter) (stating that the SEC was unable to concur that Wal-Mart could exclude proposal under Rule 14a-8(i)(7), which requests that the board prepare a report disclosing the business risks related to climate change); Letter from Gregory S. Belliston, Special Counsel, SEC, to Gregory K. Palm, Exec. Vice President & Gen. Counsel, The Goldman Sachs Group, Inc. (Feb. 7, 2011) (attaching prior correspondence with the SEC regarding this matter) (stating that the SEC was unable to concur that Goldman Sachs could exclude a proposal under Rule 14a-8(i)(7) requesting that board prepare a global warming report); Letter from Gregory S. Belliston, Special Counsel, SEC, to Ronald O. Mueller, Gibson, Dunn & Crutcher LLP, Counsel for Gen. Electric Co. (Feb. 8, 2011) (attaching prior correspondence with the SEC regarding this matter) (stating that the SEC was unable to concur that General Electric could exclude a proposal under Rule 14a-8(i)(7) requesting that the board prepare a report disclosing the business risk related to developments in the scientific, political, legislative and regulatory landscape regarding climate change); Letter from Heather L. Maples, Senior Special Counsel, SEC, to Connie S. Stamets, Bracewell & Giuliani LLP, counsel for Chesapeake Energy Corp. (Apr. 13, 2010) (attaching prior correspondence with the SEC regarding this matter) (stating that the SEC was unable to concur that Chesapeake Energy could exclude proposal under Rule 14a-8(i)(7) requesting that board issue a sustainability report describing the company’s short- and long-term responses to environmental, social, and governance-related issues, including greenhouse gas emissions data and plans to manage emissions). Compare Letter from Gregory S. Belliston, Special Counsel, SEC, to Sharon L. Burr, Deputy Gen. Counsel, Dominion Resources Services, Inc. (Feb. 22, 2011) (attaching prior correspondence with the SEC regarding this matter) (SEC concurred that Dominion Resources could exclude a proposal under Rule 14a-8(i)(7) requesting that Dominion Resources offer Virginia electric power customers the option of directly purchasing electricity generated from 100 percent renewable energy by 2012).

304. Hansen Analysis, supra note 238.

305. Id.; 2011 U.S. Postseason Report, supra note 292.

306. Hansen Analysis, supra note 238.

307. Id.

over 19 percent, while proposals submitted to S&P 500 registrants during the 1997 to 2006 proxy seasons averaged only 12 percent.309

These seemingly low support rates notwithstanding, research has shown that shareholder resolutions can motivate registrants to reevaluate their disclosure practices. A study conducted by Erin M. Reid and Michael W. Toffel of Harvard Business School, published in 2009, explored the extent to which shareholder activism and shareholder resolutions have prompted registrants to participate in the Carbon Disclosure Project’s public disclosure program.310 The authors tested two hypotheses: first, that “[a] firm is more likely to engage in practices consistent with the aims of a social movement if it has been targeted by a shareholder resolution on a related social issue,” and second, that “[a] firm is more likely to engage in practices consistent with the aims of a social movement when firms within the same institutional field have been targeted by a shareholder resolution on a related social issue.”311 To test these hypotheses, the authors focused

309. Hansen Analysis, supra note 238. For the 2011 proxy season, ISS has most recently reported that

[the number of resolutions specifically focusing on climate change fell this year, from 37 to 30 filed. After many withdrawal agreements, 11 had come to votes by June 14, down from 17 voted on the year before. Seven of those voted on by June 8 were part of the now familiar campaign requesting companies to adopt quantifiable metrics for greenhouse gas (GHG) emissions. Those votes averaged 20.1 percent support. Among the other climate change proposals that came to votes were second-year resolutions asking for reports from Chevron and ConocoPhillips on the financial risks of climate change; those votes remained low, at under 8 percent. Overall, climate change-related proposals averaged 16.2 percent support—as compared with 21.1 percent in all of 2010. In addition to the 11 proposals voted on from climate change activists, shareholders considered four from conservative groups that are skeptical about the severity of the issue. These resolutions averaged only 3.7 percent approval; the best showing was 6.5 percent support for a resolution on climate-related lobbying at Duke Power. Among other environmental issues, support for resolutions asking companies to report on oil sands development remained strong at ConocoPhillips and ExxonMobil, averaging 27.5 percent.

Ted Allen, Institutional Shareholder Services, GOVERNANCE WKLY. (June 16, 2011).


Each year, CDP [Carbon Disclosure Project] asks the top executive managers of the world’s largest public companies to disclose information about the risks and opportunities posed by climate change, the strategies being pursued to address them, and company-wide greenhouse gas emissions. In 2006 and 2007, 44% of S&P 500 Index companies responded to this request by publicly disclosing at least some portion of the requested information. By participating in CDP’s process, these firms were not only providing information to CDP and the investors it represented, but were also engaging in new and extensive disclosure practices neither common nor required in the United States.

Id. at 4.

311. Id. at 9–10.
on all registrants listed in the S&P 500 Index during the sample period of 2006 to 2007.\textsuperscript{312}

The findings of this study illustrate the power of shareholder resolutions, even those that do not achieve majority support, to influence the disclosure practices (at least voluntary disclosure practices) of target and non-target registrants. Specifically, the authors found that registrants “that have been targeted, and [registrants] in industries in which other [registrants] have been targeted, by shareholder actions on environmental issues are more likely to publicly disclose information to the [Carbon Disclosure Project].”\textsuperscript{313} In fact, “[b]eing targeted with a shareholder resolution more than doubled the odds that a firm would publicly report.”\textsuperscript{314} The results also indicated that “shareholder resolutions have spillover effects on other [registrants] in a targeted industry,” prompting participation in the Carbon Disclosure Project by non-targeted registrants.\textsuperscript{315} Although the Reid and Toffel study did not examine the link between shareholder activism and resolutions and registrant disclosures in SEC filings, their study provides compelling support for the proposition that continued shareholder activism in this regard may ultimately lead to increased disclosure in registrant SEC filings.

Fifth, private shareholder and non-shareholder lawsuits aimed at registrant activity affecting climate change will likely prompt increased disclosure in SEC filings, specifically for registrants directly involved in such litigation (e.g., pursuant to Item 103 of Regulation S-K) and, more generally, for registrants vulnerable to such lawsuits (e.g., pursuant to Item 503 of Regulation S-K). These kinds of lawsuits have proliferated in recent years and have received widespread attention, though many have encountered stiff headwinds thus far.\textsuperscript{316} Many of these are grounded in

\begin{footnotesize}
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\item \textsuperscript{312} Id. at 14.
\item \textsuperscript{313} Id. at 4.
\item \textsuperscript{314} Id. at 21.
\item \textsuperscript{315} Id. at 22.
\item \textsuperscript{316} See, e.g., Native Vill. of Kivalina v. ExxonMobil Corp., 663 F. Supp. 2d 863 (N.D. Cal. 2009) (rejecting plaintiff’s common law nuisance claims against a number of large energy companies alleging defendants’ greenhouse gas emissions contributed to global warming and forced plaintiffs to relocate their village). The Court rejected plaintiffs’ claims, concluding that they presented a non-justiciable political question and that plaintiffs failed to assert an injury sufficient to maintain Article III standing or, more specifically, that plaintiff’s theory of causation was too tenuous to the alleged injury to be traceable to defendants’ conduct. See id.; Cal. v. Gen. Motors Corp., No. C06-05755, 2007 WL 2726871 (N.D. Cal. Sept. 17, 2007) (involving claims by the state that automaker’s products were significant contributors to greenhouse gas emissions and seeking damages for harms of climate change). The Court dismissed, holding that suit presented non-justiciable political question and that the state agreed to voluntarily dismiss the suit. See Order Granting Voluntary Dismissal, No. 07-16908 (9th Cir. 2010); see also Comer v. Murphy Oil USA, 607 F.3d 1049 (5th Cir. 2010) (dismissing case and holding that appeals court lacked jurisdiction, leaving district court’s dismissal as controlling opinion). Plaintiffs, as a putative class action, sought to hold defendants partially liable for damages in connection with Hurricane Katrina claiming that defendant’s greenhouse gas emissions contributed to global warming and, in turn, the power of Hurricane Katrina and the levels of harm suffered. Id.
\end{itemize}
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nuisance theory and success is usually bound up in questions of justiciability, causation, and damages—major obstacles for claimants so far.\textsuperscript{317} Most recently, the U.S. Supreme Court held that a federal court’s authority to enjoin emissions of greenhouse gases from coal-fired plants on the basis of federal common law causes of action is displaced by the Clean Air Act.\textsuperscript{318} Nevertheless, the Court remanded to the Second Circuit Court of Appeals to determine the issue of whether the Act also preempts state common law nuisance actions.\textsuperscript{319} So, at least in theory, such suits may yet have life, albeit much more limited.\textsuperscript{320} Thus, here, as in the case of securities fraud litigation discussed above, for many registrants it may not be the prospect of liability so much as it is the prospect of merely having to defend against a claim of liability that enters the calculus of disclosure. Tort

\textsuperscript{317} See text accompanying note 278; see also Francis J. Menton, Issues of Proof in Climate Change Litigation, 242 N.Y.L.J. 124 (Dec. 29, 2009); Wallace, supra note 279, at 305.

\textsuperscript{318} See Am. Elec. Power Co., Inc. v. Conn., 131 S. Ct. 2527 (2011) (considering claims by plaintiffs, including six states, one city, and three nonprofit land trusts, against four private energy companies and one federally owned energy company, that defendants’ emissions constituted a public nuisance under federal and state common law; plaintiffs asked the court to impose caps on carbon emissions at these companies). The federal district court dismissed the suit, holding that “determining causation and redressibility in the context of alleged global warming would require [the court] to make judgments that could have an impact on the other branches’ responses to what is plainly a political question.” Conn. v. Am. Elec. Power Co., 406 F. Supp. 2d 265, 271 n.6 (S.D.N.Y. 2005). The Second Circuit Court of Appeals reversed, rejecting defendant’s jurisdictional challenges and arguments that greenhouse gas emissions claims were not covered by federal common law of nuisance. \textsuperscript{319} See Conn. v. Am. Elec. Power Co., 582 F.3d 309 (2d Cir. 2009).

\textsuperscript{320} See, e.g., Supreme Court Fails to Shut Door on Greenhouse Gas Nuisance Litigation, AKIN GUMP STRAUSS HAUER & FELD LLP (Jun. 21, 2011), http://www.akingump.com/communicationcenter/newsletterdetail.aspx?pub=2778 (“The AEP decision does not mention anywhere the potential for common-law damage actions based on any connection between GHG emissions and climate change. But, in describing the regulatory and enforcement tools available under the Clean Air Act to address GHG emissions, the Court focused on statutory provisions to establish or revise emissions limits, i.e., the relief sought by the AEP plaintiffs. The Court concluded that ‘[t]he Act itself thus provides a means to seek limits on emissions of carbon dioxide from domestic power plants—the same relief plaintiffs seek by invoking federal common law.’ By contrast, there are no parallel provisions on the Clean Air Act authorizing the award of damages for injury to persons or property. In terms of the doctrine of displacement, however, the Court characterized the issue as ‘whether the field has been occupied, not whether it has been occupied in a particular manner.’ Future plaintiffs are likely to focus on the distinction between the tests for displacement versus preemption and the lack of any language in AEP discussing claims for damages.” (footnotes omitted)); Edward Clark Lewis et al., U.S. Supreme Court Rejects Common Law Causes of Action for Climate Change Litigation, FULBRIGHT & JAWORSKI L.L.P. (June 23, 2011), http://www.fulbright.com/index.cfm?fuseaction=publications.detail&pub_id=4982&site_id=494&detail=yes (“Aside from jurisdictional matters, the Supreme Court’s opinion regarding displacement of federal common law causes of action for tort-based climate change suits will have a severe impact on the ability of plaintiffs to challenge a source’s air emissions outside of the regulatory scheme. Indeed, several components of the Court’s rationale in AEP would appear to hold true with regard to displacement of state common law causes of action as well. It warrants following whether the Second Circuit will look to such dicta in considering the merits and availability of the state common law claims. Whether in regards to pending and future tort-based challenges to climate change, or litigation over the satisfaction of regulatory actions, it is clear that this is not the last time a court will opine on these issues.”).
litigation, as these climate change cases have been styled, can be exceedingly expensive and resource intensive.

Finally, the SEC ultimately will refocus on climate change disclosure, which will likely prompt maturation and increase in climate change disclosure. At the risk of being seen as having abandoned the field after highlighting the issue, the SEC will likely return its focus to this issue as the financial crisis subsides and climate and energy policy again take center stage. The SEC’s comment letter process is an important influence in the development of registrant disclosure. Registrants tend to watch this process closely, whether or not they or their peers are targets of the process. Additionally, new or enhanced disclosures by one registrant in a particular sector tend to influence the disclosures of other registrants in the same sector.

This unfolding maturation and increase in climate change disclosure would not necessarily be a new development. Rather, it would continue a trend already underway, as evidenced by at least some of the disclosure reviews discussed previously in this Article. Recall that, as discussed earlier, the 2006 Friends of the Earth study of 112 registrants in the automobile and energy industries found modest improvements in climate change disclosure since the benchmark year of 2000, specifically, an overall climate change disclosure rate of 49 percent compared with 26 percent.321 Davis Polk’s review of trends in post-Interpretive Release disclosure found:

- An increase in generic weather risk factors;
- New disclosure on potential changes in demand for products and services and on increases in fuel prices; [and]
- A minimal increase in climate change disclosure in the Management Discussion and Analysis (MD&A) section of these SEC filings. . . .322

This finding comports with my own review of select registrant filings discussed above. These trends show that perhaps slowly, but surely, climate change disclosure is increasing and we can expect to see it increase in the future, to the extent that individual issuers determine climate change may have a material impact on their business.

CONCLUSION

Although the Interpretive Release may have been, and continues to be, controversial, it has put a premium on a registrant’s familiarity with the concept of climate change and its possible effects on a registrant’s

321. See MICHELLE CHAN-FISHEL, supra note 152.
322. ENVIRONMENTAL DISCLOSURE IN SEC FILINGS—2011 UPDATE, supra note 228, at 2.
operations and businesses. Also, there is no doubt that the Interpretive Release has prompted registrants to watch legislative and regulatory developments more closely and, in addition, has prompted savvy registrants to review their disclosure controls, procedures, and processes for assessing the materiality of climate change matters on their own operations. In these respects, the Interpretive Release has achieved some of its goals. These forces, together with the reasons discussed in Part VII of this Article, portend a maturation and increase in climate change disclosure in the years to come.