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Canary in the Coal Mine: Can the Campaign for Mandatory Climate Risk Disclosure Withstand the Municipal Bond Market's Resistance to Regulatory Reform?

Lisa Anne Hamilton

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**CANARY IN THE COAL MINE: CAN THE CAMPAIGN FOR
MANDATORY CLIMATE RISK DISCLOSURE WITHSTAND
THE MUNICIPAL BOND MARKET'S RESISTANCE TO
REGULATORY REFORM?**

Lisa Anne Hamilton, JD[†]

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I. INTRODUCTION

On January 27, 2010, the Securities and Exchange Commission (“the Commission”) voted to provide publicly traded companies with interpretive guidance on the disclosure of climate risk within the existing requirements under federal securities law.¹ The announcement followed years of letters and petitions sent to the Commission by environmental and investor advocates which described interpretive guidance about climate risk as material information that must be made available to protect corporate securities investors and to inform market participants of a company’s potential liabilities.²

1. See Press Release, U.S. Securities & Exchange Commission, SEC Issues Interpretive Guidance on Disclosure Related to Business or Legal Developments Regarding Climate Change (Jan. 27, 2010), <http://www.sec.gov/news/press/2010/2010-15.htm>. As of the date of submission of this article, interpretive guidance had been announced, but not released.

2. See, e.g., Supplemental Petition for Interpretive Guidance on Climate Risk Disclosure, No. 4-547 (Nov. 23, 2009), available at <http://www.sec.gov/rules/petitions/2009/petrn4-547-supp.pdf> [hereinafter Ceres supplement II] (asking Commission to provide interpretive guidance concerning climate risk disclosure in annual filing of corporations under Regulation S-K Items 101, 103 and 303); Petition for Interpretive Guidance on Climate Risk Disclosure, No. 4-547 (Sept. 18, 2007), available at <http://www.sec.gov/rules/petitions/2007/petrn4-547.pdf> [hereinafter Ceres Petition]; Evan Lehmann, *Regulation: SEC Turnaround Sparks Sudden Look at Climate Risk Disclosure*, E & E PUBLISHING, LLC, July 13, 2009, <http://www.eenews.net/public/climatewire/2009/07/13/1>; Letter from Cal. Pub. Employees’ Ret. Sys. et al.,

Yet this article proposes that the Commission's work is only half-finished. To date, there has been little discussion about climate risk disclosure for municipal utilities and tax-exempt rural electric cooperatives ("Publicly Owned Utilities" or "POUs") that own and operate power facilities including coal-fired-power plants.³ POUs utilize the municipal bond market to finance fossil fuel generation projects that significantly contribute to greenhouse gas emissions.⁴ Operations generating large amounts of carbon are likely to suffer the greatest fiscal, litigation, and regulatory impacts arising from carbon mitigation efforts.⁵ However, POUs are currently exempt from the registration requirements of the Securities Act of 1933 ("the Securities Act" or "the '33 Act") and the periodic filing requirements of the Securities and Exchange Act of 1934 ("the Exchange Act" or "the '34 Act").⁶ Furthermore, the Tower Amendments constrain the Commission from regulating issuers of municipal bonds, leaving some question as to whether the Commission can or will prescribe similar rules for climate risk disclosure for both publicly traded companies and municipal bond issuers.⁷ This article proposes that without the regulatory guidance to encourage municipal bond market partici-

to Florence E. Harmon, Acting Sec'y, U.S. Sec. & Exch. Comm'n (June 12, 2008), <http://www.sec.gov/rules/petitions/2008/petn4-547-suppl.pdf> [hereinafter Ceres supplement I] (regarding supplement to the September 18, 2007 petition).

3. See, e.g., Andrew Ackerman, *Climate Risk Disclosure Sought*, BOND BUYER, Jan. 13, 2010, http://www.bondbuyer.com/issues/119_257/sec-disclosure-climate-change-1005977-1.html; Letter from Peter Lehner, Executive Dir., Natural Res. Def. Council, to Elizabeth M. Murphy, Sec'y, Sec. & Exch. Comm'n (Dec. 15, 2009), <http://www.sec.gov/comments/s7-15-09/s71509-31.pdf> [hereinafter Lehner Letter] (regarding Release No. 34-60332; File No. S7-15-09, Proposed Amendments to Municipal Securities Disclosure); Letter from Tom Sanzillo, Consultant, T.R. Rose Assoc., Mark Kresowik, Corporate Accountability Representative, Sierra Club & Lisa Anne Hamilton, Counsel, to Elizabeth Murphy, Sec'y, Sec. & Exch. Comm'n (Sept. 8, 2009), <http://www.sec.gov/comments/s7-15-09/s71509-21.pdf> [hereinafter Sanzillo, Kresowik, Hamilton Letter] (regarding Release No. 34-60332; File No. S7-15-09, Proposed Amendments to Municipal Securities Disclosure).

4. Sanzillo, Kresowik, Hamilton Letter, *supra* note 3, at 1-2.

5. See The Corporate Library, et al., *Climate Risk Disclosure in SEC Filings, An Analysis of 10-K Reporting by Oil and Gas, Insurance, Coal, Transportation and Electric Power Companies* 19 (June 2009), <http://www.ceres.org/Document.Doc?id=473> [hereinafter Ceres 10K Report] (discussing related costs).

6. Securities Act of 1933, 15 U.S.C. §§ 77a-ttt (2006); Securities & Exchange Act of 1934, 15 U.S.C. §§ 78a-lll (2006).

7. See Elisse B. Walter, Comm'r, U.S. Sec. & Exch. Comm'n, Speech at the 10th Annual A. A. Sommer, Jr. Corporate, Securities and Financial Law Lecture: Regulation of the Municipal Securities Market: Investors are Not Second-Class Citizens, (Oct. 28, 2009), <http://www.sec.gov/news/speech/2009/spch102809ebw.htm> [hereinafter Walter Speech].

pants to prepare for the financial, litigation, and regulatory impacts of a carbon-constrained economy, an already fragile municipal bond market may be exposed to substantial but undisclosed risk.

Part I of this article provides a broad overview of the municipal bond market and a comparison of the differing obligations of issuers, brokers, dealers, and underwriters of corporate securities transactions versus municipal securities transactions under federal securities laws. Part II traces the development of the climate risk disclosure debate through investor networks, private voluntary initiatives, and regulatory actions for publicly traded companies. Part III provides an example and analysis of voluntary carbon emissions disclosure in the municipal bond market and an analysis of the disparities that are likely to arise among corporate and municipal securities investors.

II. BACKGROUND AND OVERVIEW OF THE MUNICIPAL SECURITIES MARKET

A. *Description of Municipal Securities Market*

Municipal securities are the debt obligations of state and local governments (“municipal issuers”)⁸ that are exempt from the registration provisions of the Securities Act and the periodic filing provisions of the Securities and the Exchange Act.⁹ Municipal issuers will issue the bonds to build our schools and our universities, maintain our water systems, and finance construction of our power plants.¹⁰ One of the types of municipal bonds most commonly issued are general obligation bonds backed by the full faith and credit or taxing power of the issuing governmental division.¹¹ Municipal issuers may also finance projects using revenue bonds “backed solely by the revenue of a specific project.”¹² A municipal issuer may also issue

8. For purposes of this article, “municipal issuer” will refer to all entities that avail themselves of the municipal bond market, including “states, their political subdivisions such as cities, towns, or counties, or their instrumentalities such as school districts or port authorities.” Walter Speech, *supra* note 7, at pt. II.

9. Theresa A. Gabaldon, *Financial Federalism and the Short, Happy Life of Municipal Securities Regulation*, 34 J. CORP. L. 739, 744 (2009) (discussing how the Exchange Act empowers the SEC to exercise authority over all aspects of the securities industry including registration, regulation, and oversight of broker-dealer activity and self-regulatory agencies including the Municipal Securities Rulemaking Board (MSRB), the New York Stock Exchange (NYSE), and the National Association of Securities Dealers (NASD)).

10. Walter Speech, *supra* note 7, at pt. II.

11. *Id.*

12. *Id.*

industrial revenue bonds, also known as conduit bonds, which enable a municipal issuer to issue notes on behalf of a third party to whom investors both lend money and from whom they receive payment of the debt.¹³ Municipal issuers typically issue conduit bonds to finance the construction or manufacturing of certain industrial-type facilities by the third party.¹⁴

There are currently \$2.8 trillion in outstanding issuances in the municipal bond market.¹⁵ Additionally, the Treasury Department launched the Build America Bonds (BABs) program, which brought \$35 billion of new taxable BAB bonds to market from April to October, 2009¹⁶ with an expected issuance forecast for 2010 of \$85 billion.¹⁷ It is estimated that “\$450.5 billion in total tax-exempt municipal securities will come to market next year” with \$347.5 billion for long-term issuances, \$68 billion in short-term issuance, and variable rate demand obligations (VRDO) estimated at \$35 billion.¹⁸ Furthermore, the municipal bond market has evolved so that it is no longer a “buy and hold” market.¹⁹ Other investors include property and casualty insurance companies, and commercial banks. But despite their reputation for safety, municipal securities can and do default.²⁰

Since 1999, issuers have defaulted on over \$24 billion in municipal bonds.²¹ In 2008 alone, 140 municipal issuers defaulted on almost \$8 billion in bonds—up significantly from the previous year, in large part due to the credit crisis.²² Most recently, the effects of lack of

13. *Id.*; see also 15 U.S.C. § 78(a) (29) (2006) (explaining the scope of parties to municipal securities).

14. Walter Speech, *supra* note 7, at pt. II.

15. *Id.*; cf. Press Release, Jason Farago, Sec. Indus. & Fin. Mkts. Assoc. (SIFMA), SIFMA Issues Report on Findings from Municipal Securities Issuance Survey, <http://www.sifma.org/news/news.aspx?id=14718> [hereinafter SIFMA Survey 2010] (last visited Mar. 8, 2010).

16. Walter Speech, *supra* note 7, at pt. II.

17. SIFMA Survey 2010, *supra* note 15. For an example of the federal government attempting to increase the utilization of the BABs program, see Press Release, U.S. Treasury Office of Pub. Affairs, Build America Bonds and School Bonds: Investing in Our States, Investing in Our Workers, Investing in Our Kids (Apr. 3, 2009), <http://www.treas.gov/press/releases/docs/BuildAmericaandSchoolConstructionBondsFactsheetFinal.pdf>.

18. SIFMA Survey 2010, *supra* note 15.

19. Walter Speech, *supra* note 7, at pt. II.

20. *Id.*

21. Joe Mysak, *Municipal Defaults Don't Reflect Tough Times: Chart of Day*, BLOOMBERG.COM, May 28, 2009, <http://www.bloomberg.com/apps/news?pid=20601087&sid=arkJTEztA2wg>.

22. *Id.*

disclosure and increased complexity have been coming to light. For example, Jefferson County, Alabama is currently over \$3 billion dollars in debt as a result of its participation in credit defaults swaps used to finance its sewage project at a lower interest rate.²³ What was, a century ago, a sleepy backwater market is now a startlingly large municipal bond market that has become increasingly complex, and has outgrown the restrictions of the regulatory structure put into place decades ago.²⁴ Regulators are becoming increasingly concerned that the size and complexity of the market coupled with limited availability of information about an issuer's risk exposure may be contributing to the vulnerability of a municipal securities market already under stress.²⁵

What is becoming increasingly alarming is that with so few regulations and limited disclosure, researchers are finding that investors will often purchase distressed debt at par value or higher instead of at lower prices.²⁶ The lapses in the quality and frequency of disclosure prevents investors from having access to informed decision-making and enables poor quality investments to be priced and sold at a premium without factoring risk into the price. The variation in the sophistication of the investor will often determine where and what information will provide the best source of information about the investment. Institutional investors may rely on professional financial analysts to gather information about the municipal issuer's or the obligor's financial condition, while a retail investor is more likely to look to the dealer for any relevant disclosure material.²⁷ On occasion, it becomes difficult for underwriters to bid on securities—in either the primary or secondary market—issued by municipal issuers with

23. See Brian Burnsed, *Bond Debacle Sinks Jefferson County*, BUSINESS WEEK, Nov. 8, 2009, http://www.businessweek.com/bwdaily/dnflash/content/nov2009/db2009118_722581.htm; Gary Palmer, *Jefferson County on Verge of Making Bankruptcy History*, VIEWPOINTS, (Ala. Pol'y Inst., Birmingham, AL.), Mar. 14, 2009, http://www.alabamapolicy.org/gary_blog/article.php?id_art=290.

24. See Christopher Cox, Chairman, U.S. Sec. & Exch. Comm'n, Speech on Integrity in the Municipal Market (July 18, 2007) <http://www.sec.gov/news/speech/2007/spch071807cc.htm>.

25. See Erik Sirri, Remarks to the 2008 Bond Attorney's Workshop of the Nat'l Ass'n of Bond Lawyers (Feb. 14, 2008), <http://www.sec.gov/news/testimony/2008/ts021408ers.htm> (describing the lack of systemic protections in the bond market as an example of the regulatory shortcomings of the market).

26. See Gretchen Morgenson, *Red Flags That Muni Investors Can't See*, N.Y. TIMES, Mar. 21, 2009, at BU1.

27. See MSRB Discussion Paper on Disclosure in the Municipal Securities Market, MSRB REPORTS, May 2001, <http://www.msrb.org/MSRB1/reports/0501v211/DiscussionPaper12-00-Reports.htm>.

outstanding continuing disclosure agreements.²⁸ But the advice is only as good as the quality of information available. Poor disclosure practices limit the availability of material necessary for informed decision-making. Furthermore, without a requirement to disclose exposure to risk caused by the financial and regulatory impacts of such known trends as climate change, limited regulation may deprive a municipal issuer of any incentive to investigate, assess, and manage risk as a preemptive measure.²⁹

Over the last thirty years, the Commission has inched its way toward improving the quality, availability, and timing of municipal bond disclosure.³⁰ However, enforcement efforts are limited both by the exemptions from certain provisions of the '33 and '34 Acts, and by the regulatory scheme established in the 1970s—commonly known as the “Tower Amendments.”³¹

B. *Inching Toward Regulatory Reform*

From the beginning, Congress has been deferential to the state and local governments that issue the bonds over the interests of the municipal bond investor.³² The exemptions from the registration and

28. *Id.*

29. See Carbon Disclosure Project, *The Carbon Chasm*, https://www.cdproject.net/CDPResults/65_329_219_CDP-The-Carbon-Chasm-Final.pdf (last visited Mar. 30, 2010). “It is widely accepted that if companies don’t measure their emissions, they can’t manage them. So the first step towards managing GHG emissions has to be calculating emissions and tracking them over time.” *Id.* See also Population Reference Bureau, *360 Risk Project*, <http://www.lloyds.com/NR/rdonlyres/38782611-5ED3-4FDC-85A4-5DEAA88A2DA0/0/FINAL360climatechangereport.pdf> (last visited Mar. 30, 2010) (discussing the insurance industry’s role in encouraging responsible and climate proof behavior to price risk and underwrite for profit).

30. See Gabaldon, *supra* note 9, at 742 (describing municipal securities regulation as “a tale of call and response between municipal financial fiasco and federal regulatory reaction” since 1975).

31. 15 U.S.C. § 78(c) (29) (2006); 26 U.S.C. § 103(c) (2) (2009); 15 U.S.C. § 78o-4(d) (1) (2006). The statute provides:

Neither the Commission nor the Board is authorized under this chapter, by rule or regulation, to require any issuer of municipal securities, directly or indirectly through a purchaser or prospective purchaser of securities from the issuer, to file with the Commission or the Board prior to the sale of such securities by the issuer any application, report, or document in connection with the issuance, sale, or distribution of such securities.

15 U.S.C. § 78o-4(d) (1).

32. Walter Speech, *supra* note 7, at pt. IV (discussing intergovernmental comity, which is not a federalism issue under the Tenth Amendment, and which limits the federal government’s ability to regulate state and local governments, as another rationale for exempting municipal securities). Walter argues, however, that this is not an issue where the federal government has brought actions for violations of federal

periodic filing provisions of the '33 Act and the '34 Act afford municipal bond issuers special treatment as to how and when bonds are offered in the market.³³ Many have argued that the reasons for special treatment—lack of perceived abuses in the market, the sophistication of the type of investor, and reasons of intergovernmental comity—are no longer compelling.³⁴ By exempting municipal securities from the mandatory disclosure requirements of federal securities law, Congress left the distribution and regulation of these bonds to the state and local governments that issued them.³⁵ The exemption was not reconsidered until the 1970s, when Congress revisited the question of exempting municipal bonds after New York City's bond crisis brought to light the fact the municipal bonds were not without risk and were not exempt from default.³⁶

In 1975, in response to the New York City financial crisis, Congress established amendments to the Securities Act that created the Municipal Securities Rulemaking Board (MSRB), and a Self Regulating Organization (SRO) that promulgated rules for the mandatory registration broker-dealers and banks that deal in municipal bonds, municipal notes, and other municipal securities.³⁷ The amendments are silent with respect to any description of mandatory disclosure for municipal securities, and the Commission is prohibited from directly or indirectly requiring any issuer of municipal securities to provide any documents to the Commission.³⁸ These provisions, also known as the Tower Amendments, limit the Commission's authority to impose directives upon issuers and frustrate the Commission's ability to protect investors. Furthermore, the provisions limit the MSRB's authority to require information either pre- or post-sale of the securities.³⁹

securities laws to municipal issuers. *Id.*

33. See A.A. Sommer, Jr., Comm'r, U.S. Secs. & Exch. Comm'n, Remarks at the Municipal Bonds Conference: The Changing Scene for Municipal Securities (Mar. 11, 1976), <http://www.sec.gov/news/speech/1976/031176sommer.pdf> (referring to the reluctance of both the banking industry and the securities industry to be subjected to regulation of each other's industry).

34. *Id.*

35. 15 U.S.C. §§ 77a–bbb (2006); 15 U.S.C. §§ 78a–nn (2006).

36. See Ann J. Gellis, *Mandatory Disclosure for Municipal Securities: Issues in Implementation*, 13 J. CORP. L. 65, 66, 72–73 (1987) (describing the New York City debt crisis of 1975).

37. Securities Acts Amendments of 1975, Pub. L. No. 94-29, 89 Stat. 97 (codified as 15 U.S.C. § 78o-4(b)(1) (2009); Gabaldon, *supra* note 9, at 742; Walter Speech, *supra* note 7, at pt. III.

38. 15 U.S.C. § 78o-4(d)(1) (2009).

39. 15 U.S.C. § 78o-4(d)(2) (2009). The statute provides:

In the years that followed, the Commission's authority to act has been a reactive measure to billion-dollar defaults that defy conventional assumptions about municipal bonds as far too stable to warrant regulation.⁴⁰ In 1988, the Washington Public Power Supply System (WPPSS—pronounced “Whoops”) defaulted on \$2.25 billion in bonds issued to finance the construction of five nuclear power plants in the Pacific Northwest.⁴¹ In response to findings concerning the slow dissemination of information leading up to that crisis, the Commission adopted rule 15c2-12 under the Exchange Act, which requires underwriters participating in primary offerings of municipal securities of \$1,000,000 or more to obtain, review, and distribute to investors copies of the issuer's disclosure documents.⁴² The Commission also issued interpretative guidance concerning the due diligence obligations of underwriters of municipal securities.⁴³

The WPPSS debacle would be closely followed by the fiscal crisis in Orange County, California where the municipal issuer's participation in the derivatives market in the 1990s led to the default and bankruptcy of the county.⁴⁴ Prior to that, no major issuer had ever defaulted on a general obligation bond.⁴⁵ The Orange County bankruptcy and default followed the loss of an estimated \$1.7 billion in public funds arising from its participation in the derivatives market.⁴⁶

The Board is not authorized . . . to require any issuer of municipal securities, directly or indirectly through a municipal securities broker or municipal securities dealer or otherwise, to furnish to the Board or to a purchaser or a prospective purchaser of such securities any application, report, document, or information with respect to such issuer.

Id.

40. See Walter Speech, *supra* note 7, at pt. III.

41. See DIV. OF ENFORCEMENT, U.S. SEC. & EXCH. COMM'N, STAFF REPORT ON THE INVESTIGATION IN THE MATTER OF TRANSACTIONS IN WASHINGTON PUBLIC POWER SUPPLY SYSTEM SECURITIES 1 (1988), http://c0403731.cdn.cloudfiles.rackspacecloud.com/collection/papers/1980/1988_0901_SEC_WPPSS.pdf; John A. Baden & Eric H. Espenhorst, *Whoops: An Expensive, Valuable History Lesson*, SEATTLE TIMES, Apr. 12, 1995, at B5. What remains particularly troubling about WPPSS is that ultimately the rate payers bore the brunt of the default by virtue of commitments under take or pay contracts that provide the revenue stream to secure the financing for the projects. *Id.*

42. 17 C.F.R. § 240.15c2-12(a) (2006).

43. See Municipal Securities Disclosure, Exchange Act Release No. 26,985, 54 Fed. Reg. 28,799 (June 28, 1989) (to be codified at 17 C.F.R. pts. 240–41).

44. See PUB. POLICY INST. OF CAL., WHEN GOVERNMENT FAILS: THE ORANGE COUNTY BANKRUPTCY 2, 4 (1998), http://www.ppic.org/content/pubs/op/OP_398OP.pdf (describing the County Treasurer's need to raise more interest income for local governments by using the funds on deposit to borrow money to invest in derivatives).

45. See *id.* at 1, 6.

46. See Arthur Levitt, Chairman, U.S. Sec. & Exch. Comm'n, Remarks at the

The Orange County crisis alerted the Commission to the proliferation of risky financial transactions in the municipal bond market and inspired a comprehensive review of primary and secondary disclosure practices.⁴⁷ Increased participation in the municipal bond market by individuals as direct purchasers and indirect purchasers through mutual funds that hold municipal securities called attention to the need for better access market information.⁴⁸ In 1994, the Commission adopted amendments to rule 15c2-12 and discussed the “duty of underwriters to the investing public to have a reasonable basis for recommending any municipal securities, and their responsibility, in fulfilling that obligation, to review in a professional manner the accuracy of statements made in connection with the offering.”⁴⁹

The regime under the Tower Amendments has created a complicated set of disclosure rules without enforcement, and regulations that don’t directly address the issuers responsible for the disclosure.⁵⁰ The MSRB rules set standards for dealers of municipal securities, and some have argued that even with the limited enforcement provisions, the rules are adequately tailored to the unique needs of the municipal bond business.⁵¹

C. MSRB Enforcement

Although the creation of the MSRB was intended to adopt standards for municipal securities dealers, the MSRB has no enforcement capabilities. Instead the MSRB coordinates with the SEC, the Finan-

National Federation of Municipal Analysts: Public Trust and Public Obligations in the Municipal Bond Market (May 8, 1996), <http://www.sec.gov/news/speech/speecharchive/1996/spch098.txt>.

47. See generally DIV. OF MKT. REGULATION, U.S. SEC. & EXCH. COMM’N, STAFF REPORT ON THE MUNICIPAL SECURITIES MARKET (1993), <http://www.sec.gov/info/municipal/mr-munimarketreport1993.pdf> (calling for review of municipal securities regulation in light of the diversification of investors and offerings).

48. *Id.*

49. Statement of the Commission Regarding Disclosure Obligations of Municipal Securities Issuers and Others, Exchange Act Release No. 33,741, 59 Fed. Reg. 12,748, 12,758 (Mar. 17, 1994) (to be codified at 17 C.F.R. pts. 211, 231, 241). The release stated that the use of “disclaimers by underwriters of responsibility for the information provided by the issuer or other parties, without further clarification regarding the underwriter’s belief as to accuracy, and the basis therefor, [sic] are misleading and should not be included in official statements.” *Id.* at n.103.

50. See Gabaldon, *supra* note 9, at 746–47.

51. See *id.* at 747 (discussing the MSRB’s successful implementation of its Transaction Reporting system that evolved into the 2005 real-time reporting requirement; dealers are now required to submit all transaction information to the MSRB within fifteen minutes of execution).

cial Industry Regulatory Authority, the Federal Reserve System, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, and the Office of Thrift Supervision, along with other securities and banking rules applicable to broker-dealers and banks subject to their respective jurisdictions.⁵² Additionally, the MSRB Rules contain no provision for liability for noncompliance.⁵³ For example, an issuer's failure to comply with rule 15c2-12's requirement of providing continuing disclosure documents would constitute a breach of contract; however, the rules do not specify any consequences for breach of contract.⁵⁴ And while the MSRB rules are specifically customized for municipal securities brokers and dealers, the MSRB has no enforcement power.⁵⁵ Instead, it is the Commission that has issued orders to institute proceedings for violations of the MSRB rules.⁵⁶ Where non-exempt municipal bond participants, in many instances underwriters, made misstatements or failed to disclose material information, the Commission brought proceedings for violations of the antifraud provisions of federal securities laws.⁵⁷

52. *See, e.g.*, 15 U.S.C. § 78o-4 (2006); *see also* U.S. SEC. & EXCH. COMM'N, DISCLOSURE AND ACCOUNTING PRACTICES IN THE MUNICIPAL SECURITIES MARKET 1-2 (2007) (discussing continued disclosure and enforcement actions involving a wide range of disclosure violations by municipal issuers, such as the failure to disclose liabilities that place the municipal issuer in serious financial jeopardy, falsely claiming a surplus for general and debt service funds, and the failure to disclose material information about the municipal issuer high risk investment pool and financial condition that brought into question its ability to pay its securities), <http://www.sec.gov/news/press/2007/2007-148wp.pdf>.

53. *See* Gabaldon, *supra* note 9, at 742 (discussing 15 U.S.C. § 78o-4(a)(1) (2006)).

54. WM Financial Strategies, Municipal Bond Disclosure (2009), <http://www.munibondadvisor.com/Disclosure%20-%202009Article.pdf>.

55. 15 U.S.C. § 78o-4(c)(6)(C) (2006).

56. *See* Notice of Filing of Proposed Rule Change by the Municipal Securities Rulemaking Board, Exchange Act Release No. 13,987 (1977), 1977 WL 190812. MSRB rule G-19(c) provides that in recommending to a customer any municipal security transaction, a broker, dealer, or municipal securities dealer shall have reasonable grounds based upon information available from the issuer of the security or otherwise, and based upon the facts disclosed by such customer or otherwise known about such customer for believing that the recommendation is suitable. Municipal Securities Rulemaking Board, Suitability of Recommendations and Transactions; Discretionary Accounts (2006), <http://www.msrb.org/MSRB1/rules/ruleg19.htm>. One such example is that MSRB rule G-17 provides that "each broker, dealer, and municipal securities dealer shall deal fairly with all persons and shall not engage in any deceptive, dishonest, or unfair practice" in the course of carrying out its municipal securities activities. Municipal Securities Rulemaking Board, Conduct of Municipal Securities Activities (2006), <http://www.msrb.org/MSRB1/rules/ruleg17.htm>.

57. *See, e.g.*, *In re* City of San Diego, Securities Act Release No. 54,745 (Nov. 14,

And while the issuers of the bonds are responsible for preparing the disclosures, federal securities law obligates municipal dealers to review the issuer's disclosure documents before offering the bonds.⁵⁸ Under the rules, an underwriter is prohibited from participating in a municipal offering unless the issuer has agreed to provide continuing disclosure documents including annual filings.

Furthermore, the underwriter must have a reasonable basis to justify their belief as to the accuracy and completeness of the representations in the document.⁵⁹ Past amendments to the rules addressed concerns that ongoing disclosure about municipal securities was not available.⁶⁰ But without any meaningful ability to regulate issuers, the Commission has relied on the antifraud provisions to reach issuers as an after-the-fact remedy for omitted material information.⁶¹

D. Enforcement Under the Antifraud Provisions

Although the Tower Amendments prohibit the Commission from

2006); *In re* City of Miami Florida, Exchange Act Release No. 54,745, 89 SEC Docket 807 (Mar. 21, 2003); *In re* City of Syracuse, New York Exchange Act Release No. 39,149, 65 SEC Docket 1199 (Sept. 30, 1997); *In re* Maricopa County, Exchange Act Release No. 37,779, 62 SEC Docket 2574 (Oct. 3, 1996) [hereinafter *Anti-fraud Investigations*]; see also U.S. Sec. & Exch. Comm'n, *Municipal Securities Cases and Materials*, (2009), <http://www.sec.gov/info/municipal/municase07.htm> (containing full text of certain Commission orders and opinions, administrative law judge decisions, litigation releases, and federal court decisions involving participants in municipal securities transactions.).

58. 17 C.F.R. § 240.15c2-12(b) (2006). The term "dealer" is used throughout to include both municipal brokers and dealers.

59. See Statement of the Commission Regarding Disclosure Obligations of Municipal Obligations of Municipal Securities Issuers and Others, Exchange Act Release No. 33,741, 59 Fed. Reg. 12,748 (Mar. 9, 1994) (codified at 17 C.F.R. §§ 211, 231, 241) (explaining that disclosure had been nearly nonexistent for offerings of non-general obligation bonds and smaller issues) [hereinafter 1994 Release]; see also *Dolphin & Bradbury, Inc. v. Sec. & Exch. Comm'n*, 512 F.3d 634, 638 (D.C. Cir. 2008) ("The antifraud provisions of the federal securities laws prohibit fraudulent or deceptive practices in the offer and sale of securities. The issuer of non-exempt corporate securities is strictly liable for failing to register a security and for any false statements or omissions made in connection with the offering, while underwriters may exercise a due diligence defense."). Where municipal dealers, including underwriters, already have obligations to register under the 1933 Act by virtue of their activities for corporate securities clients, market practices indicate differing standards for due diligence. However, municipals securities brokers and dealers are often registered by virtue of their participation in corporate transactions subject to the registration requirements of the Exchange Act.

60. See 1994 Release, *supra* note 59.

61. See sources cited *supra* note 57.

directing issuers to disclose information, the Commission has exercised its authority under the antifraud provisions to sanction the conduct of issuers, counsel, and other municipal bond participants in connection with the offer and sale of municipal bonds.⁶² Federal securities law prohibits fraudulent or deceptive practices in the offer and sale of any security including municipal bonds. As a result, the shortcomings of 15c2-12 have not kept the Commission from instituting both administrative proceedings and proceedings in federal court under the antifraud provisions of section 10b, rule 10b-5 and under section 17(a) to sanction the conduct of issuers, underwriters, and counsel for misstatements and failure to disclose material information in the course of a municipal bond offering.⁶³ The Commission has issued cease and desist orders, and brought other sanctions against market participants who knew or had reason to know that false or misleading statements in the offering documents significantly altered the total mix of information as to affect the investor's decision-making.⁶⁴

The Commission's 1994 Interpretive Guidance on the Antifraud Provisions responded to the need for greater guidance in describing the disclosure obligations for market participants both in connection with the primary offerings and continuing disclosure in the secondary market.⁶⁵ In the release, the Commission acknowledged the contributions of organizations like the National Federation of Municipal Analysts (NFMA) and the Government Finance Officers Association (GFOA) to publish voluntary guidelines as a roadmap for disclosure.⁶⁶ As with each step in the regulatory process before it, the Commission recognized that the evolution of the financial markets, which created complex and sophisticated municipal bond products, was driving the

62. See THOMAS LEE HAZEN, TREATISE ON THE LAW OF SECURITIES REGULATION § 12.3 (4th ed. 2002) (stating that rule 10b-5 was promulgated under section 10b(b) of the Exchange Act and that rule 10b-1 gives the Commission power to make rules prohibiting the use of manipulative or deceptive devices or contrivance in connection with the purchase or sale of any security).

63. See e.g., *In re Dauphin County General Authority*, Securities Act Release No. 8415, 82 S.E.C. Docket 2519 (Apr. 26, 2004) (sanctioning an offender for omitting material information in the official statement); *SEC v. Michael T. Uberuaga*, Civ. Action. No. 08 CV 0625 DMS (LSP) (S.D. Cal.), Litigation Release No. 20522, 92 S.E.C. Docket 3100 (Apr. 7, 2008) (describing instance of five San Diego City officials charged with fraud in connection with municipal offerings); see also *Municipal Securities Cases and Materials: Supplemental Texts (2004-2009)*, <http://www.sec.gov/info/municipal/municase07.htm>.

64. *TSC Indus., Inc., v. Northway, Inc.*, 426 U.S. 438, 449 (1976).

65. 1994 Release, *supra* note 59.

66. *Id.*

need for more sophisticated disclosure to fully inform investors.⁶⁷

E. Voluntary Disclosure Regime

A combination of mandatory and voluntary disclosure requirements and guidelines inform municipal bond market participants of their disclosure obligations.⁶⁸ The GFOA provides extensive voluntary guidelines for what information should be included in the primary offering of municipal securities.⁶⁹ Other groups, including the NFMA, have published voluntary disclosure guidelines covering industry-specific sectors, including, among others, housing, student loans, transportation, and health care, which again are commonly followed recommendations but are not mandatory.⁷⁰

In the summer of 2009, the Commission proposed additional amendments to impose further requirements on broker-dealers and municipal securities dealers to determine the adequacy of the disclosure of specified events by issuers or their obligated persons.⁷¹ Existing requirements under rule 15c2-12 prohibit municipal dealers from underwriting securities in the absence of a written agreement by the issuer to provide for continuing disclosure documents, including annual financial and operating information,⁷² and notices of any eleven material events.⁷³ Additionally, the MSRB filed a proposed rule that would permit issuers to disclose a series of certifications to attest to the financial reporting of the issuer.⁷⁴ These newly proposed rules

67. *Id.*

68. *See Cox, supra* note 24.

69. *See* DISCLOSURE GUIDELINES FOR STATE AND LOCAL GOVERNMENT SECURITIES, (Gov't Fin. Officers Ass'n, 1991) [hereinafter GFOA GUIDELINES].

70. *See* DISCLOSURE HANDBOOK FOR MUNICIPAL SECURITIES, at i, table of contents, (Nat'l Fed. of Mun. Analysts, 1992).

71. *See* Proposed Amendment to Municipal Securities Disclosure, Securities Exchange Act Release No. 60332, 74 Fed. Reg. 36,832 (proposed July 17, 2009) [hereinafter Proposed Rules].

72. GFOA guidelines recommend that the financial statements follow GAAP principles. *See* GFOA GUIDELINES, *supra* note 69, at xii.

73. 17 C.F.R. § 240.15c2-12(b)(5)(i)(C) (2009). The eleven material events include: (1) principal and interest payment delinquencies; (2) non-payment related defaults; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of creditor liquidity providers, or their failure to perform; (6) adverse tax opinions or events affecting the tax-exempt status of the security; (7) modifications to rights of security holders; (8) bond calls; (9) defeasances; (10) release, substitution, or sale of property security repayment of securities; and (11) rating changes.

74. Walter Speech, *supra* note 7, at pt. III (discussing the list of information that an issuer would be permitted to disclose that would act as a Gold Seal, including (1)

coincided with the launching of The Electronic Municipal Market Access system (EMMA), an electronic delivery system establishing one repository of information instead of multiple municipal securities information repositories.⁷⁵ However, all the rules in the world are not likely to replace the real impact of enforcement actions.

To date, the MSRB has never initiated enforcement actions for failure to inform investors of prejudicial continuing disclosure information in the course of a transaction.⁷⁶ Additionally, some have argued that because Rule 15c2-12 fails to establish liability for noncompliance, it is unclear whether the provision subjects issuers to liability for misstatements under the rule.⁷⁷ This lack of specificity in

an undertaking to prepare audited financial statements pursuant to GAAP as established by the Governmental Accounting Standards Board (GASB), (2) an undertaking to submit annual financial information to EMMA within 120 calendar days after the end of the fiscal year, and (3) receipt by the GFOA in connection with the preparation of a Comprehensive Annual Financial Report (CAFR) of an issuer).

75. Prior to the July 1, 2009, launch of the EMMA system, an Internet based repository of municipal bond disclosure documents, four NRMSIRs and three State Information Depositories (SIDs) maintained information about the municipal bond market. The SIDs include the Municipal Advisory Council of Michigan, the Municipal Advisory Council of Texas, and the Ohio Municipal Advisory Council. The four NRMSIRs include Bloomberg Municipal Repository, DPC Data, Inc., Interactive Data Pricing and Reference Data, Inc., and Standard & Poor's Securities Evaluations, Inc. By creating EMMA, the Commission hoped to remedy inconsistent and non-concurrent delivery of disclosure documents to each of the NRMSIRs. The Muni Council, comprising an informal group of eighteen municipal market participants including the NFMA, helped develop the central post office, a conduit for issuers and borrowers to file secondary market disclosures more easily. See SEC, Press Release, SEC, MSRB: New Measures to Provide More Transparency than Ever Before for Municipal Bond Investors (Dec. 8, 2008), <http://www.sec.gov/news/press/2008/2008-286.htm>; see also Proposed Amendment to Municipal Securities Disclosure, Securities Exchange Act Release No. 58255, 73 Fed. Reg. 46, 138 (proposed July 30, 2008) (proposing amendments to Exchange Act regarding the obligations of the broker, dealer, or municipal securities dealer).

76. See Gabaldon, *supra* note 9, at 744 (comparing MSRB rules with Regulation of Dealer Practices among the SEC, FINRA, and banking regulators); see also Peter J. Schmitt, DPC Data Report, Consequences of Poor Disclosure and Enforcement in the Municipal Securities Market, <http://www.dpcdata.com/html/about-researchpapers.html> (registration required) [hereinafter Schmitt Report] (explaining a study of questionable trading practices based on publicly available information held by the NRMSIRs and the MSRB).

77. See Lisa M. Fairchild, *Rule 15c2-12: A Flawed Regulatory Framework creates Pitfalls for Municipal Issuer*, 55 WASH. U. J. URB. & CONTEMP. L. 1, 25 (1998) (discussing the impact of 15c2-12's lack of specificity and resulting uncertainty for municipal issuers about their potential liability and how to avoid it); see also David S. Ruder, Chairman, U.S. Sec. and Exch. Comm'n, Disclosure in the Municipal Securities Markets, Remarks Before the Public Securities Association (1987) (stating an interpretation of underwriters' obligations in municipal offerings that without strict underwriter liability or due diligence defense, underwriters may not engage independent counsel

rule 15c2-12, coupled with largely voluntary disclosure practices by municipal bond market participants, contributes to the lack of credit transparency in the bond market.⁷⁸ Even with the Commission exercising its authority under the antifraud provisions, the perception persists that the municipal bond market is lightly regulated with few instances of enforcement action, leaving municipal bond investors vulnerable to abuse.⁷⁹ According to one study, the lack of rigorous enforcement of MSRB Rules G-17, G-19, and G-30 as they pertain to the use of continuing disclosure information by dealers has created a parallel sense of laxness that is manifested in highly questionable trades.⁸⁰

The financial crisis highlighted the way in which reliance on rating agencies impacted market stability and the perception of credit worthiness on a variety of financial instruments. The municipal bond market was particularly vulnerable where historically limited access to disclosure documents created a reliance on rating agencies as a significant piece of information in the total mix of information available. With limited access to disclosure, a typical investor would be more likely to rely on word of mouth, the credit rating on the bond, and whether the bond enjoyed the protection of bond

for competitive bidding), <http://www.sec.gov/news/speech/1987/102387ruder.pdf>. *But see* Gabaldon, *supra* note 9, at 748 (stating that over time a market shift decreased reliance on competitive bidding for deals in favor of negotiated dealing). *See also* John Evans, Comm'r, U.S. Sec. and Exch. Comm'n, Responsibilities and Liabilities for Municipal Offerings (1976), <http://www.sec.gov/news/speech/1976/102976evans.pdf> (describing pattern of regulation post-1975).

78. *See generally* PETER J. SCHMITT, ESTIMATING MUNICIPAL SECURITIES CONTINUING DISCLOSURE COMPLIANCE: A LITMUS TEST APPROACH (2008) (discussing impact of voluntary disclosures) (on file with author).

79. *See* MSRB rule G-37, *available at* <http://www.msrb.org/MSRB1/rules/ruleg37.htm>; *see also* Political Contributions by Certain Investment Advisors, Investment Advisors Act Release No. IA-2910, 74 Fed. Reg. 39,840 (proposed Aug. 3, 2009) (to be codified at 17 C.F.R. § 275) (regulating investment advisers under the Investment Advisers Act of 1940).

80. *See* Schmitt Report, *supra* note 76, at 13.

A study released in 2008 by this author documented the extent to which issuers/obligors in general ignore their own affirmative covenants to make regular continuing disclosure filings for as long as their bonds are deemed to be outstanding. The study identified the lack of enforcement actions involving continuing disclosure pursuant to SEC rule 15c2-12 since the requirements went into effect in 1994 as a probable cause for the general level of issuer/obligor non-compliance with their own disclosure covenants.

Id. "In the absence of regular and close scrutiny of disclosure practices and related dealer practices in the municipal market by the two main regulatory bodies over the years, the stage was set for the worst possible predatory behavior to take place in distressed bonds as the market imploded." *Id.* at 11.

insurance.⁸¹ Prior to the launching of EMMA in 2009, multiple repositories for bond documents created a system of unreliable and inconsistent access to disclosure information.⁸² In turn, bondholders often relied on the rating agency to determine an investment's creditworthiness. However, recent investigations revealed that the conflicts of interest arising between the rating agencies and the entities that paid for the rating can create instances where the securities are not always monitored in a rigorous manner.⁸³ "Investors may think they are holding investment grade bonds when in fact the issuer is teetering on bankruptcy."⁸⁴

Most experts agree that the rating agencies did not provide the necessary backstops in the recent financial crisis for investors.⁸⁵ Instead, investors are relying on disclosure documents rather than exclusively relying on a bond rating.⁸⁶ Furthermore, two years after the collapse of the auction-rate securities market along with the collapse of several bond insurance companies, fewer institutions are available to provide credit enhancements, which has left the bond market recovering, but vulnerable.⁸⁷ By some estimates, fewer than ten percent of the bonds coming to market today are insured.⁸⁸ The Commission has expressed concern that the presence of credit enhancements is not a substitute for material disclosure, particularly in instances where the issuer may or may not provide timely continuing disclosure information necessary for an accurate rating.⁸⁹

81. Walter Speech, *supra* note 7, at pt. III.

82. See Amendment to Municipal Securities Disclosure, Exchange Act Release No. 34-59062, 73 Fed. Reg. 76,104 (proposed Dec. 5, 2008) (to be codified at 17 C.F.R. § 240.15c2-12) (discussing the inconsistencies among the NRMISRs).

83. See Walter Speech, *supra* note 7, pt. V; see also Credit Ratings Disclosure: Proposed Rule, Securities and Exchange Commission Release Nos. 33-9070, 34-60797, IC-28942 (Oct. 15, 2009) (to be codified at 17 C.F.R. §§ 229, 239, 240, 249 & 274).

84. Letter from Scott McCleskey, Head of Compliance, Moody's, to the SEC (Mar. 2009) ("While a few very high profile/frequent issuers (City of New York, etc.) were receiving some periodic reviews, the vast majority had received none. . . ."), quoted in Gretchen Morgenson, *Fair Game: When Bond Ratings Get Stale*, NYTIMES, Oct. 11, 2009, at BU1.

85. Walter Speech, *supra*, note 7, pt. V.

86. *Id.*

87. See Paul Sullivan, *Wealth Matters: Some Consolation for those in Top Tax Brackets*, NYTIMES, Mar. 6, 2009, at B6 (recommending municipal bond market as an attractive wealth-preservation strategy for investors in higher tax brackets).

88. See Penelope Lemov, *Municipal Bonds Under the Gun*, GOVERNING, Dec. 10, 2009, <http://www.governing.com/column/municipal-bonds-under-gun>.

89. See Municipal Securities Disclosure, Securities Exchange Act Release No. 26,985, 54 Fed. Reg. 28,799 (proposed June 28, 1989); see also Commission's Final Rule Amendments to Rules for Nationally Recognized Statistical Rating Organiza-

Heightened scrutiny of the rating agencies, along with the disappearance of bond insurers has influenced both retail and institutional investors to focus more closely on the disclosure documents of municipal issuers.⁹⁰ The absence of traditional guideposts, including protections of credit enhancements and bond insurance, makes enhanced disclosure even more essential now than ever before.

F. Resisting Emerging Definitions of Material Information

The Commission continues to make significant progress in improving the regulatory scheme for the municipal bond market even with the limitations imposed by the Tower Amendments.⁹¹ Despite the recommendations of Commissioners and academics to repeal the Tower Amendments, the provisions remain in place and continue to limit the Commission's authority to enhance the integrity of the municipal bond market.⁹² In many ways, the Commissioners believe that the most recent proposed amendments to enhance municipal

tions, Securities Exchange Act Release No. 34-61050, 74 Fed. Reg. 63,832 (Dec. 4, 2009) (to be codified at 17 C.F.R. pts. 240, 243) (imposing additional disclosure and conflict of interest requirements to address concerns about the integrity and methods of nationally recognized statistical rating organizations (NRSROs) and discussing the Commission's efforts to remove the reliance on credit rating agencies by stripping the reference to nationally recognized statistical rating organizations from SEC rules.); Andrew Ackerman, *SEC Votes to Remove NRSRO from 38 Rules*, BOND BUYER, June 26, 2008, http://www.bondbuyer.com/issues/117_121/-290871-1.html; Christopher Cox, Chairman, U.S. Sec. & Exch. Comm'n, Statement at Open Meeting on Rules for Credit Rating Agencies (June 11, 2008), <http://www.sec.gov/news/speech/2008/spch061108cc.htm>. ("The official recognition of credit ratings for a variety of securities regulatory purposes may have played a role in investors over-reliance on credit rating agencies.").

90. Walter Speech, *supra* note 7, pt. III (discussing the increased difficulty some municipal issuers are having getting credit enhancements for their bonds because of the severe financial deterioration of municipal bond insurers); *see also* Paul Rainy, *Municipal Bond Credit Report*, SEC. INST. & FIN. MKTS. ASS'N, vol. IV, no. 12, (3rd Qtr. 2009) <http://www.sifma.org/research/pdf/RRVol4-12.pdf> (municipal bond credit report) (last visited Mar. 8, 2010).

91. Despite discussions about the Commission having exceeded or nearly exceeded its power, in 2009, the Commission issued Proposed Amendment to Municipal Securities Disclosure, Release No. 34-60332 (July 17, 2009) (to be codified at 17 C.F.R. pts. 240-41).

92. Cox, *supra* note 24; Levitt, *supra* note 46; Ruder, *supra* note 77; *see also* *Regulation of Over-the-Counter Derivatives: Hearing Before the S. comm. on Sec's, Ins., & Inv. of the S. Comm. on Banking, Housing & Urban Affairs*, United States Senate (June 22, 2009) (statement of Mary L. Schapiro, Chairman, U.S. Sec. & Exch. Comm'n); Walter Speech, *supra* note 7 (supporting the notion that reforms to the MSRB, alternatives to public offerings, regulation of financial intermediaries would enhance the municipal bond market).

bond disclosure may represent the near exhaustion of the Commission's authority to regulate municipal bond participants without violating the statute.⁹³ And yet the lack of enforcement power over disclosure rules in the municipal market has created a no-penalty environment that leaves investors defenseless against questionable practices by dealers.⁹⁴

While corporations have shareholders to engage in activism as a method of accountability, municipal bond investors seem to be at a marked disadvantage. Without the equivalent of shareholder advocates for the municipal bond market, emerging trends like climate change have gone largely unnoticed and as a result, access to material financial information critical to informed decision-making remains mostly unavailable to municipal bond investors.⁹⁵ While it is likely that the traditional sources of voluntary information from the NFMA and GFOA will generate disclosure guidelines, these provisions will likely lag behind corporate initiatives, delaying implementation of real methods for assessing and disclosing risk by the issuer. Such delays further frustrate the Commission's efforts for greater parity in the quality of disclosure available to investors.

III. THE CAMPAIGN FOR CORPORATE CLIMATE RISK DISCLOSURE

At the heart of the corporate climate risk debate is whether or not the current requirements under Regulation S-K provide corporate securities issuers sufficient guidelines about the timing and method for disclosing the complex and often speculative information to its investors. Without interpretative guidance from the Commission, voluntary disclosure efforts emerged that described techniques for measuring and disclosing the known impacts and uncertainties of climate risk with widely varying results.⁹⁶ At a time when regional carbon reduction regimes are being implemented and national standards are on the horizon, the municipal bond market's failure to participate in the climate risk debate in a meaningful way highlights the significant disparities in the treatment of corporate securities

93. See Schapiro, *supra* note 92.

94. See Morgenson, *supra* note 26.

95. See *infra* notes 243–59 and accompanying text.

96. See THE CORPORATE LIBRARY ET AL., CLIMATE RISK DISCLOSURE IN SEC FILINGS: AN ANALYSIS OF 10-K REPORTING BY OIL AND GAS, INSURANCE, COAL, TRANSPORTATION AND ELECTRIC POWER COMPANIES (2009), <http://www.ceres.org/Document.Doc?id=473> [hereinafter CERES 10K REPORT].

investors in comparison to municipal bond investors.⁹⁷

A. *Defining Material Climate Risk*

Discussions addressing corporate climate risk disclosure begin with an analysis of material fact. A fact is material if there is 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 available.⁹⁸ Despite continued efforts to deny the existence of climate risk, scientists and environmentalists have provided substantial evidence of the current and potential physical, litigation, and regulatory risks that can have a material impact on a company's bottom line.⁹⁹ Furthermore, worldwide networks of shareholder activists have demanded disclosure of these risks where access to material information is necessary to informed investing in a company and an institutional investor's ability to meet its fiduciary obligations.¹⁰⁰

1. *Physical Risk*

In 2007, the Intergovernmental Panel on Climate Change issued its fourth assessment report on the physical science of climate change, which provided the scientific evidence supporting the conclusion that the warming of the climate system is unequivocal and that long term changes have been observed.¹⁰¹

These conclusions sparked global efforts to adopt comprehensive initiatives with a particular focus on electric power and transportation,

97. Walter Speech, *supra* note 7, pt. IV (stating that investors in municipal securities are, in certain respects, afforded "second class treatment" under current law).

98. SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45, 150 (Aug. 19, 1999) (codified at 17 C.F.R. pt. 211) (quoting *TSC Indus. v. Northway, Inc.*, 426 U.S. 438, 449 (1976)).

99. See J. Robert Brown, *Corporate Disclosure, Corporate Behavior and Mirror Decision Boards*, RACE TO THE BOTTOM, Nov. 6, 2007, <http://www.theracetothetbottom.org/independent-directors/corporate-disclosure-corporate-behavior-and-mirror-image-boas.html> (discussing ExxonMobil's board of directors and the corporation's funding of organizations that deny the existence of climate change and its impact).

100. See Ceres Petition, *supra* note 2; see also Brown, *supra* note 99 (relating the composition of ExxonMobil's board of directors and the corporation's funding of organizations that deny the existence of climate change and its impact).

101. See INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, SUMMARY FOR POLICYMAKERS, IN CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS (2007), http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_wg1_report_the_physical_science_basis.htm.

and to limit the emissions of greenhouse gases (GHGs) including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).¹⁰² These initiatives were motivated in part by the realization that failure to manage the impacts of increased concentrations of GHGs would have wide-ranging impacts to weather patterns manifested in an increased number of storms, sea level rise, and changes in temperature.¹⁰³ Climate change impacts may also include water scarcity affecting real estate, agriculture, tourism, health care, insurance, fisheries, and forestry.¹⁰⁴ What has become clear is that for certain sectors, the impact of location will often drive an analysis of whether physical risks present a material hazard mandating disclosure. For example, climate-related changes to coastal properties impact not only the availability of insurance but credit risks for banks and borrowers in vulnerable areas. A more detailed discussion of private-industry-specific initiatives is included later in this article.¹⁰⁵

2. *Regulatory and Policy Risk*

Critics of mandated climate risk disclosure once argued that not only is there no link between CO₂ emissions and climate change, but that the impacts on business were too speculative to disclose.¹⁰⁶ But even for the most hardened of climate skeptics, there is no denying the regulatory impacts of carbon risk as evidenced by the current international, national, state, and local efforts to mitigate carbon emissions.¹⁰⁷

On June 30, 2009, the Environmental Protection Agency (EPA)

102. See *infra* notes 138–140 and accompanying text.

103. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 101, at 13–15.

104. See Ceres Petition, *supra* note 2, at G-4 (outlining potential effects of global warming on businesses. For example, banks with coastal property may see higher rates of storms, which would increase credit risks, and distribution companies may see interruptions in deliveries due to storms). See also *Impacts of Global Warming: Hearing Before the H. Comm. on Energy & Commerce*, 111th Cong. (2009) (Testimony of David G. Hawkins, Dir. Climate Programs, Nat'l Res. Def. Council).

105. See *infra* Part III.B.

106. See, e.g., Letter from Steven J. Milloy & Thomas J. Borelli, Portfolio Managers, Free Enter. Action Fund, to Florence Harmon, Acting Sec'y, U.S. Sec. & Exch. Comm'n (July 21, 2008), <http://www.sec.gov/rules/petitions/2008/petn4-563.pdf> (requesting that the Commission remind registrants that there is considerable debate about global warming and that statements could be in violation of anti-fraud provisions of securities laws if found to be false or misleading).

107. See CERES 10K REPORT, *supra* note 96 (citing numerous examples of established and proposed international treaties, regulations, and bills seeking to combat the emission of greenhouse gases.).

granted California and the California Air Resources Board, the authority under section 209(b) of the Clean Air Act to implement regulations controlling greenhouse gas emissions for new passenger cars, pickup trucks, and sport utility vehicles.¹⁰⁸ The measure enables seventy-three diverse measures for controlling carbon emissions including ships idling at ports, low carbon fuel standards, green building programs, and standards for industrial refrigeration (among other initiatives).¹⁰⁹ Other state and regional efforts include the Regional Greenhouse Gas Emissions Initiative, which is an effort, supported by ten northeast and mid-Atlantic states, that has implemented a cap-and-trade system to achieve carbon reduction targets of ten percent by 2018.¹¹⁰ Additionally, the Western Climate Initiative's Essential Requirements of Mandatory Reporting, a collaboration by several western states and Canada, is a partnership committed to monitoring and reducing greenhouse gas emissions.¹¹¹ Whether these

108. Notice of Decision Granting Waiver of Clean Air Act Preemption for California's 2009 and Subsequent Model Year Greenhouse Gas Emission Standards for New Motor Vehicles, 74 Fed. Reg. 32,744, 32,767, (July 8, 2009) (to be codified at 74 C.F.R. § 32744-01); Ceres Supplemental Petition II, *supra* note 2, at 17–19.

109. See Jeffrey A. Smith et al., *Climate Change: Moving Towards a Brave New World*, 3 CAP. MARKETS L. J. 469 (Oct. 2008) [hereinafter *New World Risk*] (discussing proposed California climate disclosure standard). In 2008, California's legislature passed Senate Bill 1550 which would have required the State Controller to develop voluntary climate change disclosure standard based on the Global Framework for Climate Risk Disclosure. S.B. 1550, 2007–2008 Leg. (Cal. 2008). However, the State Assembly passed an amended version of the bill on August 13, 2008 which failed to pass the Senate by one vote. *Id.* See also Letter from Corps. Comm. of the Bus. Law Section of the State Bar of Cal., to the Office of Gov't Affairs (Apr. 24, 2008), http://www.calbar.ca.gov/calbar/pdfs/sections/buslaw/corporations/2008-06-06_sb1550_statement-of-position.pdf (critiquing the bill for being duplicative under current disclosure requirements under federal securities law). The legislative efforts were consistent with California's leadership in addressing carbon emissions control measures. *Id.*

110. Regional Greenhouse Gas Initiative (RGGI), CO₂ Budget Trading Program, About RGGI, <http://www.rggi.org/about> (last visited Mar. 31, 2010). The ten mid-Atlantic states participating in the Regional Greenhouse Gas Initiative include Maryland, Maine, Massachusetts, New York, Connecticut, Delaware, New Hampshire, Rhode Island, New Jersey, and Vermont. *Id.* The website also includes more information about the cap-and-trade system and intended investment for proceeds from CO₂ allowances auctions. See *id.*

111. WESTERN CLIMATE INITIATIVE, FINAL ESSENTIAL REQUIREMENTS OF MANDATORY REPORTING (July 15, 2009), <http://www.westernclimateinitiative.org/component/remository/func-startdown/118/>. The Western Climate Initiative's provincial and state partners include Arizona, British Columbia, California, Manitoba, Montana, New Mexico, Ontario, Oregon, Quebec, Utah, and Washington. Western Climate Initiative, WCI Provincial and State Partner Contacts, <http://www.westernclimateinitiative.org/wci-partners> (last visited Mar. 31, 2010). See also Midwest Greenhouse Gas Reduction Accord, <http://www.midwesternaccord.org/> (last visited Mar. 31,

regulations require new reporting standards for carbon dioxide emissions, new vehicle emission standards,¹¹² or compliance with a regional cap-and-trade regime, the costs of compliance under national, state, and regional carbon mitigation efforts will, if they have not already done so, impact the balance sheet of every commercial and industrial entity in the country. Current state and regional efforts¹¹³ to reach carbon-reduction targets reveal a real and present commitment to actively develop agreements and implement steps to reduce greenhouse gas emissions. Now commercial entities throughout the country must comply with state and regional regulatory regimes that impact current and future earnings.¹¹⁴

a. New York State Attorney General

In the fall of 2007, the office of the New York State Attorney General issued subpoenas to five power companies including AES Corporation, Dominion Resources Inc., Dynegy Inc., Xcel Energy Inc., and Peabody Energy Corporation.¹¹⁵ The New York Attorney General expressed concern that where each entity conducted carbon-intensive activities, its annual filings lacked a description of any attempts to evaluate the company's exposure to climate risk, and that by omitting material information, the entities had failed to disclose to shareholders the company's exposure to financial, litigation and regulatory risk.¹¹⁶ The subpoenas sought and yielded the first

2010) (updating progress of nine Midwestern governors and two Canadian premiers who have signed a participation agreement called the "Midwestern Greenhouse Gas Reduction Accord.").

112. *See, e.g.*, FLA. ADMIN. CODE r. 62-285.400 (2009), available at <http://www.dep.state.fl.us/air/rules/ghg/california.htm> (describing Florida's adoption of California's motor vehicle emission standards).

113. *See* sources cited *supra* notes 109–110.

114. *See* CLEAN AIR TASK FORCE, A MULTI-CITY INVESTIGATION OF THE EFFECTIVENESS OF RETROFIT EMISSIONS CONTROLS IN REDUCING EXPOSURES TO PARTICULATE MATTER IN SCHOOL BUSES (Jan. 6, 2005), available at http://www.catf.us/publications/reports/CATF-Purdue_Multi_City_Bus_Study.pdf. Traditionally, school buses have been exempt from emissions testing. However, with the new EPA Endangerment Findings and studies investigating the detrimental impacts of black carbon in school buses, these may be target for future activism.

115. The Martin Act authorizes the New York State Attorney General to file civil or criminal charges as well as exercise broad investigatory powers to pursue fraud in connection with the offer and or sale of securities. *See* N.Y. GEN. BUS. § 358 (1996). These provisions confer powers that are unusually broad relative to authority conferred by other state Blue Sky laws.

116. *See* Letter from Katherine Kennedy, Special Deputy Attorney Gen., Envtl. Prot. Bureau, Office of the N.Y. Attorney Gen., to Richard C. Kelly, Chairman, President and Chief Executive Officer, Xcel Energy (Sept. 14, 2007),

agreements between a publicly traded company and the New York Attorney General.¹¹⁷

Under the terms of the agreements announced in August 2008 for Xcel and October 2008 for Dynegy, the parties agreed to disclose in their respective 10-K filings

- (1) an analysis of financial risks from regulation including the material financial risks associated with the present and probable future regulations of greenhouse gas emissions;
- (2) an analysis of financial risks from litigation involving the company, the outcome of which will likely have a material financial effect on the company, including any climate-change-related decisions issued, by any court in any jurisdiction in which the company operates;
- (3) an analysis of the physical impacts of climate change that pose material financial risks to the company's operations; and
- (4) a strategic analysis of climate change risk and emissions management.¹¹⁸

On November 19, 2009, the AES Corporation also reached a settlement arising from the 2007 investigation launched by the New York Attorney General to disclose more information in its 10-Ks.¹¹⁹ In the absence of interpretative guidance from the Commission concerning what is required under federal securities law, these agreements provided an analytical framework to evaluate whether exposure to climate risk is material and a disclosure framework for providing shareholders material information to avoid triggering the antifraud provisions under federal securities law.

http://www.oag.state.ny.us/media_center/2007/sep/xcel%20energy.pdf.

117. *In re* The AES Corporation, AOD 09-159, (N.Y. Atty. Gen., Dep'ts of Inv. Prot. & Envtl. Prot., 2009), http://www.ag.ny.gov/media_center/2009/nov/AES%20AOD%20Final%20fully%20executed.pdf [hereinafter AES Settlement]; see also Nicholas Confessore, *Xcel to Disclose Global Warming Risks*, N.Y. TIMES, Aug. 27, 2008, at C1; see also Karen Freifeld, *Dynegy Required to Disclose Climate Change Risks*, BLOOMBERG, Oct. 23, 2008, <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aby4Iym3BfsE> (discussing the Dynegy settlement and how the deal required similar reporting requirements to those required of Xcel Energy).

118. AES Settlement, *supra* note 117, at 2-5; *In re* Dynegy, Inc., AOD 08-132, 3-5 (N.Y. Atty. Gen., Dep'ts of Inv. Prot. & Envtl. Prot., 2009), http://www.oag.state.ny.us/media_center/2008/oct/DynegyAOD.pdf [hereinafter Dynegy Settlement].

119. AES settlement, *supra* note 117, at 2. The AES settlement is consistent with the terms reached in settlements with Dynegy and Xcel settlements.

b. Congressional Initiatives

In June 2009, the American Clean Energy and Security Act of 2009 (ACES), one of the most comprehensive energy bills to address the impacts of climate change, passed the U.S. House of Representatives.¹²⁰ This bill followed the introduction of over 235 bills, resolutions, and amendments addressing climate change and greenhouse gas emissions during the 110th Congress.¹²¹ At the close of 2009, the Senate Committee on Environment and Public Works, in an eleven to one vote, approved the Clean Energy Jobs and American Power Act, also known as the Kerry-Boxer Bill, which includes details on the reduction of greenhouse gas emissions through investment in renewable energy sources and the distribution of greenhouse gas emissions allowances through a cap-and-trade system.¹²² In addition, the Kerry-Boxer Bill will give the EPA administrator the power to designate greenhouse gases and establish the annual tonnage limit on greenhouse gas emissions.¹²³

Should the key elements of the Kerry-Boxer Bill survive, a cap-and-trade system will be used as a method for gradually reducing carbon dioxide and other greenhouse gas emissions.¹²⁴ Under that system, a permit is issued for each ton of GHG that large-scale emitters—those producing in excess of 25,000 tons per year—will release into the atmosphere.¹²⁵ Those permits set a cap on the amount of GHG that the entity is permitted and over time those emission limits become stricter in order to achieve the long-term reduction goal.¹²⁶ Where the task of reducing emissions will be easier for some, a system will be created whereby an entity can trade the

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

121. See, e.g., Ceres Petition, *supra* note 2 (giving an example of such a petition before the 110th Congress).

122. Clean Energy Jobs and American Power Act, S. 1733, 111th Cong. (2009) [hereinafter Kerry-Boxer Bill]. Entities covered by the bill include large stationary sources with annual GHG emissions over 25,000 tons, producers and importers of petroleum fuels, distributors of natural gas, producers of hydrofluorocarbon gases, and other specified large sources. *Id.* Approximately eighty-five percent of national greenhouse gas emissions are covered under the cap. *Id.* Like the early drafts, the final committee bill draws heavily from the climate provisions of the American Clean Energy and Security Act but it continues to differ in several important areas, for example, a 2020 reduction target and preemption of certain aspects of EPA regulatory authority. *Id.*

123. *Id.*

124. *Id.*

125. *Id.*

126. *Id.*

unused permits or tons of emissions on the market to be purchased by entities with less effective reduction capabilities.¹²⁷ The system is intended to create a reward for the most efficient companies.¹²⁸ However, critics of the bill are particularly concerned about the new derivatives market that will be created out of a cap-and-trade system, and question the wisdom of creating what may potentially be a volatile and therefore risky derivatives market given the outstanding concerns over the extent to which aspects of the derivatives market remain unregulated or under-regulated.¹²⁹

While it is likely that Congress will call upon the SEC, Commodity Futures Trading Commission, and other regulatory agencies to assist with regulating a carbon-trading market, it will complement Congress' earlier efforts to encourage the Commission to provide guidance concerning the disclosure of climate risk in the filings of registered companies. On December 6, 2007, Senator Chris Dodd, Chairman of the Senate Committee on Banking, Housing, and Urban Affairs, and Senator Jack Reed urged then-Chairman Cox to issue guidance on climate disclosure "to ensure greater consistency and completeness in disclosure of material information related to climate change and current and probable future governmental regulation of greenhouse gas emissions."¹³⁰

These conclusions were further supported by expert testimony before Senator Jack Reed, Chairman of the Subcommittee on Securities, Insurance, and Investment.¹³¹ Among those testifying, Russell Read, then-Chief Investment Officer of the California Public

127. *Id.*

128. See Financial Accounting Standards Board, Technical Plan and Project Updates, <http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1218220137074> (last visited Mar. 31, 2010) (summarizing the liabilities concerning emissions trading schemes, tradable rights, tradable offsets when they are received free of charge, and developing accounting models).

129. See MICHELLE CHAN, FRIENDS OF THE EARTH, SUBPRIME CARBON?: RE-THINKING THE WORLD'S LARGEST NEW DERIVATIVES MARKET (Mar. 2009), available at <http://www.foe.org/pdf/SubprimeCarbonReport.pdf> (arguing that the speculative nature of the secondary market has the potential to create a carbon bubble and prohibiting offsets as the surest way to ensure asset quality).

130. See Letter from Sen. Christopher J. Dodd, Chairman, S. Comm. on Banking, Hous. & Urban Affairs, & Sen. Jack Reed, Chairman, S. Comm. on Sec., Ins. & Inv. to Christopher Cox, Chairman, U.S. Sec. & Exch. Comm'n (Dec. 6, 2007), http://dodd.senate.gov/multimedia/2007/120607_CoxLetter.pdf.

131. See *Climate Disclosure: Measuring Financial Risks and Opportunities: Hearing Before the Subcomm. on Sec., Ins. & Inv. of the Sen. Comm. on Banking, Hous. & Urban Affairs*, 110th Cong. (2007) (testimony of Russell Read, Chief Investment Officer, California Public Employees' Retirement System).

Employees' Retirement System (CalPERS) emphasized that certain environmental risks and opportunities can affect the performance of investment portfolios and that well-positioned companies may be able to avoid the financial risks associated with climate risk and capitalize on new opportunities including alternative energy technologies.¹³²

The movement toward regulating a carbon-constrained environment has also triggered a number of risk assessments and moratoria in connection with federal-financing practices and policies. In March 2008, the Rural Utilities Service, which provides financing to hundreds of rural electric cooperatives, placed a moratorium on loans for any new base load coal-fired power plants until the agency could develop a subsidy rate that reflected the risks and costs associated with control of greenhouse gas emissions.¹³³ Additionally, in response to the Government Accounting Office's investigation into the possible overuse of tax-exempt financing, Comptroller William C. Thompson, Jr. cautioned the U.S. Treasury Department to "conduct a thorough review of the financial and environmental risks associated with the use of tax-exempt financing for coal-fired power plants."¹³⁴ Thompson's letter cited the financial obligations to curb greenhouse emissions among other speculative costs associated with the construction of coal-fired power plants that may lead to disruptive debt restructuring and premature refinancing over the life of the bonds.¹³⁵ While only a small portion of the tax-exempt funding program is devoted to the energy sector, on a project-by-project basis those projects were found to be the most cost intensive.¹³⁶

c. Executive Branch Initiatives EPA CO₂ Endangerment Findings

On December 7, 2009, the EPA, through its Administrator Lisa Jackson, made two findings regarding greenhouse gases (GHG) under section 202(a) of the Clean Air Act.¹³⁷ The endangerment finding

132. *Id.*

133. See Letter from James M. Andrew, Adm'r, Rural Utils. Serv., Dep't of Agric., to Sen. Henry A. Waxman, Chairman, Comm. on Oversight & Gov't Reform (Mar. 11, 2008), <http://oversight.house.gov/images/stories/documents/20080312104146.pdf>.

134. See Letter from William C. Thompson, Jr., Comptroller of N.Y., to Eric Solomon, Assistant Sec'y for Tax Policy, U.S. Dep't of the Treasury (June 6, 2008) (on file with author) [hereinafter Thompson Letter].

135. *Id.*

136. *Id.*

137. 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)

concludes that the current and projected concentrations of the key well-mixed GHG gases—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)—pose a threat to human health and welfare.¹³⁸ The Cause or Contribute finding concludes that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to greenhouse gas pollution, which threatens public health and welfare.¹³⁹ The findings were published in response to the Supreme Court's ruling in *Massachusetts v. EPA*,¹⁴⁰ where the court held that greenhouse gases are air pollutants covered under the Clean Air Act.¹⁴¹ The decision stated that the statute requires the EPA to determine whether or not emissions of greenhouse gases from motor vehicles cause or contribute to air pollution, which may endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision.¹⁴² The Supreme Court's decision resulted from a petition for rulemaking under section 202(a) filed by more than a dozen environmental organizations.¹⁴³ This action does not in and of itself impose any requirements on industry or other entities. Rather, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.¹⁴⁴

As a result, the EPA will begin working on lowering emissions.¹⁴⁵ Cap-and-trade measures will be controlled through New Source Performance Standards and Title V of the Clean Air Act, and the

[hereinafter Endangerment and Cause]; *see also* EPA, Climate Change—Regulatory Initiatives, <http://www.epa.gov/climatechange/endangerment.html> (last visited Mar. 31, 2010).

138. Endangerment and Cause, *supra* note 137, at 66,516.

139. *Id.* at 66,496.

140. *Mass. v. Envtl. Prot. Agency*, 549 U.S. 497 (2007).

141. *Id.* at 532.

142. *Id.* at 532–34.

143. *Id.* at 510.

144. *See* Proposed Rulemaking to Establish Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 74 Fed. Reg. 49,454 (proposed Sept. 28, 2009) (to be codified at 49 C.F.R. pts. 531, 533, 537–38); EPA, Climate Change, Regulatory Initiatives, Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act, <http://www.epa.gov/climatechange/endangerment.html> (last visited Apr. 7, 2010).

145. EPA, Climate Change, Regulatory Initiatives, Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act, <http://www.epa.gov/climatechange/endangerment.html> (last visited Apr. 7, 2010).

United States will likely shed coal plants with older technology to comply with emissions standards.¹⁴⁶ Administrator Jackson described the rule as a “common-sense rule tailored to apply to only the largest facilities—those that emit at least 25,000 tons of carbon dioxide a year—which are responsible for nearly 70 percent of greenhouse gas emissions in the United States.”¹⁴⁷ Critics argue that the comprehensive regulation of greenhouse gases under the Clean Air Act will impose a substantial cost, allow insufficient flexibility, and, ultimately, result in an overreaching of the Agency to impose a regulatory regime that exceeds what was ever intended under the Clean Air Act.¹⁴⁸ House and Senate Republicans opposed to the EPA’s actions argue that the regulations are a job-killer.¹⁴⁹

On October 5, 2009, President Barack Obama signed Executive Order 13514, which instructs federal agencies to set or achieve various emissions reduction and energy and environmental benchmarks by 2015, 2020, and 2030.¹⁵⁰ The order requires agencies to set GHG emissions reduction targets for 2020 within ninety days.¹⁵¹ The order also sets out required reductions in vehicle fleet petroleum use and requires increases in water and energy efficiency and in recycling and waste diversion rates.¹⁵² The order also mandates adoption of certain contract and procurement practices designed to promote energy and water efficiency and environmentally preferable products.¹⁵³ The Executive Order, along with the EPA’s findings, were intended to bolster the President’s negotiation leverage in Copenhagen by having regulatory proof that the U.S. is serious about tackling climate

146. See ENERGY PUB., INC., COAL & ENERGY PRICE REPORT, vol. II, 4 (2009) (on file with author).

147. John M. Broder, *E.P.A. Moves to Curtail Greenhouse Gas Emissions*, N.Y. TIMES, Oct. 1, 2009, at A1; see also Memorandum from Sutherland, Asbill & Brennan, LLP, Legal Alert: EPA Publishes Tailoring Rule Requirements for Greenhouse Gases from Stationary Sources (Oct. 29, 2009), <http://www.sutherland.com/alertspubs/> (enter keyword “greenhouse”).

148. See Maura Judkis, *EPA: Greenhouse Gases are a Public Health Hazard*, U.S. NEWS & WORLD REP. Apr. 17, 2009 (noting the response of EPA Administrator Lisa Jackson to comments made by Scott Segal, Director of the Electric Reliability Coordinating Council, which lobbies on behalf of Southern Company and Duke Energy Corp.). Critics warned that the EPA’s regulation of CO₂ would apply to everything from cows to Dunkin’ Donuts. Broder, *supra* note 147, at A1.

149. See Susan Jones, *EPA Attempt to Regulate Greenhouse Gas Emissions Will Kill Jobs, Critics Warn*, CNSNEWS.COM, Dec. 8, 2009, <http://www.cnsnews.com/news/article/58206>.

150. Exec. Order No. 13514, 74 Fed. Reg. 52,117–119 (Oct. 8, 2009).

151. *Id.*

152. *Id.* at 52,118.

153. *Id.*

change.¹⁵⁴ However, many have considered the results of the meetings an utter failure.¹⁵⁵ Despite a disappointing (but not unexpected) result in Copenhagen, the U.S. made steps toward agreeing to commitments to reduce carbon emissions by 2020. The accord, while not legally binding, marks a substantial step toward U.S. commitments to a 14%–17% decrease in GHG emissions from 2005 levels by 2020.¹⁵⁶

Ultimately, these regulatory initiatives will have material impacts on every sector in the U.S. economy but will significantly impact the transportation and energy sectors as the two largest sources of greenhouse gas emissions. Industry waits with bated breath to determine the extent to which the United States will commit to comprehensive initiatives to reduce carbon emissions that will in turn create material financial risks and opportunities for nearly every sector of the market. From the perspective of the registered company, their financial conditions will increasingly depend on whether or not they are well-positioned to manage regulatory costs and capitalize on new business opportunities arising from national commitments to reduce carbon emissions and decrease dependence on foreign oil in favor of developing renewable sources of energy including, but not limited to, wind and solar.¹⁵⁷

154. *See id.*

155. John Vidal et al., *Low Targets, Goals Dropped: Copenhagen Ends in Failure*, *GUARDIAN*, Dec. 19, 2009, <http://www.guardian.co.uk/environment/2009/dec/18/copenhagen-deal> (opining that the lack of deeper emission cuts could lock developing countries into a cycle of poverty forever).

156. *See* United Nations Climate Change Conference, Copenhagen, Den., Dec. 7–18, 2009, *Copenhagen Accord*, Appendix I, available at http://graphics8.nytimes.com/packages/pdf/science/earth/20091218CLIMATE_TEXT.pdf; *see also* Posting of Kenneth G. Lieberthal & John L. Thornton to The Brookings Institution Up Front Blog, (Dec. 23, 2009) http://www.brookings.edu/opinions/2009/1222_china_climate_lieberthal.aspx (arguing that the benefits of the “failure” in Copenhagen include successful avoidance of a total breakdown in negotiations and a more pragmatic approach to reducing carbon emissions which will likely result in a “combination of national, bilateral and regional initiatives, along with negotiations among the group of major greenhouse gas emitters (about 15 countries account for over 90 percent of global emissions)”).

157. Although beyond the scope of this analysis, it is believed that the growth in Clean Technology from \$500 million in 2001 to \$8.4 billion in 2008 reflects the expectation of a carbon-constrained marketplace. *See* Press Release, Cleantech Group, LLC, Clean Technology Venture Investment Reaches Record \$8.4 billion in 2008 Despite Credit Crisis and Broadening Recession (Jan. 6, 2009), <http://cleantech.com/about/pressreleases/010609.cfm>.

3. *Litigation Risk*

Climate change has been at the focus of litigation under theories of common law nuisance actions in addition to violations under statutory and regulatory schemes. One of the anticipated consequences of the EPA's findings that greenhouse gases endanger the public health and welfare is that opponents to the construction of new carbon intensive projects may sue under the National Environmental Policy Act (NEPA)¹⁵⁸ or its state law equivalents. Based on this finding, "it seems likely that any development that generates significantly more vehicle trips and any power production or manufacturing project that results in significantly more GHG emissions could be subject to challenge based on a failure to adequately assess its climate change impacts."¹⁵⁹

Furthermore, there are likely to be new tort claims based on a theory of common law nuisance where the plaintiffs allege harm suffered as a result of a defendant's activities that contribute to climate change.¹⁶⁰ In 2005, eight state attorneys general, the city of New York, and three land trusts filed federal common law public nuisance claims against six electric power companies for harm suffered as a result of the defendants' activities that contribute to concentrations of greenhouse gas emissions that contribute to climate change.¹⁶¹ The District Court found that plaintiffs did not have standing to bring a case of nuisance and that the case was a political question better addressed by another branch of government.¹⁶² On September 21, 2009, the U.S. Court of Appeals for the Second Circuit vacated and remanded the district court's findings, allowing the plaintiffs' claims to proceed.¹⁶³ The Second Circuit rejected the grounds on which the district court had identified a political question and held that the EPA's preliminary finding did not definitively require regulation to address climate change and that other federal remedies are not barred on political question grounds where

158. 42 U.S.C. § 4321 (2006).

159. Memorandum from Steven Jones, Marten Law Group, EPA's Endangerment Finding Could Spur More NEPA, Nuisance Litigation (Dec. 10, 2009), <http://www.martenlaw.com/newsletter/20091210-epa-endangerment-finding>.

160. See COLUMBIA LAW SCH. CTR. FOR CLIMATE CHANGE, U.S. LITIGATION CHART (2010), available at <http://www.climatecasechart.com>.

161. Connecticut v. Am. Elec. Power Co., 406 F. Supp. 2d 265, 267 (S.D.N.Y. 2005).

162. *Id.* at 265.

163. Connecticut v. Am. Elec. Power Co., 582 F.3d 309, 393 (2d Cir. 2009).

Congress had not legislated GHG emissions.¹⁶⁴ Furthermore, the court determined that the allegations of current and future injury associated with climate change were sufficient to establish judicial standing to assert claims against electric utilities.¹⁶⁵ For large emitters of greenhouse gases, whose operations generate 25,000 metric tons or more per year, the Court's decision provides yet another reason why efforts to assess climate change are material to an emitter's financial condition and demonstrates that climate risk is no longer speculative and instead may be the basis for triggering future litigation.¹⁶⁶

In *Comer v. Murphy Oil USA*, plaintiffs with properties along the Mississippi Gulf Coast filed suit against several petro-chemical companies seeking damages and alleging that the defendants' operations of energy, fossil fuel, and chemical industries in the United States caused the emission of greenhouse gases that contributed to global warming by increasing the surface air and water temperature.¹⁶⁷ Plaintiffs argued that the defendants' activities caused the rise in sea levels adding to the severity of Hurricane Katrina, which destroyed their private property and the public property that was useful to them.¹⁶⁸ Following the second circuit's decision in *Connecticut*, the fifth circuit reversed in part the district's court decision holding that plaintiffs had the standing to raise nuisance, trespass, and negligence claims and that those claims were justiciable.¹⁶⁹ Ultimately, the potential for litigation under the new EPA rules or for suits filed under a theory of federal common law public nuisance signals how an entity may need to position itself to respond

164. *Id.* at 332.

165. *Id.* at 349.

166. See Memorandum from Ben Lippard, Vinson & Elkins, LLP, Second Circuit Opinion on *Connecticut v. American Electric Power*—Nuisance Claims Against Companies Emitting GHGs (Sept. 25, 2009), <http://www.vinsonelkins.com/resources/SecondCircuitOpinionConnecticutvAmElecPower.aspx> (recommending that the second circuit's opinion should be studied closely by industrial operators that emit significant quantities of greenhouse gases, to understand the potential for future litigation).

167. 585 F.3d 855, 859 (5th Cir. 2009).

168. *Id.* at 859.

169. *Id.* at 879–80. But see *Native Vill. of Kivalina v. ExxonMobil Corp.*, 663 F. Supp. 2d 863, 863 (N.D. Cal. 2009) (describing that an Eskimo village claimed that global climate change was traceable to the defendants and made their village uninhabitable and sought damages for the cost of relocating the village). The district court concluded that the lawsuit raised a non-justiciable political question and that the plaintiffs did not have standing because their harm was not fairly traceable to the defendants' conduct, rejecting the second circuit's analysis in *Connecticut v. American Electric Power Co., Inc.* *Id.*

to the potential impact of future litigation.

B. Private Initiatives to Address Climate Risk

In the absence of Commission-articulated guidance, private entities have acted preemptively within their sectors by providing guidance to assess and disclose the exposure to climate risk.¹⁷⁰ In addition to public sector initiatives, private organizations are addressing climate risk by developing a framework of guidelines to assess and disclose climate risk and thereby mitigate potential losses.¹⁷¹ In response to a carbon-constrained market, private entities across every sector of the economy have already begun to analyze and report current exposure to climate risk.¹⁷²

1. Voluntary Disclosure Initiatives

The National Association of Insurance Commissioners began requiring insurance companies with premiums in excess of \$500 million dollars to disclose to regulators and to the public their exposure to financial risks from climate change.¹⁷³ The Commissioners reasoned that “insurer disclosures will allow regulators to understand the impact of climate change on insurance (property, casualty, life and health) including its availability, affordability, and solven-

170. See *infra* notes 171–82 and accompanying text.

171. See Perry E. Wallace, *Climate Change, Corporate Strategy, and Corporate Law Duties*, 44 WAKE FOREST L. REV. 757, 759 (2009) (discussing Andrew J. Hoffman’s Carbon Strategies: a three-stage method for providing a roadmap for a corporate climate strategy).

172. See Ceres Petition, *supra* note 2; see also Letter from Karina Litvack, Dir., Head of Governance & Sustainable Inv., F&C Mgmt., et al. to Florence E. Harmon, Acting Sec’y, U.S. Sec. & Exch. Comm’n (June 12, 2008), <http://www.sec.gov/rules/petitions/2008/petn4-547-suppl.pdf> (providing supplemental information to the Request for Interpretive Guidance on Climate Disclosure petition filed on September 18, 2007).

173. See NAT’L ASS’N OF INS. COMM’RS., INSURER CLIMATE RISK DISCLOSURE SURVEY 1 (2008), available at http://www.naic.org/documents/committees_ex_climate_climate_risk_disclosure_survey.pdf (requiring answers to the following: (1) plans for assessing, reducing, or mitigating its emissions; (2) policy for risk and investment management; (3) process for identifying climate change-related risks and business impacts; (4) current and anticipated climate change risks; (5) investment strategy response to climate change impacts; (6) steps to encourage policy holders to reduce losses caused by climate change-influenced events; (7) steps to engage key constituencies on climate change; and (8) action to manage climate change risks including the use of computer modeling). The drafters reasoned that these disclosures should provide good insights to risks insurance companies are insuring as more businesses face liability from environmental events such as floods, tropical storms, and the like. *Id.*

cy.”¹⁷⁴ The Commissioners further concluded that climate risk is critical to insurer solvency and insurance availability, and will aid regulators as they assess an insurer’s risk assessment.¹⁷⁵

Additionally, several of the nation’s financial institutions have also addressed climate risk as material information that impacts both an investor’s ability to make informed investment decisions and a financial institution’s ability to assess project economics within the parameters of carbon risk and financing arrangements.¹⁷⁶ JPMorgan Chase, Citi, and Morgan Stanley, in partnership with power companies and other environmental shareholders, authored and publicly pledged a commitment to the Carbon Principles in February 2008.¹⁷⁷ The Carbon Principles include the “Enhanced Environmental” due diligence recommendations, which provide a process for evaluating carbon mitigation strategies among the range of financing considerations for the construction of fossil fuel generation facilities, including coal-fired power plants.¹⁷⁸

Additionally, private initiatives within sectors have been coupled with efforts to participate across sectors in global networks of corporate entities who voluntarily disclose climate risk. A variety of investor networks including the Investor Network on Climate Risk (INCR)¹⁷⁹ and the Institutional Investors Group on Climate Change (IIGCC)¹⁸⁰ collaborated to encourage companies to apply new disclosure recommendations through a variety of reporting mechanisms including the Carbon Disclosure Project (CDP)¹⁸¹ and the Global

174. Posting of William Um & John Wyckoff to Global Climate Law Blog, <http://www.globalclimatelaw.com/2009/03/articles/insurance-recovery/insurance-companies-required-to-disclose-climate-change-risks-will-disclosure-facilitate-risk-mitigation-climate-change-regulation-or-litigation/> (Mar. 26, 2009).

175. *Id.*

176. *See, e.g.*, JP Morgan Chase & Co., Carbon Principles, <http://www.jpmorgan.com/pages/jpmc/community/env/carbon> (last visited Feb. 22, 2010) [hereinafter Carbon Principles]; JP MORGAN CHASE & CO., CLIMATE CHANGE INVESTMENT RESEARCH (2008), <http://www.jpmorgan.com/pages/jpmorgan/investbk/solutions/research/climatechange> [hereinafter Climate Change Investment Research].

177. *See* Carbon Principles, *supra* note 176.

178. *See* Carbon Principles, *supra* note 176.

179. Investor Network on Climate Risk (INCR) Home Page, <http://www.incr.com> (last visited Mar. 31, 2010).

180. IIGCC Home Page, <http://www.iigcc.org/> (last visited Mar. 31, 2010).

181. Carbon Disclosure Project Home Page, <https://www.cdproject.net> (last visited Mar. 31, 2010) (explaining that the CDP was launched in 2000 to collect and distribute data concerning how organizations around the world measure and manage greenhouse gas emissions and make performance improvements to minimize their exposure to risk and maximize business opportunities).

Reporting Initiative (GRI).¹⁸²

2. *Shareholder Resolutions and New SEC Proxy Rules*

Shareholder activism has been a powerful force in raising awareness about the physical, regulatory, and litigation impacts of climate change on the financial condition of registered companies. Investor networks, often representing trillions of dollars of assets, have orchestrated a movement among shareholders to submit resolutions urging boards to report on the company's climate risk assessment at annual shareholder meetings.¹⁸³ If the resolution met statutory guidelines and survived scrutiny, the resolution would be presented for vote before all shareholders.¹⁸⁴ The process enables shareholders with an ownership and fiduciary interest in the activities of publicly registered corporations to influence corporate behavior.¹⁸⁵

During the 2008 proxy season, a record fifty-seven climate-related shareholder resolutions were filed with U.S. companies with the intent of engaging corporate management and encouraging enhanced disclosure.¹⁸⁶ Until recently, the Commission allowed companies to reject shareholder resolutions through a no action request if the resolution linked environmental or social issues to a company's evaluation of risk.¹⁸⁷ On October 27, 2009, the Commission's Division of Corporation Finance issued Staff Legal Bulletin 14E (CF), providing guidance for companies and shareholders regarding rule 14a-8 with respect to shareholder proxy proposals relating to risk, succession plans for a company's chief executive officer, and the manner by which shareholder proponents and companies can notify

182. The GRI works closely with CDP on sustainability reporting of environmental and social dimensions of corporate activities, products, and services and is a repository for information for how corporations disclose significant information regarding climate risk. *Id.*

183. These organizations include the INCR, IIGCC, and Interfaith Center for Corporate Responsibility (ICCR). ICCR Home Page, <http://www.iccr.org> (last visited Mar. 31, 2010); *see also supra* notes 179–80.

184. Ceres, led by its president Mindy Luber, is a national network of investors, environmental organizations, and other public interest groups working with companies and investors to address sustainability challenges such as global climate change. Ceres Home Page, <http://www.ceres.org> (last visited Mar. 31, 2010).

185. *See* Sung Ho (Danny) Choi, *It's Getting Hot in Here: The SEC's Regulation of Climate Change Shareholder Proposals Under the Ordinary Business Exception*, 17 DUKE ENVTL. L. & POL'Y F. 165, 172–73 (2006).

186. *See* Ceres, Shareholder Action, <http://www.ceres.org/Page.aspx?pid=428> (last visited Mar. 31, 2010).

187. *See* Choi, *supra* note 185, at 176–77.

the commission about submitting a no-action request.¹⁸⁸ Rather than focusing on whether a proposal and supporting statement relates to the company engaging in an evaluation of risk, the Commission will now consider whether the underlying subject matter of the risk evaluation involves a matter of ordinary business to the company.¹⁸⁹ The ruling makes it easier for investors to demand climate change disclosure from listed companies via shareholder resolutions including the financial risks companies face from environmental and social issues.¹⁹⁰ The hundreds of shareholders resolutions seeking enhanced disclosure demonstrates a real need for material information concerning a company's exposure and its assessment of the potential and actual liabilities arising from a carbon-constrained economy.¹⁹¹

3. *Ceres Petition for Interpretive Guidance*

In the campaign for mandatory climate risk disclosure, shareholder activists advocated a broader reading of a company's existing obligations to disclose material environmental information under federal securities law and under generally accepted accounting principles. It was argued that adaptation of a broader reading of these provisions would provide investors with access to enhanced information concerning a company's assessment of its material climate risk exposure.¹⁹² Their efforts reflect a growing belief among shareholders that the potential impacts of climate change on a registered company include (1) the possibility of damage to property, (2) interruption of revenue streams, (3) increased costs incidental to complying with regulations, and (4) all potential liability in lawsuits reasonably likely to have a material impact on a company's financial performance.¹⁹³

Beginning in October of 2006, a group of leading investors from

188. See SEC, Staff Legal Bulletin No. 14E(CF) (Oct. 27, 2009), available at <http://www.sec.gov/interps/legal/cfslb14e.htm>.

189. *Id.*

190. See Press Release, Ceres, Ceres Applauds SEC Decision Allowing Financial Risks in Environmental and Social Resolutions (Oct. 28, 2009), <http://www.ceres.org/Page.aspx?pid=1145>; see also SEC, *Guidance To Ease Climate Change Resolutions*, ENVTL. FINANCE, Oct. 29, 2009, <http://www.environmental-finance.com/onlinews/2910sec.html>.

191. See Press Release, Ceres, Investors Achieve Major Company Commitments on Climate Change (Aug. 24, 2009), <http://www.ceres.org/Page.aspx?pid=1121>.

192. Ceres Petition, *supra* note 2, at 7-10.

193. See Peter L. Gray, *The SEC is Getting Hot and Bothered Over Climate Change*, METRO. CORP. COUNSEL, at 11 (2008), available at <http://www.metrocorpcounsel.com/pdf/2008/January/11.pdf>.

around the world, led by Ceres, released the Global Framework for Climate Risk Disclosure.¹⁹⁴ The framework provided companies a list of expectations and criteria investors wanted to see from corporations about their total greenhouse gas emissions production and called for a plan to manage emissions and a risk assessment of the anticipated physical and regulatory impacts.¹⁹⁵

In September of 2007, a coalition of state officials, shareholder advocates, and environmental groups, led by Ceres, petitioned¹⁹⁶ the Commission seeking interpretative guidance to clarify climate risk disclosure as material information that, if undisclosed, could impact an investor's ability to make informed decisions.¹⁹⁷ The petition also requested clarification on the scope and substance of disclosure about the financial, regulatory, and litigation impact of climate risk on a corporation's financial stability.¹⁹⁸ Investor groups like Ceres have documented the competitive disadvantage power-generating entities may face as a result of (1) heightened exposure to the physical risks from climate change, (2) the regulatory risks related to proposed greenhouse gas emission limits, (3) the indirect regulatory risks and the opportunities related to products or services from high emitting companies, and (4) litigation risks for emitters of greenhouse gases.¹⁹⁹ While the Ceres Petition and its supplements galvanized the efforts of Investor Networks and Corporate Boards, they also challenged assumptions concerning the adequacy of existing environmental disclosure procedures under federal securities law.²⁰⁰

C. *Disclosing Climate Risk Under Federal Securities Law*

Regulation S-K under the Exchange Act provides the scope and substance of required non-financial disclosures for publicly traded companies in its annual reports (Form 10K), its quarterly reports

194. See GLOBAL FRAMEWORK FOR CLIMATE RISK DISCLOSURE: A STATEMENT OF INVESTOR EXPECTATIONS FOR COMPREHENSIVE CORPORATE DISCLOSURE 1-3 (2006), http://www.calstrs.com/Investments/Global_Framework_Climate.pdf.

195. *Id.* at 6-8.

196. Ceres Petition, *supra* note 2, at 1.

197. *Hearing Before the U.S. Cong. Subcomm. on Sec., Ins. & Inv.*, 110th Cong. (Oct. 31, 2007) (testimony of Mindy Lubber, Pres. of Ceres and Dir. of INCR).

198. See Ceres Petition, *supra* note 2, at 51-53; see also Ceres Supplement I, *supra* note 2, at 5-6; Ceres Supplement II, *supra* note 2, at 21-27.

199. See Ceres Petition, *supra* note 2, at 53; see also CLIMATE RISK DISCLOSURE IN SEC FILINGS: AN ANALYSIS OF 10-K REPORTING BY OIL AND GAS, INSURANCE, COAL, TRANSPORTATION AND ELECTRIC POWER COMPANIES 2-3, (2009), <http://www.ceres.org/Document.Doc?id=473> [hereinafter *Ceres 10K Risk*].

200. Smith Transcript, *infra* note 205.

(10Q), and its episodic filings (8K).²⁰¹ Climate risk activists have argued that the provisions registered companies currently apply to disclose environmental impacts should be expanded and clarified for purposes of disclosing climate risk liabilities.²⁰²

1. *Item 101*

Item 101 requires disclosure of material effects of compliance with federal, state, and local environmental law provisions.²⁰³ Traditionally, such disclosure would include a description of the capital expenditures, earnings, and competitive position of the company and its subsidiaries. This might also include a description of capital expenditures necessary to comply with enacted or adopted environmental regulations or initiatives to protect the environment, including the acquisition of control facilities as well as any material acquisition of plant and equipment necessary to the registered company's business activities.²⁰⁴ Authors of the Ceres petition argued for a broader reading of this provision that includes a recommendation that registrants should also disclose the challenges that climate risks present to the general development of business, including the impact of the costs of energy and contingency planning for extreme weather.²⁰⁵ While it is unsettled whether this broader reading of the provision should prevail, it is largely agreed that any material expenditures a company makes to comply with climate change regulations would be disclosed under this provision, including those costs associated with complying with the multi-state regional initiatives like RGGI and WCI.²⁰⁶

2. *Item 103*

Item 103 requires disclosure of any material pending legal proceedings, other than ordinary routine litigation incidental to the business, to which the registrant or any of its subsidiaries is a party, or

201. See Rose, *infra* note 230, at 2 n.3.

202. Ceres Petition, *supra* note 2, at 40–42.

203. 17 C.F.R. § 229.101(c)(1)(xii) (2007).

204. *Id.*

205. See Jeffrey Smith, *Climate's Impact on Securities Disclosures*, 38 ENVTL. L. REP. NEWS & ANALYSIS 10128 (2008) (transcribing a speech given by Smith at the September 27, 2007 Environmental Law Institute seminar) [hereinafter Smith Transcript].

206. See Gray, *supra* note 193.

which any of its property is the subject.²⁰⁷ Additionally, the company subject to litigation must accrue a charge if it is probable that the liability has been incurred and can be reasonably estimated.²⁰⁸ But no disclosure is required where the monetary sanctions are less than ten percent of the company's assets or if a government agency is involved and the possibility of sanctions imposed is less than \$100,000.²⁰⁹

A broader interpretation of Item 103, which some have called an extrapolation, may include disclosing litigation that could have a significant impact on the registrant's sector even if that registrant is not a party to the litigation.²¹⁰ For example, a registrant that is a large emitter of carbon dioxide may want to assess and disclose the risk for potential litigation, if reasonably likely, as a result of the *Comer v. Murphy Oil* and *Connecticut v. American Electric Power* decisions, where the Second and Fifth Circuits have acknowledged that a party can state a cause of action under a federal common law public nuisance theory for the harm caused by a registrant's greenhouse gas emissions that contribute to climate change.²¹¹

3. *Item 303, Management's Discussion and Analysis (MD&A)*

Item 303, the Management's Discussion and Analysis of Financial Condition and Results of Operations, requires the disclosure of material effects of known trends, events, or uncertainties that may impact a company's financial condition, changes in financial condition, and its operations.²¹² This section also requires disclosure of off-balance sheet arrangements that materially affect or are reasonably likely to have a material effect on the financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources on the results of

207. 17 C.F.R. § 229.103 (2007).

208. See SEC Staff Accounting Bulletin 92, 56 Fed. Reg. 33, 376 (June 14, 1993) (codified at 17 C.F.R. pt. 229.103).

209. *Crouse-Hinds Co. v. InterNorth, Inc.*, 518 F. Supp. 416, 474–75 (N.D.N.Y. 1980).

210. See Smith Transcript, *supra* note 205, at 10128.

211. *Id.* at 10129; *Comer v. Murphy Oil*, 585 F. 3d 855 (5th Cir. 2009); *Connecticut v. Am. Elec. Power*, 582 F.3d 309 (2d Cir. 2009); see also SEC Staff Accounting Bulletin No. 92, 56 Fed. Reg. 33,376 (June 14, 1993) (codified at 17 C.F.R. pt. 229.103) (mandating that corporations must disclose charges accrued for environmental liabilities where it is probable that the liability was incurred and can be reasonably estimated and where liability is a reasonably probable result of legal proceedings).

212. See Item 303, 17 C.F.R. § 229.303(a) (2009).

operations.²¹³

The 1989 MD&A Interpretative Release provides the starting point of analysis to determine when and how a company must disclose material known events and uncertainties by conducting a probability/magnitude test as defined by the Supreme Court.²¹⁴ It recommended that a company distinguish between (1) information that must be disclosed and (2) forward-looking information, of which disclosure is optional.²¹⁵ The release further provides that in order for a registrant to determine whether information is prospective and therefore must be disclosed, the registrant should assess (1) the likelihood that the known trend will come to fruition, and (2) that if management cannot make a determination it should objectively evaluate the trend, assume that it will come to fruition, and determine whether it is reasonably probable that the effects would have a material effect on operations and, if so, disclosure would be required.²¹⁶

The 2003 MD&A Interpretative Release further provides that uncertainties in the MD&A not only encompass both financial and non-financial factors that may influence the business either directly or indirectly, but also may include matters that often precede accounting recognition when the registrant becomes aware of information that creates a likelihood of material effect on its financial condition or results of operation.²¹⁷ Practitioners agree that this guidance applies to the scientific findings, statutory and regulatory initiatives, as well as recent court rulings that all support the conclusion that climate change is a material known trend.²¹⁸ However, the question remains whether the known and likely liabilities of climate risk are reasonably

213. Item 303, 17 C.F.R. § 229.303(a) (4) (2009). These arrangements include retained or contingent interest in assets and actual or contingent obligations arising out of a material variable interest. *Id.* at (a) (4) (ii). The third requirement under Item 303 includes disclosure of payment amounts due under long term contractual liabilities on its balance sheets. *Id.* at (a) (4) (i) (C).

214. *See* Management's Discussion and Analysis of Financial Condition and Results of Operations, 54 Fed. Reg. 22427 (May 18, 1989) (codified at 17 C.F.R. pts. 211, 231, 241, 271) (discussing the Supreme Court's decision in *Basic v. Levinson*, 485 U.S. 224 (1988)) [hereinafter MD&A Release].

215. *Id.*

216. *Id.*

217. *See* SEC Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations, Securities Act Release No. 8350, Exchange Act Release No.

48,960, 68 Fed. Reg. 75,056 (Dec. 29, 2003) (codified at 17 C.F.R. pts. 211, 231, 241).

218. *Id.*; *see also* Smith Transcript, *supra* note 205.

estimable enough to influence financial conditions—and if so, whether those financial conditions are reasonably likely to result in a material impact on the company’s liquidity, capital resources, revenues, and results of operations, including income from continuing operations.²¹⁹

4. *Other Supplemented Disclosure in the 10-K*

A number of practitioners have noted that in the absence of guidance by the Commission on how to disclose climate risk, registered companies may also disclose material climate risk in Item 503(c) pursuant to Regulation S-K, which requires disclosure in the registration statement and periodic reports that discuss specific factors or changes that make an offering particularly risky or speculative.²²⁰ Companies may also include details about climate risk in the Forward Looking Statements’ safe harbor provisions, as well as in the notes to the financial statements.²²¹

Furthermore, Regulation FD prohibits certain selective disclosures of material nonpublic information so that if a company’s disclosure is selective, or incomplete about material climate risk exposure, omission of these facts may trigger violation of federal securities law.²²² Additionally, practitioners have relied on Staff Accounting Bulletin 99 for guidance on determining whether environmental information is sufficiently material to warrant disclosure pursuant to Items 101, 103 and 303 of Regulation S-K.²²³

219. See SEC Commission Guidance Regarding Management’s Discussion and Analysis of Financial Condition and Results of Operations, Securities Act Release No. 8350, Exchange Act Release No.

48,960, 68 Fed. Reg. 75,056 (Dec. 29, 2003) (codified at 17 C.F.R. pts. 211, 231, 241); see also SEC Division of Corporation Finance, Significant Issues Addressed in the Review of the Periodic Reports of the Fortune 500 Companies, www.sec.gov/divisions/corpfin/fortune500rep.htm (last visited Mar. 31, 2010).

220. See JANE WHITT SELLERS ET AL., CLIMATE CHANGE DISCLOSURE: CREEPING UP THE LEARNING CURVE—WILL DISCLOSURE CATCH UP WITH DEVELOPMENTS? (2009), <http://www.mcguirewoods.com/news-resources/publications/Climate%20Change%20Disclosure%202009.pdf>; see also Gray, *supra* note 192.

221. See SELLERS ET AL., *supra* note 220, at 3.

222. See Posting of Kristy T. Harlan et al. to Climate Change Report, (Dec. 9, 2009), <http://www.climatelawreport.com/tags/investor-network-on-climate-ri/> (discussing how the selective disclosure of material fact can trigger a violation of Regulation FD).

223. DAVIS POLK & WARDWELL, ENVIRONMENTAL DISCLOSURES IN SEC FILINGS 4 n.4 (2009) [hereinafter DPW], available at <http://www.davispolk.com/> (from main page,

However, without specific SEC guidance concerning the construction of these provisions, companies are likely to face a great deal of scrutiny as to the sufficiency of their disclosures. Furthermore, the lack of specific guidance may create uncertainty concerning best practices for addressing the complexities of climate risk and ambiguity regarding the scope of disclosure sufficient to meet certain obligations under federal securities law.

D. Financial Statement Disclosure and Accounting Standards

Pursuant to the Commission's rules and staff guidance, registered companies apply Generally Accepted Accounting Principles standards and disclose certain liabilities in their financial statements.²²⁴ The following provides a brief overview of a few key accounting concepts and fair value rules that apply to environmental liabilities and may be applicable to climate risk disclosure.²²⁵

1. FAS 5 and FIN 14

Financial Accounting Standards No. 5 (Accounting for Contingencies) (FAS 5) provides the standard for disclosure of material-contingent liabilities where it is reasonably possible that a liability has been incurred or that an asset has been impaired at the time of the financial statement.²²⁶ Where a material contingent liability is

search "Environmental Disclosures in SEC Filings"; follow hyperlink "Section 1"). See also ASTM Work Item: ASTM WK21096, New Guide for Disclosures Related to Climate Change Exposures/Risks, <http://www.astm.org/DATABASE.CART/WORKITEMS/WK21096.htm> (last visited Mar. 31, 2010) (showing that the committee is contemplating instructions consistent with good commercial practices for climate change related disclosure); AICPA Statement of Position 94-6, Disclosure of Certain Significant Risks and Uncertainties, § 10,640 (1994) [hereinafter SOP 94-6] (providing standard setting bodies with practical methods to improve information disclosure and measurements of risks and uncertainties); AICPA Statement of Position 96-1, Environmental Remediation Estimates, § 10,680.02, ¶ A.12 (1996) [hereinafter SOP 96-1].

224. See Commission Guidance Regarding the Financial Accounting Standards Board's Accounting Standards Codification, Sec. & Exch. Comm. Release Nos. 33-9062A; 34-60519A; FR-80A, 74 Fed. Reg. 163 (Aug. 25, 2009) (codified at 17 C.F.R. pts. 211, 231, 241, at 3), available at <http://sec.gov/rules/interp/2009/33-9062a.pdf> (explaining that the Commission's rules and staff guidance make reference to U.S. GAAP for both the form and content of financial statements, and for disclosure outside of the financial statement, including Regulation S-K).

225. This list is in no way comprehensive and does not address disclosure potential under Form 20F for Disclosure Requirements on Foreign Private Issuer as discussed in DPW, *supra* note 223, at 16.

226. FINANCIAL ACCOUNTING STANDARDS NO. 5: ACCOUNTING FOR CONTINGENCIES, ¶

reasonably possible but cannot be estimated, FAS 5 requires that the liability be disclosed in the footnotes of the financial statements.²²⁷ FASB Interpretation 14, *Reasonable Estimation of the Amount of a Loss* (FIN 14), the interpretation of FAS 5, clarifies the method for the best estimate for an amount accrued as well as the estimated range for possible loss.²²⁸ The Ceres Petition refers to the provisions that trigger instances where companies should be accruing for climate change liability and disclosing their risk on their balance sheets.²²⁹ For example, accrual for climate change liability may be triggered in instances where the altered economic conditions from climate change may result in expenses exceeding income for some products associated with high GHG-emitting assets.²³⁰

2. FAS 143-FIN 47

Under FAS 143 and the Interpretative Note FIN 47, a company is required to disclose material asset retirement obligations where the fair value can be estimated and is material. These standards may be relevant to climate risk disclosure for those companies that may retire assets that are carbon intensive as part of a carbon reduction strategy.²³¹ However, FAS 143 is applied in instances where there is a legal obligation to retire the asset, so that it may resume normal operation. Some practitioners speculate about the scope of interpreting the standard where material remediation may be necessary before retiring the asset either in the course of normal or abnormal operations,

8 (FIN. ACCOUNTING STANDARDS BD. OF THE FIN. ACCOUNTING FOUND. 1975).

227. See Smith Transcript, *supra* note 205, at 10130.

228. See U.S. Securities & Exchange Commission, Summary by the Division of Corporation Finance of Significant Issues Addressed in the Review of the Periodic Reports of the Fortune 500 Companies, <http://www.sec.gov/divisions/corpfin/fortune500rep.htm> (last visited Mar. 31, 2010) (directing companies to FIN 14 for guidance on estimating amounts accrued and range for possible loss); see also U.S. Securities & Exchange Commission, Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations, <http://www.sec.gov/rules/interp/33-8350.htm> (last visited Mar. 31, 2010) (noting that these provisions are not exhaustive of the FASB rules applicable to accounting for environmental liabilities).

229. See Ceres Petition, *supra* note 2, at 15.

230. *Id.* at 15; see also Raymond R. Rose, *Being Underway, Not in Delay, on Climate Change-Related Disclosure*, 20 ENVTL. CLAIMS J. 23, 23–28 (2008) (discussing the drawbacks of filing a SEC petition as a method for activism).

231. FINANCIAL ACCOUNTING STANDARDS NO. 143: ACCOUNTING FOR ASSET RETIREMENT OBLIGATIONS, ¶ 3 (FIN. ACCOUNTING STANDARDS BD. OF THE FIN. ACCOUNTING FOUND. 2001).

which may trigger FAS 5.²³² This analysis is admittedly an oversimplification of the rules intended only to highlight the need for interpretation as it applies to climate risk.

3. SAB 92

In Staff Accounting Bulletin No. 92 (SAB 92), the SEC provided enhanced guidance concerning claims for loss recovery where additional disclosure might be required under Regulation S-K to “enable a reader to understand” the environmental contingencies facing the registrant.²³³ For example the Commission distinguishes between gross liabilities and the expected insurance recoveries or third party indemnification claims that must be recorded in the balance sheets. Under SAB 92, the registrant may be required to also include: (1) recurring costs associated with hazardous substances and pollution operations, (2) capital expenditures to limit or monitor of costs of pollutants, (3) mandatory expenditures to remediate previously contaminated sites, and (4) other infrequent or nonrecurring or cleanup expenses that can be anticipated.²³⁴ The recommended approach for measuring those liabilities would be based on considering the currently available facts, existing technology, and presently enacted laws and regulations that take into account the likely effects of inflation and other societal and economic factors.²³⁵

4. ASTM International

Beginning in 2008, the American Society for Testing and Materials International (ASTM) established Committee E50 on Environmental Risk Management and Correction Action to provide guidance to companies for good commercial and customary practices for climate risk disclosure in audited and nonaudited financial statements.²³⁶ The Guide for Disclosure Related to Climate

232. FINANCIAL ACCOUNTING STANDARDS NO. 5: ACCOUNTING FOR CONTINGENCIES, ¶ 8 (FIN. ACCOUNTING STANDARDS BD. OF THE FIN. ACCOUNTING FOUND. 1975).

233. SEC Staff Accounting Bulletin No. 92, 58 Fed. Reg. 32,843 (1993) [hereinafter SAB 92].

234. DPW, *supra* note 223, at 19–20; *see also* Rose, *supra* note 229; SAB 92, *supra* note 232.

235. *See* SAB 92, *supra* note 233, at 32, 844.

236. *See* ASTM Work Item: ASTM WK21096, New Guide for Disclosures Related to Climate Change Exposures/Risks, <http://www.astm.org/WorkItems/WK21096.htm> (last visited Mar. 31, 2010) (showing a committee work item to create a guide that provides companies with a series of options or instructions consistent with good commercial and customary practice for climate change-related disclosures accompa-

Change/Exposures/Risks is in a second round of balloting with final standards to become available in the near future.²³⁷ While the guide is intended for use on a voluntary basis, practitioners have noted that many ASTM standards may become mandatory after being adopted by regulatory agencies.²³⁸

Ultimately, the Ceres petition and its subsequent supplements sought both interpretive guidance from the Commission under Accounting Standards and disclosure provisions under Regulation S-K.²³⁹ But a derivative benefit of requiring certain information for a disclosure is that the entity must devise adequate internal procedures for gathering and assessing information to comply with its fiduciary duties and its obligations under federal securities laws.²⁴⁰

By comparison, the municipal bond market does not have to adhere to the accounting standards of the FASB, nor is it subject to the mandatory provisions outlined above.²⁴¹

IV. TENUOUS PARTICIPATION IN THE CLIMATE RISK DEBATE

With the considerable amount of will focused upon the evaluation, assessment and disclosure of climate risk in nearly every sector of the global economy, it is difficult to imagine that the \$2.8 trillion municipal bond market has been left out in the cold. While the energy sector may make up a relatively small percentage of the total tax-exempt bond market, energy projects are among the largest emitters of greenhouse gases and are by far the most costly on a project-by-project basis.²⁴² Even for municipal issuer funding projects that are not carbon intensive, the framework for measuring, assessing

nying audited and unaudited financial statements); Jonathan Berr, *Assessing the Business Impact of Climate Change*, ASTM INTERNATIONAL, Jan./Feb. 2009, http://www.astm.org/SNEWS/JF_2009/berr_jf09.html (stating that “[t]hese days, the business of doing business includes providing more information about greenhouse gases, and a new task group in Committee E50 on Environmental Assessment, Risk Management and Corrective Action is developing guidelines on how to do it”).

237. Berr, *supra* note 236 (explaining that the first balloting recently took place in Miami).

238. See Lewis B. Jones, *ASTM Issues Draft Standard on Climate Change Disclosures*, ENVTL. DISCLOSURE COMM. NEWSL., Mar. 2009, at 5.

239. 17 C.F.R. § 229.10(a) (2009).

240. Ceres Petition, *supra* note 2, at 9.

241. See Cox, *supra* note 24 (discussing Texas and Connecticut legislation that considered allowing state and local governments to avoid following the rules of the Government Accounting Standards Board which mandated uniformity in the accounting standards).

242. See Thompson Letter, *supra* note 134.

and disclosing the physical impacts of climate risk will become increasingly essential as issues of water management and scarcity influenced by climate change come to the forefront.²⁴³

It has been predicted that the speculative nature of the regulatory risks of climate change may undermine the payment of debt service obligations, leading to an increased likelihood of premature refinancing and disruptive debt restructuring.²⁴⁴ Even in the energy sector where climate risk will have and is having a direct and significant impact on the fiscal stability of operations, the reporting of these risks has been essentially voluntary and arguably so incomplete as to be misleading to investors.²⁴⁵ As the municipal bond market recovers from the financial crisis of 2008, lax disclosure obscures its many vulnerabilities, including declining tax and project revenues and the increased likelihood of defaults, many due to soured derivative transactions. Resisting participation in the climate risk disclosure debate, a discussion about enhanced disclosure generally, may offer a front row seat concerning the consequences of undisclosed risk and its contributions to a perfect storm that could impact market stability.

A. *An Example of Voluntary Climate Risk Disclosure*

Power generation entities, many of which operate coal-fired power plants, are among the principal contributors to carbon dioxide emissions and the most vulnerable to material environmental risks under carbon reduction regulations.²⁴⁶ Rural electric cooperatives are facilities organized as tax-exempt 501(c)(12) organizations that often operate carbon-intensive generation and transmission power facilities.²⁴⁷ These entities will use a combination of financing arrangements to fund their operations including the tax-exempt bond market.²⁴⁸ The following climate risk disclosure appeared in the

243. Ceres Petition, *supra* note 2, at 28.

244. *Id.* at 28–29.

245. See Ceres 10K Report, *supra* note 96, at 19 (comparing the disclosure levels on emissions and climate change for six coal companies where “one company had no disclosure, five had disclosure evaluated as poor or limited [and] [o]nly two companies disclosed GHG emissions data, a significant shortcoming in a sector facing regulatory risks because of its carbon dioxide emissions intensity”).

246. *Id.*

247. Section 501(c)(12) of the Internal Revenue Code provides an income tax exemption for rural electric cooperatives if at least 85 percent of the cooperative’s income consists of amounts collected from members for the sole purpose of meeting losses and expenses of providing service to its members. See Rev. Rul. 72-36, 1972-1 C.B. 151.

248. See Andrew, *supra* note 133, at 4–9 (summarizing financial arrangements of

Spring 2009 official statement of an electric cooperative's multi-million dollar tax-exempt bond offering to finance ongoing construction of a new coal fired power plant.

[Entity] is unable to predict whether the EPA will impose regulations of GHG, and if so, what their form or effect would be. [Entity] is also unable to predict whether [sic] the federal bill proposed to regulate GHG will become law or what their final form or effect would be. At this time, there does not appear to be a consensus as to what the level of future regulation of emissions will be, or the costs associated with that regulation. However, any such costs would likely impact the [project] and the electric market, and could be material to the Participants.²⁴⁹

Even with interpretive guidance from the Commission, the question of whether or not this kind of disclosure is adequate for purposes of federal securities law remains unclear. The disclosure focuses on predicting outcomes instead of addressing internal efforts to measure climate risk and ultimately does not leave the investor better informed about its climate risk strategy.²⁵⁰ It is common for the quality of disclosure to improve as an emerging concept is tested in the courts and by the regulatory initiatives.²⁵¹ However, it begs the question: at what point does an issuer trigger the antifraud provisions where an investor is no better informed about the cooperative's risk exposure for having read the disclosure?

The Commission's 1994 Interpretive Guidance on the Antifraud Provisions for municipal securities provides that "[t]he adequacy of disclosure provided in municipal security offering materials is tested against an objective standard: an omitted fact is material if there is a substantial likelihood that, under all the circumstances, the omitted fact would have assumed actual significance in the deliberations of the reasonable (investor)."²⁵² Ultimately, "there must be a substantial likelihood that the disclosure of omitted fact would significantly alter the 'total mix' of information available."²⁵³ To date, the Commission remains silent as to the extent to which the omission of certain

rural utility services).

249. For purposes of this article, the electric cooperative at issue will remain unnamed.

250. See Smith Transcript, *supra* note 204 (discussing the objectives of adequate disclosure).

251. *New World Risk*, *supra* note 109.

252. 1994 Release, *supra* note 59, at 12740.

253. 1994 Release, *supra* note 59, at 12740 n.30 (citing *TSC Indus. v. Northway, Inc.*, 426 U.S. 438, 449 (1976)).

climate risks are in fact significant in the deliberations of the reasonable investor. However, New York Attorney General Cuomo's regulatory efforts may create an inference of materiality and may be worth considering in assessing the adequacy of climate risk disclosure.²⁵⁴

The agreements reached between the New York Attorney General and each of the subpoenaed power companies may provide guidance for determining whether or not climate risk disclosure has significance in the deliberations of the reasonable investors. While the agreements were binding only on each of the publicly traded companies, the terms of the settlement could provide a framework for prioritizing volumes of complex financial and nonfinancial information concerning the present and potential impacts of climate risk. Furthermore, the settlement terms could help establish a reasonable standard for inferring materiality where the parameters were crafted by regulators who share the Commission's interest in protecting the investors from fraud. Even though the issuer at question is not a publicly traded company, the power companies bound by these settlements are in many ways industry peers of the issuer.

In applying the settlement criteria, it is apparent that the issuer's climate risk analysis differs substantially from the analysis described in the settlement. First, the issuer's disclosure does not include a description of an analysis of the financial risks from the present and probable regulations of greenhouse gas emissions.²⁵⁵ Nor does it include any description of implemented methods, procedures or committees to evaluate the current and impending regulations of its carbon intensive activities.²⁵⁶ Second, the disclosure makes no mention of any analysis of financial risk from litigation involving the company, the outcome of which will likely have a material financial effect on the company, including any climate change-related decisions issued by any court in any jurisdiction in which the company operates.²⁵⁷ Third, the disclosure makes no mention of the physical impacts of climate change, nor does it provide a method for measuring the material financial impact that climate change may have on the

254. See, e.g., AES Settlement, *supra* note 117, ¶ E; Dynegy Settlement, *supra* note 118, ¶ E.

255. See AES Settlement, *supra* note 117, at ¶¶ 1(a)(1)–(2); Dynegy Settlement, *supra* note 118, at ¶¶ 1(a)(1)–(2).

256. See AES Settlement, *supra* note 117, at ¶¶ 1(a)(1)–(2); Dynegy Settlement, *supra* note 118, at ¶¶ 1(a)(1)–(2).

257. See AES Settlement, *supra* note 117, at ¶ 1(b); Dynegy Settlement, *supra* note 118, at ¶ 1(b).

company's operations.²⁵⁸ Lastly, the official statement lacks a description of a strategic analysis of climate change risk or emissions management.²⁵⁹ Ultimately, the disclosure is an example of the kind of information that fills a void by acknowledging that there is a need for some kind of climate risk disclosure, but the execution falls short of informing investors.²⁶⁰

B. Legacy of Exemption

At the end of 2009, as the Senate Banking Committee contemplated sweeping regulatory reform, it sidestepped the question of whether or not Congress would finally repeal the Tower Amendments and empower the Commission to directly regulate issuers.²⁶¹ Instead, by some accounts, the Senate intends to commission the Government Accountability Office to submit a report within one year of enactment, comparing municipal and bond disclosure requirements and evaluating the costs and benefits to issuers.²⁶² It is likely that Congress will also require the Commission to conduct a study addressing the importance of the Government Accounting Standards Board, its funding and recommended legislative action.²⁶³ The delay is not a surprising turn of events and is consistent with the history of aggressive lobbying to oppose any form of direct issuer regulations.²⁶⁴

258. See AES Settlement, *supra* note 117, at ¶ 1(c); Dynege Settlement, *supra* note 118, at ¶ 1(c).

259. AES Settlement, *supra* note 117, at ¶ 1(d); Dynege Settlement, *supra* note 118, at ¶ 1(d).

260. *New World Risk*, *supra* note 109; see also 1994 Release, *supra* note 59 (discussing Commission's suspicions that Issuers may avoid disclosure to prevent triggering the antifraud provisions as a reason why municipal issuers resist developing a routine of ongoing disclosure to the investing market).

261. Andrew Ackerman, *Regulatory Reform Bill Faces Dissent*, BOND BUYER, Nov. 24, 2009, http://www.bondbuyer.com/issues/118_226/reform-bill-objection-1004219-1.html (explaining that "[t]he Senate bill sidesteps some of the more controversial calls for reform in the municipal market, such as the repeal of the so-called Tower Amendment, which was added to the Securities and Exchange Act of 1934 and restricts the MSRB and SEC from collecting offering documents prior to bond sales"); see also Wall Street Reform and Consumer Protection Act of 2009, H.R. 4173, 111th Cong. (2009) (as passed by House, 223-202, Dec. 11, 2009) (historical financial regulatory bill).

262. Ackerman, *supra* note 261.

263. *Id.*

264. Interview with Michael McCarthy, Chairman of the Bond Mkt. Found, and Christopher Taylor, Exec. Dir. of the Mun. Sec. Rulemaking Bd., ConnectLive.Com, *Fireside Chat: Municipal Securities* (Sec. & Exch. Comm'n Historical Soc'y Apr. 20, 2004) (discussing the strong opposition that has cooled legislative efforts to directly regulate issuers), <http://www.connectlive.com/events/sechistorical/420%20>

Unfortunately, the delay will continue to frustrate the Commission's efforts to improve the access, quality, and level of information in order to create parity among corporate securities and municipal securities investors.²⁶⁵ In the opinion of Commissioners and academics alike, the Commission has nearly, if not already, exceeded its authority.²⁶⁶ As a result, efforts to regulate the market will continue to focus on municipal dealers.

The Commission is currently contemplating proposed amendments to rule 15c2-12 under the Exchange Act. These provisions would amend certain requirements regarding the information that a broker, dealer, or municipal securities dealer acting as an underwriter in a primary offering must reasonably determine that an issuer or underwriter has undertaken to support the veracity of the offering.²⁶⁷ The proposed amendments also address the municipal dealer's determination that an issuer has agreed to provide material event information within ten days and amendments to the list of events for which notice is required.²⁶⁸ Additionally, the MSRB filed a rule proposal with the Commission that would permit issuers and their designated agents to make certain voluntary submissions to EMMA.²⁶⁹

Finalizing these rules will be a substantial step forward in providing guidance to municipal bond participants by further defining material information and defining the reasonable period of time within which material information must be made available to market participants for continuing disclosure documents in the secondary market. The amendments continue past practices of regulating the municipal dealers in order to improve the municipal marketplace by encouraging issuers to voluntarily provide information.²⁷⁰ However, without any real enforcement measures, the bond market remains at a marked disadvantage.

V. CONCLUSION: CLIMATE DEBATE AS REGULATORY CANARY

In some ways, the climate change debate could be construed as a

Municipal%20Securities%20Transcript.htm.

265. Schapiro, *supra* note 92.

266. Schapiro, *supra* note 92.

267. Proposed Rules, *supra* note 71, at 12.

268. *Id.* at 12–13. *See also* Walter Speech, *supra* note 7, pt. III.

269. Notice of Filing of Proposed Rule Change Relating to Additional Voluntary Submissions by Issuers to the MSRB's Electronic Municipal Market Access System (EMMA®), Exchange Act Release No. 34-6015, 74 Fed. Reg. 36,294, 36,295 (July 22, 2009).

270. Gabaldon, *supra* note 9, at 765.

test of how close municipal bond disclosure documents can come to reaching a level of parity with corporate securities disclosure. Achieving substantive parity would meet an elusive goal long-championed by past and present Commissioners.²⁷¹ More importantly, parity would create patterns and practices for disclosure that would foster quality and consistency of information available to all investors. With the creation of EMMA, the Commission now has a repository for material information that municipal bond investors can access free of charge.²⁷² Proposed amendments to rule 15c2-12 seek to enhance the timing of information, expand the definition of material events that must be disclosed, and offer guidelines to enhance the underlying quality of information available.²⁷³ And even with the continuation of the Tower Amendments limiting the authority of the Commission, there is a growing trend in the market to place greater reliance on disclosure documents, and less emphasis on credit ratings, credit enhancements, and bond insurance to make determinations about the soundness of a municipal bond as an investment.²⁷⁴ All signs point toward a disclosure regime for the municipal bond market that may develop a substantive sophistication worthy of the \$2.8 trillion dollar space it occupies in the U.S. capital markets.

An issuer's assessment and methods for addressing its exposure to the financial risks of climate change should be a reasonably similar process for both corporate and municipal issuers in the energy sector. Because Municipal securities are debt, not equity, instruments, there are no shareholders and as a result no coalition or process for influencing the issuer's approach to managing and disclosing climate risk as material information. The question then remains whether the hundreds of corporate shareholder resolutions demanding climate change disclosure from the largest carbon emitters sufficiently illustrate that it is reasonably likely that the desires of corporate

271. See, e.g., Walter Speech, *supra* note 7 (noting past Commissioners' work); see also Schapiro, *supra* note 92; Christopher Cox, Chairman, U.S. Sec. & Exch. Comm'n, Statement at Open Meeting on Municipal Securities Disclosure (July 30, 2008), http://www.sec.gov/news/speech/2008/spch073008cc_msr.htm.

272. U.S. Sec. & Exc. Comm. Amendment to Municipal Securities Disclosure (Dec. 5, 2008) (codified at 17 C.F.R. pt. 240).

273. Proposed Rules, *supra* note 71.

274. See, e.g., Carl Dincesen, *Municipal Bonds: Time for a Closer Look*, SEEKING ALPHA, Mar. 26, 2009, <http://seekingalpha.com/article/127953-municipal-bonds-time-for-a-closer-look> (recommending that investors should not buy or sell without a full understanding of the bond's credit risk where the municipal market has been willing to accept weaker forms of pledge revenue and bond covenants, greater complexity, unfounded contract liabilities and circumnavigation of debt limits).

investors would be substantially similar to the desires of municipal bond investors.

An issuer's exposure to financial risk continues to drive discussions about the factors impacting a municipal bond's credit risk and likelihood of default. Under a carbon constrained regime, the financial risks of carbon regulation can and will have a significant impact on the bottom line of large carbon emitters that utilize the tax-exempt bond market.²⁷⁵ Impending regulations addressing each stage in the lifecycle of a coal-fired power plant will have substantial financial impacts on its operations. A risk assessment will likely include procedures to answer questions concerning the efforts to minimize the impact of CO₂ regulations and whether those initiatives will include offsets. Other considerations may include the formation of committees to assess implications of a cap-and-trade regime, impact from other regions, reactions to litigation, the impact of carbon credit regulations, and regulations governing coal combustion residuals, also known as coal ash, containing arsenic and heavy metals.²⁷⁶ As additional information emerges concerning the short- and long-term financial impacts of operating carbon-intensive energy projects, it will become increasingly clear that those well-positioned to mitigate those risks will be well-positioned to issue bonds that are less likely to default.²⁷⁷

In addition to the anticipated financial impacts of climate risks, the municipal bond market continues to withstand pressure from the

275. Ceres Petition, *supra* note 2.

276. See Testimony of Ken Ladwig, Sr. Research Mgr., Electric Power Research Inst., before the U.S. House of Representatives Subcommittee on Energy and Environment (Dec. 10, 2009) (discussing the possibility of coal ash addressed as a hazardous waste and the impact the regulation will have on owners and operators of coal fired power plants), http://energycommerce.house.gov/Press_111/20091210/ladwig_testimony.pdf.

277. See The Climate Institute, Topics/Core Issues: Water, <http://www.climate.org/topics/water.html> (last visited Mar. 31, 2010) (including an analysis of the impact of climate change on water decreased freshwater availability caused by disruption of the hydrological cycle and changes in precipitation); see generally Jason Morrison et. al, *Water Scarcity and Climate Change: Growing Risk for Business and Investors* (Ceres 2009), http://www.pacinst.org/reports/business_water_climate/full_report.pdf (last visited Mar. 8, 2010) (regarding the growing risks for businesses and investors due to water scarcity and climate change); see also Press Release, World Resources Institute, General Electric and Goldman Sachs Launch Initiative to Measure Water Risks and Opportunities (Dec. 7, 2009), <http://www2.goldmansachs.com/services/advising/environmental-markets/center-for-em/water-index.pdf> (includes an analysis of the impact of climate change on decreased freshwater availability caused by disruption of the hydrological cycle and changes in precipitation).

financial crisis of the last several years. Some experts speculate that many municipal bond issuers are likely to face defaults and possibly bankruptcies where the recession has sapped tax receipts with revenues falling for four consecutive quarters.²⁷⁸ The anticipated cracks in the municipal bond market caused by unfundable state deficits, growing gaps between revenue and spending, and increasing pressures to cover investment losses on higher pension obligations reveal frailties that will continue to undermine the myth that municipal bonds don't default.²⁷⁹

Even for municipal issuers that do not fund carbon intensive projects, the recent crisis in the financial markets has demonstrated the interconnectedness of market participants and how weaknesses in one area of the market can infect other areas. The lack of bond insurers available to guarantee bond offerings now is part of the legacy and continuing impact of the subprime crisis of mid-2008. Once guarantors of municipal bonds were downgraded and auctions for securities began to fail, interest rates on municipal securities converted to high default rates that have left struggling communities with billions of dollars in debt.²⁸⁰ While the energy sector occupies a small portion of the tax-exempt funding program, its projects are the most cost-intensive with total expenditures ranging as high as \$6 billion.²⁸¹ The speculative costs associated with the construction of coal-fired power plants may lead to disruptive debt restructuring and premature refinancing over the life of the bonds which could send a ripple effect throughout the market.²⁸²

Access to all sources of material information concerning an issuer's exposure to material financial risk is more important now than ever before. As these financial realities begin to surface in the market,

278. See Nicole Bullock, *Warning on U.S. Muni Market Threat*, FINANCIAL TIMES, Dec. 1, 2009, http://www.rockinst.org/newsroom/news_stories/2009/2009-12-01-Financial_Times.pdf.

279. Frederick J. Sheehan, *Dark Vision: The Coming Collapse of the Municipal Bond Market*, WELLING@WEEDEN REPRINTS Vol. 11, Issue 18 (Sept. 29, 2009), http://content.municipalbonds.com/wp-content/uploads/2009/11/1118_gp_sheehan_reprint.pdf.

280. See Don Van Natta, Jr., *Firm Acted as Tutor as it Sold Risky Deals to Towns*, N.Y. TIMES, Apr. 09, 2009, at A1 (discussing the escalated debt on Lewisburg, Tennessee bonds); see also Burnsed, *supra* note 23 (discussing the billion dollar bond default Jefferson County).

281. David Schlissel & Lucy Johnston, *The Financial Risks to Old Dominion Electric Cooperative's Consumer Members of Building and Operating the Proposed Cypress Creek Power Station*, SYNAPSE ENERGY ECONOMIES, INC., Apr. 22, 2009, <http://www.southernenvironment.org/uploads/fck/file/hampton%20roads%20coal%20plant/synapse%20economic%20report%20final%2004-22-09.pdf>.

282. Thompson Letter, *supra* note 134.

issuer discussions about what are perceived as the prohibitive costs of enhanced disclosure are likely to pale in comparison to the multi-billion dollar bond defaults that are occurring as a result of escalating interest rates on derivative transactions.²⁸³

283. Gabaldon, *supra* note 9, at 762 (discussing the necessary costs of disclosure, and whether specific disclosure is overkill, and not useful); *see also* Statement of the Commission Regarding Disclosure Obligations of Municipal Securities Issuers and Others, 59 Fed. Reg. 12748 (March 17, 1994) (discussing testimony from NABL, stating that if issuers choose to undertake the financial benefits of these sophisticated and complicated transactions, they can assume the financial costs of providing information).