

July 21, 2016

Mr. Brent J. Fields
Secretary

The Honorable Mary Jo White
Chair

U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-1090

Re: File No. S7-06-16

Dear Secretary Fields and Chair White:

The Center for International Environmental Law, Center of Concern, Environmental Investigation Agency-US, Foundation Earth, Friends of the Earth-United States, Greenpeace USA, Rainforest Action Network, and the Sierra Club welcome the opportunity to comment on the recent Securities and Exchange Commission (“SEC”) concept release on “Business and Financial Disclosure Required by Regulation S-K” (“Concept Release”).¹ In this Comment Letter, we address five issues: (1) the growth of socially-responsible investment (SRI) (Concept Release questions 15, 17); (2) the definition of materiality (question 6); (3) the materiality of sustainability information (questions 216-23); and (4) the limits of voluntary disclosure initiatives to meet the information needs of today’s investors, both SRI investors and non-SRI (questions 205-15, 216-18, 223). We also ask the SEC to issue mandatory sustainability disclosure regulations and offer preliminary suggestions on the main aspects that sustainability disclosure regulations would have to cover in order to inform investment decisions while effectively addressing environmental, social, and governance concerns (questions 21, 23, 219).

I. Introduction

This comment letter is submitted by a number of legal and environmental organizations with members throughout the United States. Specifically:

- Founded in 1989, the **Center for International Environmental Law (CIEL)** uses the power of law to protect the environment, promote human rights, and ensure a just and

¹ Professor Cynthia A. Williams, Osler Chair in Business Law at Osgoode Hall Law School, was the principal author of this letter. Sachin Seth, recent law graduate from Osgoode Hall Law School, and Kaitlin Cordes and Lauren Waugh Columbia Center on Sustainable Investment contributed to development of the letter. Additional drafting support was provided by the Center for International Environmental Law attorneys Muriel Moody Korol and Melissa Blue Sky, and legal interns Harjot Kaur Dhillon, and Kimberly A. Reynolds.

sustainable society. **CIEL** is dedicated to advocacy in the global public interest through legal counsel, policy research, analysis, education, training, and capacity building.

- **Center of Concern** researches, educates, and advocates from Catholic social tradition to create a world where economic, political, and cultural systems promote sustainable flourishing of the global community.
- Founded in 1989, the **Environmental Investigation Agency (US)** is an international campaigning organization focused on protecting the environment with intelligence. Utilizing undercover investigative techniques, an extensive advocacy network, and research and data analysis, **EIA** works worldwide to protect the Earth's forests, species, and climate for the benefit of people and wildlife.
- Founded in 2011, **Foundation Earth** is a think-tank – rethinking society from the ground up. It creates reports on major steps that can be taken to produce long-term sustainability via a true cost, zero-waste, circular economy grounded in general systems theory.
- **Friends of the Earth-United States** is one of 75 national member groups of Friends of the Earth International, a global network representing more than two million activists in 75 countries. In the United States, we advocate in the halls of Congress, in state capitals, and with community groups around the country. Our economic policy program works to expose and challenge the economic drivers of environmental destruction and spark transformation toward a more just and environmentally sustainable economic system.
- **Greenpeace USA (Greenpeace Inc.)** is the leading independent campaigning organization that uses peaceful protest and creative communication to expose global environmental problems and to promote solutions that are essential to a green and peaceful future.
- **Rainforest Action Network** campaigns for the forests, their inhabitants and the natural systems that sustain life by working to transform the global marketplace through education, grassroots organizing and non-violent direct action.
- **Sierra Club** is the oldest and largest grassroots environmental group in the United States, with over 1.2 million members and supporters. Sierra Club's mission is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.

Each of these organizations is part of a movement of investors and the public who care about the ecological and human impacts of investments. More directly, as stakeholders whose work is focused on creating an economic system with core values of social justice, environmental protection and scientific integrity, our organizations recognize that it is critical that the capital markets operate to allocate capital to companies that are motivated to operate consistently with those goals. Capital market regulation in the United States depends on accurate

information to direct capital, and to date there is insufficient environmental, social, and governance (ESG) data for the markets to function properly in this regard.² None of the commenting organizations think that markets alone can solve the systemic problems that drive sustainability concerns, but we do recognize the importance of well-regulated markets in supporting the necessary transition to a socially-just, sustainable economy.

II. SRI Investment

A. The Growth of SRI Investment

In order to understand the importance of sustainability data to investors, it is important to take account of the rapid growth of socially-responsible impact investment (SRI), although, as discussed below, it is by no means only, or even primarily, SRI investors who need and are seeking better sustainability disclosure. When the SEC last considered the issue of expanded social and environmental disclosure in a comprehensive fashion, between 1971 and 1975, there were two active “ethical funds” which by 1975 collectively held \$18.6 million, or 0.0005% of mutual fund assets.³ Today, \$6.57 trillion of assets are managed with SRI parameters in the United States, representing close to 18% of money under professional management.⁴

As shown below, SRI investing has grown particularly rapidly in the past 20 years. That trend shows no signs of abating. Investors and the public continue to display increasing concerns about the environmental and societal impacts of business practices, both as a reflection of their ethical values and out of a more nuanced understanding of the ways in which environmental and social considerations can influence risk exposure and shareholder value. Thus, the factual context in which the SEC is now considering the question of promulgating ESG disclosure regulations is substantially different than its consideration in the early 1970s.⁵

² The SEC’s Concept Release uses the term “sustainability disclosure” in its request for comments, recognizing that the term “encompasses a range of topics, including climate change, resource scarcity, corporate social responsibility, and good corporate citizenship. These topics are characterized broadly as environmental, social, or governance (“ESG”) concerns.” Concept Release, at 206, quoting *Sustainability goes Mainstream: Insights into investor views*, PricewaterhouseCoopers LLP (May 2014), available at <https://www.pwc.com/us/en/governance-insights-center/publications/sustainability-goes-mainstream-investor-views.html>; *Exchange Guidance and Recommendation—October 2015*, World Federation of Exchanges (Oct. 2015), available at <http://www.sseinitiative.org/wp-content/uploads/2015/11/WFE-ESG-Recommendation-Guidance-Oct-2015.pdf>. As does the SEC, we will use the terms “sustainability” and “ESG” interchangeably to refer to the broad range of social, environmental, or corporate governance topics that may be of concern to investors in addition to financial results in their investing and voting decisions.

³ See Cynthia A. Williams, *The Securities and Exchange Commission and Corporate Social Transparency*, 112 Harv. L. Rev. 1197, 1267 (1999) (providing data showing \$18.5 million of SRI assets under professional management as of 1975).

⁴ US SIF Foundation, *2014 Trends Report Executive Summary: 2014 Report on Sustainable and Responsible Investing Trends* 12-13 (2014).

⁵ The SEC in its Concept Release relies on the logic of its 1970s examination to suggest caution regarding expanded sustainability disclosure now; thus, the issues raised in that series of proceedings are still relevant. See Concept Release, at 209-212; see Williams, *supra* note 3, at 1246-1273 (discussing and analyzing SEC proceedings in the 1970s concerning expanded social and environmental disclosure).

B. Definition of SRI investing

SRI investing is an investment approach that actively considers ESG issues when making and monitoring investment portfolios.⁶ These ESG considerations encompass a wide variety of issues, and thus SRI investing is sometimes referred to more specifically as community investing, ethical investing, green investing, mission-related investing, sustainable investing, socially conscious investing, values-based investing, or impact investment, among many others.⁷ SRI investors typically incorporate both financial analyses and ethical and moral values into investment and voting decisions.⁸

C. SRI assets under management

Data on the growth of SRI investment is available from the leading SRI industry association, the U.S. Social Investment Forum. (To our knowledge the SEC has not published data on this topic, nor are we aware of the SEC having studied the significance of the rapid increase in SRI funds under management.) SRI assets under management have increased ten-fold in the past 20 years; between 1995 and 2014, SRI assets under management have increased from \$639 billion to over \$6.57 trillion, an increase of 929%,⁹ with a compound annual growth rate of 13.1%.¹⁰ The total U.S.-domiciled assets using SRI strategies in 2014 of \$6.57 trillion comprise nearly 18% of the \$36.8 trillion in assets under management in the U.S. in 2014.¹¹

The magnitude of this rapid increase in SRI funds under management can perhaps be appreciated from the following table:

	1/1/2012	1/1/2014
US-domiciled assets under management engaged in sustainable, responsible and impact investing strategies ¹²	\$3.74 trillion	\$6.57 trillion
All professionally managed assets in the United States (SRI + non-SRI) ¹³	\$30.9 trillion	\$36.8 trillion

⁶ *Socially Responsible Investment – SRI*, Investopedia, <http://www.investopedia.com/terms/s/sri.asp> (last visited July 15, 2016).

⁷ *SRI Basics*, The Forum for Sustainable and Responsible Investment, <http://www.ussif.org/sribasics> (last visited July 15, 2016).

⁸ Steven J. Schueth, *History of SRI*, The Conference on Sustainable, Responsible, Impact Investing, <http://www.sriconference.com/about/what-is-sri/history-of-sri.html> (last visited July 15, 2016).

⁹ US SIF Foundation, *supra* note 4.

¹⁰ *Id.*

¹¹ *Id.* The SIF report describes its research methodology as follows. \$6.20 trillion of assets are held by 480 institutional investors, 308 money managers, and 880 community investment institutions who apply ESG criteria in their portfolio selection. Two-hundred-and-two institutional investors and money managers who filed or co-filed shareholder resolutions on ESG issues in publicly traded companies between 2012 and 2014 collectively held \$1.72 trillion in assets. The overall \$6.57 trillion total is thus calculated from combining the ESG-screened portfolio data with the data on ESG resolution filers, and then eliminating double-counting when shareholders or asset managers are using both strategies. *Id.* at 12.

¹² US SIF Foundation, *2014 Report on US Sustainable, Responsible and Impact Investing Trends* 12 (2014), available at <https://www.sec.gov/comments/disclosure-effectiveness/disclosureeffectiveness-27.pdf>.

D. Reasons for the rapid increase in SRI investment

One reason for the explosive growth in SRI investment is that many investors have recognized that a more proactive approach to managing environmental and social issues promotes shareholder value and a more accurate assessment of risk.¹⁴ In addition, BlackRock, the world's largest asset manager with \$4.6 trillion of assets under management as of December 31, 2015,¹⁵ has identified four other key market drivers accelerating the SRI investing trend. These include: shifting demographics, with younger investors desiring more positive impact from their investments; stakeholder advocacy towards responsible investing; expanding opportunities for SRI investment; and government policies in many countries that encourage investment in renewable energy sources or require reporting on ESG risks.¹⁶

Students are demanding that university endowments divest from fossil fuel assets, and endowments are listening.¹⁷ Millennials are especially driving demand to invest in more socially responsible ways.¹⁸ They care about SRI investing after experiencing the negative effects of irresponsible investing that led to the 2008 recession.¹⁹ Further, millennials have an expansive sense of global political awareness from growing up with the internet and increased access to information, and thus tend to have a greater understanding of socially responsible investments' positive impact.²⁰ This generation will likely grow the pool of investors who care about socially responsible investing.²¹

Commenting organizations have also played a role in promoting SRI investing, and in advocating for better, clearer, ESG data to be incorporated into the market to meet the specific informational needs of SRI investors. CIEL has launched a report calling for credit rating agencies to begin incorporating climate risk into credit assessments.²² CIEL also submitted

¹³ E-mail from Meg Voorhees, Dir. of Research, US SIF, to Cynthia Williams, Osler Chair in Business Law, Osgoode Hall Law Sch. (July 13, 2016, 04:40PM EST) (on file with author) (data gathered by Cerulli Assoc. and reported in US SIF Foundation, *supra* note 12).

¹⁴ See, e.g., CalPERS, *ESG*, <https://www.calpers.ca.gov/page/investments/governance/sustainable-investing/esg> (last updated June 29, 2015); Investor Network on Climate Risk, *2012 Investor Action Plan on Climate Change Risks & Opportunities*, <https://www.ceres.org/investor-network/investor-summit/summit-files/2012-investor-action-plan> (last visited July 21, 2016).

¹⁵ *Who We Are*, Blackrock, <https://www.blackrock.com/corporate/en-nl/about-us> (last visited July 15, 2016).

¹⁶ *Market Drivers*, Blackrock Impact, <http://www.blackrockimpact.com/> (last visited July 15, 2016).

¹⁷ ClearBridge Investments, *The Future of Investing ESG Portfolios: Changing Beliefs, Perceptions and Goals*, Advisor Perspectives (May 12, 2015), <http://www.advisorperspectives.com/articles/2015/05/12/the-future-of-investing-esg-portfolios-changing-beliefs-perceptions-and-goals>.

¹⁸ *Id.*

¹⁹ Angelo Young, *Socially Responsible Investing for Millennials: How to Pick Retirement Funds that Match Your Values*, IBTimes (Oct. 8, 2015), <http://www.ibtimes.com/socially-responsible-investing-millennials-how-pick-retirement-funds-match-your-2133437>.

²⁰ *Id.*

²¹ *Id.*

²² See (Mis)Calculated Risk and Climate Change: Are Rating Agencies Repeating Credit Crisis Mistakes?, Center for International Environmental Law (May 2015), available at <http://www.ciel.org/wp->

comments advising the Task Force on Climate-related Financial Disclosures.²³ Friends of the Earth has developed materials to guide individual investors about SRI pension options, and has encouraged employers to provide SRI options within 401(k) or 403(b) offerings.²⁴ On June 22, 2015, Greenpeace USA, in an effort to promote sustainable industries, notified the SEC that Consol Energy may not have adequately disclosed risks, including declining demand for coal, in the initial public offering (IPO) of CNX Coal Resources, a master limited partnership that would manage Consol's thermal coal operations in Pennsylvania.²⁵ It was reported on June 30, 2015 that Consol revised the terms of the IPO and decreased the number of units of CNX Coal Resources being offered from 8 to 5 million units.²⁶ Sierra Club has provided firms like Harris Bretall Sullivan & Smith with its proprietary environmental screens to apply to the firm's equities.²⁷ Sierra Club has also drawn upon its established social and environmental guidelines to help in the development of two SRI mutual funds, the Sierra Club Stock Fund and the Sierra Club Balanced Fund.²⁸

E. ESG data is important for SRI and commenting organizations

The ESG risk factors of investments are material for SRI investors beyond their financial implications. Indeed, to many SRI investors ESG factors are more important than short-term financial metrics in both voting and portfolio construction. And while investment returns matter, the implications of the use of SRI assets to promote a just and sustainable global community matter as well.

SRI investors' needs for clear, consistently-presented, comparable ESG data are not being met by the information being produced by the combination of current mandatory disclosure under Regulation S-K and companies' voluntary sustainability reports. A regulatory mandate from the SEC for the disclosure of ESG data is needed.

content/uploads/2015/10/ciel-rpt-credits-10.15-webv2smaller.pdf. Fixed-income investors also have a need for better, clearer sustainability information to be available in the market, given that they often have long-term exposures to credit quality.

²³ See *CIEL Comments Submitted To FSB Task Force on Climate Related Disclosures*, Task Force on Climate-related Financial Disclosures (Mar. 31, 2016) (on file with author).

²⁴ See *Green up your 401K*, Friends of the Earth, <http://action.foe.org/content.jsp?key=3801> (last visited July 15, 2016).

²⁵ Greenpeace USA, SEC Warned that Consol Coal IPO Overstates Coal Demand with "Incomplete and Misleading Disclosures, June 22, 2015, available at <http://www.greenpeace.org/usa/news/sec-warned-that-consol-coal-ipo-overstates-coal-demand-with-incomplete-and-misleading-disclosures/>.

²⁶ Anya Litvak, *CNX Coal to Start Trading July 1*, Pittsburgh Post-Gazette June 30, 2015, available at <http://powersource.post-gazette.com/powersource/companies/2015/06/30/CNX-Coal-to-start-trading-July-1/stories/201506300284>; Pittsburgh Business Times, *Consol revises its coal IPO a second time*, June 30, 2015, available at <http://www.bizjournals.com/pittsburgh/blog/energy/2015/06/consol-revises-its-coal-ipo-a-second-time.html>.

²⁷ William Baue, *Sierra Club Launches SRI Mutual Funds*, The Conference on Sustainable, Responsible, Impact Investing (Jan. 15, 2003), <http://www.socialfunds.com/news/article.cgi?sfArticleId=1006>.

²⁸ *Id.*

III. Materiality

As acknowledged by the SEC in its Concept Release, the statutory authority of the Commission with respect to disclosure is broad. Congress, in both the Securities Act and the Exchange Act, “authorize[d] the Commission to promulgate rules for registrant disclosure as necessary or appropriate in the public interest or for the protection of investors.”²⁹ Generally the Commission has used that authority in its disclosure rules “to protect investors, facilitate capital formation and maintain fair, orderly and efficient capital markets.”³⁰

The concept of “efficient capital markets” includes informational efficiency (market mechanisms able to process new information quickly and with broad distribution) and allocative efficiency (distributing capital resources to their highest value use at the lowest cost and risk). Disclosure is obviously relevant to both efficiency goals, the latter being particularly relevant in the discussion of requiring better sustainability disclosure. As Mark Carney, Governor of the Bank of England has put the point with respect to one major sustainability challenge, climate change, with “consistent, comparable, reliable, and clear disclosure” of firms’ “carbon change footprint and how they manage their risks and prepare (or not) for a 2 degree world,” both markets and governments can better manage the transition to a low-carbon future by supporting the allocation of capital to its risk-adjusted highest-value use in that transition.³¹

The intellectual workhorse in securities law is the concept of “materiality.” As defined by the U.S. Supreme Court in *TSC v. Northway*,³² material information is information that a “reasonable shareholder would consider important in deciding how to vote.”³³ As the Court stated, “[p]ut another way, there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of information made available.”³⁴ This concept is not self-executing, though. What is material depends on the perceptions of reasonable investors of what information is already available in the market, and how any new or omitted information changes those reasonable investors’ perceptions of the quality of management, when voting, or the value of a company or its shares, when investing or selling.

In promulgating disclosure regulations under Regulation S-K, the SEC has predominantly, but not exclusively, sought to require the disclosure of economically material information (or, more accurately, information it construed as economically material).³⁵ In contrast to any economic materiality basis for disclosure, though, the SEC has promulgated corporate governance disclosure regulations, for instance requiring statistics on board members’ attendance at meetings, and the committee structure of the board of directors, with the stated

²⁹ SEC Concept Release, at 22.

³⁰ *Id.* at 23.

³¹ Mark Carney, Governor, *Breaking the tragedy of the horizon: climate change and financial stability*, Bank of England 14 (Sept. 29, 2015), <http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx#>.

³² 426 U.S. 438 (1976).

³³ *Id.* at 449.

³⁴ *Id.*

³⁵ See Williams, *supra* note 3, at 1264- 66.

purpose of encouraging the board to be more active and independent in monitoring management's actions with respect to law compliance.³⁶ It has required extensive disclosure of executive compensation, starting in the early 1990s, as a response to public frustration with the levels of executive compensation.³⁷ Indeed, with respect to illegal actions by members of management or the company, the SEC has used a qualitative approach to the definition of materiality (properly, in our view), establishing an almost *per se* materiality standard even where the economic consequences of the illegal actions were trivial.³⁸ So clearly the SEC recognizes it has the statutory authority to promulgate disclosure requirements beyond those that seem to be financially material in a short-term sense. The touchstone is the "reasonable investor," and what information the reasonable investor is relying upon in voting and investment.

So, would it have been reasonable for investors to have wanted more clearly-comparable information about BP plc's safety practices in its U.S. operations, using well-constructed, industry-standard metrics, prior to the Deepwater Horizons tragedy in the Gulf of Mexico in 2010? Would it have been reasonable for investors to compare that safety data, had it been available, with other oil majors' safety records using well-constructed, industry-standard metrics? There was some information in the market that could have suggested BP was a risky investment from a safety perspective: information was available in BP's annual reports about its continuing efforts to implement the recommendations from the U.S. Chemical Safety and Hazard Investigation Board's evaluation of BP's previous tragedy, in 2005 in Texas City, where BP's operations had led to an explosion that killed 15 people and injured an additional 180.³⁹ Yet, without some benchmarks and metrics, it would be difficult for investors to compare BP's safety practices with other oil majors. Easily comparable information about companies' safety records would have significantly altered the total mix of information available about BP, a company that was promoting itself as "Beyond Petroleum" and a corporate responsibility leader.⁴⁰

Not only did BP's operations lead to an explosion that cost 11 people their lives, tens of thousands of people their livelihood, massive environmental damage, and over \$ 60 billion in financial losses to the company due to cleanup costs and from liability judgments,⁴¹ it also led to stock prices that underperformed other fossil fuel companies' share prices by approximately 37%

³⁶ *Id.*, at 1265 & fn. 359.

³⁷ *Id.*, at 1266 & fn. 363.

³⁸ *Id.*, at 1265 & fn. 361 (citing Division of Corporation Finance's Views and Comments on Disclosure Relating to the Making of Illegal Campaign Contributions by Public Companies and/or their Officers and Directors, Securities Act Release No. 5466, Exchange Act Release No. 10673, 3 SEC Docket 647, 648 (Mar. 19, 1974) (stating SEC's view that a conviction of a member of management for making illegal campaign contributions is a material fact to be disclosed)). See also *In re Franchard Corp.*, 42 S.E.C. 163, 172 (1964) (Cary, Chair) (stating that the integrity of management "is always a material factor.").

³⁹ See U.S. Chemical Safety and Hazard Investigation Board, *BP America Refinery Explosion Investigation Report: Refinery Explosion and Fire (15 killed, 180 injured)* (Mar. 2007), available at: <http://www.csb.gov/bp-america-refinery-explosion/>.

⁴⁰ See Raj Thamoorthram & Maxime Le Floc'h, *The BP Crisis as a 'Preventable Surprise': Lessons for Institutional Investors*, 5(1) *Rotman Int'l J. of Pension Mngmt.* 68 (2012), available at <http://www.ssrn.com/abstract=2064738>.

⁴¹ Cain Burdeau, *BP estimates cost of 2010 Gulf oil spill at \$61.6 billion*, *Washington Post*, July 14, 2016, available at https://www.washingtonpost.com/national/energy-environment/bp-estimates-cost-of-2010-gulf-oil-spill-at-616-billion/2016/07/14/7b045012-4a14-11e6-8dac-0c6e4acce5b1_story.html.

for five years.⁴² So, socially and environmentally-relevant information, based on standard data-collection and industry disclosure metrics, also would have turned out to be financially-relevant information.

Or, take another example. Data summarized in an article in a pre-eminent, peer-reviewed academic management journal, the *Academy of Management Review*, show slavery and debt bondage are continuing problems, estimated to affect between 12 to 30 million people worldwide, in agriculture, mining and other extractives industries, construction, brickmaking, fishing in South-East Asia, carpet weaving, domestic work and other industries.⁴³ Would it be reasonable for investors today to care about whether the companies they hold in their investment portfolios have slavery or debt bondage in their supply chains?

We submit that yes, reasonable investors today could care and often do care about these and many other facts about companies' responsibilities to the environment and the people affected by their actions. Many investors care because these types of issues have short-term financial implications, as did the lack of a process safety culture at BP.⁴⁴ Other investors care because of those investors' moral commitments not to support modes of production that are excessively harmful or inconsistent with human rights and dignities. Society's expectations of companies' social and environmental responsibilities have changed over the four decades since the SEC first considered requiring better disclosure of environmental and social facts, as has the composition of the investing public. Today, better sustainability disclosure is required to meet the needs of today's reasonable investors.

The SEC need not start from scratch in developing guidance for companies to make materiality determinations about ESG factors. A number of voluntary organizations are already working with companies and investors to produce industry-specific disclosure frameworks, based on the most salient ESG issues in each industry and the contextual sustainability data that investors seek. These initiatives, such as the Global Reporting Initiative ("GRI") or the Sustainability Accounting Standards Board ("SASB"), usefully balance the costs of disclosure with the utility of the information being produced, while also providing sufficient guidance to companies about what to disclose. We'll further discuss in Section VIII how we think the SEC could build upon these frameworks to develop clear, comparable, efficient ESG disclosure requirements.

IV. More investors today consider ESG information as material

A. Global Investor coalitions and "mainstream investors" comments

⁴² See Gordon L. Clark, Andreas Feiner & Michael Viehs, *From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance* 14 (March 2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2508281 (discussing BP as a case study showing the financial effects of social and environmental risk; stock price under-performance analyzed through March 2015).

⁴³ See Andy Crane, *Modern Slavery as a Management Practice: Exploring the Conditions and Capabilities for Human Exploitation*, 38(1) *Acad. Mngmt. Rev.* 49, 51 (2013).

⁴⁴ See Thamotheram & Le Floc'h, *supra* note 40 (discussing BP's lack of a process safety culture).

Today, investors with \$60 trillion of capital are committed to incorporating ESG factors in their investing and voting decisions as part of the U.N. Principles for Responsible Investment (“PRI”).⁴⁵ Institutions, pension funds, sovereign wealth funds and mutual funds with \$95 trillion of invested capital support the Climate Disclosure Project’s (“CDP”) annual survey of companies regarding their greenhouse gas emissions and strategies for addressing climate change.⁴⁶ Global assets under management utilizing sustainability screens, ESG factors, and corporate engagement/shareholder action have risen 61% since 2012, to US \$21.4 trillion at the start of 2014.⁴⁷

The statements of leading U.S. investors and executives also emphasize the importance of having access to better ESG data. BlackRock, the world’s largest asset manager, has indicated its recognition of the strategic value of ESG information, and has advocated public policy changes to mandate the provision of such information with appropriate safe harbors.⁴⁸ Since 2009, Bloomberg data terminals now incorporate ESG data that Bloomberg sells to securities dealers, brokers, and investors around the world.⁴⁹ Even as Bloomberg sells what information it can confidently assure as accurate, its CEO, Michael Bloomberg, has said that:

[F]or the most part, the sustainability information that is disclosed by corporations today is not useful for investors or other decision-makers. . .

To help address this issue, I became chair of the Sustainability Accounting Standards Board (SASB) in 2014, and last year, I agreed to build on that work by chairing the new Task Force on Climate-Related Financial Disclosures (TCFD). . . The market cannot accurately value companies, and investors cannot efficiently allocate capital, without comparable, reliable and useful data on increasingly relevant climate-related issues . . .⁵⁰

These are just a few of the indications of growing shareholder interest in sustainability factors affecting different industries, and the need for better ESG data.⁵¹

⁴⁵ *About the PRI*, U.N. Principles for Responsible Investment, <https://www.unpri.org/about> (last visited July 21, 2016).

⁴⁶ *Catalyzing business and government action*, Carbon Disclosure Project, <https://www.cdp.net/en-US/Pages/About-Us.aspx> (last visited July 21, 2016).

⁴⁷ Global Sustainable Investment Alliance, *The Global Sustainable Investment Review 2014* 3, 7-8, available at http://www.gsi-alliance.org/wp-content/uploads/2015/02/GSIA_Review_download.pdf.

⁴⁸ See BlackRock, *Viewpoint, Exploring ESG: A Practitioners Perspective* (June 2016), available at: <http://www.blackrock.com/corporate/en-fi/literature/whitepaper/viewpoint-exploring-esg-a-practitioners-perspective-june-2016.pdf>.

⁴⁹ Bloomberg, *Impact Report Update 2015* 2, (2015), available at https://www.bbhub.io/sustainability/sites/6/2016/04/16_0404_Impact_Report.pdf.

⁵⁰ *Id.*

⁵¹ Other major institutional investors managing successful funds using ESG factors include TIAA-CREF, Parnassus, Vanguard FTSE, and Eventide Gilead. Nellie S. Huang, *7 Great Socially Responsible Mutual Funds*, Kiplinger (Mar. 2016), <http://www.kiplinger.com/article/investing/T041-C009-S002-7-great-socially-responsible-mutual-funds.html?page=3>. In 2015, Morningstar began including ESG impact scores for all mutual funds and exchange-traded funds, noting that this addition was driven by investor demand and interest in ESG factors. Jeff Benjamin, *Morningstar Shines an ESG light on all mutual funds and ETFs*, InvestmentNews (Aug. 4, 2015), <http://www.investmentnews.com/article/20150814/FREE/150819944/morningstar-shines-an-esg-light-on-all-mutual-funds-and-etfs>.

B. Evidence from shareholder resolutions

Over 200 institutional investors and money managers (owning a collective total of at least \$1.7 trillion) filed or co-filed shareholder resolutions on ESG issues between 2012 and 2014.⁵² Climate change has become a particularly salient topic for shareholder resolutions; from 2001 to 2015 there has been an increase in North American shareholder resolutions related to climate change disclosure, from less than 10 to 167.⁵³

Of particular note, ESG disclosure resolutions broke records in 2015 and 2016, the majority of which were regarding political spending and climate change issues.⁵⁴ In 2015, BP shareholders voted 98% in favor of a resolution committing BP to provide information on climate change resilience.⁵⁵ Shell shareholders have similarly voted 99% in favor of a disclosure resolution on climate resilience.⁵⁶ These percentages ensure that the shareholder proposals are legally binding on BP and Shell management.⁵⁷ Shareholders at ExxonMobil's and Chevron's annual meetings in 2016 also registered strong support for climate disclosure resolutions. Exxon shareholders voted 38% in favor of a proposal to publish a report on the impacts of climate change policies.⁵⁸ Chevron shareholders voted 41% in favor of a similar proposal to publish long-term impacts of possible climate change policies.⁵⁹ These votes showed more shareholder support for climate-related proposals at Exxon and Chevron than in any previous shareholder meeting.⁶⁰ Collectively these voting results show that the shareholders of companies particularly vulnerable to pressures on their business model from climate change want to know more than companies are currently disclosing about what management is doing to position the company in the future.

⁵² *SRI Basics*, *supra* note 7.

⁵³ *Investor Network on Climate Risk, Shareholders Spur Action on Climate Change: Company Commitments from 2014 & 2015 Proxy Seasons* 3, 4 (Ceres) (2015), available at <http://www.ceres.org/resources/reports/shareholders-spur-action-on-climate-change-company-commitments-from-the-2014-2015-proxy-seasons>.

⁵⁴ Press Release, *Record Number of Climate and Corporate Political Spending Resolutions Dominate 2016 Shareholder Votes*, Proxy Preview (Mar. 8, 2016), available at http://www.proxypreview.org/wp-content/uploads/2016/03/proxy_preview_release_record_number_climate_corporate_political_spending_resolutions_dominant_2016_shareholder_votes_20160308.pdf (providing data on 2016 shareholder resolutions); Press Release, *Record Number of Social and Environmental Shareholder Resolutions Filed in 2015*, Proxy Preview (Mar. 5, 2015), available at <http://www.proxypreview.org/wp-content/uploads/2015/03/release-record-number-of-social-and-environmental-shareholder-resolutions-filed-in-2015.pdf> (providing data on 2015 shareholder resolutions).

⁵⁵ Terry Macalister, *BP Promises more Transparency on Climate Change issues*, *The Guardian*, Apr. 16, 2015, available at <https://www.theguardian.com/business/2015/apr/16/bp-promises-more-transparency-on-climate-issues>.

⁵⁶ ClientEarth, *Shell follows BP with climate change resolution* (May 19, 2015), <http://www.clientearth.org/shell-follows-bp-with-climate-change-resolution/>.

⁵⁷ ClientEarth, *98% vote for climate change resolution at BP AGM* (Apr. 16, 2015), <http://www.clientearth.org/98-vote-for-climate-change-resolution-at-bp-agm/>.

⁵⁸ Exxon, *Notice of Annual 2016 Proxy Meeting and Proxy Statement* 69, (2016) (listing details of proxy item 12); Exxon, *Summary of 2016 Proxy Voting Results* (2016) (listing voting results of proxy item 12).

⁵⁹ Chevron, *2016 Proxy Statement* 70 (2016) (listing details of proxy item 7); Chevron Corporation, *U.S. S.E.C. Form 8-K* (Proxy Item 7) (2016) (listing voting results of all proxy statements).

⁶⁰ Bradley Olson & Nicole Friedman, *Exxon, Chevron Shareholders Narrowly Reject Climate-Change Stress Tests*, *The Wall St. Journal*, May 25, 2016, available at <http://www.wsj.com/articles/exxon-chevron-shareholders-narrowly-reject-climate-change-stress-tests-1464206192>.

V. The materiality of sustainability information

One reason that more investors today are seeking better ESG disclosure is because in today's world sustainability factors present economically material risks, and possibly opportunities, for companies in almost every industry and every part of the world. There are many reasons for this development, a number of which we discuss here: (A) Companies managing ESG factors well can outperform other companies; (B)(1) the physical and regulatory changes associated with climate change present material financial risks in almost every industry and throughout the world; (2) the resource pressures on global ecosystems present material financial risks in many industries; and (3) changing environmental and social justice norms are creating acute pressures on companies in many industries. The ability of NGOs to communicate about companies' actions throughout the world and the increasingly interdependent global supply chains for products across a range of industries exacerbate these material financial risks.

A. Managing ESG Matters Well Can Produce Positive Financial Outcomes

While discussions of sustainability and ESG disclosure often frame the issues for investors in terms of risks and potential costs of inattention to sustainability issues, as measuring techniques improve and mediating variables are identified, certain results are emerging that substantiate the early (2003) meta-analytic result of Marc Orlitzky, Frank Schmidt, and Sara Rynes that sustainability investments (which they construe under the rubric of "corporate social responsibility") can pay off.⁶¹ In a comparative paper evaluating attention to sustainability across countries, Hao Liang and Luc Renneboog show that better sustainability performance also increases firm value, as measured by Tobin's Q.⁶² This finding is consistent with the results of Bob Eccles, Ioannis Ioannou, and George Serafeim, who demonstrate that companies with a strategic focus on ESG issues show financial outperformance, and stock market and accounting value premiums, based on eighteen years' worth of observations of 90 matched pairs of high-sustainability versus low-sustainability companies.⁶³ More recent work by Serafeim and colleagues Mozaffar Khan and Aaron Yoon show that management attention to a range of sustainability risks yields financial outperformance of 3% to 8%, evaluated within industries using specific concepts of industry-relevant materiality being developed in the United States by the SASB.⁶⁴

A comprehensive review in 2014 of empirical studies of the financial results of corporate responsibility by Gordon Clark, Andreas Feiner and Michael Viehs found that 90% of studies

⁶¹ This study is a widely-cited (over 3,300 citations to 2015) meta-analysis of 52 prior studies, and it shows better financial performance of firms with better environmental and social records, although the magnitudes of the financial correlations, while statistically significant, are modest. See Marc Orlitzky, Frank L. Schmidt, & Sara L. Rynes, *Corporate Social and Financial Performance: A Meta-Analysis*, 24 *Org. Stud.* 403 (2003).

⁶² See Hao Liang & Luc Renneboog, *Finance and Society: On the Foundations of Corporate Social Responsibility*, Tilburg Univ. CentER for Econ. Research, European Corporate Governance Inst. (ECGI) Finance Working Paper No. 394/2013 (Jan. 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2360633.

⁶³ See Robert G. Eccles, Ioannis Ioannou, & George Serafeim, *The Impact of Corporate Sustainability on Organizational Processes and Performance*, 60:11 *Mngmt. Science* 2835 (2014).

⁶⁴ See Mozaffar Khan, George Serafeim, & Aaron Yoon, *Corporate Sustainability: First Evidence on Materiality*, Harv. Bus. Sch. Working Paper 15-073 (Mar. 2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2575912.

show that sound sustainability standards lower firms' cost of capital; 80% of studies show that the stock price performance of companies is positively influenced by good sustainability practices; and 88% of studies show that better E, S, or G practices result in better operational performance.⁶⁵ The answers are thus becoming clearer on the empirical questions related to the positive financial effects of attention to sustainability issues.

There are a number of implications that could be drawn from these studies for the question of mandatory ESG disclosure. First, voluntary disclosure efforts can be expected to produce some ESG data, since it is in firms' interests to publicize their positive results. Second, though, since most ESG disclosure is voluntary, firms may not provide a balanced view, and may not discuss the bad with the good. Third, and most relevant for these purposes, these results show the financial (quantitative) materiality of some types of sustainability practices.

Disclosure regimes well-designed to capture these data are of potential value to both SRI and non-SRI investors. To the extent that SRI investors' concerns are broader than those of non-SRI investors, or take account of trends with a longer time-frame to eventuate, disclosure frameworks to be discussed in Part VIII below can accommodate both types of investors without recourse to the disclosure of clearly insignificant information or formulaic, uninformative, boiler-plate.

B. Managing ESG Matters Badly Can Produce Negative Financial Outcomes

1. Climate change risk

a. Five types of risk

Climate change has arguably created the most encompassing range of risks facing companies, their investors, and citizens and communities generally. There are five types of risks that arise from the meteorological and geophysical events, economic and social trends, and future uncertainties that can be attributed to climate change. Each of these risks present differential implications depending on the industry and location of a company's operational facilities throughout the world.

Regulatory Risks

The agreement concluded during the 21st Conference of the Parties of the United Framework Convention on Climate Change ("COP21") in Paris in December, 2015, demonstrates a global consensus to address the risks associated with climate change.⁶⁶ The

⁶⁵ See Gordon L. Clark, Andreas Feiner & Michael Viehs, *From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance* (2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2508281. We submit that this report is an excellent resource for the SEC to consult because it analyzes the empirical literature on the financial effects of sustainability initiatives by type of initiative (E, S, or G) and by various financial measures of interest (cost of debt capital; cost of equity capital; operating performance; and effect on stock prices). The study also identifies scientifically sound meta-analyses and literature reviews.

⁶⁶ See *The Paris Agreement*, U.N.F.C.C.C., http://unfccc.int/paris_agreement/items/9485.php (last visited July 15, 2015).

underlying goal of the Paris Agreement -- to limit the warming of the Earth to “well under” 2° Celsius⁶⁷, and “pursuing efforts” to limit to 1.5° Celsius⁶⁸ -- will have a significant effect on companies that operate in the countries that ratify the Agreement and implement their “nationally determined contributions” (“NDCs”).⁶⁹

In the wake of the Paris Agreement, businesses that operate in carbon-intensive industries (such as fossil fuels, coal, non-renewable energy production, transportation, cement, and agriculture, for instance) will face risks to their business models posed by regulation aimed at encouraging the necessary transition to a low-carbon economy. Most notably, the International Energy Agency (“IEA”) estimates that no more than one-third of current global fossil fuel reserves can be burned before reaching that temperature target.⁷⁰ Thus, as countries take action to meet this collective target, two-thirds of the world’s fossil fuel reserves are at risk of becoming “stranded assets,” jeopardizing an estimate \$6 trillion of dollars of shareholder value.⁷¹

SASB is in the process of developing sustainability accounting standards with the collaboration of industry and investors in the U.S., and has found that 72 of 79 industries it evaluated face financial pressures from climate change and regulatory efforts to address it, although the implications are different for different industries.⁷² In the wake of the Paris Agreement, it is likely that businesses that operate in carbon-intensive industries (such as fossil fuels, coal, non-renewable energy production, transportation, cement, and agriculture) will face risks to their business models posed by regulation aimed at encouraging the necessary transition to a low-carbon economy. Similarly, the credit rating agency Moody’s has recently announced that it will analyze carbon transition risks when analyzing companies’ credit worthiness, taking into account all commitments made during last year’s Paris Agreement.⁷³

⁶⁷ Haydn Watters, *5 key points in Paris Agreement on climate change*, CBC News (Dec. 12, 2015), <http://www.cbc.ca/news/world/paris-agreement-key-climate-points-1.3362500>; Paris Agreement, article 2(1)(a), Dec. 12, 2015, http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

⁶⁸ Haydn Watters, *5 key points in Paris Agreement on climate change*, CBC News (Dec. 12, 2015), <http://www.cbc.ca/news/world/paris-agreement-key-climate-points-1.3362500>; Paris Agreement, article 2(1)(a), Dec. 12, 2015, http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf (“Article 2 (a): Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;”).

⁶⁹ See, e.g., *What the COP 21 Paris Agreement means for your business* (ERM) (2015), available at <http://www.erm.com/globalassets/documents/presentations/2015/what-paris-agreement-means-for-your-business-erm.pdf>.

⁷⁰ International Energy Agency, *World Energy Outlook 2012: Executive Summary 3* (2012), available at <https://www.iea.org/publications/freepublications/publication/english.pdf>.

⁷¹ Carbon Tracker Initiative, *Unburnable Carbon – Are the world’s financial markets carrying a carbon bubble?*, (2011) available at <http://www.carbontracker.org/wp-content/uploads/2014/09/Unburnable-Carbon-Full-rev2-1.pdf>; Carbon Tracker Initiative, 2013. *Unburnable carbon 2013: Wasted capital and stranded assets*, available at <http://www.carbontracker.org/report/unburnable-carbon-wasted-capital-and-stranded-assets.pdf>.

⁷² *Climate Risk: SASB Technical Bulletin 2016 -01*, The Sustainability Accounting Standards Board (working draft Jan. 27, 2016), available at <http://using.sasb.org/wp-content/uploads/2016/02/SASB-Technical-Bulletin-Climate-Risk-02022016c.pdf>.

⁷³ *Moody’s to Analyse Carbon Transition Risk Based on Emissions Reduction Scenario Consistent with Paris Agreement*, Moody’s Investor Service (June 28, 2016), available at http://www.eenews.net/assets/2016/06/29/document_cw_01.pdf.

Physical Risks

These are risks to businesses posed by physical changes that have already occurred, or are likely to occur, based on scientific predictions and current trends. Drought, rising sea levels, increasing acidification of the oceans, and an increase in storm intensity are all examples of ways that climate change has already affected our environment.⁷⁴ These events have had profound impacts on many businesses, from supply chain disruptions to higher production costs.⁷⁵ Insurance companies, for instance, have already been affected by the increasing number of billion-dollar storms in the last decade.⁷⁶

Competitive risks

An increase in carbon emissions regulation, coupled with a global demand for sustainable business products, has resulted in increased competition for the sale of environmentally friendly products, presenting opportunities for some businesses.⁷⁷ Alternatively, these regulations have increased the costs of manufacturing or extracting carbon-intensive products while simultaneously lowering demand for those products.⁷⁸ Changing environments contribute to a shift in demand and thus, an increase or decrease in competitive advantage.

Legal Risks

A number of developments are creating increased legal risk for recalcitrant companies. Some corporations and their directors may face tort and fiduciary duty liability if they do not seriously consider and address the potential legal risks of continued contributions to climate change. ExxonMobil is under investigation by a number of state attorneys general, including those of California, New York and Massachusetts, and by the attorney general of the District of Columbia, for potential material misstatements or omissions in their communications to the public and investors about the threat of climate change.⁷⁹ By publicly expressing deep skepticism about the reality of climate change and challenging the reliability of scientists'

⁷⁴ Jim Coburn & Jackie Cook, *Cool Response: The SEC and Corporate Climate Change Reporting* 8 (Ceres) (2014), available at <https://www.ceres.org/resources/reports/cool-response-the-sec-corporate-climate-change-reporting/>.

⁷⁵ *Climate Change Risk Perception and Management 2* (Ceres) (2010), available at https://www.ceres.org/resources/reports/risk-manager-survey/at_download/file.

⁷⁶ Insurance companies are facing higher costs to insure disaster-prone areas not only for losses incurred during a weather disaster, but also due to those areas' increasing development costs. In 2005, total losses from Hurricanes Katrina, Wilma, and Rita were \$63 billion, with hurricane-related losses projected to grow by 40% in the next 20 years. *Climate Change: Insurance Issues*, Insurance Information Institute (Sept. 2014), <http://www.iii.org/issue-update/climate-change-insurance-issues>. Insurance companies will also face increasing costs from increasing earthquakes, tornadoes, and wildfires. See *Catastrophes: Insurance Issues*, Insurance Information Institute (July 2016), <http://www.iii.org/issue-update/catastrophes-insurance-issues>.

⁷⁷ Shannon Rohan & Hasina Razafimahefa, *Banking on 2° The Hidden Risks of Climate Change for Canadian Banks* 8 (Shareholders Association for Research and Education), available at http://www.share.ca/files/SHARE_ClimateChangeandBankPaperFINAL_1.pdf.

⁷⁸ The drop in demand for coal is the clearest example of this trend to date. Earlier this year the largest publicly-traded company in the world, Peabody Energy, filed for bankruptcy. See Tiffany Kary, Tim Loh & Jim Polson, *Coal Slump Sends Mining Giant Peabody Energy Into Bankruptcy*, Bloomberg (Apr. 13, 2016), available at <http://www.bloomberg.com/news/articles/2016-04-13/peabody-majority-of-its-u-s-entities-file-for-chapter-11>.

⁷⁹ See John Schwartz, *Exxon Mobil Climate Change Inquiry in New York Gains Allies*, N.Y. Times (Mar. 29, 2016), available at http://www.nytimes.com/2016/03/30/science/new-york-climate-change-inquiry-into-exxon-adds-prosecutors.html?_r=0.

climate models while using those same models in its long-term infrastructure planning, Exxon Mobil may have opened itself to not only public regulatory suits, but shareholder litigation⁸⁰ as well.⁸¹ Such suits would be similar in nature to the cases brought against tobacco companies for misrepresenting the adverse health impacts of cigarette smoking, which ultimately resulted in settlements of almost \$250 billion.⁸²

Companies are at heightened risk of both climate change litigation and liability risk today around the world. Major oil, gas, and coal companies, some of which are listed and regulated in the U.S., are currently under investigation by the Commission on Human Rights of the Philippines for current and threatened human rights violations resulting from climate change.⁸³ There is a discernible tendency for courts to accept and to act on IPCC climate science in holding that governments and corporations owe a duty of care to present and future generations.⁸⁴ New multi-billion dollar investment projects such as drilling for oil and gas in Arctic waters may thus face the risk that licenses awarded by a country's government will be declared constitutionally invalid by that country's courts.⁸⁵

Reputational Risks

Companies that continue to contribute unapologetically to climate change today without a clear, public plan to mitigate emissions and transition to a low-carbon economy are at risk of reputational damage. BP and Royal Dutch Shell are the most obvious examples of companies that have already suffered serious reputational damage due to environmental catastrophes and deeply-problematic community relationships, evidenced by the fallout from the Deepwater Horizon explosion in the Gulf of Mexico (BP), and decades-long litigation against Royal Dutch Shell plc and/or Shell Petroleum Development Company of Nigeria concerning serious allegations, such as human rights abuses and environmental pollution in the Niger Delta.⁸⁶ Today, Exxon Mobil is litigating on multiple fronts with the potential for serious reputational

⁸⁰ Matt Levine, *Bloomberg Might Be In Trouble Over Climate Change*, Bloomberg, Nov. 6, 2015, available at <https://www.bloomberg.com/view/articles/2015-11-06/exxon-might-be-in-trouble-over-climate-change>.

⁸¹ David McCann, *Battles Brew over Climate Risk Disclosure*, CFO (Apr. 8, 2016), available at <http://ww2.cfo.com/disclosure/2016/04/battles-brew-climate-risk-disclosure/>.

⁸² *Fifteen years later, where did all the cigarette money go?*, National Public Radio (Oct. 13, 2013), available at <http://www.npr.org/2013/10/13/233449505/15-years-later-where-did-all-the-cigarette-money-go>.

⁸³ See Emma Howard, *Philippines investigates Shell and Exxon over climate change*, The Guardian, May 7, 2016, available at: <https://www.theguardian.com/sustainable-business/2016/may/07/climate-change-shell-exxon-philippines-fossil-fuel-companies-liability-extreme-weather>.

⁸⁴ See *Urgenda Foundation, et. al. v. The Netherlands* (Ministry of Infrastructure and the Environment), Case No. C/09/456689/HA ZA 13-1396, The Hague District Court, 24 June 2015; Am. Compl., *Juliana, et al. v. United States*, No. 01517 (D. Or. Apr. 8, 2016); *Ashgar Leghari v. Federation of Pakistan* (W.P. No. 25501/2015) (Lahore High Court Green Bench).

⁸⁵ See Atle Staalesen, *Norway's new Arctic oil licenses on the table*, The Ind. Barents Observer, May 17, 2016, available at <http://thebarentsobserver.com/industry/2016/05/norways-new-arctic-oil-licenses-table>; see also Dr. James Hansen, *Open Letter to Norway's Prime Minister: On the Arctic and Our Common Future*, The Huffington Post (Oct. 13, 2015), http://www.huffingtonpost.com/dr-james-hansen/an-open-letter-to-norwegi_b_8281326.html.

⁸⁶ Agence France-Presse, *Shell accused of lying over Nigeria oil spill clean-up*, Al Jazeera (Nov. 3, 2015), <http://www.aljazeera.com/news/africa/2015/11/shell-accused-lying-nigeria-oil-spill-clean-151103160941729.html>; British Petroleum, *Deepwater Horizon accident and response*, BP, http://www.bp.com/en_us/bp-us/commitment-to-the-gulf-of-mexico/deepwater-horizon-accident.html (last visited July 21, 2016).

consequences in addition to the financial consequences of litigation costs and potential liability judgments.

b. These risks are significant to shareholders

Investors currently do not have access to clear, comparable information on how companies intend to manage many of these climate-change risks. The U.S. insurance industry provides a good example. Climate change is understood to be contributing to an increase in extreme weather events around the world, such as heat waves, droughts and wildfires. In the U.S., droughts in the Midwest and on the Mississippi River in 2012 resulted in close to \$18 billion in insured losses,⁸⁷ while Hurricane Sandy caused nearly \$29 billion in insured losses.⁸⁸ In 2013, in response to these extreme weather events, regulators in five key states required climate change risk disclosure from all insurers with an excess of \$100 million in written premiums. This requirement affected 87 per cent of the American insurance market.⁸⁹ Yet, a study published in October, 2014, by Ceres found that only 38 of the 330 companies affected by this regulatory requirement had issued public climate change risk management statements, despite these insurers being on “the front lines of climate change risk.”⁹⁰

This lack of in-depth insight into managements’ strategies for managing climate change risks is also of concern in the fossil fuel industry. As a result, in 2013, 70 institutional investors managing upwards of \$3 trillion launched an on-going effort called the Carbon Asset Risk (“CAR”) project, calling on the world’s top 45 non-renewable energy companies to assess the risks of climate change to their businesses.⁹¹ The risk assessment sought information on how “current and probable future policies for reducing greenhouse gas emissions by 80 percent by 2050” would affect company reserves of fossil fuels that may never be burned, but are valued as assets in the companies’ financial statements.⁹² To date, responses to the CAR project have been insufficient: episodic and incomplete. The concern about unburnable carbon is even more acute after the commitment made at COP21 to keep global warming to under 2° Celsius, as the International Energy Agency (“IEA”) estimates that no more than one-third of current global fossil fuel reserves can be burned before reaching that temperature increase.⁹³ As policies are implemented around the world to reflect that estimate, these reserves are increasingly at risk of becoming “stranded assets.”⁹⁴

⁸⁷ Coburn & Cook, *supra* note 74, at 8.

⁸⁸ Max Messervy, Cynthia McHale & Rowan Spivey, *Insurer Climate Risk Disclosure Survey Report & Scorecard: 2014 Findings & Recommendations* 7, (Ceres), available at <http://www.ceres.org/resources/reports/insurer-climate-risk-disclosure-survey-report-scorecard-2014-findings-recommendations/view>.

⁸⁹ *Id.* at 1.

⁹⁰ *Id.* at 6.

⁹¹ Aaron Pickering, *Investors ask fossil fuel companies to assess how business plans fare in low carbon future*, online: Ceres, <<http://www.Ceres.org/press/press-releases/investors-ask-fossil-fuel-companies-to-assess-how-business-plans-fare-in-low-carbon-future>>.

⁹² *Ibid.*

⁹³ Coburn & Cook, *supra* note 74 at 6.

⁹⁴ A recent analysis of the coal industry and the potential for stranded assets in light of regulatory developments was completed by the Carbon Tracker Initiative. See Rob Schuwerk & Luke Sussams, *No Rhyme or Reason: Unreasonable projections in a world confronting climate change*, Carbon Tracker Initiative, (July 2016), available at http://www.carbontracker.org/wp-content/uploads/2016/07/EIA-designed-10_pages.pdf. The analysis evaluated the annual disclosures between 2010 and 2015 of selected U.S. coal companies, and found highly unrealistic

c. Disclosure as a regulatory tool to address these risks

Each of these categories of risk was discussed by Mark Carney, the Governor of the Bank of England, and Chairman of the G20's Financial Stability Board ("FSB"), in a speech in September, 2015, to members of Lloyds of London. Gov. Carney entitles the risks from climate change a "tragedy of the horizon" since the most serious consequences of today's emissions will eventuate beyond the time-frame of today's business cycles, political cycles and regulatory cycles, which are at maximum ten years.⁹⁵

Governor Carney recognized global risks from climate change to property, political stability, food supplies and water security. He then concentrated on three categories of financial risks discussed above: those caused by the physical changes induced by climate change; liability risks if "extractors and emitters" and/or their officers and directors were to be held liable for the negative effects of their products; and financial risks from the transition to a low-carbon economy.⁹⁶ This latter category includes the risk of the value of "stranded [oil, gas and coal] assets" on the balance sheets of banks, insurance companies and pension funds rapidly losing value; and the potential that "an abrupt resolution of the tragedy of the horizons is itself a financial stability risk."⁹⁷

Governor Carney then suggested that a solution to this "tragedy of the horizons" would be better information to help "the market itself to adjust efficiently," in a situation where multiple parameters will "affect the speed of transition to a low-carbon economy," including public policy, technology, investor preferences and physical events.⁹⁸ One approach Gov. Carney discussed then was for the FSB is to ask the G20 "to establish an industry-led group, a Climate Disclosure Task Force, to design and deliver a voluntary standard for disclosure by those companies that produce or emit carbon."⁹⁹ (That task force has since been established, and its first round of consultations concluded.¹⁰⁰) By having access to information about the carbon intensity of goods and services investors can then "assess risks to companies' business models and to express their views in the market."¹⁰¹ This information can also inform policy makers as well, who could "learn from markets' reactions and refine their stance, with better information allowing more informed reactions, and supporting better policy decisions including on targets and instruments."¹⁰²

forecasts and projections for future continued coal use, and equally unrealistic assessments of the potential for effective policy interventions.

⁹⁵ Mark Carney, Governor, *Breaking the tragedy of the horizon: climate change and financial stability*, Bank of England (Sept. 29, 2015), available at <http://www.bankofengland.co.uk/publications/Pages/speeches/2015/844.aspx#>.

⁹⁶ *Id.*

⁹⁷ *Id.* at 13.

⁹⁸ *Id.* at 12.

⁹⁹ *Id.* at 14.

¹⁰⁰ See generally Financial Stability Board, *Task Force on Climate-Related Financial Disclosure*, <http://www.fsb-tcfd.org>.

¹⁰¹ See Carney, *supra* note 95.

¹⁰² Carney, *supra* note 95, at 12.

Governor Carney recognized that information on carbon emissions is not lacking in the market: indeed, he stated that there are “nearly 400 initiatives”¹⁰³ that suggest or require the disclosure of companies’ greenhouse gas emissions or environmental data. Still, with more consistent, comparable, reliable, clear and efficient information about companies’ current emissions and the strategies companies plan to employ in their transition to the “net-zero world of the future,” he asserted that both markets and governments would have better tools to manage the transition to a low-carbon economy. Generally Gov. Carney has faith that by “managing what gets measured, we can break the Tragedy of the Horizon.”¹⁰⁴

As we’ll discuss below, voluntary initiatives such as that now underway in the FSB’s Task Force on Climate-Related Financial Disclosures are useful in establishing benchmarks for proactive corporate action to address the encompassing risks of climate change, as are broader sustainability reporting initiatives. Voluntary initiatives are insufficient, however, to provide investors with the comprehensive, comparable, and consistently-presented information that could enable the markets to perform in the way Governor Carney suggests they can: to allocate capital efficiently towards companies that are effective in pioneering the necessary transition to a low-carbon economy. An SEC mandate is therefore necessary to address the “tragedy of the horizons,” acting perhaps in concert with other securities regulators through IOSCO, the International Organization of Securities Commissions.

2. Resource constraints generally

Statistics show that the world is using natural resources at a rate that exceeds the earth’s annual carrying capacity.¹⁰⁵ In order to sustain our current use of natural resources, it is estimated we would need 1.6 Earths.¹⁰⁶ This overuse of our resources places obvious constraints on future resource use, across industries and geographic regions, from the increased costs of food leading to food insecurity, to changing business models to absorb the market uncertainties.¹⁰⁷

Resource constraints affect industries across the board.¹⁰⁸ In a 2013 survey, McKinsey and Company lists resource constraints as one of the factors that are reshaping the global

¹⁰³ Carney, *supra* note 95.

¹⁰⁴ Carney, *supra* note 95, at 16.

¹⁰⁵ See World Commission on Environment and Development, *Our Common Future: Rep. of the World Commission on Environment and Development*, ¶¶ 9-15, U.N. Doc. A/42/427, Annex, Ch.7 (1987).

¹⁰⁶ See Global Footprint Network, *World Footprint, Do we Fit on our Planet?*,

http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/ (last updated March 31, 2016); *Our Common Future*, *supra* note 105.

¹⁰⁷ See FAO, *The State of Food Insecurity in the World: How does International Price Volatility affect Domestic Economies and Food Security*, 1-55, 2 (2011) (discussing resource constraints and food insecurity); Stephan Mohr, et. al., *Manufacturing Resource Productivity*, McKinsey&Company, <http://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/manufacturing-resource-productivity> (last updated June 2012) (describing supply circles versus supply chains to address natural capital hot spots); Natural Capital Coalition, *Natural Capital Protocol: Food and Beverage Sector Guide*, 9-10, 23 (2016) (discussing how food production businesses can expect higher operating costs from supply chain disruption, describing how to assess when business activities negatively impact natural capital).

¹⁰⁸ See Andrew Winston, *Leading in a World of Resource Constraints and Extreme Weather*, Harv. Bus. Rev., June 15, 2016, available at <https://hbr.org/2015/06/leading-in-a-world-of-resource-constraints-and-extreme-weather>.

economy.¹⁰⁹ These constraints lead to price shocks, price volatility and increased prices, which in turn increase the costs and risks for manufacturers.¹¹⁰ The agriculture and food industries illustrate how resource scarcity paired with a linkage to the energy industry creates production and price issues.

The food and agriculture industries are significantly affected by the depletion of natural resources because of their resource-intensive¹¹¹ nature and the emerging and potentially competing biomass market.¹¹² Not only do resource restraints contribute to high and volatile food prices, they also limit the capacity to increase global food production as the world's population increases.¹¹³ Experts suggest that a smooth transition to new forms of food production to adapt to a resource-constrained world will require technological innovation, paired with regional management of resources, more sustainable use of resources, and increased long-term investment distributed to smallholder farmers.¹¹⁴ In the interim, companies from energy, agriculture, food, distribution, packaging, and chemicals (for fertilizers and pesticides) will be affected by the uncertainties of managing this transition.

3. Changing environmental and social justice norms are creating acute pressures on many industries

Many industry sectors that pose serious environmental challenges also create significant social and political risks that affect companies' on-going production and social license to operate.¹¹⁵ Such social risks are acute in, but are not limited to, such industries as agriculture, including forest and land conversion; energy infrastructure such as dams, power plants, refineries and incinerators; transport infrastructure including ports, roads, and terminals; and mining of minerals.¹¹⁶

¹⁰⁹ McKinsey & Company, *Five Factors Reshaping the Global Economy: McKinsey Global Survey Results*, <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/five-forces-reshaping-the-global-economy-mckinsey-global-survey-results> (last updated May 2010).

¹¹⁰ See Winston, *supra* note 108.

¹¹¹ See E.C. Standing Committee on Agricultural Research, *Sustainable Food Consumption and Production in a Resource-constrained world*, 3d SCAR Foresight Exercise, 1-148, 6-7 (Feb. 2011) (stating that most of the food systems today are exceeding environmental limits, and compromise the planet's capacity to produce food in the future).

¹¹² See E.C. Standing Committee on Agricultural Research, *supra* note 111, at 5 (discussing how due to resource scarcity there is the emerging biomass market which competes with the food market); FAO 2011 report, *supra* note 106, at 2 (discussing the linkage between the energy and food industry contributes to price volatility).

¹¹³ See E.C. Standing Committee on Agriculture Research, *supra* note 111, at 7 (stating that in addition to climate change, resource restraints limit future food production); FAO, *supra* note 107; E.C. Standing Committee on Agricultural Research, *supra* note 111, at 7 (discussing that farm fishery contributes significantly to biodiversity loss and that coral reefs could collapse by 2050).

¹¹⁴ FAO, *supra* note 107, at 2 (stating that long-term investments in smallholder farmers will aid in increased food security).

¹¹⁵ See Herz, *et al*, (2007) *Development Without Conflict: The Business Case for Community Consent*, World Resources Institute, available at http://pdf.wri.org/development_without_conflict_fpic.pdf.

¹¹⁶ Fossil fuel industries like oil, gas, and coal heighten climate-related risks such as extreme weather and water crises, which tend to spur interstate conflicts and increased costs of living. See *The Price of Climate Change: Global Warming's Impact on Portfolios* (BlackRock) (Oct. 2015), available at <https://www.blackrock.com/corporate/en-mx/literature/whitepaper/bii-pricing-climate-risk-international.pdf>. Agriculture directly affects US food systems, erosive land use, labor, and rural communities. See *What is*

Underlying all of these sectors, largely but not exclusively in developing economies, is land rights or land tenure risk.¹¹⁷ As demand for minerals, energy, timber, and agricultural products has grown it has stimulated widespread acquisitions of land by private companies for natural resource investments.¹¹⁸ While such investments can provide positive development benefits, they can also cause harmful development impacts, which at different points may require conflict management, remediation, compensation, or other forms of intervention, all of which have material costs and consequences.

Not infrequently, material harm is caused to companies in response to material harm caused to local communities¹¹⁹ by companies or their government counterparts; when land occupied by communities is allocated to an investment project, conflicts over land tenure¹²⁰ and related issues frequently emerge. Land tenure conflicts with attendant “land tenure risks” are particularly prevalent and costly in the agriculture, forestry, infrastructure, and mining sectors, due to the land-dependent nature of those sectors.¹²¹ US-domiciled companies are prominent investors in land in all sectors.¹²²

Land tenure risk to projects can stem from local communities’ opposition, resulting in losses from delayed operations or even forced withdrawal, as well as reputational damage,¹²³ and loss of the “social license to operate”. Tenure-related disputes can greatly increase financial risks for companies in land-dependent sectors,¹²⁴ making this issue highly relevant to informed voting and investment decisions. In many documented examples, tenure-related disputes have caused delays, significantly increased project costs, and even imperiled the solvency of the investor companies encountering such conflicts.¹²⁵

Sustainable Agriculture?, Agricultural Sustainability Institute, <http://asi.ucdavis.edu/programs/sarep/about/what-is-sustainable-agriculture/#the-economic-social-political> (last visited July 21 2016). Hydroelectric dams pose a particularly significant threat to neighboring communities, land, and water resources. *Guidelines for Dams*, ABM AMRO (Apr. 2013), available at https://www.abnamro.com/en/images/040_Sustainable_banking/Links_en_documenten/Documenten/Beleid_-_Guidelines_for_Dams_April_2013_EN.pdf; See also Michael M. Cernea, *Social Impacts and Social Risks in Hydropower Programs: Preemptive Planning and Counter-risk Measures* (U.N. Symposium on Hydropower and Sust. Dev.) (Oct. 27-29, 2004), available at

http://www.un.org/esa/sustdev/sdissues/energy/op/hydro_cernea_social%20impacts_backgroundpaper.pdf.

¹¹⁷ The Munden Project, *The Financial Risks of Insecure Land Tenure: An Investment View 2*, (Dec. 2012), available at http://rightsandresources.org/wp-content/uploads/2014/01/doc_5715.pdf.

¹¹⁸ Klaus Deininger & Derek Byerlee, *Rising Global Interest in Farmland*, World Bank (2011), available at <http://siteresources.worldbank.org/DEC/Resources/Rising-Global-Interest-in-Farmland.pdf>.

¹¹⁹ *5 Ways your companies’ reputation is at risk*, Proformative (July 9, 2013) (describing how, inter alia, a companies’ ethics issues, faulty or non-existent corporate social responsibility policies, and employee dissatisfaction can create reputational harm, which is material).

¹²⁰ Land tenure is defined as “the relationship, whether legally or customarily defined, among people, as individuals or groups, with respect to land.” Food and Agriculture Organization, *FAO Land Tenure Studies 3: Land Tenure and Rural Development*, ¶ 3.1, available at <ftp://ftp.fao.org/docrep/fao/005/y4307E/y4307E00.pdf>.

¹²¹ The Munden Project, *supra* note 117, at 2.

¹²² According to the Land Matrix, which has documented over 1,000 land deals, the U.S. ranks first for outward investments in large-scale land acquisitions. Land Matrix, *Web of Transnational Deals*, <http://www.landmatrix.org/en/get-the-idea/web-transnational-deals/>.

¹²³ *Ibid*, 9-12.

¹²⁴ The Munden Project, *supra* note 117, at 2.

¹²⁵ *Ibid*, 2. The following case studies are also drawn from *Ibid*, 24-32.

VI. The existence of many voluntary sustainability disclosure initiatives does not preclude the need for SEC action

A. The voluntary disclosure landscape

Over the past two decades, corporate sustainability reporting has developed from an academic idea in critical accounting to a global business practice.¹²⁶ While some jurisdictions are starting to require ESG reporting, much of this reporting is still voluntary.

The most comprehensive source of data on ESG reporting is that done by KPMG in the Netherlands. KPMG published its first ESG report in 1993, and its most recent in 2013. In 1993, 12% of the top 100 companies in the OECD countries (ex. Japan) published an environmental or social report.¹²⁷ By 2013, 76% of the top 100 companies in the Americas publish a separate corporate responsibility report, as do 73% of top 100 companies in Europe and 71% in Asia.¹²⁸ Of the largest 250 companies globally, reporting rates are 93%.¹²⁹

The Global Reporting Initiative (GRI)'s voluntary, multi-stakeholder framework for ESG reporting has emerged as the clear global benchmark: 78% of reporting companies worldwide and 82% of the Global 250 use GRI as the basis for their corporate responsibility reporting.¹³⁰ Slightly over half (59%) of the Global 250 now have their reports “assured,” most often (two-thirds of the time) by the specialist bureaus of the major accountancy firms.¹³¹

In addition to the quantity of corporate responsibility reporting, KPMG also evaluates the quality of reporting. Here, European companies generally do substantially better than those in Asia or the Americas (average quality scores of 71 out of 100 in Europe versus 54 for companies in the Americas and 50 in Asia Pacific).¹³² Within the Global 250, companies are starting to see more opportunities than risks from social and environmental factors, such as for the development of new products and services. Eighty-seven percent of the Global 250 identifies climate change, material resource scarcity and trends in energy and fuel as “megatrends” that will affect their

¹²⁶ For an overview of the evolution of corporate responsibility as an academic theory in the management literature, see Archie V. Carroll, *Corporate Social Responsibility: Evolution of a Definitional Construct*, 38 Bus. & Soc’y 268 (1999).

¹²⁷ See Ans Kolk, *A Decade of Sustainability Reporting: Developments and Significance*, 3 Int’l J. Environment & Sust. Devel. 51, 52 Fig. 1 (2004). KPMG has changed the format of the report since its original 1993 report on corporate responsibility reporting, so direct comparisons are not possible between the Global 250 in 1993 and the Global 250 in 2013.

¹²⁸ *The KPMG Survey of Corporate Responsibility Reporting 2013* 10 (KPMG) (2013), available at <http://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/corporate-responsibility/Documents/corporate-responsibility-reporting-survey-2013-exec-summary.pdf>.

¹²⁹ See *id.*

¹³⁰ See *id.* at 11. The Global Reporting Initiative is now in its fourth iteration. It has been developed by, and is used by, thousands of companies, governments, and non-profit entities around the world to report on the economic, environmental, social and governance effects of entities’ actions. See Global Reporting Initiative, <http://www.globalreporting.org>.

¹³¹ See *KPMG Survey of Corporate Responsibility Reporting 2013*, *supra* note 128, at 11.

¹³² See *id.*, at 14.

business.¹³³ Ultimately KPMG concludes that “[m]any companies no longer see corporate responsibility as a moral issue, but as core business risks and opportunities.”¹³⁴

B. Problems with comparability

Given GRI’s diffusion throughout the global 250 for use as the framework for sustainability reporting, it will be used to demonstrate the problems associated with voluntary disclosure initiatives generally. GRI is a pioneer in expanded ESG disclosure, and as such has played an important role in working with companies to legitimize the idea that companies should routinely disclose more information about their social and environmental effects to stakeholders and investors. The problems being discussed below are endemic to voluntary disclosure initiatives, we argue, and ought not to be interpreted as a unique criticism of GRI.

Some context about GRI is in order. The goal of GRI is to provide a standard, high-quality framework for organizations to use and adapt for purposes of their “triple bottom line” reporting, which is reporting on their most “critical impacts—positive or negative—on the environment, society and the economy.”¹³⁵ The framework includes two parts: “general standard disclosures” for all organizations, and “specific standard disclosures” based on the industry and social and environmental risks and opportunities in that particular industry. The general standard disclosures comprise seven categories, those being “strategy and analysis; organizational profile; identified material aspects and boundaries; stakeholder engagement; report profile; governance; and ethics and integrity.”¹³⁶ The specific standard disclosures include Disclosure on Management’s Approach (DMA) to identifying and managing its material Aspects; and then ninety-one potential indicators describing various social, economic and environmental material Aspects that might be affected by a company’s operations.

Sector specific frameworks are being developed to identify specific standard disclosures for airport operators; construction and real estate; electric utilities; event organizers; financial services; food processing; media; mining and metals; NGOs; and oil and gas. In the new to latest iteration of the G4, organizations are asked to identify the boundaries they are using in defining the scope of reporting, recognizing that the boundaries of an organization’s effects can be both within its organization and outside of its organization, such as in its supply chain or in the communities where it operates.¹³⁷

Comparability of information has been an articulated goal for GRI’s triple bottom line disclosure, just as it is for financial disclosure, yet GRI’s framework, since it is voluntary, allows for quite non-comparable reports among organizations. Companies and other organizations can choose to report in accordance with GRI’s G4 framework based on one of two options, just as they’ve been able to choose their approach to reporting in prior versions of GRI. “Core”

¹³³ See *id.*, at 14-15.

¹³⁴ See *id.*, at 15.

¹³⁵ *Id.*

¹³⁶ See *G4 Frequently Asked Questions* 16, GRI, <https://www.globalreporting.org/resourcelibrary/G4-FAQ.pdf> (last visited July 21, 2016).

¹³⁷ See Global Reporting Initiative, *G4 Sustainability Reporting Guidelines*, <https://www.globalreporting.org/standards/g4/Pages/default.aspx>.

reporting requires a generic DMA (Disclosure of Management’s Approach) and use of at least one indicator for each material Aspect of an organization’s operations; while “comprehensive” reporting requires a generic DMA and use of all indicators that GRI has identified for each material Aspect.¹³⁸ While organizations are encouraged to report on indicators that give a comprehensive and balanced view of material Aspects, there is no enforcement mechanism yet to advance that normative suggestion. As a result, even where companies are in the same sector, their reports cannot easily be compared.

One study comparing GRI reports in the automotive industry sought to evaluate whether the information being produced by GRI reporters can be used in the way GRI suggests—to affect organizations’ decisions, to promote sustainability and to empower outside stakeholders—and concluded as follows:

In sum, our brief analysis of actual GRI reports suggests that even though all [automotive] companies claim full coverage of the GHG indicators, the information they provide is of limited practical use. A look at other indicators confirms this finding. . .

Thus, quantitative data are not always gathered systematically and reported completely, while qualitative information appears unbalanced and often fails to include a credible assessment of the sustainability impacts of various measures taken by a reporting organization. These findings are consistent with a GRI study on human rights reporting, according to which only 7 percent of all reports examined complied with the information requirements of quantitative human rights indicators.¹³⁹

Other academic studies have observed similar problems with the comparability of the information being reported.¹⁴⁰

C. Problems with completeness

Another serious problem with voluntary sustainability reporting is a lack of completeness: often central issues to a particular industry or company are not discussed, or are discussed in cursory terms that give investors no clear insights into how the company is managing the issue or positioning itself for the future. This problem was studied by Markus Milne, Amanda Ball and Rob Gray, the latter a pioneer in social accounting, in surveying the

¹³⁸ *G4 Reporting Principles and Standard Disclosures*, Global Reporting Initiative 11-14 (last updated Aug. 5, 2015), <https://www.globalreporting.org/resourcelibrary/GRIG4-Part1-Reporting-Principles-and-Standard-Disclosures.pdf>.

¹³⁹ Klaus Dingwerth & Margot Eichinger, *Tamed Transparency: How Information Disclosure under the Global Reporting Initiative Fails to Empower*, 10:3 *Global Env. Politics* 74, 88 (2010), citing Global Reporting Initiative and Roberts Environment Center, *Reporting on Human Rights: A Survey Conducted by the Global Reporting Initiative and the Roberts Environment Center*, Claremont McKenna College, (2008).

¹⁴⁰ See, e.g., David Levy, Halina S. Brown, & Martin de Jong, *The Contested Politics of Corporate Governance: The Case of the Global Reporting Initiative*, 49 *Bus. & Socy.* 88, 90-91 (2009); Carl-Johan Hedberg & Fredrik von Malmborg, *The Global Reporting Initiative and Corporate Sustainability Reporting in Swedish Companies*, 10 *Corp. Soc. Respon. & Envt’l. Mngmt.* 153, 163 (2003).

existing literature on GRI as a preeminent example of triple bottom line reporting.¹⁴¹ As summarized in their research from 2012-13:

The quality—and, especially, the *completeness*—of many triple bottom line reports are not high. Despite increased awareness, recent reporting remains little better than that of the early European pioneers in the early 1990s. And with a few notable exceptions, the reports cover few stakeholders, cherry pick elements of news and generally ignore the major social issues that arise from corporate activity such as lobbying, advertising, increased consumption, distributions of wealth and so on. The reports often refer to “sustainability” and “sustainable development,” but virtually unaddressed are issues of equity and social justice, and completely unaddressed are issues of the scale of development, limits and constraints to that development, and future generations: issues we identified in the previous section [of this Article] as core to sustainability concerns.¹⁴²

Milne, Ball and Gray concluded that “current efforts of environmental or sustainability reporting are woefully inadequate”¹⁴³

A 2012 report by SRI pioneer Steve Lydenberg, written for the Hauser Institute at Harvard’s Kennedy School and the Initiative for Responsible Investment concurred:

As part of an effort to regain [societal] trust, corporations are increasingly issuing sustainability reports, but are often accused of “greenwashing” when these reports do not address the issues of greatest sustainability importance to their industry. Natural gas companies do not address the implications of their controversial hydraulic fracturing practices. Food product companies do not confront the obesity epidemic and the role their products may be playing in it. Utility companies do not confront the long-term environmental implications of dependence on coal as a primary fuel.¹⁴⁴

But it is not only academic studies of voluntary sustainability disclosure that have identified these problems of a lack of comparability and completeness with such disclosure. In a recent report, BlackRock, as stated above the world’s largest asset manager, stated that:

Environmental, social, and governance issues are integral to our investment stewardship activities, as the majority of our clients are saving for long-term goals. It is over the long-term that ESG factors – ranging from climate change to diversity to board effectiveness – have real and quantifiable financial impacts. Our risk analysis extends

¹⁴¹ Markus J. Milne, Amanda Ball & Rob Gray, *Wither Ecology? The Triple Bottom Line, the Global Reporting Initiative, and the Institutionalization of Corporate Sustainability Reporting* 1, (J. Bus. Ethics) (2008), available at http://www.acis.canterbury.ac.nz/documents/Markus_Milne_Research_Programmes/Wither_Ecology_TBL,_GRI_and_Corporate_Sustainability_Reporting.pdf.

¹⁴² *Id.* at 9.
¹⁴³ *Id.* at 16.

¹⁴⁴ See Steve Lydenberg, *On Materiality and Sustainability: The Value of Disclosure in the Capital Markets*, (Initiative for Responsible Investment and the Hauser Center for Non-profit Organizations) (Sept. 2012), available at http://hausercenter.org/iri/wp-content/uploads/2010/05/OnMateriality_Final.pdf.

across all sectors and geographies, helping us identify companies lagging behind peers on ESG issues.¹⁴⁵

And yet current reporting practices are insufficient for the kinds of in-depth investment analysis that BlackRock seeks with its ESG integration:

Companies face a distinct challenge in that different issues will be important to different stakeholders. In our experience, current corporate sustainability reporting often includes disclosure about factors that, while honorable, are less relevant to investment decision making (e.g., corporate philanthropy). As a result, current reporting practices may make it difficult to identify investment decision-useful data (e.g., water usage and risks in . . . [a] beverage company¹⁴⁶

Generally, BlackRock identifies three problems with current voluntary initiatives, which views are worth quoting at length:

“(1) Reliance on self-reported data to questionnaires and industry bodies

Company disclosed information is sparse and disparate across industries and regions. The reliance on self-reported data to private aggregators allows companies to disclose favorable data or opt out completely. Furthermore, there is no accountability or overarching governing body ensuring accuracy of reported information.

(2) Inconsistent collection, management, and distribution of ESG data

ESG data is collected, managed, and dispersed by multiple data providers and is not easily accessible to all investors in a standard form. This creates a challenge for investment professionals attempting to systematically compare companies across industries and regions, either in real time or over historical time periods.

(3) Disparate approaches to measure and report ESG information to investors

Due to different methodologies and disclosures, index providers and asset managers report ESG considerations inconsistently, creating challenges for investors seeking to compare ESG investment strategies, objectives and outcomes consistently.”¹⁴⁷

VII. Design principles for mandatory sustainability disclosure

Given the above problems, there is ample reason for the SEC to promulgate mandatory sustainability disclosure regulations, so that ESG disclosure and data would be clearer, more comparable, more complete, and more consistently presented. Academic insights into important aspects of policy design for such disclosure is found in Archon Fung, Mary Graham and David Weil’s work as part of the Harvard Kennedy School’s Transparency Policy Project analyzing the

¹⁴⁵ See *Viewpoint, Exploring ESG: A Practitioners Perspective* (Blackrock) (June 2016), available at <http://www.blackrock.com/corporate/en-fi/literature/whitepaper/viewpoint-exploring-esg-a-practitioners-perspective-june-2016.pdf>.

¹⁴⁶ *Id.*

¹⁴⁷ *Id.* at 8.

use of “targeted transparency” as a regulatory mechanism.¹⁴⁸ They find disclosure is an effective approach to regulation when used to “compel companies to disclose information in standardized formats to reduce specific risks, to ameliorate externalities arising from a failure of consumers or producers to consider social costs associated with a product, or to improve provision of public goods and services.”¹⁴⁹

The five elements of properly-targeted transparency initiatives the authors identified are:

A. Clearly-stated purposes

As the FSB defined the purpose of the Task Force on Climate-Related Financial Disclosures, now led by Michael Bloomberg, it is to reduce fragmentation of global climate change risk reporting schemes by creating “consistent, comparable, reliable, clear and efficient climate change-related disclosures.”¹⁵⁰ The Task Force is using a voluntary approach for its recommendations, however, presumably because of the jurisdictional limits of the regulators involved.¹⁵¹ A similar, and similarly necessary purpose, could well inform the SEC’s promulgation of required sustainability disclosure—presumably relying upon a number of the voluntary initiatives that already have been developed with industry support, such as GRI, SASB, the FSB taskforce, and so forth. Additionally, the *Mandatory Corporate Ecological Impact Disclosure: A Working Paper* by Foundation Earth suggests specific ways to ensure consistent disclosure (including on the effects of companies’ supply chains) and auditable standards to be used by independent ecological auditors.¹⁵²

B. Specified Targets for Disclosers

Fung et al. argue that targeted transparency regimes must clearly specify which entities and organizations “are viewed as responsible for some public risk or performance problem.”¹⁵³ This design parameter supports the development of industry-specific data and disclosure requirements, as both GRI and SASB have done. For instance, it is widely scientifically accepted that GHG emissions absorb heat in the atmosphere, and an increase in gasses like carbon dioxide and methane have contributed to, and are contributing to, an increase in the world’s temperature over time.¹⁵⁴ Thus, industry-specific sustainability disclosure requirements

¹⁴⁸ David Weil, Mary Graham & Archon Fung, *340 Targeting Transparency* 1410-11 (2013), available at <http://archonfung.net/docs/articles/2013/Science-2013-Weil-Graham-Fung.pdf> (summarizing Weil, Graham and Fung’s comprehensive book evaluating different disclosure regimes in the U.S., and what creates effective regimes). Archon Fung, Mary Graham & David Weil, *Full Disclosure: The Perils and Promise of Transparency* (Cambridge University Press) (2008).

¹⁴⁹ *Id.*

¹⁵⁰ Financial Stability Board, *FSB to establish Task Force on Climate-related Financial Disclosures*, available at <https://www.fsb-tcfd.org/wp-content/uploads/2016/01/12-4-2015-Climate-change-task-force-press-release.pdf>.

¹⁵¹ *Id.*

¹⁵² Foundation Earth, *Mandatory Corporate Ecological Impact Disclosure: A Working Paper* (July 2014), available at <http://www.fdnearth.org/files/2012/11/Mandatory-Ecological-Impact-Disclosure-Report-Final-v3.pdf>.

¹⁵³ *Full Disclosure: The Perils and Promise of Transparency*, *supra* note 148 at 183.

¹⁵⁴ Mark Maslin, *Six reasons that scientists are sure global warming is happening*, *The Independent*, <http://www.independent.co.uk/environment/six-reasons-that-scientists-are-sure-that-global-warming-is-happening-a6753996.html>.

addressing climate risks should apply to companies that are responsible for producing carbon-intensive products and/or emitting large amounts of GHG into the atmosphere.

According to research published by Richard Heede of the Climate Accountability Institute, 12.5% of all carbon pollution from 1854-2010 was emitted by the five companies now known as Chevron, Conoco Phillips, BP, Exxon Mobil and Royal Dutch Shell.¹⁵⁵ More than 60% of carbon and methane emissions in that same time frame were produced by just 90 entities around the world, all of which operate in fossil fuels or cement production.¹⁵⁶ While these would presumably not be the only industry participants required to disclose their GHG emissions, particular regulatory (and enforcement) attention could be applied first to these industries.

C. Defined Scope of Information

Fung et al. explain that the information mandated by disclosure obligations must clearly state what information is to be released, and moreover, that information must relate directly to the information asymmetry the policy seeks to remedy.¹⁵⁷ If it is information the company already collects, it must now disclose it to the public. If it is new information that is required, companies must create mechanisms that allow them to capture that information and disseminate it to the public.¹⁵⁸

While the SEC will clearly be concerned that the benefits of any new disclosure obligations outweigh the costs, it should be noted that there are benefits to companies as well as costs from better sustainability practices, as might be motivated by expanded ESG disclosure. Evidence presented above (see page 13, *supra*) included discussion of a comprehensive review in 2014 of empirical studies of the financial results of corporate responsibility by Oxford University Professor Gordon Clark, Andreas Feiner and Michael Viehs, which found that 90% of studies show that sound sustainability standards lower firms' cost of capital; 80% of studies show that the stock price performance of companies is positively influenced by good sustainability practices; and 88% of studies show that better E, S, or G practices result in better operational performance.¹⁵⁹

D. Standardized content

¹⁵⁵ Union of Concerned Scientists, *Largest Producers of Industrial Carbon Emissions*, Union of Concerned Scientists, http://www.ucsusa.org/global_warming/science_and_impacts/science/largest-producers-industrial-carbon-emissions.html#.Vuh0-Mdln-Y (citing Richard Heede, *Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and cement producers, 1854-2010* 122-229, *Climatic Change* (Nov. 21, 2013), available at <http://link.springer.com/article/10.1007/S10584-013-0986-Y>).

¹⁵⁶ *Id.*

¹⁵⁷ *Full Disclosure*, *supra* note 148 at 42.

¹⁵⁸ *Id.* at 43.

¹⁵⁹ See Gordon L. Clark, Andreas Feiner & Michael Viehs, *From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance* (2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2508281. This report is an excellent resource because it analyzes the empirical literature on the financial effects of sustainability initiatives by type of initiative (E, S or G) and by various financial measures of interest (cost of debt capital; cost of equity capital; operating performance; and effect on stock prices). The study also separately identifies scientifically sound meta-studies and literature reviews.

Fragmentation of ESG disclosure has led to a wealth of information that lacks investor utility on a global scale. Standardization of measuring and reporting information within and across industries is key “in order to make the information comparable from product to product and institution to institution.”¹⁶⁰ In many industries, such standardization is in development within voluntary initiatives, or even in some cases global protocols are in development. One example of the latter is with respect to GHG emissions, where standardization is being achieved: at the 2014 COP20 conference in Peru countries were able to establish, after a decade of work, a globally-endorsed standard to measure GHG emissions.¹⁶¹ The development of common, reliable, consistent and verifiable standards for data disclosure generally would help eliminate issues regarding comparability of different measurement standards, for the benefit of both investors and policy-makers. Many voluntary initiatives have produced models to evaluate in this regard, as discussed below.

What must be avoided is the approach taken to toxic pollution reporting in the United States, where Fung et al. found that the structure of regulation allows companies to use “a variety of estimating techniques to determine pollution quantities, [and where] changes in estimating techniques sometimes led to sudden drops in reported pollution levels that were not necessarily associated with true reductions.”¹⁶² This lack of standard metrics to use, and weak oversight, has resulted in incomplete and misleading disclosure, which is arguably no better than a complete lack of disclosure.¹⁶³

E. Enforcement

The final point is arguably the most important element of targeted transparency: there must be the enforcement of penalties for egregious misrepresentations or omissions in order for transparency to be effective as a regulatory mechanism. Without costs associated with misreporting and non-reporting, corporations can operate with relative impunity. As BlackRock noted regarding voluntary sustainability disclosure “there is no accountability or overarching governing body ensuring accuracy of reported information.”¹⁶⁴

VIII. Ideas for useful formats and/or procedures

Assuming that the SEC will be requiring companies to produce and disclose more ESG and sustainability data, we provide here some preliminary thoughts on design principles. A number of concepts are important here.

¹⁶⁰ See *Full Disclosure*, *supra* note 148, at 43.

¹⁶¹ *Launch of First Global Standard to Measure Greenhouse Gas Emissions from Cities*, International Council for Local Environmental Initiatives, <http://www.iclei.org/details/article/launch-of-first-global-standard-to-measure-greenhouse-gas-emissions-from-cities.html>.

¹⁶² See *Full Disclosure*, *supra* note 148, at 43.

¹⁶³ See Coburn & Cook, *supra* note 74 at 7-8.

¹⁶⁴ See *Viewpoint, Exploring ESG: A Practitioners Perspective*, BlackRock (June 2016), available at <http://www.blackrock.com/corporate/en-fi/literature/whitepaper/viewpoint-exploring-esg-a-practitioners-perspective-june-2016.pdf>.

First, a number of organizations have been producing disclosure frameworks that the SEC should evaluate as potentially useful starting points, in part or in whole. The value of many of these frameworks, such as the GRI; the Carbon Disclosure Project’s CDSB (Carbon Disclosure Standards Board); or the SASB, to name just a few, is that they’ve been developed with the participation of investors, industry and NGOs. On evaluation, the SEC may conclude that one or more of these frameworks provide a good indication of investors’ interests, as well as industries’ capacities to produce the information being sought. In its recent report “Exploring ESG,” BlackRock identified and described what it termed “select major ESG Standards initiatives.”¹⁶⁵ These included the three just mentioned, as well as six others: Ceres; the FSB’s Task Force on Climate-related Financial Disclosures; the Global Impact Investing Rating System (GIIRS); International Integrated Reporting Council (IIRC), described below; the U.N. Principles of Responsible Investment; and Sustainable Stock Exchanges (SSE). Each has a different focus and approach, as well as “maturity,” so all would presumably be worth evaluating for strengths and weaknesses for an ESG disclosure framework.

Second, one design feature that seems particularly apt is that of industry-specific disclosure frameworks, or industry-specific key performance indicators (KPIs) or data points. Some indicators (such as labor indicators or energy consumed) may span all industries, but an indicator for the amount of water used per million dollars of revenue would not—yet would be a highly useful indicator for evaluating the risks of investments in beverage companies or agriculture, among others. By developing industry-specific disclosure and data frameworks for companies to use, the SEC could blunt criticisms that such new disclosure regulations are unlikely to produce useful information.

Third, beyond newly-required KPIs or data points, the context in which companies view those data should be provided. Rather than disclosing pages and pages of risks that are often generic and boiler-plate, management should be required to disclose how they prioritize social and environmental risks, and what strategic initiatives they have developed to respond to which global trends they perceive as highest-priority. As with Management Discussion and Analysis, what matters to investors and other stakeholders is how management is thinking about the challenges facing a particular company, and how they are positioned to respond.

Finally, it may behoove the SEC in its regulatory design to think carefully about connecting ESG data or KPIs to context-based reporting addressing the question: how do a company’s efforts relate to the broader issues of system constraints? This type of reporting cannot only be the responsibility of companies, since it will require scientists, policy-makers and experts to identify those system constraints.

One approach which may connect ESG data (which looks at an individual firm) and its systemic sustainability context is Integrated Reporting, a framework being developed by the IIRC. Integrated Reporting is a “concise communication about how an organization’s strategy, governance, performance and prospects . . . lead to the creation of value in the short, medium and long term.” What is critical to this definition is the concept of “value,” which the IIRC website defines as: “accountability and stewardship for the broad base of capitals

¹⁶⁵ *Id.* at 4.

[that companies rely upon to produce goods and services], (financial, manufactured, intellectual, human, social relationship, and natural) and promote understanding of their interdependencies.”¹⁶⁶ The IIRC has recently entered into a Memorandum of Understanding with IASB, the International Accounting Standards Board, author of IFRS, so work may be proceeding to connect global financial accounting with broader “capitals accounting.”

IX. Conclusion

We thank the Commission for the invitation to discuss the need for mandatory sustainability reporting. Corporate reporting requirements should not be structured to encourage *status quo* interpretations of materiality over innovation or the recognition of societal, environmental and economic changes occurring in the broader environment and in investors’ concerns. Markets that discourage innovation are destined to fall behind those that foster the exchange of information that is forward-looking. What the Commission decides about mandatory sustainability reporting will have a major impact on whether investors have the ability to allocate capital to help create the future that we need, or whether they are limited to preserving the past.

We would be happy to discuss any of the points raised in this letter with any of the Commissioners or members of the SEC staff.

Sincerely,

Center for International Environmental Law

Center of Concern

Environmental Investigation Agency - Global

Foundation Earth

Friends of the Earth

Greenpeace - US

Rainforest Action Network

Sierra Club

¹⁶⁶ *The International <IR> Framework 2*, Integrated Reporting (Dec. 2013), available at <http://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>.

cc:

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Commissioner Michael S. Piwowar
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