 

# RISING ABOVE THE STORM: CLIMATE RISK DISCLOSURE AND ITS CURRENT AND FUTURE RELEVANCE TO THE ENERGY SECTOR

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**Synopsis:** With the growing awareness of the financial consequences caused by the physical impacts of climate change and the need to account for future risks and opportunities of transitioning to a low-carbon economy, institutional investors and stakeholders increasingly are calling on publicly traded companies to provide enhanced climate risk disclosure in their financial reporting. The lack of standardized and mandatory climate risk reporting no longer is regarded solely as an environmental or social governance issue, but one that impacts future global financial stability. The energy sector, for the most part, has resisted calls for enhanced financial regulation of climate risk disclosure, and with the election of President Donald J. Trump in November 2016, likely obtained a reprieve from the institution of mandatory climate risk disclosure requirements by the Securities and Exchange Commission (SEC).

This article explains that notwithstanding the financial and environmental deregulation policies under the current Administration, U.S. energy companies should expect to face continued and increased pressures to provide enhanced climate risk disclosure in their financial reporting. Parts I through III of this article provide an introduction and overview of the background and current state of climate risk disclosure in the United States. Part IV examines some of the key factors which will continue to exert pressure on energy companies to provide more thorough and meaningful climate risk disclosure. These factors include: (a) legislative and policy initiatives by international governments and organizations, including the establishment of the Financial Stability Board's Taskforce on Climate-related Financial Disclosure (TCFD) and the release of its Final Recommendations (TCFD Recommendations) in June 2017; (b) state investigations and climate change litigation actions brought by state and local governments, shareholders, and environmental groups; and (c) increased utilization of the shareholder proposal process and demands for greater engagement by major institutional investors, as well as growing developments in the financial sector. Part V of this article provides recommendations as to what strategies and measures U.S. energy companies can utilize when responding to pressures for more comprehensive and substantive climate risk disclosure. Finally, this article concludes that notwithstanding the absence of enhanced financial regulation of climate risk disclosure under the current Administration, given the aforementioned international and domestic factors, along with the endorsement of the TCFD Recommendations and growing

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recognition of the importance of having standardized climate risk reporting by international oil and gas majors, it is in the long-term interests of U.S. energy companies to participate in the formulation of fair, realistic and viable industry standards for climate risk disclosure.



## I. INTRODUCTION

As the world begins to transition towards a low-carbon economy to combat the effects of global warming, there is growing recognition that companies need to take climate change risks into account and that this information should be disclosed to shareholders and investors. This article will provide an overview of the current climate risk disclosure framework in the United States, and in the absence of further reforms mandating enhanced climate risk disclosure under the current Administration, examine key international and domestic factors that will continue to exert pressures on companies—particularly those in the energy sector—to provide more comprehensive and substantive climate risk disclosure in the future. Finally, as global efforts continue towards the formulation of standardized climate-related disclosure, this article offers recommendations as to what strategies and measures energy companies can utilize to address these developments.

## II. BACKGROUND

For the past three decades, environmental investor coalitions, institutional investors, and financial leaders have been advocating for greater climate risk disclosure by publicly traded companies.[1] Given the negative impacts of climate change

1. Jeffrey M. McFarland, *Warming Up to Climate Change Disclosure*, 14 FORDHAM J. OF CORP. & FIN. L. 282, 284, 303 (citing Mark A. White, *Effect of the Green Movement on Investors*, THE GREENING OF AM. BUS.: MAKING BOTTOM-LINE SENSE OF ENVTL. RESP. (Thomas F.P. Sullivan ed. 1992)). The Coalition for Environmentally Responsible Economies (Ceres) has been one of the main proponents advocating for enhanced reporting of sustainability issues, including climate risk disclosure. *See* CERES, https://www.ceres.org. Institutional investors include, *inter alia*, asset managers, insurance companies, pension funds and mutual funds. Many of these institutional investors are members of national and international climate risk disclosure and sustainability investor networks and coalitions. For example, "[t]he Ceres Investor Network on Climate Risk and Sustainability comprises more than 140 institutional investors, collectively managing more than $20 trillion in assets." CERES,

 



and concerted international efforts to combat the effects of global warming, proponents have argued that such disclosure is required for stakeholders to make informed investment decisions and to enable global markets to function smoothly.[2] This information is necessary not only to account for the physical risks posed by climate change, but for the economic risks and opportunities emanating from a diminished reliance on fossil fuel energy stemming from the transition towards a low-carbon economy.[3] Climate change not only will have a direct impact on a wide range of industries in the global economy, but due to its systemic and systematic risks, directly will affect other future risks that companies may face, including, *inter alia*, technology disruptions, changing consumer preferences, demographics and shifting values.[4] In particular, the physical impacts of climate

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https://www.ceres.org/networks/ceres-investor-network. Such financial leaders include, *inter alia*, Mark Carney, Governor of the Bank of England and Chairman of the G20 Financial Stability Board, along with Michael Bloomberg, former Mayor of New York City and United Nations Special Envoy for Climate Action.

2. There is scientific consensus amongst actively publishing climate change scientists that anthropogenic greenhouse gas (GHG) emissions have been a significant factor in contributing to global warming over the past century. NASA, SCIENTIFIC CONSENSUS: EARTH'S CLIMATE IS WARMING, https://climate.nasa.gov/scientific-consensus (last visited Jan. 23, 2018). This position has been recognized by over 200 worldwide scientific organizations. *Id.* (citing STATE OF CAL. GOVERNOR'S OFFICE OF PLANNING & RESEARCH, LIST OF WORLDWIDE SCIENTIFIC ORGS., http://www.opr.ca.gov/facts/list-of-scientific-organizations.html). The Climate Science Special Report, prepared by the U.S. Global Change Research Program and reviewed by the National Academics of Sciences, Engineering, and Medicine, established that in the past four years, new scientific advances have concluded that human activities, especially emissions produced from GHGs, were primarily responsible for climate change and extreme weather. *See* Timothy Puko, *Climate Report's Deadline Poses Test for Trump Administration*, WALL ST. J. (Aug. 9, 2017), https://www.wsj.com/articles/climate-reports-deadline-poses-test-for-trump-administration-1502296213; *see also* THE NAT'L ACAD. OF SCI. ENG'G & MED., REVIEW OF THE DRAFT CLIMATE SCIENCE SPECIAL REPORT 1 (2017). This report was released by the White House on November 3, 2017. Brady Dennis, Juliet Eilperin & Chris Mooney, *Trump Administration Releases Report Finding 'No Convincing Alternative Explanation for Climate Change*, WASH. POST (Nov. 3, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/11/03/trump-administration-releases-report-finds-no-convincing-alternative-explanation-for-climate-change/?utm_term=.d9023539dfe3. The increase to the Earth's temperature will result in physical environmental impacts including rising sea levels (due to the melting of polar ice caps), changing precipitation and weather patterns (resulting in droughts and flooding) and increased frequency and severity of extreme weather patterns (leading to hurricanes, tornados and storm surges). NASA, CLIMATE CHANGE: HOW DO WE KNOW, https://climate.nasa.gov/evidence (last visited Jan. 23, 2018); *see also* EPA, CLIMATE CHANGES BY SECTOR, https://19january2017snapshot.epa.gov/climate-impacts/climate-impacts-energy_.html (last visited Jan. 23, 2018) [hereinafter Climate Changes by Sector] (note: This webpage, which previously appeared on the official EPA website, has been archived by the EPA as of January 19, 2017). *See also* CERES, DISCLOSE WHAT MATTERS, https://www.ceres.org/campaigns/disclosure (last visited Jan. 23, 2018); Lisa Woll, *Shining a Light*, ENVTL. FIN. 25 (Sept. 2, 2009).

3. These physical risks include acute risks ("increased [frequency and] severity of extreme weather events") and chronic risks (changes in precipitation patterns, increased weather variability and rising temperatures and sea levels). Transition risks include changes in law and policy, technology, market (customer behavior and increased material costs), and reputation (changing preferences and increased stakeholder concerns). TCFD, FINAL REPORT: RECOMMENDATIONS OF THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (June 29, 2017) [hereinafter TCFD Recommendations]. *See also* Fatima Maria Ahmad, *Beyond the Horizon: Corporate Reporting on Climate Change*, CTR. FOR CLIMATE & ENERGY SOLUTIONS (Sept. 2017), https://www.c2es.org/site/assets/uploads/2017/09/beyond-horizon-corporate-reporting-climate-change.pdf.

4. The Sustainability Accounting Standards Board (SASB) has concluded that climate change will impact seventy-two of 79 industries. Elisse B. Walter, SASB Board Member and former Chair of the SEC, Keynote Address to the CPA Canada Conference, *Sustainability Matters: Focusing on your Future Today*, (Mar. 30, 2017)

change are projected to have significant consequences to the energy sector as there will be increased demand for electricity, water scarcity and damage to infrastructure caused by catastrophic weather events.[5] In addition, the energy sector will be affected directly by various international measures and initiatives targeting global warming, as countries attempt to achieve a reduction in GHG emissions in their transition towards a low-carbon economy.[6]

Certain conservative think-tank organizations, lobby and advocacy groups, and members of the Trump Administration have disputed that there is scientific consensus on anthropogenic global warming and have voiced skepticism about the extent or existence of climate change.[7] These parties have opposed government

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(citing SASB, CLIMATE RISK TECHNICAL BULLETIN (Oct. 2016), https://www.sasb.org/blog-elisse-walters-keynote-at-cpa-canada-conference). Climate change encompasses both systemic risk (a source of contagion that exists across markets) and systematic risk (risk that cannot be diversified away from). *Id.*; *see* Daniel Yergin, *Disclosing Climate-related Risk: Let's Get it Right the First Time*, CNBC (June 26, 2017), https://www.cnbc.com/2017/06/26/dan-yergin-on-disclosing-climate-related-risk-lets-get-it-right-the-first-time-commentary.html.

5. *See generally* INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE: IMPLICATIONS FOR THE ENERGY SECTOR: KEY FINDINGS FROM THE INTERGOVERNMENTAL PANEL OF CLIMATE CHANGE FIFTH ASSESSMENT REPORT (June 2014), https://www.worldenergy.org/wp-content-uploads/2014/06/Climate-Change-Implications-for-the-Energy-Sector-Summary-from-IPCC-AR5-2014-Full-report.pdf [hereinafter IPCC].

6. "The energy sector is the largest contributor to global GHG emissions. In 2010, 35% of direct GHG emissions came from energy production." *Id.* at 5. Initiatives involving the transition to a low-carbon economy will include "cutting emissions from fossil fuel extraction and conversion, switching to lower-carbon fuels . . ., improving energy efficiency . . ., increasing use of renewable and nuclear generation, introduction of carbon capture and storage (CCS), and reducing final energy demand." WORLD ENERGY COUNCIL, ENERGY SECTOR FACES INCREASING PRESSURES FROM CLIMATE CHANGE - NEW REPORT (June 13, 2014), https://www.worldenergy.org/news-and-media/news/climate-change-implications-for-the-energy-sector-key-findings-from-the-ipcc-ar5/.

7. These include, *inter alia*, the Competitive Enterprise Institute, the Heartland Institute, the Heritage Foundation, and the Manhattan Institute for Policy Research. In refuting the premise that there is scientific consensus on anthropogenic global warming, these groups and organizations have advanced a number of arguments, including *inter alia*, that climate change is a historical and inevitable phenomenon, there is scientific uncertainty about the pace and extent of global warming, and that there is scientific evidence that disputes the existence of global warming. *See* Am. Legis. Exchange Council, *ALEC Energy Principles* (Jan. 12, 2017), https://www.alec.org/model-policy/alec-energy-principles*; see also* HEARTLAND INST., *Climate Change*, https://www.heartland.org/topics/climate-change/ (last visited Jan. 23, 2018); *see also* Marlo Lewis Jr., *Time for a Sensible Sense of Congress Resolution on Climate Change*, COMPETITIVE ENTERPRISE INST. (June 17, 2015), https://cei.org/content/time-sensible-sense-congress-resolution-climate-change. The President of the American Energy Alliance, Thomas Pyle, headed President Trump's energy transition team. Jennifer A. Dlouhy, *Meet the Obscure Group Influencing Trump's Energy Policy*, BLOOMBERG (Jan. 5, 2017), https://www.bloomberg.com/news/articles/2017-01-05/tiny-group-of-tesla-skeptics-emerges-as-trump-energy-powerhouse. EPA Administrator Scott Pruitt has stated that he does not agree that human activity is a primary contributor to global warming and that further review and analysis of the issue was required. Tom DiChristopher, *EPA Chief Scott Pruitt Says Carbon Dioxide is Not a Primary Contributor to Global Warming*, CNBC (Mar. 9, 2017), https://www.cnbc.com/2017/03/09/epa-chief-scott-pruitt.html. Energy Secretary Rick Perry has stated that he believes that ocean waters and the environment are primarily responsible for climate change as opposed to carbon dioxide emissions. Tom DiChristopher, *Energy Secretary Rick Perry Says CO2 is Not the Main Driver of Climate Change*, CNBC (June 19, 2017), https://www.cnbc.com/2017/06/19/energy-sec-rick-perry-says-co2-is-not-the-main-driver-of-climate-change.html. President Donald Trump previously tweeted that, "[t]he concept

regulations aimed at reducing GHG emissions and climate disclosure initiatives, believing that they are harmful to America's competitive advantage and economic interests, and that energy and environmental regulation should be based on free-market economic principles.[8] While the debate over climate change in the United States has become ideologized and politicized amidst these economic concerns, major oil and gas companies, on the other hand, have acknowledged that anthropogenic factors are a significant contributor to global warming, and the necessity of taking measures to reduce GHG emissions to combat the effects of climate change.[9]

## III. CURRENT STATE OF CLIMATE DISCLOSURE IN THE UNITED STATES

Since the late 1990s, due to increasing pressures to address sustainability concerns, a growing number of publicly traded companies had begun to report on environmental issues on a voluntary basis; however, these companies often failed to provide specific information as to how their businesses were being impacted by climate change risks.[10] As such by 2010, the SEC was facing increased calls to enhance corporate financial reporting of climate change risks under its existing disclosure rules and regulations.[11]

A basic underlying principle of corporate disclosure is that public companies are required to disclose accurate information that is important to making investment and voting decisions in order for financial markets to function properly.[12]

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of global warming was created by and for the Chinese in order to make U.S. manufacturing non-competitive." President Donald J. Trump (@realDonaldTrump), TWITTER (Nov. 6, 2012, 11:15 AM), https://twitter.com/realdonaldtrump/status/265895292191248385?lang=en.

8. *See* Donn Dears, *Foreign Entanglements and Climate Change*, HEARTLAND INST. (May 24, 2017), https://www.heartland.org/news-opinion/news/foreign-entanglements-and-climate-change; *see also* ENERGY & ENVIRONMENT, MANHATTAN INST., https://www.manhattan-institute.org/energy-environment (last visited Jan. 23, 2018).

9. *See* Jean-Daniel Collomb, *The Ideology of Climate Change Denial in the United States*, EUROPEAN J. OF AM. STUD. (Spring 2014), https://ejas.revues.org/10305; *see also* Alvin Powell, *Science vs. Politics*, HARV. GAZETTE (Feb. 14, 2014), https://news.harvard.edu/gazette/story/2014/02/science-vs-politics; *see also* Jim Manzi, *Conservatives and Climate Change*, COMMENTARY: MANHATTAN INST. (June 21, 2015), https://www.manhattan-institute.org/html/conservatives-and-climate-change-6272.html. Chevron, ConocoPhillips, and ExxonMobil all have stated publicly that GHG emissions from the use of fossil fuels has contributed to increases in global temperatures. CHEVRON, CLIMATE CHANGE, https://www.chevron.com/corporate-responsibility/climate-change (last visited Jan. 23, 2018); *see also* CONOCOPHILLIPS, CLIMATE CHANGE, http://www.conocophillips.com/sustainable-development/environment/climate-change/Pages/default.aspx (last visited Jan. 23, 2018); *see also* EXXONMOBIL, OUR POSITION ON CLIMATE CHANGE, http://corporate.exxonmobil.com/en/current-issues/climate-policy/climate-perspectives/our-position (last visited Jan. 23, 2018). As well in November 2016, CEOs from ten major oil and gas companies (British Petroleum (BP), China National Petroleum Corporation (CNPC), Eni, Pemex, Reliance Industrial Limited, Repsol, Saudi Aramco, Shell, Statoil and Total) formed the Oil and Gas Initiative, whose aim is to collaborate on action to reduce GHG emissions. OIL & GAS CLIMATE INITIATIVE, http://www.oilandgasclimateinititative.com/about.html (last visited Jan. 23, 2018); *see also* CANADIAN ASS'N OF PETROLEUM PRODUCERS, CLIMATE CHANGE, http://www.capp.ca/responsible-development/air-and-climate/climate-change (last visited Jan. 23, 2018).

10. McFarland, *supra* note 1, at 284.

11. Business and Financial Disclosure Required by Regulation S-K, Securities and Exchange Releases No. 33-10064, 34-77599, 81 Fed. Reg. 23,916, 23,970 (Apr. 22, 2016) (to be codified at C.F.R. pts. 210, 229, 230, 232, 239, 240, and 249) [hereinafter SEC 2016 Concept Release].

12. *Id.* at 23,921.

Pursuant to the Securities Act of 1933 (Securities Act) and the Securities Exchange Act of 1934 (Exchange Act), domestic issuers are required to file quarterly (Form 8-K) and annual reports (Form 10-K) with the SEC and to adhere to the reporting requirements set out in Regulation S-K of the Securities Act.[13] With respect to current environmental disclosure practices, Regulation S-K requires issuers to (1) report on information about material effects from compliance with environmental laws (Item 101); (2) disclose pending legal proceedings against the company arising from environmental laws (Item 103); (3) report on significant risk factors to which the company is subject (Item 503(c)); and (4) provide a Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A), which would include identifying and disclosing "known trends, events, demands, commitments and uncertainties . . . likely to have a material effect on financial condition or operating performance" (Item 303).[14]

Another fundamental aspect of corporate disclosure is that issuers are required to disclose information that is material to investors.[15] The United States Supreme Court has ruled that "information is material if there is a substantial likelihood that a reasonable investor would consider it important in deciding how to vote or make an investment decision, or, put another way, if the information would alter the total mix of available information."[16] The standard of what constitutes material disclosure has been recognized to be an evolving one and will depend on the priorities and investing behavior of the reasonable investor.[17] In addressing the issue of what constitutes effective climate risk disclosure in financial filings,

13. 14 U.S.C. § 77(a) (1916); 15 U.S.C. § 78(a) (1934). Specific disclosure requirements for foreign private issuers are governed by Form 20-F, which requires climate-related disclosures on: material risk factors; material effects of government regulations; environmental issues affecting the utilization of assets; operating and financial review and prospects; and, pending legal proceedings. Robert G. Eccles and Michael P. Krzus, *An Analysis of Oil & Gas Company Disclosures from the Perspective of the Task Force on Climate-related Financial Disclosures* (Dec. 14, 2017), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3091232, (citing Securities and Exchange Commission Form 20-F, https://www.sec.gov/files/form20-f.pdf).

14. SEC. & EXCH. COMM'N, INTERPRETATION: COMM'N GUIDANCE REGARDING MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS (2018). *See* McFarland, *supra* note 1, at 286; *see also* CTR. FOR ENVTL. L., ADAPTATION & RESOURCES, CLIMATE CHANGE RISK DISCLOSURE AND PRACTICES AND POSSIBLE CHANGES BRIEFING PAPER [hereinafter CLEAR Briefing Paper]; Ahmad, *supra* note 3 (citing SEC. & EXCH. COMM'N, INTERPRETATION: COMMISSION GUIDANCE REGARDING MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OPERATIONS (Dec. 19, 2003) (to be codified at 17 C.F.R. pts. 211, 231, 241)).

15. SEC 2016 Concept Release, *supra* note 11, at 23,925.

16. SEC. & EXCH. COMM'N, COMMISSION GUIDANCE REGARDING DISCLOSURE RELATED TO CLIMATE CHANGE, 17 C.F.R. pts. 211, 231, 241 (Feb. 8, 2010) [hereinafter 2010 Guidelines] (citing Basic Inc. v. Levinson, 485 U.S. 224 (1988) (quoting TSC Indust. v. Northway, Inc., 426 U.S. 438 (1976)). This notion of materiality is relevant when assessing whether to purchase, sell or hold securities and with respect to voting decisions. See Tom Quaadman, *Letter to SEC*, CENTER FOR CAPITAL MARKETS COMPETITIVENESS (July 20, 2016), https://www.sec.gov/comments/s7-06-16/s70616-173.pdf.

17. Mary Jo White, Chair, Keynote Address at the International Corporate Governance Network Annual Conference: Focusing the Lens of Disclosure on Board Diversity, Non-GAAP and Sustainability (June 27, 2016).

the SEC has defined it as being '"a systemic analysis of potential risks and opportunities' . . . which are judged to be material."[18] As such, given that a growing number of shareholders and investors view sustainability information, such as climate risk, to be relevant when making investment decisions, it is arguable that climate risk should be regarded as a material factor for financial disclosures.[19]

Facing pressure from a broad range of stakeholders, in January 2010 the SEC issued an Interpretive Release "to provide guidance to public companies regarding . . . existing disclosure requirements as they apply to climate change matters."[20] The 2010 Guidelines highlighted four areas where climate change may trigger disclosure requirements: (1) impact of legislation and regulation; (2) impact of international accords; (3) indirect consequences of regulation or business trends; and (4) physical impacts of climate change.[21] The SEC also addressed the issue of uncertainty in the context of the materiality standard, commenting that "doubts as to materiality of information would be commonplace, but, that, particularly in view of the prophylactic purpose of securities laws and the fact that disclosure is within management's control, 'it is appropriate that these doubts be resolved in favor of those the statute is designed to protect.'"[22]

Despite the issuance of the 2010 Guidelines, there was minimal improvement made by publicly traded companies with respect to climate risk disclosure.[23] A study conducted by Ceres found that the vast majority of financial reporting on climate change between 2010-2014 failed to meet SEC requirements, and that there was little oversight or enforcement by the SEC.[24] In addition, although cur-

18. CLEAR Briefing Paper, *supra* note 14 (citing Jim Coburn, *Disclosing Climate Risks & Opportunities in SEC Filings: A Guide for Corporate Executives, Attorneys & Directors*, CERES (Feb. 2011), http://environblog.jenner.com/files/disclosing-climate-risks-and-opportunities-in-sec-filings.pdf).

19. *See generally* Daniel Goelzer, *Opening Remarks to SEC Advisory Committee*, PANEL ON SUSTAINABILITY REPORTING (July 14, 2016), https://www.sec.gov/comments/265-28/26528-268.pdf; *see also* Raymond L. Coss, *et al.*, *Climate Change Risk and Sustainability Disclosures: A New Enforcement Regime*, ACC DOCKET (Nov. 2016) [hereinafter Climate Change Risk and Sustainability Disclosures].

20. 75 Fed. Reg. 6,290 (Feb. 8, 2010). These stakeholders included "a coalition of [twenty-two] investor groups, pension fund managers, various state treasurers and comptrollers, NGOs, [Ceres,] the New York Attorney General and the U.S. Senate Appropriations Committee." Climate Change Risk and Sustainability Disclosures, *supra* note 19, at 29; 2010 Guidelines, *supra* note 16, at 6,290.

21. 2010 Guidelines, *supra* note 16.

22. *Id.*

23. *See generally* Jim Coburn & Jackie Cook, *Cool Response: The SEC & Corporate Climate Change Reporting*, CERES (Feb. 2014), https://www.ceres.org/resources/reports/cool-response-sec-corporate-climate-change-reporting [hereinafter Cool Response Report].

24. In their study, the authors found that "most companies are not discussing company specific material information and are not quantifying risks or past impacts. Most are briefly discussing climate change using boilerplate language of minimal utility to investors, providing few material[] details about climate risks and opportunities facing them." *Id.* at 5. A recent review conducted by the U.S. Government Accountability Office (GAO) of the SEC's disclosure requirements of climate-related risks found that the SEC provided few training sessions regarding climate-related disclosures and that most SEC staff did not have direct prior experience with climate-related disclosures. According to interviews conducted with SEC employees, SEC training on climate-related disclosure was limited to an initial session following the release of the 2010 Guidelines and a few "brown bag" discussions on climate-related disclosures. The report noted that climate-related disclosures were not specifically addressed in materiality training sessions or when training new staff on how to conduct filing reviews.

rently there are numerous voluntary climate risk reporting frameworks and standards being administered by various environmental groups, industry organizations and NGOs, these standards have inconsistent reporting criteria, differing requirements and are non-comparable across industries and sectors, making it difficult to conduct proper analyses and comparisons between companies and sectors as to their respective climate-related risks. [25]

As a result of this inadequacy, proponents continued to press for enhanced regulations of climate risk disclosure and for greater enforcement by the SEC.[26] In April 2016, as part of President Obama's initiative for improved corporate disclosure, the SEC issued a Concept Release on Business and Financial Disclosure Required by Regulation S-K.[27] The SEC Concept Release called for, *inter alia*, public comments on whether the SEC should consider line-item disclosure for sustainability issues as well as materiality standards of sustainability factors, including the environment.[28] The SEC received comments from a number of NGOs and investor groups, such as the CDP, the SASB, Ceres, and the SEC Investor Advisory Committee, advocating for mandatory climate risk disclosure and increased enforcement by the SEC.[29] The SEC also received comments from industry groups opposed to having further regulation of climate risk disclosure, arguing, *inter alia*, that (1) environmental, social and governance (ESG) issues were sufficiently addressed in the 2010 Guidelines; (2) the SEC lacked authority to require

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As well, the GAO review found that SEC employees were not provided with industry specific training on climate-related disclosures. U.S. Government Accountability Office, Climate Related Risks—SEC Has Taken Steps to Clarify Climate Disclosure Requirements, GAO-18-188 (February 2018), https://www.gao.gov/products/GAO-18-188 [hereinafter GAO Review].

25. It has been estimated that there are over 400 such reporting programs on climate change or other sustainability issues. TCFD, PHASE 1 REPORT OF THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (2016). Key climate-related reporting frameworks and standards include those developed by: the Carbon Disclosure Project (CDP), the Climate Disclosure Standards Board (CDSB), the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC), the Sustainability Accounting Standards Board (SASB), the ASTM International Committee E50, and the National Association of Insurance Companies (NAIC) Insurer Climate Risk Disclosure Survey. TCFD Recommendations, *supra* note 3, at 33; *see also* Climate Change Risk and Sustainability Disclosures, *supra* note 19, at 30, 35; *see also* TCFD Recommendations, *supra* note 3, at 1 (citing SASB, SASB CLIMATE RISK TECHNICAL BULLETIN: TB001-10182016, Oct. 2016); *see also* William Thomas & Annise Maguire, *SEC Studying Change of Regulation S-K to Require ESG Disclosures*, CLIENT MEMORANDUM, WILLKIE FARR & GALLAGHER LLP (Nov. 7, 2016), http://www.willkie.com/~/media/Files/Publications/2016/11/SEC_Studying_Change_of_Regulation_SK_to_Require_ESG_Disclosures.pdf.

26. As part of these efforts, in April 2015 an alliance of sixty-two institutional investors wrote to the SEC "calling for greater scrutiny of climate-related disclosures from energy companies in particular." David Gelles, *SEC Is Criticized for Lax Enforcement of Climate Risk Disclosure*, N.Y. TIMES (Jan. 23, 2016), https://www.nytimes.com/2016/01/24/business/energy-environment/sec-is-criticized-for-lax-enforcement-of-climate-risk-disclosure.html.

27. Under the 2013 Jumpstart Our Business Startups Act (JOBS Act), the SEC was required to issue "a report [to Congress] on the state of corporate disclosure rules." Hank Boerne, *Will We See Mandated Corporate Reporting on ESG/Sustainability Issues in the USA?*, GOVERNANCE & ACCOUNTABILITY INST.'S SUSTAINABILITY UPDATE (May 13, 2016), http://ga-institute.com/Sustainability-Update/2016/05/13/will-we-see-mandated-corporate-reporting-on-esg-sustainability-issues-in-the-usa; *see* SEC 2016 Concept Release, *supra* note 11, at 23,921.

28. *See* White, *supra* note 17; *see also* Boerne, *supra* note 27.

29. Climate Change Risk and Sustainability Disclosures, *supra* note 19, at 30.

such disclosures; (3) materiality in the context of fiduciary duties only could extend to financial interests; (4) further regulation would unfairly burden reporting entities; and (5) the disclosure of such information would be advantageous to competitors.[30]

In view of the SEC's increasing focus on financial disclosure rules and climate risk reporting, along with growing international calls for enhanced and standardized climate risk disclosure following the ratification of the Paris Agreement in November 2015, it appeared that the SEC was poised to engage in greater oversight and institute enhanced regulations governing climate risk disclosure.[31] With the election of President Trump, however, it is now highly unlikely that the current Administration will implement any financial regulatory reforms addressing climate risk disclosure, as it pursues its objective of reducing government regulations and eliminating environmental protection measures deemed to be impediments to economic growth and the expansion of the energy sector.[32]

At the time of writing, Regulation S-K disclosure requirements still are being reviewed by the SEC; however, it is doubtful that the SEC will be taking independent measures to address climate risk disclosure in the near future as it will be expected that President Trump's policies will be considered when implementing new guidelines and regulations.[33] Indeed, although current SEC Chair, Jay Clayton, expressed support for the 2010 Guidelines during his Senate Confirmation Hearing, Mr. Clayton has since stated that he does not believe the 2010 Guidelines

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30. *See* Thomas & Maguire, *supra* note 25.

31. Under the Paris Agreement, which came into force on November 4, 2016, 197 countries, including the United States, pledged to introduce policies to limit global warming to no more than 2°C above pre-industrial [average temperatures] and to pursue efforts to limit the temperature increase even further to 1.5°C, in order to significantly reduce the impacts of climate change. UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, THE PARIS AGREEMENT, http://unfccc.int/paris_agreement/items/9485.php (last visited May 11, 2017). It is recognized that such efforts are required to prevent irreversible and catastrophic consequences that could occur if global warming continued to increase above 2°C. TCFD Recommendations, *supra* note 3 (citing INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, FIFTH ASSESSMENT REPORT (2014), http://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf); Climate Change Risk and Sustainability Disclosures, *supra* note 19, at 30. With respect to the SEC's increasing focus on climate-risk reporting, former SEC Chair, Mary Jo White, previously stated,

> Although we are seeing increased disclosure and engagement on sustainability matters, we are taking a more focused look at such disclosures, particularly related to climate change, in our annual filings [and] reviews. We understand, however, that there are those who do not believe that our materiality-based approach to sustainability disclosure goes far enough. That is one of the reasons we included a discussion of the topic in our recent Regulation S-K Concept Release and solicited input from investors and others. . . . There is, in short, more work and thinking to be done on sustainability reporting at the SEC, and by companies and investors, including on whether, when, where, and how to provide disclosure and what precisely should be provided. The issue has our attention.

White, *supra* note 17.

32. Exec. Order 13,771, 82 Fed. Reg. 9,339 (Feb. 3, 2017). *See also* Exec. Order 13,783, 82 Fed. Reg. 16,093 (Mar. 28, 2017); *see also* THE WHITE HOUSE, ENERGY AND THE ENVIRONMENT, https://www.whitehouse.gov/issues/energy-environment (last visited Feb. 24, 2018).

33. Linda M. Lowson, *Global Climate Change and Sustainability Financial Reporting: An Unstoppable Force With or Without Trump*, 20 AM. BAR ASS'N, AIR QUALITY COMM. NEWSL. 8 (June 2017).

 



should be expanded.[34] As well, in its recent review of the 2010 Guidelines, the GAO reported that, "the SEC has no current plans to modify its climate-related disclosure requirements.[35] Finally, it should be noted that given the politicization of the climate change debate in the United States, Congressional efforts are being undertaken to prevent climate change risks from being regulated by the SEC.[36] Viewing climate change to be "immaterial" and that the 2010 Guidelines were politically motivated, since 2010 Congressman Bill Posey (R-Fla.) has been spearheading efforts to implement legislation which would prohibit federal funds from being used to "implement, administer, enforce, or codify into regulation, the [2010 Guidelines]."[37]

## IV. KEY FACTORS COMPELLING ENHANCED REPORTING OF CLIMATE RISK DISCLOSURE

Notwithstanding the financial and environmental deregulation policies of the current Administration and the improbability of further SEC regulation of climate risk disclosure in the foreseeable future, energy companies very likely will encounter increasing pressures to report on climate change risk, and in the absence of mandatory disclosure requirements, to adopt voluntary climate risk reporting standards. Key pressures will stem from (1) continued international efforts calling for enhanced and standardized mandatory reporting of climate-related risk; (2) the prospect of increased litigation against companies who fail to acknowledge and disclose climate change risks to their shareholders and investors; and (3) concerted engagement efforts by institutional investors and continued demands from stakeholders that companies account for climate risk issues in their business decisions and that this information be disclosed to their shareholders and investors. These pressures will continue to affect companies—particularly those in the energy sector—irrespective of the current political realities in the United States, due to the growing awareness and understanding of the financial consequences arising from climate change risks by stakeholders and investors, and the commitment by local,

34. *Clayton Unsure About Usefulness of Nonfinancial Disclosures*, WGL-ACCTALERT, Vol 12 No 50 (March 14, 2018).

35. GAO Report, *supra* note 24. During their interviews with the GOA, SEC employees commented that not all investors were in agreement that climate-related disclosures were warranted and that the SEC's Investor Advisory Committee and had not reached an agreement on climate-related disclosures. In addition, the GAO noted that since current climate-related disclosures vary in format and specificity, it may pose difficulty for SEC reviewers and investors to compare and analyze these disclosures amongst companies and that "stakeholders advocating for climate-related disclosures have not agreed on whether to adopt one of the existing reporting frameworks or develop a new framework for companies to use in reporting climate-related disclosures." Finally, the GAO concluded that "additional disclosure requirements or increased scrutiny of companies' climate-related information—which, if necessary, SEC and Congress can consider—could have mission and resource implications for SEC's Division of Corporate Finance." *Id.*

36. Alex Koch & David Sirota, *Despite Irma, Florida Congressman Aims to Let Companies Hide Climate-Change Risks,* INT'L BUS. TIMES (Sept. 11, 2017), http://www.ibtimes.com/political-capital/despite-irma-florida-congressman-aims-let-companies-hide-climate-change-risks.

37. *See* H.R. 5485, 114th Cong. (2016), H. Amdt. 1271 (statement of Rep. Posey); *see also* Koch & Sirota, *supra* note 36.

 



state, and international governments, as well as the private sector, to adhere to the commitments set out in the Paris Agreement.[38]

### A. International Action on Climate Risk Disclosure

Internationally, individual countries, multinational institutions, and global investor groups are making concerted efforts towards the development of standardized climate risk disclosure frameworks for publicly traded companies and institutional investors. There is growing consensus by financial leaders that if countries are to adhere to the 2°C Scenario set out in the Paris Agreement, international markets need to account for the physical impacts of climate change and the consequences of transitioning to a low-carbon economy in order to secure economic growth and financial stability.[39] Mark Carney, Bank of England President and Chairman of the G20 Financial Stability Board ("FSB"), has warned of the financial consequences of failing to act on climate-related risks and the need to develop consistent, comparable and reliable disclosure, particularly with respect to carbon-based assets to prevent future financial instability.[40] The announcement by the United States of its intention to withdraw from the Paris Agreement only appears to have emboldened the international community to continue with their commitments to reduce global warming and to transition towards a low-carbon economy.[41] Given this commitment, international support for the development of

38. Hiroko Tabuchi & Henry Fountain, *Bucking Trump, These Cities, States and Companies Commit to Paris Accord*, N.Y. TIMES (June 1, 2017), https://www.nytimes.com/2017/06/01/climate/american-cities-climate-standards.html.

39. "The [2°C Scenario] lays out an energy system deployment pathway and an emissions trajectory consistent with at least a 50% chance of limiting the average global temperature increase to 2°C. The [2°C Scenario] limits the total remaining cumulative energy-related $CO_2$ emissions between 2015 and 2100 to 1 000 GtCO2. The [2°C Scenario] reduces $CO_2$ emissions (including emissions from fuel combustion and process and feedstock emissions in industry) by almost 60% by 2050 (compared with 2013), with carbon emissions being projected to decline after 2050 until carbon neutrality is reached." INT'L ENERGY AGENCY, SCENARIOS AND PROJECTIONS, https://www.iea.org/publications/scenariosandprojections. The Paris Agreement is part of the United Nations Framework on the Convention on Climate Change (UNFCC) which was ratified by the U.S. Senate in 1992. On August 4, 2017, the United States submitted to the United Nations its "intent to withdraw from the Paris Agreement as soon as it is eligible to do so." U.S. DEP'T OF STATE, COMMUNICATION REGARDING INTENT TO WITHDRAW FROM PARIS AGREEMENT (Aug. 4, 2017), https://www.state.gov/r/pa/prs/ps/2017/08/273050.htm. Under the Paris Agreement, the earliest that a signatory is permitted to withdraw from the Agreement is November 2020. If President Trump were to have withdrawn the United States from the UFCC, this would have enabled the United States to exit the Paris Agreement in just one year. William Mauldin, *Leaving Paris Climate Accord Takes Time*, WALL ST. J. (Jun 1, 2017), https://www.wsj.com/articles/leaving-paris-climate-accord-takes-time-1496348149.

40. Mark Carney, Keynote Address at Lloyd's of London City Dinner: Breaking the Tragedy of the Horizon: Climate Change and Financial Stability (Sept. 29, 2015).

41. At the July 7-8, 2017, G20 Summit in Hamburg, Germany, the international community directly addressed the withdrawal of the United States from the Paris Agreement and issued the following statement:

> We take note of the decision of the United States of America to withdraw from the Paris Agreement. . . . Leaders of the other G20 members state that the Paris Agreement is irreversible. We reiterate the importance of fulfilling the UNFCCC commitment by developed countries in providing means of implementation including financial resources to assist developing countries with respect to both mitigation and adaptation actions in line with Paris outcomes and note the OECD's report 'Investing in Climate, Investing in Growth.' We reaffirm our strong commitment

standardized industry guidelines for climate-related disclosure will continue, and it is likely that other countries will be implementing enhanced financial reporting regulations of climate-related risks in the future.[42]

In September 2015, the FSB established an industry-led taskforce in response to a request from G20 Finance Ministers to consider how the financial sector could take into account the risks climate change posed to the financial system.[43] Chaired by Michael Bloomberg, the goal of the TCFD was to develop a set of voluntary and consistent climate-related financial disclosures for organizations with public debt or equity, along with asset managers and owners, that would be useful to investors, lenders and insurance underwriters in understanding material risks.[44] The TCFD is of the view that by providing more substantive disclosure of climate-related risks and strategies, financial regulators are better able to "assess potential system-wide exposures [while] entities, regulators and governments can identify and mitigate potential vulnerabilities."[45] The TCFD consulted a wide range of business and financial leaders over the course of eighteen months and conducted a public consultation to solicit input and comments to guide the development of

> to the Paris Agreement, moving swiftly towards its full implementation in accordance with the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

G20 LEADERS' DECLARATION, SHAPING AN INTERCONNECTED WORLD (July 7-8, 2017). France in particular, has been emerging as a world leader on climate change. During his speech to the United Nations General Assembly on September 19, 2017, President Emmanuel Macron stated that the Paris Agreement would not be renegotiated. *Macron Defends Iran Deal, Paris Climate Accord at U.N. General Assembly*, FRANCE24 (Sept. 20, 2017), http://www.france24.com/en/20170919-french-president-macron-response-trump-un-general-assembly-iran-deal-climate. China also has been looked upon as an emerging global leader on the issue of climate change, and has reaffirmed its commitments to protecting the Paris Agreement. *Climate Change*: *China Vows to Defend Paris Agreement*, BBC (May 9, 2017), http://www.bbc.com/new/world-asia-china-39861589.

42. On December 12, 2017, President Emmanuel Macron, along with United Nations Secretary-General Antonio Guterres and World Bank President Jim Yong Kim, co-hosted the One Planet Summit. Attended by over sixty heads of state and government officials, along with business and financial leaders, the goal of the summit was to galvanize continued support for the commitments in the Paris Agreement and to secure financial commitments for climate initiatives from the private sector given the lack of participation from the United States government. *See generally* James McAuley, *France's Macron Takes Lead in Climate Change Battle, with the U.S. Absent*, WASH. POST (Dec. 12, 2017), https://www.washingtonpost.com/world/frances-macron-takes-lead-in-climate-change-battle-with-the-us-absent/2017/12/12/2da019aa-de88-11e7-b2e9-8c636f076c76_story.html?utm_term=.a7dbb99166eb. *See also* Jess Shankleman et al., *Macron's Climate Summit Draws Pledges to Make Coal a Risky Bet*, BLOOMBERG (Dec. 12, 2017), https://www.bloomberg.com/news/articles/2017-12-12/macron-s-climate-summit-draws-pledges-to-make-coal-a-risky-bet.

43. "The [FSB] is an international body that monitors and makes recommendations about the global financial system." FIN. STABILITY BD., ABOUT THE FSB (Jan. 19, 2018), http://www.fsb.org/about. Its mandate is to promote international financial stability by coordinating national financial authorities and international standard-setting bodies in developing regulatory, supervisory and other financial sector policies. *See generally* TCFD Recommendations, *supra* note 3.

44. The TCFD comprised of thirty-two members "from various organizations, including large banks, insurance companies, asset managers, pension funds, large non-financial companies, accounting and consulting firms, and credit rating agencies." TCFD Recommendations, *supra* note 3, at 8.

45. Linda M. Lowson, *FSB TCFD Guidance on Climate-Related Financial Disclosures: Regulatory and Market Responses*, HARV. L. SCH. F. ON CORP. GOVERNANCE & REGULATION (Oct. 30, 2017), https://corpgov.law.harvard.edu/2017/10/30/fsb-guidance-on-climate-related-financial-disclosures-regulatory-and-market-responses.

its recommendations.[46] Following the release of its Draft Report in December 2016, the TCFD conducted a second consultation to gather feedback on its initial recommendations.[47] In its Final Report, which was released in June 2017, the TCFD provided a detailed framework for climate risk reporting, including sector-specific guidelines, which, although voluntary, could serve as a foundation for improved reporting of climate-related issues in mainstream financial filings.[48] The TCFD anticipates that this framework will be implemented over the next five years as it realistically recognizes that the "reporting of climate-related risks and opportunities will evolve over time as organizations, investors, and others contribute to the quality and consistency of the information disclosed," and as companies become familiar and gain experience with climate risk disclosure practices.[49] Given their materiality, the TCFD recommends that companies make their climate-related disclosures in mainstream annual financial filings and "ensure that appropriate controls govern the production . . . of the required information . . . [that are] in accordance with their national disclosure requirements."[50]

The TCFD Recommendations address four core elements of climate-related financial disclosure:

(1) governance ("the organization's governance around climate-related risks and opportunities");

(2) strategy ("the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning");

(3) risk management ("the processes used by the organization to identify, assess and manage climate-related risks"); and

(4) metrics and targets ("the metrics and targets used to assess and manage relevant climate-related risks and opportunities").[51]

The TFCD Recommendations specifically encourage the implementation of scenario analysis, including the utilization of the 2°C Scenario, when assessing the resiliency of an organization's strategy to climate-related risks and opportunities.[52] In addition, the TCFD Recommendations include supplemental guidance for four non-financial groups: (1) Energy; (2) Transportation; (3) Materials and Buildings;

46. TCFD Recommendations, *supra* note 3, at i.

47. *Id.* at 48.

48. *Id.* at iv.

49. *Id.* at 3.

50. *Id.*at iv.

51. *Id*. at iv-v.

52. A scenario analysis evaluates a range of potential outcomes across alternative plausible futures driven by a set of assumptions and constraints. This forward-looking analysis allows companies to consider a range of potential effects on future performance and develop more resilient portfolio strategies. *See generally* INSTITUTIONAL INV. GROUP ON CLIMATE CHANGE, UPDATED GUIDE – INVESTOR EXPECTATIONS OF OIL AND GAS COMPANIES 2016 (Nov. 22, 2016), http://www.iigcc.org/publications/publication/updated-guide-of-investor-expectations-of-oil-and-gas-companies-2016. Scenario analysis is a useful "business tool to stress test the resilience of a company's strategy and portfolio" given the amount of uncertainty involved regarding the physical impacts of climate change and long-term transition risks. Ahmad, *supra* note 3, at 18.

and (4) Agriculture, Food, and Forest Products.[53] The Energy Group (consisting of the oil and gas, coal and electric utilities industries) is advised to provide disclosures on "qualitative and quantitative assessments and potential impacts" with respect to:

i. "changes in compliance and operating costs, risks, or opportunities (e.g., older, less-efficient facilities or un-exploitable fossil fuel reserves in the ground);"

ii. "exposure to regulatory changes or changing consumer and investor expectations (e.g., expansion of renewable energy in the mix of energy supply);" and

iii. "changes in investment strategies (e.g., opportunities for increased investment in renewable energy, carbon-capture technologies, and more efficient water usage)."[54]

For companies in the four non-financial sectors having more than an equivalent of US$1 billion in annual revenue, the TCFD Recommendations set an additional reporting threshold.[55] These companies specifically are encouraged to provide additional disclosure of non-material information related to strategy as well as metrics and targets in their financial reports, and to conduct more robust scenario analyses to assess the resilience of their strategies.[56] To support companies implementing the TCFD Recommendations, the TCFD will be launching a web-based platform in Spring 2018—the TCFD Knowledge Fund (www.tcfdhub.org)—which also will provide references and links to other climate-related disclosure frameworks that have incorporated the TCFD Recommendations.[57]

The TCFD Recommendations have garnered support from governments, financial institutions, accounting boards, insurance companies, pension funds as a

53. These sectors account for the largest proportion of GHG emissions, energy usage, and water usage. Supplemental Guidance also was developed for the following financial industries: Banks, Insurance Companies, Asset Managers and Asset Owners. TCFD Recommendations, *supra* note 3, at 15. In its Draft Report, the TCFD had not included transport, agriculture, materials, and buildings in its proposed definition of "carbon-related assets." IHS MARKIT, CLIMATE-RELATED FINANCIAL RISK AND THE OIL AND GAS SECTOR (May 2017), https://www.ihs.com/Info/0417/climate-financial-risk.html [hereinafter IHS Markit Report].

54. TCFD, IMPLEMENTING THE RECOMMENDATIONS OF THE TASK-FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (June 2017), https://www.fsb-tcfd.org/wp-content/uploads/2017/12/FINAL-TCFD-Annex-Amended-121517.pdf [hereinafter Implementing the TCFD Recommendations].

55. TCFD Recommendations, *supra* note 3, at 17.

56. The TCFD Recommendations encourage that companies "[d]isclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material," and provide specific guidance as to the disclosure of numerous climate change related issues (*i.e.*, internal carbon pricing, calculation of GHG emissions, anticipated regulatory requirements, etc.) in relation to the metrics and targets utilized. TCFD Recommendations, *supra* note 3, at 22-23, 35.

57. Press Release, TCFD, Mike Bloomberg and FSB Chair Mark Carney Announce Growing Support for the TCFD on the Two-Year Anniversary of the Paris Agreement (Dec. 12, 2017) [hereinafter TCFD December 12, 2017 Press Release].

well as numerous multinational corporations.[58] They have not however, been embraced fully by the energy sector, particularly in the oil and gas industry. A report conducted by IHS Markit (IHS Markit Report), which was commissioned by four oil and gas majors, has criticized the TCFD Recommendations and opposes the proposition of having mandatory financial disclosure requirements for climate-related risks, believing that this would result in the misplacement of risks and distort markets.[59]

According to the IHS Markit Report, climate-related risk should not be treated separately and given a special reporting requirement by financial regulators since it is "one of the many types of risks that affect the future strategies and performance of oil and gas companies."[60] The IHS Markit Report maintains that since it is an "established principle" that company boards and management make their own determination of materiality, they should be the ones to determine which information related to climate-related risk is "material" and publicly disclosed in

58. When the final TCFD Recommendations were released in June 2017, CEOs "from over 100 firms with market capitalizations totaling more than GBP3.3 trillion and financial firms responsible for more than $24 trillion in assets" publicly expressed support for the TCFD Recommendations. Sarah Kent, *Companies Pressed to Disclose More Climate Change Risks*, INVESTORS HUB, (June 29, 2017), https://ih.advfn.com/p.php?pid=nmona&article=75136119; *see also* TCFD, *Publications* (June 29, 2017), https://www.fsb-tcfd.org/publications. As of December 2017, 237 companies with a combined market capitalization of more than $6.3 trillion have publicly supported the TCFD Recommendations. TCFD December 12, 2017 Press Release, *supra* note 57.

59. The four oil and gas majors who commissioned the report were: BP, Chevron, ConocoPhillips, and Total. IHS Markit Report, *supra* note 53, at 2. Following the release of the IHS Markit Report, Chevron stated that it agreed with the conclusions in the report and "that a separate requirement for disclosing climate-related risks in financial filings could mislead investors." Benjamin Hulac, *Their Guns Are Out: Oil Firms Blindside Disclosure Effort*, E&E NEWS (May 17, 2017) (quoting Melissa Ritchie, Chevron Spokeswoman), https://www.eenews.net/climatewire/stories/1060054668). Chevron however, did make efforts to align its 2018 climate change report, *Climate Change Resilience – A Framework for Decision Making*, with the TCFD Recommendations. Press Release, *Chevron Issues Second Climate Report for Investors*, CHEVRON (Mar. 1, 2018), https://www.chevron.com/stories/chevron-issues-second-climate-report-for-investors [hereinafter, Chevron Press Release].

60. IHS Markit Report, *supra* note 53, at 5. Other future risks that have been noted include "technology disruptions, changing consumer preferences, demographics, shifting values, central bank actions, electoral outcomes and the effects of [long-term management] decisions." Yergin, *supra* note 4. The author notes, however, that a majority of these future risks will be influenced significantly by the physical consequences of climate change and the transition to a low-carbon economy, which arguably demonstrates the importance for companies to address climate-related risks. Others have commented that "climate change can act as a risk multiplier, amplifying and making certain risks more prominent and the impacts more significant." Ahmad, *supra* note 3, at 2.

financial filings.[61] Information that is deemed not to be "material" could be disclosed through other channels ("such as strategy presentations, sustainability reports, and independent reporting programs") at the company's discretion.[62]

The IHS Markit Report found that the most problematic aspect of the TCFD Recommendations was the obligation to disclose "metrics and targets and the use of scenario [analysis]."[63] With respect to the use of metrics and targets, IHS Markit is of the view that they do not correlate with financial risk and therefore cannot be used to value securities.[64] Investors should base their own assessments of the financial implications of long-term climate-related risk by relying on company-specific information and on publicly available information about economic, social, business and policy trends, as well as their own appetite for risk.[65] The IHS Markit Report also was critical of the use of a quantitative scenario analysis, believing that such long-term planning tools only can be utilized in qualitative terms.[66] Since a quantified scenario analysis is contingent on multiple assumptions and long-term strategic changes, it cannot "provide substantive, objective information that can be used to assess financial risk," and therefore could mislead markets.[67]

An additional argument put forth in the IHS Markit Report, and which has been voiced by other critics, is that companies could be compelled to disclose confidential business information which might damage existing shareholder value.[68] As well, it has been asserted that mandatory climate risk disclosure requirements could expose companies to future legal claims if shareholders were to

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61. Critics of this argument point out, however, that most fossil fuel companies have acknowledged that climate risk is material. In addition, where disclosure has been inadequate the SEC has previously issued guidance and itemized disclosure requirements. Robert Shuwerk, *Industry Opposes Enhanced Climate Risk Disclosure, Concerned It Will Move Markets*, CARBON TRACKER (May 31, 2017), https://www.carbontracker.org/oil-industry-climate-risk-disclosure-ihs-markit-tcfd. Former SEC Chair Mary Schapiro has criticized this assertion stating that "markets work best when they are transparent. It's impossible for me to understand the perspective that opacity is somehow better, as a capital markets person." Eccles and Krzus, *supra* note 13 (citing Daniel Brooksbank, *TCFD Analysis: The Focus Now Turns to Re-thinking Materiality*, RESPONSIBLE INVESTOR (Jun. 29, 2017).

62. IHS Markit Report, *supra* note 53, at 6.

63. *Id*. at 5.

64. In particular, the IHS Markit Report asserts that "there is no certainty that companies that invest in climate-related opportunities such as low-emission products will deliver better financial results for investors." *Id.* at 6.

65. However, "[t]wo-thirds of institutional investors [were of the view that] companies do not adequately disclose information about . . . ESG risks." Ahmad, *supra* note 3, at 18 (citing ERNST & YOUNG GLOBAL LIMITED, *Tomorrow's Investment Rules 2.0: Emerging Risk and Stranded Assets Have Investors Looking for More from Nonfinancial Reporting* (2015), http://www.ey.com/gl/en/services/specialty -services/climate-change-and-sustainability-services/ey-tomorrows-investment-rules-2). It has been noted, however, that currently there are too many disclosure frameworks for investors to make comparisons and informed investment decisions. Raymond L. Coss, et. al. *Climate Change Law and Sustainability Disclosures: What's Next?*, ACC Docket, (November 2017), [hereinafter, What's Next?].

66. IHS Markit Report, *supra* note 53, at 15.

67. *Id.* at 7. It has been pointed out that various forms of quantitative analysis occur under the current financial disclosure regime. In addition, the utilization of a 2°C Scenario Analysis would provide an alternative to the current scenario that there will be continued long-term fossil fuel demand. Shuwerk, *supra* note 61.

68. IHS Markit Report, *supra* note 53, at 17. The author notes that this is a valid concern and the conflict between providing adequate and pertinent climate risk disclosure while protecting confidential company information will need to be addressed in the formulation of industry standards for climate risk disclosure.

experience a material loss arising from reporting errors or company misrepresentations, or from a reliance on erroneous forward-looking statements.[69] Finally, concerns have been raised that mandatory financial disclosure of climate-related risk could cause investors to become buried "in an avalanche of information," thus preventing them from being able to make informed decisions.[70]

The use of scenario analysis may not be as problematic as is being asserted by climate disclosure critics. Although there will be an adjustment period as companies become accustomed to using scenario analysis when assessing climate-related risks, a number of energy companies already have been utilizing this type of forecasting to understand how external developments may impact their economic performance and to make future business decisions.[71] In addition, Russel Platt, a special advisor to the TCFD, has stated that the TCFD is not demanding that companies provide financial forecasts, but that companies "explain how their businesses would be impacted under various climate change scenarios."[72] Finally, regarding the argument that disclosure of climate-related risks might expose companies to future legal claims, it has been noted that companies could rely on safe harbor provisions when making forward looking projections and analyses to protect themselves from legal liability.[73]

The absence of standardized mandatory climate disclosure practices arguably exposes companies to greater litigation risks as there is a strong potential that companies may provide inaccurate or contradictory statements and disclosures to the multitude of reporting mechanisms (NGO surveys, sustainability reports, websites, social media statements, etc.) that are in existence.[74] Establishing a formalized process with clear reporting requirements and standards, and which would have the company's disclosure on climate risks and opportunities be reviewed by corporate officers and internal auditors would greatly diminish this risk. Finally, it should also be noted that the TCFD is working with other organizers of climate reporting frameworks to promote consistency and eliminate the production of non-

69. Nick Snow, *IHS Report Questions Climate-Related Financial Risk Disclosure Idea*, OIL & GAS J. (May 16, 2017) (citing comments made by Brian O'Shea, senior director, U.S. Chamber's Center for Capital Markets Competitiveness, and J.W. Verret, assistant professor, George Mason University Antonin Scalia Law School, http://www.ogj.com/articles/print/volume-115/issue-5c/general-interest/ihs-report-questions-climate-related-financial-risk-disclosure-idea.html). Eccles and Krzus, *supra* note 13.

70. Yergin, *supra* note 4.

71. Eccles and Krzus, *supra* note 13.

72. *Id.*

73. Rule 175B of the Securities Act and Rule 3b-6 of the Exchange Act allow safe harbor protection for forward-looking information that is provided by companies in their SEC filings. These protections were expanded by the Private Securities Litigation Reform Act in 1995. Forward-looking statements include "statements containing projections of financial matters, plans and objectives for future operations or future economic performance (such as statements contained in the issuer's MD&A), as well as the assumption underlying or relating to such statements. Forward-looking statements made in connection with tender offers, going private transactions, initial public offerings and financial statements made in accordance with Generally Accepted Accounting Principles, … are" exempted from this provision. *Application Of The Safe Harbor for Forward-Looking Statements*, FINDLAW, http://corporate.findlaw.com/finance/application-of-the-safe-harbor-for-forward-looking-statements.html. *See generally* SUSTAINABILITY ACCOUNTING STANDARDS BOARD, Legal FAQs, https://www.sasb.org/approach/legal-faqs/ (hereinafter SASB Legal FAQs).

74. *See generally* Climate Change Risk and Sustainability Disclosures, *supra* note 19.

financially relevant information, thus reducing the likelihood that there would be an "avalanche" of immaterial information contained in financial filings.[75]

Not all oil and gas majors agree with IHS Markit's criticisms of the TCFD Recommendations. Eni, Shell, Statoil and Total have officially endorsed the TCFD Recommendations and have communicated their support for enhanced disclosure of climate-related risks and opportunities.[76] Although Shell has stated that there are challenges in implementing the TCFD Recommendations, particularly when providing forward-looking as well as commercially sensitive data in financial filings, Shell appears to have concluded that it is more beneficial to participate in the development of industry standards for climate risk disclosure, rather than opposing the process.[77] In its company statement regarding "Transparency on Climate-Related Risks," Statoil also confirmed its support of "new initiatives to improve and drive convergence of standards and practices related to business-related climate risk disclosures . . . [and] will . . . take into consideration the recommendations of the TCFD."[78] Total has taken a measured approach acknowledging that "[t]ransparency on climate and long-term issues through adequate reporting and disclosure is key for investors and other stakeholders," and stating that it wishes to work with the TCFD to implement its recommendations to allow investors to obtain comparable data "while businesses remain responsible for defining which information about climate-related risks and opportunities is material and should be disclosed in financial filings and which additional information they choose to report on a voluntary basis."[79] There are indications that other oil and gas majors ultimately may follow suit with their support as Occidental Petroleum has stated that it has the "intention to incorporate the [TCFD Recommendations] . . . into its future reporting."[80]

An analysis conducted by Robert G. Eccles and Michael P. Krzus found that already there is a strong foundation in existence for energy companies to follow the TCFD Recommendations, as many oil and gas majors have been providing disclosures on matters addressed in the TCFD Recommendations in their financial statements and annual reports. When analysing the disclosure reports provided by the top 15 oil and gas companies in 2016, Eccles and Krzus found that in the aggregate, at least one company was providing disclosures relating to 10 of the 11

75. Ahmad, *supra* note 3, at 17.

76. TCFD, SUPPORTING COMPANIES (AS OF DECEMBER 17), https://www.fsb-tcfd.org/tcfd-supporters-december-2017.

77. *See generally* Media Release, Shell Global, Shell Welcomes Report on Climate-Related Transparency (June 29, 2017), http://www.shell.com/media/news-and-media-releases/2017/report-on-climate-related-transparency.html.

78. STATOIL, OUR POSITION ON CLIMATE, https://www.statoil.com/en/how-and-why/climate-change/our-position-on-climate.html (last visited Jan. 20, 2018).

79. TOTAL, TOTAL SUPPORTS THE VOLUNTARY RECOMMENDATIONS OF THE FINANCIAL STABILITY BOARD ON CLIMATE (Aug. 14, 2017), https://www.total.com/en/news/total-supports-voluntary-recommendations-financial-stability-board-climate.

80. ASIA INV. GROUP ON CLIMATE CHANGE, INVESTOR CLIMATE COMPASS: OIL AND GAS—NAVIGATING INVESTOR ENGAGEMENT 21 (May 12, 2017), https://www.ceres.org/resources/reports/investor-climate-compass-oil-and-gas [hereinafter Investor Climate Compass].

TCFD Recommendations, even before the TCFD Recommendations were released in June 2017.[81] Although the majority of the disclosures appeared in voluntary sustainability reports (as opposed to financial reports) and the scope of disclosure varied amongst companies, with Eni, ExxonMobil and Statoil providing "the most robust" disclosures on recommendations they reported on, the authors concluded that the results of their analysis demonstrated that energy companies would be able "to follow the TCFD's Recommendations if they are interested in doing so."[82]

Whether climate risk disclosure becomes part of mainstream financial reporting, and a standard industry practice, will depend upon the acceptance and adoption of the TCFD Recommendations by the financial leaders of the G20 nations.[83] Given global economic realities, even if only one or two countries eventually were to incorporate the TCFD Recommendations into their respective financial reporting regulations, this would create a significant impact as corporations with listed international subsidiaries likely would be required to adhere to the most stringent reporting requirements, irrespective of the financial disclosure regime in their home jurisdiction.[84] Already, there are indications that this likely will be an eventual outcome. The French, Swedish and United Kingdom governments have officially endorsed the TCFD Recommendations, and the London Stock Exchange incorporated the December 2016 Draft TCFD Recommendations in its February 2017 ESG Guidance, noting that the TCFD Recommendations "very closely align with our Guidance for ESG reporting."[85] In March 2017, the Canadian Security Administrators (CSA) announced that, in response to increasing scrutiny of climate risk disclosure, they would be reviewing the disclosure of climate change risks and financial impacts, and specifically referenced the TCFD Recommendations.[86] The CSA completed its public consultation in August 2017 and will be

81. The analysis reviewed disclosures from the following 15 oil and gas companies: Exxon, Shell, Chevron, PetroChina, Total, BP, Sinopec, Petrobras, ConocoPhillips, Eni, Statoil, EOG, CNOOC, Occidental Petroleum and Anadarko. None of the 15 oil and gas companies reported on Risk Management-Recommended Disclosures 3 ("Integration of climate-related risks into overall risk management.") According to Eccles and Krzus, this is "largely an issue of thinking about risk management more broadly to go beyond the usual operational issues to examining the risks to a company from a system-level factor." Eccles and Krzus, *supra* note 13.

82. Eccles and Krzus, *supra* note 13.

83. The TCFD Recommendations were presented at the 2017 G20 Summit and are referenced in the G20 Hamburg Climate and Energy Action Plan for Growth. *See generally* G20 SUMMITS, G20 HAMBURG CLIMATE AND ENERGY ACTION PLAN FOR GROWTH (July 7-8, 2017), https://www.g20.org/Content/DE/_Anlagen/G7_G20/2017-g20-climate-and-energy-en.pdf?__blob=publicationFile&v.

84. *Audio Blog: The Changing Landscape of Climate Risk Disclosures*, FOUR TWENTY SEVEN CLIMATE SOLUTIONS (Mar. 7, 2017), http://427mt.com/2017/03/audio-changing-landscape-climate-risk-disclosures.

85. *See generally* Press Release, U.K. Government, *UK Government Launches Plan to Accelerate Growth of Green Finance* (Sept. 18, 2017); CLIMATE DISCLOSURE STANDARDS BD., NEW ESG GUIDANCE RELEASED BY THE LONDON STOCK EXCH. REFLECTS TASK FORCE RECOMMENDATIONS, https://www.cdsb.net/news/stock-exchange/666/new-esg-guidance-released-london-stock-exchange-reflects-task-force (last visited Jan. 25, 2018); LONDON STOCK EXCH. GROUP, YOUR GUIDE TO ESG REPORTING, https://www.lseg.com/sites/default/files/content/images/Green_Finance/ESG_Guidance_Report_LSEG.pdf (last visited Jan. 25, 2018).

86. Press Release, Canadian Sec. Adm'rs, Canadian Securities Regulators Announce Climate Change Disclosure Review Project (Mar. 21, 2017).

releasing its report once it has reviewed the findings.[87] In April 2017, the Australian Senate Economics References Committee recommended to Parliament in its Carbon Risk Disclosure Report that "the government commit to implementing the recommendations of the [FSB] Task Force on Climate-related Financial Disclosure where appropriate, and undertak[e] the necessary law reform to give them effect."[88] Additionally in March 2018, Euronext, the Belgian Ministry of Finance, along with the Belgian National Bank and Belgian stock exchange publicly endorsed the TCFD Recommendations.[89]

European nations already have been at the forefront in legislating and implementing financial climate disclosure frameworks as part of their goal in transitioning to a greener economy, and the global trend towards increased mandatory climate risk reporting.[90] On January 1, 2016, France instituted mandatory annual climate risk reporting requirements under Article 173 of the Law on Energy Transition for Green Growth, which may serve as a precedent for regulatory frameworks in other G20 nations.[91] Public companies, banks and credit providers, and institutional investors now must comply with specific reporting requirements regarding the impact that climate change has on their activities and assets.[92] In particular, public companies are required to disclose (1) financial risks related to the

87. Lowson, *supra* note 45.

88. PARLIAMENT OF AUSTRALIA SENATE ECONOMICS REFERENCES COMMITTEE, CARBON RISK: A BURNING ISSUE (Apr. 21, 2017).

89. Press Release, TCFD, Euronext, FSMA, NBB and Belgian Ministry of Finance Show Joint Support for the TCFD Recommendations (Mar 22, 2018), https://www.fsb-tcfd.org/wp-content/uploads/2018/03/Press-Release-TCFD-Brussels-Announcement-FINAL-22-Mar-2018.pdf. Euronext is the largest stock exchange in Europe, with exchanges in Amsterdam, Brussels, Dublin, Lisbon, London and Paris. See STOCKMARKETCLOCK.COM, *What is Euronext NV?*, https://www.stockmarketclock.com/articles/what-is-euronext.

90. Climate Change Risk and Sustainability Disclosures, *supra* note 19, at 31.

91. The Law for the Energy Transition and Green Growth aims to reduce French GHG emissions, cap fossil fuel and nuclear production and increase renewable energy usage. Article 173 aims to increase climate change risks disclosure and align investors' portfolios with French and international climate change policy**.** *See generally* Louise Guthrie & Luke Blower, *Corporate Climate Disclosure Schemes in G20 Countries After COP21*, CDSB, https://www.oecd.org/environment/cc/g20-climate/collapsecontents/Climate-Disclosure-Standards-Board-climate-disclosure.pdf; *Art. 173*: *France's Groundbreaking Climate Risk Reporting Law*, FOUR TWENTY SEVEN CLIMATE SOLUTIONS (Jan. 16, 2017), http://427mt.com/2017/01/impact-french-law-article-173 [hereinafter France's Groundbreaking Climate Risk Reporting Law]. Those reporting under Article 173 are required to disclose on a "comply or explain" basis. PRINCIPLES FOR RESPONSIBLE INVESTMENT, FRENCH ENERGY TRANSITION LAW GLOBAL INVESTOR BRIEFING, (2016) [hereinafter PRI Report]. The "comply or explain" principle "combines voluntary compliance with corporate governance codes and a legal obligation (either by law, regulation, or listing rule) to declare compliance with or explain deviations from a code." Bjorn Fasterling & Jean-Christophe Duhamel, *The "Comply or Explain" Approach: Company Law's Conformist Transparency*, CAIRN INT'L (2009), http://www.cairn-int.info/article-E_RIDE_232_0129—the-comply-or-explain-approach.htm. When there is non-compliance, the explanations would need to demonstrate that the non-compliant disclosure is consistent with the principle set out in the particular provision and contributes to good governance. FIN. TIMES, DEFINITION OF COMPLY OR EXPLAIN, http://lexicon.ft.com/Term?term=comply-or-explain (last visited Jan. 25, 2018).

92. Banks and credit providers are required to disclose the risk of excessive leverage and the risks exposed by regular stress tests. "Asset managers with funds above 500 M euros and institutional investors with balance sheets above 500 M Euros are subject to extended climate change-related obligations." France's Groundbreaking Climate Risk Reporting Law, *supra* note 91. They must provide (1) an "[a]ssessment of the portfolio's exposure to . . . physical risks [] and transition risks" related to climate change; and (2) an "[a]ssessment of the investor's

effects of climate change; (2) the measures adopted by the company to reduce them; and (3) the consequences of climate change on the company's activities and on the use of goods and services it produces.[93] This is a notable contrast to prior climate-related reporting requirements which focused only on the company's impact on climate change, and underscores the premise that climate change risk is a substantive financial risk to companies.[94] By having Article 173 specifically reference transition risks (which are defined as exposure to the changes caused by the transition to the low-carbon economy), France became the first G20 country to have addressed these risks in financial reporting regulations.[95]

With respect to disclosure requirements from financial institutions and investors, Article 173 specifically requires disclosure of the methods used in the analysis.[96] This likely will result in more substantive and detailed reporting and should prevent the usage of boilerplate or generalized statements when disclosing climate-related risks.[97] Currently, Article 173 does not prescribe a specific reporting methodology; however, investors are encouraged to utilize current best practices and are required to disclose information to justify the methodology that was used.[98] In addition, the French government will conduct an implementation assessment at the end of 2018, at which point "the best-in-class approaches will be promoted," and more specific guidelines will be published.[99]

Since Article 173 does not provide for any monitoring or enforcement provisions to ensure compliance, the effectiveness of this legislation in the short term will depend on the cooperation and willingness of management and company boards to comply with these new disclosure requirements.[100] There are indications that such climate risk disclosures are being accepted as forming part of French mainstream financial reporting practices. As of June 2017, 69 of the 100 largest French institutional investors had published disclosures in compliance with Article 173 in the first year of the reporting requirement.[101] Given the commitment

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contribution to meeting the international and national low-carbon goals, including the low-carbon targets set by the investor itself and the action taken to achieve these targets." *Id.*

93. *Id.*

94. *Id.*; *see also* PRI Report, *supra* note 91, at 9.

95. *See generally* Guthrie & Blower, *supra* note 91.

96. PRI Report, *supra* note 91, at 7.

97. A main criticism of the current SEC reporting requirements is that companies are relying on broad, "boilerplate" statements rather than providing specific information as to how climate risk is impacting their business. *See generally* Cool Response Report, *supra* note 23. *See also* Justin Gundlach, *Energy Transition and Climate Risks Included in New French Financial Disclosure Rules*, COLUMBIA LAW SCHOOL CLIMATE LAW BLOG (Mar. 5, 2016), http://blogs.law.columbia.edu/climatechange/2016/03/05/energy-transition-and-climate-risks-included-in-new-french-financial-disclosure-rules; Susanna Rust, *France Aims High With First-Ever Investor Climate-Reporting Law*, INVESTMENT & PENSIONS EUROPE (Feb. 1, 2016), https://www.ipe.com/countries/france/france-aims-high-with-first-ever-investor-climate-reporting-law/10011722.fullarticle.

98. PRI Report, *supra* note 91, at 13.

99. France's Groundbreaking Climate Risk Reporting Law, *supra* note 91. Mara Lemos Stein, *France Gets Climate Risks Disclosures from Invest Firms*, THE WALL STREET JOURNAL (Dec. 7, 2017), https://blogs.wsj.com/riskandcompliance/2017/12/07/france-gets-climate-risks-disclosures-from-invest-firms/ [hereinafter France Gets Climate Disclosure from Invest Firms].

100. *See generally* France's Groundbreaking Climate Risk Reporting Law, *supra* note 91.

101. France Gets Climate Risks Disclosures from Invest Firms, *supra* note 99.

that the French government has demonstrated in incorporating climate risk disclosure into its financial reporting requirements, in addition to the interest from stakeholders and environmental interest groups, public companies and institutional investors likely will be monitored closely to ensure that they are being forthcoming in providing meaningful climate risk disclosures and engaging in proper reporting practices once specific guidelines are developed and published.[102]

France's Article 173 will have international implications as it also applies to financial firms and companies that either are headquartered or registered in France, and therefore could extend to foreign subsidiaries of entities conducting business in France that are based in other countries.[103] Furthermore, it is anticipated that Article 173 will have a ripple effect across all economic sectors, as French asset owners likely will be obliged to require greater disclosure from companies with whom they invest, including international companies that are not subject to French regulations, in order to provide climate risk information in accordance with French requirements.[104] Finally, the French government has indicated that it is working on "build[ing] a coalition of countries for broad implementation of disclosure requirements similar to [] Article 173."[105]

Multinational companies already are subject to environmental reporting requirements in many other jurisdictions that have been enhancing their regulations governing non-financial information disclosure.[106] As of November 2017, all twenty-eight Member States of the European Union ("EU") have transposed the EU Directive on "Non-Financial and Diversity Information" into their own national legislation.[107] Under the EU Directive, companies that are Public Interest Entities ("PIEs") with 500 or more employees, and having a net equity of 20 million Euros or a revenue of 40 million Euros, are required to report on specified ESG matters.[108] Member States are permitted to institute their respective requirements for qualifying companies, thus potentially expanding the application of the

102. PRI Report, *supra* note 91, at 7; France Gets Climate Risks Disclosures from Invest Firms, *supra* note 99.

103. Gundlach, *supra* note 97.

104. PRI Report, *supra* note 91, at 13; *Is France Leading the Way on ESG Investors' Mandatory Reporting?*, EUROSIF, http://www.eurosif.org/wp-content/uploads/2016/12/The-French-Energy-Law-editorial.pdf.

105. Lowson, *supra* note 45.

106. Currently, fourteen members of the G20 have some form of climate disclosure reporting scheme in place. Nadine Robinson, *Mandatory Climate Change Disclosure in the G20: Where Are We At?*, CLIMATE DISCLOSURE STANDARDS BD. (July 3, 2017), http://www.cdsb.net/g20schemes.

107. *See* Directive 2014/95/EU of the European Parliament and of the Council of 22 Oct. 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups, 2014 O.J. (L 330) 1 (Nov. 15, 2014) [hereinafter EU Directive]. Although the UK now is undertaking formal measures to withdraw from the European Union, the recent policies of the current government indicate that the UK will continue its support of climate disclosure initiatives and the TCFD Recommendations. *Brexit: Article 50 Has Been Triggered – What Now?*, BBC (Mar. 29, 2017), http://www.bbc.com/news/uk-politics-39143978.

108. A company is deemed to be a PIE if it is legally incorporated in a Member State and issued transferable securities that are admitted to trading on a regulated market in a EU Member State. *See generally* ERNST & YOUNG, EU AUDIT LEGISLATION, UNDERSTANDING THE LEGISLATION AND HOW IT WILL AFFECT YOU (Oct. 2014), http://www.ey.com/Publication/vwLUAssets/EY_EU_audit_legislation_Understanding_the_legislation_and_how_it_will_affect_you/$FILE/EY-EU-audit-legislation-public-interest-entities.pdf; ALLEN & OVERY, 2017 HERALDS NEW NON-FINANCIAL

EU Directive.[109] In addition, the reporting requirements under the EU Directive could extend to qualifying European subsidiaries of foreign-based companies, and thus potentially require them to provide more substantive ESG disclosures than they currently are obliged to disclose in their home jurisdictions.[110]

Pursuant to the EU Directive, PIEs are required to report on "details of the current and foreseeable impacts of the [company's] operations on the environment," "the use of renewable and/or non-renewable energy, greenhouse gas emissions, water use and air pollution."[111] PIEs also are required to provide adequate information on matters that "stand out as being most likely to bring about the materiali[z]ation of principal risks of severe impacts, along with those that have already materiali[z]ed."[112] In addition, PIEs need to provide "a description of the policies, outcomes and risks related to" their non-financial reporting and an explanation of the due diligence process that was implemented.[113]

At this time, PIEs are permitted to provide their disclosure in separate reports (such as corporate social responsibility reports, sustainability reports, etc.) rather than integrating this information in their management report.[114] PIEs also are exempt from reporting requirements if "the disclosure of such information would be seriously prejudicial to the commercial position of the [company]."[115] Although this "safe harbor" clause is intended to be used in exceptional circumstances, and company directors have a collective onus to ensure that the omission would not be misleading, the potential exists for companies to treat this provision as a "loophole" to avoid full disclosure of their environmental issues.[116] With increasing demands, particularly in Europe, for improved disclosure on ESG issues, such conduct likely will be met with intense scrutiny by regulators, stakeholders and other interested parties. It is notable that certain Member States, acknowledging

REPORTING REQUIREMENTS ACROSS EUROPE (Feb. 2017), http://www.allenovery.com/publications/en-gb/Pages/2017-heralds-new-non-financial-reporting-requirements-across-Europe.aspx.

109. For a summary of the implementation of the EU Directive by individual Member States, please refer to CSR EUROPE, MEMBER STATE IMPLEMENTATION OF DIRECTIVE 2014/95/EU, https://www.csreurope.org/sites/default/files/uploads/CSR%20Europe_GRI%20NFR%20publication_0.pdf (last visited Feb. 6, 2018) [hereinafter Member State Implementation of Directive 2014/95/EU].

110. David Taylor et. al., *In Brief, EU to Extend Reporting on Environmental, Social and Governance Matters*, PwC (Feb. 5, 2015), http://www.pwc.com/us/en/cfodirect/publications/in-brief/european-commission-extends-reporting-on-environmental-social-governance-us2015-06.html.

111. EU Directive, *supra* note 107, Art. 7.

112. *Id*. Art. 8.

113. *Id*. Art. 6.

114. EUROPEAN COAL. FOR CORP. JUSTICE, ASSESSMENT OF THE EU DIRECTIVE ON THE DISCLOSURE OF NON-FINANCIAL INFORMATION BY CERTAIN LARGE COMPANIES, (MAY 2014), https://business-human-rights.org/sites/default/files/media/documents/eccj-assessment-eu-non-financial-reporting-may-2104.pdf [hereinafter Assessment of the EU Directive].

115. EU Directive, *supra* note 107, Art 29.

116. Assessment of the EU Directive, *supra* note 114, at 2; *see also* EUROPEAN COALITION FOR CORP. JUSTICE, *Denmark Leading the Way on Implementation of New EU Rules on Corporate Transparency* (June 17, 2015), http://corporatejustice.org/news/178-denmark-leading-the-way-on-implementation-of-new-eu-rules-on-corporate-transparency [hereinafter Denmark Leading Implementation].

this potential for abuse, eliminated this safe harbor exception when they transposed the EU Directive into their national legislation.[117]

Following the release of the TCFD Recommendations, on June 26, 2017, the European Commission "adopted guidelines on the disclosure of" non-financial information.[118] These guidelines specifically take into account the TCFD "[R]ecommendations concern[ing] areas [previously identified in the EU] Directive, such as governance, strategy, risk management and metrics."[119] Although not mandatory, these guidelines are intended to assist companies in complying with reporting requirements, and to ensure that businesses do not rely on broad statements and boilerplate language when fulfilling their disclosure requirements.[120] The first company reports are expected to be published in 2018, accounting for the 2017-2018 financial year, and the European Commission will be reviewing Member State implementation at the end of 2018.[121]

The validity and success of these international regulations on climate change reporting largely will depend on the will of the respective regulatory agencies to legislate and enforce climate risk disclosure regulations. In light of the priority that has been placed on addressing the effects of climate change, it is likely that there will be concerted international support for the establishment of standardized climate risk reporting practices, such as those suggested by the TCFD.[122] As well, given the increased international resolve to adhere to the commitments of the Paris Agreement, there is a strong possibility that once climate risk reporting develops into a standardized industry practice, these disclosures will form part of mandatory financial reporting requirements in other jurisdictions.[123] Even if American multinationals were able to avoid foreign climate risk reporting requirements, as climate risk reporting practices develop internationally and become a standardized norm for publicly traded companies, it will become increasingly difficult for U.S.

117. Denmark Leading Implementation, *supra* note 116. Member States that have omitted the Safe Harbor Provision include: Denmark, Estonia, Hungary, Luxembourg, Norway and Slovakia. *See* Member State Implementation of Directive 2014/95/EU, *supra* note 109.

118. Press Release, European Comm'n, Commission Takes Further Steps to Enhance Business Transparency on Social and Environmental Matters (June 26, 2017), http://europa.eu/rapid/press-release_IP-17-1702_en.htm.

119. *Guidelines on Non-Financial Reporting*, COM 215 final (July 5, 2003).

120. EUROPEAN COAL. FOR CORP. JUST., GETTING NON-FINANCIAL REPORTING RIGHT: EU COMMISSION GUIDELINES CLARIFY EXPECTATIONS TOWARDS BUSINESSES (June 30, 2017), http://corporatejustice.org/news/1174-getting-non-financial-reporting-right-eu-commission-guidelines-clarify-expectations-towards-business.

121. Lowson, *supra* note 45.

122. The EU High Level Expert Group on Sustainable Finance (HLEG) recommended for the EU to embrace the TCFD Recommendations and that they be implemented at the EU level. In addition, the HLEG recommended that the TCFD Recommendations be implemented as soon as possible and that the EU should explore how to align more closely their Non-Financial Reporting Directive with the TCFD Recommendations. *Financing a Sustainable European Economy – Final Report 2018*, EUROPEAN COMMISSION, https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf.

123. Nina Chestney, *Company Climate Risk Disclosure Could Become Mandatory in a Few Years*, REUTERS (May 23, 2017), http://uk.reuters.com/article/us-climatechange-risks-disclosure/company-climate-risk-disclosure-could-become-mandatory-in-a-few-years-idUKKBN18J1QB (citing John Roome, Senior Director of Climate Change, World Bank).

companies to assert that climate-related disclosures are not material, and therefore should not be included in mainstream financial reporting practices.

### *B. Litigation Actions Addressing Climate Risk Disclosure Practices*

With the growing public concern about global warming, the planned withdrawal of the United States from the Paris Agreement, and the environmental deregulation policies under the current Administration, U.S. energy companies—particularly those in the fossil fuel industry—stand to encounter increased climate-related legal actions.[124] In the absence of government regulation, State Attorney Generals, local governments, shareholders, along with environmental groups and activists will be utilizing litigation to pressure energy companies to address climate change risks in their disclosure and accounting practices, and to adopt environmental measures aimed at reducing global warming.[125] In addition, energy companies will face increased public nuisance claims from local governments attempting to hold energy companies accountable for infrastructure and other adaptation costs resulting from the physical impacts of climate change, by alleging that energy companies failed to disclose the impact of fossil fuel emissions on global warming and misled the public about the effects of climate change. In 2017, Chevron became the first publicly owned fossil fuel company to openly acknowledge this risk.[126] In its 2016 Annual SEC 10-K filing, Chevron stated that "increasing attention to climate change risks has resulted in an increased possibility of governmental investigations and, potentially, private litigation against the company."[127]

124. In a letter to President Trump calling for the withdrawal of the United States from the Paris Agreement, Republican Senators had argued that remaining in the Paris Agreement would subject the United States to significant litigation risk and prevent the Administration from rescinding the Clean Power Plan. In addition, the Senators argued that there would be continuous litigation regarding clean air regulations. Press Release, U.S. Senate Comm. on Env't & Pub. Works, Senators Send Letter to President Trump Calling for Withdrawal from Paris Climate Agreement (May 25, 2017). While environmentalists no longer may be able to rely on the Paris Agreement to block government efforts to deregulate prior environmental protection measures, both the United States government and fossil fuel companies likely will face significant litigation claims for failing to take action on climate change. *See* Marlene Cimons, *Climate Policy Increasingly Showing up in Court*, NEXUS MEDIA (Sept. 7, 2017), https://nexusmedianews.com/climate-policy-increasingly-showing-up-in-court-1b4da114a18c. According to Gallup's annual environmental poll, in 2017 45% of Americans stated they were worried a great deal about global warming (up from 37% in 2016), and that 68% of Americans believed that the increase in the Earth's temperature over the past century is attributable to human activities rather than natural causes. Linda Saad, *Global Warming Concern at Three Decade High in U.S.*, GALLUP (Mar. 14, 2017), http://www.gallup.com/poll/206030/global-warming-concern-three-decade-high.aspx?g_source=global+warming&g_medium=search&g_campaign=tiles.

125. *Update 2- California Cities Sue Big Oil Firms Over Climate Change*, CNBC (Sept. 20, 2017), https://www.cnbc.com/2017/09/20/reuters-america-update-2-california-cities-sue-big-oil-firms-over-climate-change.html (citing Ken Kimmell, President of the Union of Concerned Scientists). Sophie Harris and Sebastien Malo, *Climate Change Cases Predicted to Make a Legal Splash in 2018*, Reuters (Dec. 27, 2017), https://www.reuters.com/article/us-global-climatechange-lawsuit/climate-change-cases-predicted-to-make-a-legal-splash-in-2018-idUSKBN1EM0IZ. See also Donald G. Gifford, Trump's EPA Cuts: An Invitation to Litigation, PROGRESSIVE POLICY INSTITUTE (Mar 3, 2017), http://www.progressivepolicy.org/publications/trumps-epa-cuts-invitation-litigation/.

126. Keith Goldberg, *Chevron Admits Risks of Climate Change Probes, Litigation*, LAW360 (Feb. 24, 2017), https://www.law360.com/articles/895590/chevron-admits-risks-of-climate-change-probes-litigation.

127. *Id.*

The New York Attorney General's Office has been at the forefront in pursuing state investigations against energy companies with respect to climate risk disclosure, and in November 2015, launched an investigation under the Martin Act into whether ExxonMobil misled the public and investors about climate change risks and the potential impact on the oil and gas industry.[128] The Attorney General from Massachusetts also has launched a similar investigation into ExxonMobil's climate risk reporting practices.[129] The investigations are focusing on whether ExxonMobil funded outside groups to dispute climate science even though ExxonMobil was aware, through its own internal discussions with scientists, about the possible consequences of climate change.[130]

The New York Attorney General has had prior success in utilizing its broad investigative powers under the Martin Act to obtain enhanced climate risk disclosure from energy companies.[131] The Martin Act allows "the attorney general to investigate companies for finance-related 'deception, misrepresentation, concealment, suppression, [or] fraud.'"[132] In 2007, the New York Attorney General subpoenaed five energy companies over concerns that they failed to disclose the financial risk associated with GHG emissions and the potential risks to their business from climate change.[133] Settlement agreements were secured with four of these companies, which, *inter alia*, obliged them to provide further disclosure of material risks associated with climate change in their annual filings with the SEC.[134]

128. Climate Change Risk and Sustainability Disclosures, *supra* note 19, at 32. *See* N.Y. Gen. Bus. Law 23-A §§ 352-59; *see also Will the ExxonMobil Probe Improve Climate Risk Disclosure?* KNOWLEDGE@WHARTON (Nov. 10, 2015), http://knowledge.wharton.upenn.edu/article/will-the-exxon-mobil-probe-improve-climate-risk-disclosure [hereinafter Wharton Article].

129. There also have been calls for the California Attorney General to launch a similar investigation. Cassidy Craighill, *Several Environmental Coalitions Call for California to Join State Investigations into Exxon*, GREENPEACE (Apr. 18, 2017), http://www.greenpeace.org/usa/news/several-environmental-organizations-call-california-join-state-investigations-exxon.

130. *See generally* Wharton Article, *supra* note 128.

131. Under the Martin Act, the Attorney General is not required "to prove intent to demonstrate liability." The Martin Act allows the Attorney General to rely on "multiple remedies," including injunctive relief and the ability for the Attorney General to bring criminal or civil charges. Chris Erickson, *Climate Change Regulation Through Litigation: New York's Investigation of ExxonMobil under the Martin Act*, MICH. J. ENVTL. & ADMIN. L., (Feb. 4, 2017), http://www.mjeal-online.org/climate-change-regulation-through-litigation-new-yorks-investigation-of-exxonmobil-under-the-martin-act. In addition, the Martin Act "allows the [Attorney General] to issue subpoenas even without a lawsuit in cases of alleged fraud related to the sale of securities within the state." Wharton Article, *supra* note 128.

132. Erickson, *supra* note 131 (citing N.Y. Gen. Bus. Law § 23-A).

133. The five companies subpoenaed were AES Corp, Dominion Resources Inc., Xcel Energy, Dynegy Inc., and Peabody Energy. Jesse Greenspan, *N.Y. Subpoenas Energy Cos Over CO2 Disclosures*, LAW360, (Sept. 17, 2007, 12:00 AM), https://www.law360.com/energy/articles/35057/n-y-subpoenas-energy-cos-over-co2-disclosures. *See* Dan Zegart, *Peabody Energy Investigation in Late Stages: New York Attorney General Probe*, CLIMATE INVESTIGATIONS CTR. (Nov. 9, 2015), http://www.climateinvestigations.org/peabody_energy_investigation_in_late_stages_new_york_attorney_general_probe.

134. Brian Nearing, *Climate Change Denying Coal Company Will Address Risks Under AG Deal*, TIMESUNION (Nov. 9, 2015), http://www.timesunion.com/business/article/Climate-change-denying-coal-company-will-address-6620554.php. *See also* Climate Change Risk and Sustainability Disclosures, *supra* note 19.

In November 2016 the New York Attorney General launched a second investigation into ExxonMobil, this time targeting its accounting practices on the basis that ExxonMobil had not written down the value of its petroleum assets during the recent downturn in oil prices, even though other major oil and gas companies had been writing down their assets since 2014.[135] On June 2, 2017, the New York Attorney General alleged in a court filing that it had significant evidence that ExxonMobil may have misled investors by failing to apply proxy costs for greenhouse gases when estimating profits and losses on investments.[136] ExxonMobil has publicly denied these allegations.[137] The SEC also has launched its own investigation into ExxonMobil's accounting practices and asset valuations and is investigating how ExxonMobil calculates the impact of the world's response to climate change and the valuation of the economic viability of its projects.[138]

These investigations into ExxonMobil have become highly politicized and are unlikely to be resolved in the near future. ExxonMobil has sued the Massachusetts and New York Attorneys General, respectively, seeking to block their investigations, alleging that these investigations were politically motivated, being pursued in bad faith and were in violation of ExxonMobil's constitutional rights.[139] On March 29, 2018, U.S. District Judge Valerie Caproni dismissed Exxon Mobil's New York complaint against the Attorneys General with prejudice, finding that ExxonMobil's complaint was based on "extremely thin allegations and speculative inferences."[140] ExxonMobil is challenging this dismissal and on April 20, 2018, filed a Notice of Appeal to the U.S. Court of Appeals for the Second Circuit.[141] On April 13, 2018, the Massachusetts Supreme Judicial Court upheld the decision of the Massachusetts Superior Court and refused to quash the Civil Investigative Demand of the Massachusetts Attorney General, ruling that Attorney General Healey has personal jurisdiction over ExxonMobil and "has the authority

135. Bradley Olson & Aruna Viswanatha, *SEC Probes Exxon Over Accounting for Climate Change*, WALL ST. J. (Sept. 21, 2016), https://www.wsj.com/articles/sec-investigating-exxon-on-valuing-of-assets-accounting-practices-1474393593.

136. Emily Flitter, *New York Prosecutor says Exxon Misled Investors on Climate Change*, REUTERS (June 2, 2017), http://www.reuters.com/article/us-usa-climatechange-exxon-idUSKBN18T1XK.

137. *Id.*

138. Olson & Viswanatha, *supra* note 135.

139. Olson & Viswanatha, *supra* note 135. In addition, in July 2016, the House Committee on Science, Space and Technology issued subpoenas to the New York and Massachusetts Attorneys General regarding communications they had with environmental groups before the investigations were launched. Steven Mufson, *A 'Red Scare' Tactic or Standing up for ExxonMobil on Climate Change*? WASH. POST (Sept. 14, 2016), https://www.washingtonpost.com/business/economy/red-scare-or-exxon-mobil-rescue/2016/09/14/3b772752-7a80-11e6-beac-57a4a412e93a_story.html?utm_term=.2657ecbfad99. These subpoenas were reissued in February 2017. Both Attorneys General are maintaining that the federal government does not have the authority to intervene in their investigations of possible corporate malfeasance. Erik Larson, *U.S. House Steps Up Effort to Derail Exxon Climate Probe*, BLOOMBERG (Feb. 17, 2017, 7:30 AM CST), https://www.bloomberg.com/politics/articles/2017-02-16/congress-again-subpoenas-two-attorneys-general-over-exxon-probe. On April 20, 2017, eleven Republican Attorneys General filed a brief supporting Exxon's bid to halt the probes. Emily Flitter, *Exxon Probe is Unconstitutional, Republican Prosecutors Say*, REUTERS (Apr. 20, 2017), http://www.reuters.com/article/us-usa-environment-lawsuit-idUSKBN17M2OY.

140. Exxon Mobil Corporation v. Schneiderman, 2018 WL 1605572 (U.S. S.D. N.Y.).

141. Keith Goldberg, Exxon Takes AG Climate Probe Fight to 2d Circ., LAW 360 (Apr 23, 2018) https://www.law360.com/energy/articles/1035925.

under state consumer protection laws to prove any allegedly false or deceptive advertising."[142]

It is unclear whether there will be additional state investigations into climate-related reporting practices of other energy companies.[143] Nonetheless, in the absence of a regulatory framework on climate risk reporting, the investigation process itself is an effective tool in exerting pressures on companies to factor climate risk in their business decisions and accounting practices.[144] Following the inquiries by the New York Attorney General and the SEC into its accounting practices, ExxonMobil cut its estimate of recoverable reserves by $20 billion in its 2016 annual 10-K SEC filing.[145] Although ExxonMobil maintained that this action was a result of low crude prices and that it stood by its previous valuations, commentators have noted that this write-down effectively alleviated the pressure emanating from the SEC investigation.[146]

Companies also may face the prospect of increased shareholder claims for their failure to account for the risks posed by climate change. For example, a securities fraud class-action suit has already been brought against ExxonMobil, which alleges that ExxonMobil "artificially inflat[ed] the prices of its oil reserves and its stock by not publicly accounting for climate change" even though it was aware of the risks posed by global warming.[147] The suit alleges that ExxonMobil: (1) issued materially false and misleading statements that failed to disclose "the environmental risks caused by global warming and climate change;" (2) "that, given the risks associated with global warming and climate change," it should

142. Keith Goldberg, Breaking: Mass. Top Court Won't Quash AG Climate Probe of Exxon, LAW 360 (April 13, 2018), https://www.law360.com/energy/articles/1033189.

143. There have been various efforts made by state governments to address climate change and climate-related risk disclosure practices. In March 2016, a group of state Attorneys General formed a coalition to combat climate change and to work together "on key climate change-related initiatives, [including] ongoing and potential investigations into whether fossil fuel companies misled investors and the public on the impact of climate change on their businesses." Press Release, A.G. Schneiderman, Former Vice President Al Gore and a Coalition of Attorneys General from Across the Country Announce Historic State-Based Effort to Combat Climate Change (Mar. 29, 2016). In addition, following the announcement of the intention to withdraw the United States from the Paris Agreement, the United States Climate Alliance was formed to uphold the commitments of the Paris Agreement. Comprised of fifteen members, this bipartisan alliance is committed to taking aggressive climate action towards its goal of meeting the commitments under the Paris Agreement. *See generally* U.S. CLIMATE ALLIANCE, https://www.usclimatealliance.org (last visited Feb. 24, 2018). Members of the United States Climate Alliance met with world leaders during the 2017 U.N. General Assembly pledging to work together on climate change. Lisa Friedman & Brad Plumer, *U.S. Governors at U.N. Assembly: 'You Have Allies' on Climate Change*, N.Y. TIMES (Sept. 18, 2017), https://www.nytimes.com/2017/09/18/climate/climate-change-unga-governors.html.

144. Climate Change Risk and Sustainability Disclosures, *supra* note 19, at 28.

145. *Exxon's Big Oil Sands Write-Off Could Help It Dodge SEC Troubles,* FORTUNE (Feb. 23, 2017), http://fortune.com/2017/02/23/exxon-mobil-oil-sands-sec.

146. *Id.*

147. Demand for Jury Trial, Ramirez v. ExxonMobil Corporation, No. 3:16-cv-3111 (N.D. Tex. Nov. 7, 2016) [hereinafter *Ramirez*]; Amy Martyn, *Exxon's Investors Sue Energy Giant for Downplaying Climate Concerns*, CONSUMER AFFAIRS (Nov. 25, 2016), https://www.consumeraffairs.com/news/exxons-investors-sue-energy-giant-for-downplaying-climate-concerns-112516.html.

have written down a material portion of its reserves; and (3) that it materially overstated the value of its reserves by valuing "its future oil and gas prospects" based on an inaccurate carbon price.[148]

Energy companies also have been encountering tort based common law climate litigation claims being brought by local governments in state courts. In July 2017, three local California governments filed separate common law claims against thirty-seven energy companies alleging that although the defendant companies were aware that fossil fuel production contributed to climate change, they continued to profit from fossil fuel production and substantially contributed to global GHG emissions over five decades, which resulted in rising sea levels and harm to the local communities and residents.[149] To support their claim for both compensatory and punitive damages, the local governments are claiming that these companies engaged in "willful, deceptive and malicious behavior," as they not only concealed the dangers posed by climate change but "sought to undermine public support for greenhouse gas regulation, and engaged in massive campaigns to promote the ever-increasing use of their products at ever greater volumes."[150]

These suits do not appear to be an anomaly and already there are clear indications that more local governments will follow suit. In September 2017, the cities of San Francisco and Oakland filed separate claims against five major oil and gas companies, seeking that the defendants be required to fund an abatement program to compensate for future seawalls and infrastructure projects required to protect the cities from potential damages caused by rising sea levels.[151] In January 2018, the City of New York filed a similar public nuisance lawsuit against the same oil and gas companies.[152] As well in California, the City of Richmond, the City of Santa Cruz and the County of Santa Cruz recently filed separate complaints

148. *Ramirez, supra* note 147.

149. County of San Mateo v. Chevron Corp., 2017 WL 3048970 (Cal. Super. 2017); County of Marin v. Chevron Corp., No. c.v. 1702586 (Cal. Super. 2017); City of Imperial Beach v. Chevron Corp., No. 17C17-01227) (Cal. Super. 2017) [collectively hereinafter California County Actions]. Some of the fossil fuel companies named in the lawsuits included: Anadarko, Apache, Arch Coal, BP, Chevron, Citgo, ConocoPhillips, Devon, Encana, Eni, ExxonMobil, Hess, Marathon, Occidental, Peabody Energy, Phillips 66, Repsol, Rio Tinto, Shell, Statoil, and Total. Romany Webb, *Local Governments in California File Common Law Claims Against Largest Fossil Fuel Companies*, COLUMBIA L. SCH. CLIMATE L. BLOG (July 18, 2017), http://blogs.law.columbia.edu/climatechange/2017/07/18/local-governments-in-california-file-common-law-claims-against-largest-fossil-fuel-companies. In August 2017, Chevron filed Notices of Removal and had these actions removed from the state court to the United States District Court of Northern California. Sabine Center for Climate Change Law, *Conservation Law Foundation Filed Lawsuit Alleging Shell Violated Clean Water Act by Failing to Prepare Providence Fuel Terminal for Climate Change*, CLIMATE L. BLOG (Sept. 7, 2017), http://blogs.law.columbia.edu/climatechange/2017/09/07/september-2017-updates-to-the-climate-case-charts.

150. Press Release, Sher Edling LLP, California Communities Confronting Rising Sea Levels Fight Back (July 17, 2017). *See* Webb, *supra* note 149.

151. Complaint for Public Nuisance, People v. BP, No. CGC-17-561370 (Cal. Super. 2017) [hereinafter San Francisco Action]; Complaint for Public Nuisance, People v. BP, Case No. RG17875889 (Cal. Super. 2017), [hereinafter Oakland Action]. The companies named in the lawsuits were BP, Chevron, ConocoPhillips, ExxonMobil and Shell. *Id.* The Oakland and San Francisco actions were initially filed in State Court but were removed to Federal Court at the request of the defendants. *People v. PB p.l.c.*, CLIMATE CASE CHART, http://climatecasechart.com/case/people-state-california-v-bp-plc-oakland.

152. City of New York v. BP. PLC.; Chevron Corporation; ConocoPhillips; Exxon Mobil Corporation; and Royal Dutch Shell PLC, No. 18 cv 182 (N.Y. Southern District Court 2018).

 



against twenty-nine energy companies seeking restitution not only from the impact of sea level rise, but from damages to the hydrologic cycle and resulting increase in severe weather, droughts and wildfires.[153] These suits also will not be limited to coastal communities and cities. On April 17, 2018, three Colorado communities (the City of Boulder and the Counties of San Miguel and Boulder) filed claims against ExxonMobil and Suncor seeking climate change adaptation costs, alleging that the sale of fossil fuels by the defendants contributed to climate change which has caused shifts in precipitation patterns and water availability, an increased risk of droughts and wildfires, as well as an increased risk to forest health and to public health.[154]

Previously, climate litigation claims involving liability for fossil fuels emissions that were brought in Federal Court were dismissed since such claims were determined to be displaced by federal statutes, namely the Clean Air Act.[155] The plaintiffs however, are arguing that these cases are state public nuisance claims in that they are seeking damages caused by the defendants' private and collective actions and market behavior.[156] This jurisdiction issue is being strenuously litigated as a preliminary matter in these climate change actions, and already there have been conflicting rulings in California as to whether these actions were properly filed in State Court, or whether they fall under the jurisdiction of the Federal Court. In February 2018, U.S. District Judge William Alsup ruled that the Oakland and San Francisco Actions fall under the Federal Court's jurisdiction, but left open the possibility that these claims could proceed under federal common law, on the basis that statutory preemption might not apply as these claims involve the production, as opposed to the emission, of fossil fuels.[157] On the other hand, in the California County Actions, U.S. District Judge Vincent Chhabria ruled that these complaints were improperly removed to Federal Court as they were properly filed in State Court, and also disagreed with Judge Alsup's conclusions that federal common law might be applicable in these suits.[158] This question over appropriate

153. City of Richmond v. Chevron Corp, et al, 3:18CV00732 (U.S. Cal. Northern District Court), City of Santa Cruz v. Chevron Corp, et al, 17CV03242 (Cal. Super. 2017) and County of Santa Cruz v. Chevron Corp. et al, 17CV03242 (Cal. Super. 2017).

154 Board of County Commissioners of Boulder County et al. v. Suncor Energy (U.S.A.) Inc. et al., https://assets.bouldercounty.org/wp-content/uploads/2018/04/climate-accountability-lawsuit-filed-boulder-district-court.pdf. These coastal and inland public nuisance claims all are alleging that although the defendant companies knew that GHG emissions from fossil fuels contributed to global warming, they engaged in a large-scale and sophisticated advertising and public relations campaign to promote fossil fuel usage, while denying mainstream climate science and concealing or misrepresenting the risks of global warming to increase sales and protect their market share.

155. See Native Village of Kivalina v. ExxonMobil Corp, 696 F.3d 849 (9th Cir. 2012). See also Connecticut v. AEP, 564 U.S. 410 (2011).

156. Webb, *supra* note 149.

157. Order Denying Motions to Remand, People v. BP, No. 17-0611WHA and No. 17-0602WHA. See Brian H. Potts, *A California Court Might Have Just Opened the Floodgates for Climate Litigation*, FORBES (Mar. 1, 2018), https://www.forbes.com/sites/brianpotts/2018/03/01/a-california-court-might-have-just-opened-the-floodgates-for-climate-litigation/#126af9fd1851. *Lawyers Warn Climate Nuisance Ruling Could Open Litigation 'Floodgates'*, INSIDE EPA CLIMATE (Mar. 5, 2018), https://insideepa.com/daily-news/lawyers-warn-climate-nuisance-ruling-could-open-litigation-floodgates?destination=node/209876.

158. Order Granting Motions to Remand, County of San Mateo v. Chevron Corp., 17-cv-04929-VC (Cal. Supr). The cities of San Francisco and Oakland are not seeking an interlocutory appeal of Judge Alsup's ruling

 



jurisdiction will be brought imminently before the Ninth Circuit Appellate Court; however, as additional public nuisance-based claims are filed by local governments in other states, it stands to reason that courts throughout the country also will be addressing this issue.

In addition to the lawsuits being brought by local governments, there likely will be increased public nuisance tort claims and other novel climate-related lawsuits from public interest organizations and environmental groups seeking to rely on federal and state courts to enforce environmental protection measures and exert pressures on energy companies to address climate change risks.[159] For example, the Conservation Law Foundation recently brought a federal suit claim against ExxonMobil in Massachusetts for failing to "adequately safeguard[] hazardous materials at a petroleum storage facility from" the effects of climate change, alleging that ExxonMobil had been aware of the risks of rising sea levels due to global warming since the 1970s.[160] The Conservation Law Foundation also filed a similar claim against Shell for "fail[ing] to take measures to protect its Providence Terminal" in Rhode Island from the effects of climate change (collectively, "Conservation Law Actions").[161]

Although the defendants in the Conservation Law Actions appear to have obtained valid permits, the issue will be whether assessing or addressing climate change risks form part of a requirement for a valid environmental permit, and whether the defendant companies had the ability and duty to disclose in their permit information and stormwater plans, the risks that their facilities posed.[162] In September 2017, on a motion by ExxonMobil to dismiss the claim for lack of standing, the Massachusetts District Court ruled that there were sufficient facts to establish a plausible claim that "there is [a] 'substantial risk' that severe weather events, such as storm surges, heavy rainfall, or flooding will cause additional discharges in the 'near future.'"[163] In order to avoid the lawsuit from turning into a trial about the existence of climate change, the Court, however, found that there was no standing to sue for injuries resulting from sea level rises occurring in the

and currently this case is proceeding in federal court. The defendants in the California County Actions are appealing Judge Chharia's Order and have sought to stay their proceedings until the matter of jurisdiction is resolved before the Ninth Circuit Court. Defendants' Motion to Stay Pending Appeal of Remand Order; Memorandum of Points and Authorities, Case No. 3:17-cv-4929-VC

159. Following the election of President Trump, there was an unprecedented spike in financial contributions to environmental groups, which will fund future litigation actions. *See* What's Next?, *supra* note 65.

160. Stan Parker, *Enviros Sue Exxon Over Climate Risk to Mass. Terminal*, LAW360, (Sept. 29, 2016, 4:19 PM), https://www.law360.com/articles/846181. In addition, the Conservation Law Foundation also is alleging that ExxonMobil and Shell were in violation of the National Pollution Discharge Elimination System (NPDES) Permit and the Clean Water Act. *Id.*

161. Karen Savage, *Lawsuit: Shell Knew Climate Risks in Providence and Ignored Them*, CLIMATE LIABILITY NEWS (Sept. 12, 2017), https://www.climateliabilitynews.org/2017/09/12/lawsuit-shell-oil-climate-change-risks-providence-ri.

162. Keith Goldberg, *New Strategy in Exxon Suit May Stir Up More Climate Cases*, LAW360 (Sept. 30, 2016).

163. Karen Savage, *Fed. Judge Allows Suit vs. Exxon to Hinge on Climate Impacts at Mass. Oil Facility*, CLIMATE LIABILITY NEWS (Sept. 14, 2017), https://www.climateliabilitynews.org/2017/09/14/exxon-climate-change-everett-massachusetts.

distant future (such as 2050 or 2100) and that these references should be stripped out of the claim.[164]

Given that climate change and its resulting consequences are national and global issues, it is arguable that legislatures and international actors—rather than courts—should be making determinations regarding climate change issues, and that it is inappropriate to utilize the legal theory of public nuisance as a means to secure compensation from energy companies for economic losses attributable to global warming and climate change.[165] Despite these arguments, as the body of scientific evidence on the causes and effects of anthropogenic global warming develops, and with the growing reduction of environmental protection measures, courts may become more willing to consider and address climate change issues, and in turn on matters related to climate risk disclosure practices.[166] In March 2018, Judge Alsup ordered the first-ever climate change "tutorial" where the parties in the San Francisco and Oakland actions were requested to make presentations as to the causes and effects of climate change and to answer eight specific questions related to climate change.[167] Of the five defendants, Chevron was the only party that elected to make presentations regarding its position on climate change. It is notable that following Chevron's submissions, Judge Alsup ordered the attorneys for the four co-defendants to file documents indicating whether they disagreed with Chevron's statements during the tutorial, thus making them submit before the Court their positions on climate change at the very outset of these proceedings.[168]

At this time, the eventual outcomes of these climate change cases remain uncertain as there are a number of jurisdictional, procedural and constitutional issues that need to be overcome by the plaintiffs before the substantive causation and liability issues that have been raised in the complaints can be addressed.[169] Based on the allegations that energy companies misled the public about the contribution of fossil fuel production and consumption to GHG emissions, comparisons are being drawn to the Big Tobacco and Lead Paint cases which have been

164. *Id.*

165. See generally Tracy D. Hester, *A New Front Blowing In: State Law and the Future of Climate Change Public Nuisance Litigation*, STANFORD ENVIRONMENTAL LAW JOURNAL, 31 Stan. Envtl. L.J.49, Thomas W. Merrill, *Is Public Nuisance a Tort?*, JOURNAL OF TORT LAW, 4 J. Tort L.1, Victor E. Schwartz, Phil Goldberg and Corey Scaecher, *Why Trial Courts Have Been Quick to Cool "Global Warming" Suits*, Tennessee Law Review, 77 Tenn. L. Rev. 803 ,and James W. Shelson, *The Misuse of Public Nuisance Law to Address Climate Change*, DEFENSE COUNSEL JOURNAL, 78 Def. Couns. J. 195. See also Nicolas Iovino, *Big Oil Climate Change Suits Stay in Federal Court*, COURTHOUSE NEWS (Feb. 28, 2018), https://www.courthousenews.com/big-oil-climate-change-suits-stay-in-federal-court/.

166. See Gifford, *supra* note 125.

167. Keith Goldberg, Judge Alsup Embraces Giving Climate Change Its Day In Court, LAW 360 (March 20, 2018), https://www.law360.com/energy/articles/1023485/judge-alsup-embraces-giving-climate-change-its-day-in-court?nl_pk=87354a48-f789-4dee-a0e2-ddcf10fd9b2f&utm_source=newsletter&utm_medium=email&utm_campaign=energy.

168. Notice to Defendants re Tutorial, People v. BP, No. C17-06011WHA. Chevron is the only defendant not to have contested personal jurisdiction in the proceedings before Judge Alsup.

169. The defendants have raised a number of legal arguments including, *inter alia*, that the claims infringe on federal foreign affairs power, are barred by the Commerce Clause and Due Process Clause, do not present a justiciable case or controversy, present a political question, and that there is a lack of personal jurisdiction.

 



litigated over the past decades.[170] Although there are some notable differences, it is a certainty that these climate change cases also will continue for years, and likely go well beyond the term of the current Administration.[171] Irrespective of their eventual outcome, these lawsuits and investigations will generate a number of interim negative externalities for energy companies, by way of economic costs, resource costs and reputational harm. They also highlight the potential for future liability claims if going forward, energy companies do not consider and account for their current climate-related risks or fail to disclose these risks to their stakeholders.[172] The adoption and adherence to accepted and standardized climate disclosure practices, particularly if they were to form part of mandatory financial reporting requirements, arguably would provide a strong defense for energy companies against future claims that there was inadequate disclosure of their current climate-related risks.

### *C. Influence from Shareholders, Institutional Investors and the Financial*

170. Chelsea Harvey, *Scientists Can Now Blame Individual Natural Disasters on Climate Change*, SCIENTIFIC AMERICA (Jan 2, 2018), https://www.scientificamerican.com/article/scientists-can-now-blame-individual-natural-disasters-on-climate-change/ . In the Big Tobacco cases, the Department of Justice eventually filed a civil racketeering lawsuit under the Racketeer Influenced & Corrupt Organizations Act (RICO). Under RICO, to establish liability the prosecution must prove that the defendant "engaged in a pattern of racketeering acts in a scheme to defraud" whereas under the Martin Act, the New York Attorney General does not have to prove intent. Lana Ulrich, *Climate Change in the courts: Big Oil and Big Tobacco*, CONST. DAILY BLOG (July 15, 2016), https://constitutioncenter.org/blog/climate-change-in-the-courts-big-oil-and-big-tobacco. State Attorneys General previously have requested that the Department of Justice file RICO proceedings against ExxonMobil; however, this would be extremely unlikely under the current Administration. *Id*. For a general discussion of public nuisance theory in the Lead Paint cases, see Elizabeth O'Conner Thomlinson, *Proof of Public Nuisance in Products Liability Tort Cases*, AMERICAN JURISPRUDENCE PROOF OF FACTS 3d, 13 AM. Jur. Proof of Facts 3d 193. See also Jules Zeman, *Lead Paint as a Public Nuisance in California*, Law 360 (Dec 6, 2017), https://www.law360.com/articles/991787/lead-paint-as-a-public-nuisance-in-california.

171. An analysis of the legal merits of these cases is beyond the scope of this paper. The author notes, however, that legal experts have commented that it would be challenging to prove that a company deceived investors about the reality of climate change. Wharton Article, *supra* note 128. It also has been noted that shareholder actions relating to improper share valuations may have greater success than claims alleging climate change deception, given that they are easier to prove. David Hasemyer, *Class Action Lawsuits Adds to Exxon Mobil's Climate Change Woes*, INSIDE CLIMATE NEWS (Nov. 21, 2016), https://insideclimatenews.org/news/18112016/exxon-climate-change-research-oil-reserves-stranded-assets-lawsuit. In addition, it has been noted that although courts may be reluctant to address the issue of climate change, as courts increasingly rely on climate science and the body of climate science develops, "nuisance" suits that have been previously dismissed may be successful in the future. Marlen Cimons, *Climate Policy Increasingly Showing up in Court*, NEXUS MEDIA (Sept. 7, 2017), https://nexusmedianews.com/climate-policy-increasingly-showing-up-in-court-1b4da114a18c. *See generally* Webb, *supra* note 149. *See also* Chris Mooney & Brady Dennis, *This Could be the Next Big Strategy for Suing Over Climate Change*, WASH. POST (July 20, 2017), https://www.washingtonpost.com/newrgy-environment/wp/2017/07/20/this-could-be-the-next-big-strategy-for-suing-over-climate-change/?utm_term=.8eaec6aa0d3c.

172. David Schultz, *How Climate Change Can Get You Sued*, BLOOMBERG DAILY ENV'T REPORT (July 26, 2017), https://www.bna.com/climate-change-sued-n73014462305.

*Sector*

In recent years, shareholders and institutional investors have been exerting pressure on companies to report on climate risk by utilizing the shareholder proposal process and by engaging directly with company boards and executives.[173] These strategies have been perceived as being more effective than utilizing divestment efforts when persuading companies to provide more transparent and substantive climate-related disclosures, and to support and endorse the TCFD Recommendations.[174]

Various international investor coalitions have encouraged and spearheaded these initiatives for the past decade.[175] For example, the Global Investor Coalition on Climate Change and the CDP have published climate risk engagement guidelines on ten oil and gas companies, which not only outline and analyze particular climate risks faced by these companies, but provide specific "priority questions" for investors to address with each company.[176] As well, the non-profit sustainability action organization, Ceres, has played a key role in coordinating efforts with activist shareholder groups to file proxy proposals calling for greater climate risk disclosures from major energy companies, a process which has garnered increasing support from major institutional investors.[177]

Rule 14a-8 of the Exchange Act allows proposals from shareholders to be included in a company's proxy statement that is voted on by all shareholders at

173. At the One Planet Summit, "[m]ore than 200 institutional investors with US$26 trillion in assets under management" announced that they would increase engagement efforts with the 100 "biggest pollution companies" to curb GHG emissions and to improve upon climate-related disclosure and governance. Alister Doyle, *Big Investors Press Major Companies to Step Up Climate Action*, REUTERS (Dec. 12, 2017). Major institutional investors that have supported shareholder proposals on climate risk disclosure include, *inter alia*, Deutsche Asset & Wealth Management, Fidelity Management & Research Co., Goldman Sachs Asset Management, Morgan Stanley Investment Management Inc, Northern Trust Investments, Norges Bank Investment Management and State Street Global Advisors. *See Warming Up – A spotlight on institutional investors' voting patterns on key US climate change resolutions in 2017*, SHARE ACTION (Sept. 2017), https://shareaction.org/wp-content/uploads/2017/10/InvestorReport-ProxyVoting2017updated.pdf [hereinafter, Warming Up].

174. Members of the 200 institutional investors engaging with the 100 biggest pollution companies are pursuing a policy whereby divestment is being viewed as a last resort. Doyle, *supra* note 173; *see generally* Investor Climate Compass, *supra* note 80.

175. See INSTITUTIONAL INVESTOR'S GROUP ON CLIMATE CHANGE, Publications, Investor Guides, http://www.iigcc.org/publications/category/investor-guides (last viewed April 12, 2018).

176. See Investor Climate Compass, *supra* note 80. Members of the Global Investor Coalition consist of the Asia Investor Group on Climate Change, Ceres, Investor Group on Climate Change and the Institutional Investor's Group on Climate Change.

177. These activist shareholder groups include *inter alia*: public employee pension funds, socially responsible investing funds and religious institutions. *See Proxy Monitor 2017 Score Card*, PROXY MONITOR, http://www.proxymonitor.org/ScoreCard2017.aspx. [hereinafter Proxy Monitor 2017 Score Card]. Examples of recent proposals include publishing an assessment of portfolio risks under a 2°C Scenario; assessing risks of stranded assets due to climate change reporting on methane emissions monitoring and management; and reporting on the transition to a low-carbon economy. *See Climate and Sustainability Shareholder Resolution Data Base*, CERES (Mar. 7, 2017), https://www.ceres.org/resources/tools/climate-and-sustainability-shareholder-resolutions-database. *See also* Mara Lemos Stein, *The Morning Risk Report: Choice Act Fuels Debate Over Shareholder Proposals*, WALL ST. J. (June 20, 2017 7:00 AM), https://blogs.wsj.com/riskandcompliance/2017/06/20/the-morning-risk-report-choice-act-fuels-debate-over-shareholder-proposals and Erin Ailworth, *Occidental Shareholders Vote for Climate Proposal*, WALL ST. J. (May 12, 2017), https://www.wsj.com/articles/occidental-shareholders-vote-for-climate-proposal-1494616669.

the annual shareholder meeting.[178] Although these resolutions are non-binding, they provide an opportunity for shareholders to initiate and engage in meaningful dialogue with company boards and executives, and have been effective in highlighting demands around ESG issues, especially on matters related to climate change.[179] Historically, these shareholder resolutions have failed to pass without the support from company boards and management; however, they have been an effective tool in encouraging companies to notice and address specific shareholder concerns, as a resolution that obtains even 20% of the vote is viewed as being significant.[180] Shareholder resolutions calling for greater climate risk disclosure have been gaining traction in recent years as major institutional investors are voting in favor of climate-related resolutions, rather than abstaining or supporting management positions.[181] In addition, although the SEC does not appear to have any intention of expanding the 2010 Guidelines, the SEC's Division of Corporate Finance recently has issued a number of comment letters disagreeing with positions taken by various energy companies that the ordinary business operations exemption under Rule 14a-8(i)7 permitted them to exclude shareholder proposals calling for greater climate risk disclosures from their proxy materials.[182]

The filing of a shareholder proposal in itself, has been an effective means to encourage companies to engage with stakeholders and address their concerns.[183] In 2016, 34% of shareholder resolutions were withdrawn after the targeted company opted to engage with shareholders and address the issues and concerns raised in the shareholder proposal.[184] In 2017, shareholders of Chevron withdrew their resolution calling for more detailed and annual disclosure of climate risk after

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178. Sec. & Exch. Comm'n, Shareholder Proposals, 17 C.F.R. § 240.14a-8 (1998); Carlton Tarpley, *How Shareholders Can Fill an Environmental Regulatory Void*, GEO. ENVTL. L. REV. (Jan. 29, 2017), https://gelr.org/2017/01/29/how-shareholders-can-fill-an-environmental-regulatory-void.

179. *See* Fossil Free Indexes, *Shareholder Resolutions in the Carbon Underground 200 Companies, 2012-2016: A Complex Picture*, FFI PERSPECTIVES (Sept. 6, 2016), http://fossilfreeindexes.com/2016/09/06/shareholder-resolutions-carbon-underground-200-compa nies-2012-2016-complex-picture [hereinafter Fossil Free Indexes]; see also Stein, *supra* note 177.

180. Tarpley, *supra* note 178.

181. Warming Up, *supra* note 173.

182. See SEC No-Action Letter re. Entergy Corporation, 2018 WL 318111 (Mar 14, 2018), SEC No-Action Letter re. PNM Resources, Inc., 2017 WL 261991 (Feb 16, 2017), and SEC No-Action Letter re. Dominion Resources, Inc. 2016 WL 7646656 (Feb 15, 2017). Under Rule 14a-8(i)7, a company is permitted "to exclude a proposal that 'deals with a matter relating to the company's ordinary business operations.' The purpose of the exception is 'to confine the resolution of ordinary business problems to management and the board of directors, since it is impracticable for shareholders to decide how to solve such problems at an annual shareholders meeting.'" Division of Corporation Finance, SEC, Staff Legal Bulletin, No. 14I(CF) (Nov 1, 2017), citing Release No. 34-40018 (May 21, 1998), https://www.sec.gov/interps/legal/cfslb14i.htm. In November 2017, the SEC issued a new Guidance on shareholder proposals which may have the effect of "increas[ing] the importance of directors developing relationships with a broader group of investors, including those who submit shareholder proposals, [and] … encourag[ing] boards to engage with proponents earlier in the shareholder proposal process to seek a negotiated agreement for proposal withdrawal." Troy Paredes, Allie Rutherford, and Sharo Atmeh, Analysis of SEC Guidance on Shareholder Proposals, HARVARD LAW SCHOOL FORUM ON CORPORATE GOVERNANCE AND FINANCIAL REGULATION (Nov 20, 2017), https://corpgov.law.harvard.edu/2017/11/20/analysis-of-sec-guidance-on-shareholder-proposals/.

183. Fossil Free Indexes, *supra* note 179.

184. *Id.*

Chevron agreed to produce a report on climate change impacts.[185] Although Chevron's report fully did not address all of the issues raised in the shareholder proposal, the shareholders recognized Chevron's engagement efforts and that it was appropriate to give Chevron additional time to incorporate the TCFD Recommendations and other reporting practices in its disclosure.[186] That being said, in their Shareholder Proposal Withdrawal Statement, the shareholders emphasized that they expect Chevron to provide a more "robust and comprehensive analysis that identifies emerging risk factors" in the future, and to be willing "to adjust its business plan" to guarantee long term resilience.[187] Similarly, a shareholder resolution requesting a climate risk report from Anadarko Petroleum Corp. (Anadarko) was withdrawn in 2017 after Anadarko agreed to engage with shareholders "to develop methods for reporting on climate risks that would be practical for the company but still convey to investors the full extent of the risks it could face."[188]

Previously, it was extremely difficult to pass a shareholder resolution without support from the company's Board of Directors. This changed however, in May 2017, when a majority of shareholders from Occidental Petroleum, PPL Corp., and ExxonMobil, voted in favor of shareholder proposals for the production of climate change impact assessments and environment related scenario planning, including a 2°C Scenario Analysis, despite Board opposition.[189] The shareholder proposals at Occidental Petroleum and ExxonMobil would not have passed had they not garnered support from their major institutional investors, such as BlackRock Inc. (BlackRock), State Street Global Advisors (SSGA) and the Vanguard Group (Vanguard), who in recent years have been increasing their engagement efforts to have energy companies provide more substantive climate risk disclosure.[190] Historically, BlackRock and Vanguard relied on engagement efforts

185. Ed Crooks, *Chevron Investors Back-off from Climate Change Proposal*, FIN. TIMES, (May 15, 2017), https://www.ft.com/content/b32f9d10-3984-11e7-821a-6027b8a20f23?mhq5j=e1.

186. *Id.*

187. HERMES EOS & WESTPATH INV. MGMT, *Climate Change Stress Testing and Scenario Impact Assessment Shareholder Proposal Withdrawal Statement: Chevron Corporation Proxy Item No. 7* (May 2, 2017), https://www.wespath.org/assets/1/7/Withdrawal-Statement-Chevron-4-24-17.pdf.

188. Ross Kerber, *Ahead of Exxon's Annual Meeting, Shareholders and Investors Push for Climate Action*, Reuters, (May 22, 2017), http://www.businessinsider.com/r-ahead-of-exxons-annual-meeting-climate-activists-gain-ground-2017-5.

189. The shareholder proposal for Occidental Petroleum passed with 65.7% of the eligible votes cast. *Form 8-K: Occidental Petroleum Corp.*, SEC. & EXCH. COMM'N (May 12, 2017). 57% of shareholders from PPL Corp. (a Pennsylvania utility company) voted in favor of the shareholder resolution. Bradley Olson, *Exxon Shareholders Pressure Company on Climate Risks*, WALL ST. J. (May 31, 2017), https://www.wsj.com/articles/exxon-shareholders-pressure-company-on-climate-risks-1496250039. The ExxonMobil shareholder proposal was supported by 62% of shareholders who cast ballots. *Id.*

190. Olson, *supra* note 189. In December 2017, BlackRock issued a letter to 120 of its companies viewed to have inherent material climate risks, urging them to align their climate risk reporting with the TCFD Recommendations. Meaghan Kilroy, *BlackRock Calls on Companies to Improve Climate Risk Reporting*, PENSIONS & INV. (Dec. 13, 2017), http://www.pionline.com/article/20171208/ONLINE/171209846/blackrock-calls-on-companies-to-improve-climate-risk-reporting. "In January 2017 . . . State Street Global Advisors" (US $2.4 trillion in assets under management) publicly stated that it "planned to focus on board oversight of sustainability issues, including climate change," believing it to have a material impact on long-term returns. Ahmad, *supra* note 3. In August 2017, SSGA issued a guidance for listed companies outlining pertinent disclosure practices when evaluating climate risk and is focusing specifically on 50 global companies in the oil and gas, utilities and

and voted with company management on shareholder proposals; however, when commenting on ExxonMobil's 2017 annual shareholder meeting, BlackRock publicly stated that it voted against the recommendations of ExxonMobil's Board of Directors, after ExxonMobil failed to provide meaningful disclosure about the effects of climate risk on its long-term business performance, despite shareholder demands for greater disclosure, and also ignored demands to make independent directors available to shareholders.[191] BlackRock also disclosed its reasons for supporting Occidental Petroleum's shareholder proposal, stating that "it was concerned about Occidental Petroleum's pace of disclosure to date."[192] These results from the 2017 annual shareholder meetings demonstrate that major institutional investors regard climate risk as a material economic factor that may affect their long-term investment decisions and as such, will be demanding greater transparency from companies on climate risk disclosure, as well as greater access to non-employee directors to enable further discussions on climate-related issues.[193]

Institutional investors have indicated they are prepared to be patient with companies, provided companies are willing to engage and work with them on climate risk disclosure issues and management.[194] During the 2017 proxy season BlackRock voted against a shareholder resolution on setting greenhouse GHG targets at Shell's 2017 annual shareholder meeting.[195] After engaging with Shell's management and executives, BlackRock concluded that Shell was committed to climate risk disclosure, but that the proposal advanced "was overly prescriptive, difficult to implement" and not in long-term investment interests.[196] As well, institutional investors have been willing to work privately with companies during the engagement process and usually have refrained from commenting publicly on

mining sectors. *SSGA's Perspectives on Effective Climate Change Disclosure*, STATE STREET GLOBAL ADVISORS (Aug. 14, 2017), https://www.ssga.com/investment-topics/environmental-social-governance/2017/perspectives-on-effective-climate-change-disclosure.pdf. In August 2017, Vanguard publicly urged companies to disclose how climate change could affect their business and asset evaluations. Ross Kerber, *Vanguard Seeks Corporate Disclosure on Risks from Climate Change*, REUTERS (Aug. 14, 2017), https://www.reuters.com/article/us-vanguard-climate/vanguard-seeks-corporate-disclosure-on-risks-from-climate-change-idUSKCN1AU1KJ.

191. Mara Lemos Stein, *The Morning Risk Report A Glimpse into BlackRock's Climate Voting*, WALL ST. J. (June 14, 2017), https://blogs.wsj.com/riskandcompliance/2017/06/15/the-morning-risk-report-a-glimpse-into-blackrocks-climate-voting.

192. Ross Kerber, *BlackRock Switch Helps Pass 'Historic' Climate Measure at Occidental*, REUTERS (May 12, 2017), https://www.reuters.com/article/us-blackrock-occidental-climate/blackrock-switch-helps-pass-historic-climate-measure-at-occidental-idUSKBN1882AA.

193. Olson, *supra* note 189.

194. "In [their] recently published engagement priorities for 2017-18, BlackRock Investment Stewardship explained that, as a long-term investor, we are willing to be patient with companies when our engagement affirms they are working to address our concerns. However, our patience is not infinite – when we do not see progress despite ongoing engagement, or companies are insufficiently responsive to our efforts to protect the long-term economic interests of our clients, we will not hesitate to exercise our right to vote against management recommendations." BlackRock, *Statement Proposal 21: Binding Resolution on Setting Greenhouse Gas ("GHG") Reduction Targets* (May 23, 2017), https://www.blackrock.com/corporate/en-gb/literature/publcations/blk-vote-bulleticn-shell-may2017.pdf.

195. *Id.*

196. *Id.*

 



the details of their discussions and negotiations, which should encourage increased levels of trust and cooperation with targeted companies.[197]

Companies are ill-advised to ignore shareholder proposals since institutional investors likely will be demanding greater engagement, particularly with respect to matters related to climate change and the disclosure of climate-related risks that are in line with the TCFD Recommendations.[198] A failure to address the issues raised likely will result in additional shareholder proposals being filed in subsequent years, which stand to garner greater shareholder support given the traction that the shareholder proposal process has achieved, particularly with respect to ESG issues.[199] Despite the fact that in 2017, Anadarko's shareholders withdrew their shareholder proposal calling for Anadarko to report on a 2-degree analysis and strategy in order to engage in discussions, a similar shareholder proposal has once again been filed for the 2018 annual shareholder meeting.[200] In addition, companies also face the prospect that shareholders will resort to other measures in voicing their dissatisfaction if companies fail to address adequately shareholder concerns. For example, in 2016 BlackRock did not support the election of two key ExxonMobil directors, since ExxonMobil continued to make it a policy not to engage in discussions regarding strategy and capital allocation, notwithstanding requests for such discussions from its institutional investors.[201]

It should be noted that the ability of shareholders to file proxy proposals under Rule 14a-8 may become restricted in the future if proposed amendments under the Financial Choice Act of 2017 were to become law.[202] Currently, in order to file a shareholder resolution, shareholders are required to hold at least US$2000 in market value or 1% of the company's outstanding voting securities for one year or more.[203] The proposed changes would eliminate the $2000 minimum threshold, but require shareholders to own at least 1% of the voting securities for a three-year

197. Both BlackRock and Vanguard had declined to comment on their engagement efforts with ExxonMobil leading up to ExxonMobil's recent commitment to provide future climate risk disclosure in accordance with the 2017 shareholder proposal. *See ExxonMobil Gives in to Shareholders on Climate Risk Disclosure*, FORTUNE (Dec. 12, 2017), http://fortune.com/2017/12/12/exxon-mobil-climate/, [hereinafter, ExxonMobil Gives in to Shareholders].

198. Investor Climate Compass, *supra* note 80, at 5.

199. Stein, *supra* note 191; *see also* Climate Change Risk and Sustainability Disclosures, *supra* note 19, at 31.

200. Engagement Tracker, CERES, https://engagements.ceres.org/ceres_engagementdetailpage?recID=a0l1H00000C47pKQAR [hereinafter 2018 Engagement Tracker] (last visited Apr 25, 2018).

201. *BlackRock Investors Refused to Back Two Key Directors at ExxonMobil,* FORTUNE (Aug. 29, 2016), http://fortune.com/2016/08/29/blackrock-exxon-mobil. *See* Bradley Olson et al., *BlackRock, Vanguard Mull Pressuring Exxon to Disclose Climate Risks*, WALL ST. J. (May 25, 2017), https://www.wsj.com/articles/blackrock-vanguard-mull-pressuring-exxon-to-disclose-climate-risks-1495704601.

202. The Financial Choice Act was passed by the House of Representatives on June 8, 2017 and currently is before the Senate. Financial Choice Act of 2017, H.R.10, 115th Cong. (2017).

203. In 1998, the SEC increased the eligibility threshold to US $2000 to US $1000. There were calls for a greater increase; however, at the time, the SEC justified their position stating that the goal of Rule 14a-8 was to provide an avenue of communication with small investors. Final Rule, Amendments to Rules on Shareholder Proposals, Sec. & Exch. Comm'n, 17 C.F.R. pt. 20.

period.[204] Shareholders also would be prohibited from authorizing other individuals to submit proposals on their behalf.[205]

If the proposed amendments to Rule 14a-8 were to become law, it would restrict the ability of smaller shareholders and institutional investors (such as pension funds or socially responsible investing funds) to use the shareholder process as a mechanism to encourage companies to provide greater disclosure, as they would be unable to meet the proposed threshold requirements, especially when targeting large energy companies.[206] Although it would become more difficult for smaller institutional investors to file shareholder proposals, such a development would not eliminate demands for more substantive disclosure of climate-related risks as companies still will face pressure from major institutional investors to provide this information. Since an increasing number of institutional investors regard climate change risk to be a material economic factor in their long-term investment decisions, the environmental deregulation policies under the current Administration and resulting environmental consequences likely will cause institutional investors to address climate change risk with greater emphasis and focus in the immediate future.[207]

Major institutional investors also will face greater scrutiny and demands from their own shareholders and environmental proponents to take action on these issues, especially if the ability of other shareholders to address climate risk disclosure issues is curtailed.[208] After BlackRock supported ExxonMobil's Board of Directors and voted against a shareholder resolution in 2016, BlackRock faced intense criticism from its own shareholders and environmental activists, and has now indicated that the disclosure of climate risk is a key engagement priority.[209]

204. The proposed amendments to Rule 14a-8 go further than the recommendations that had been made by the Business Round Table, an association of U.S. chief executives, who advocated for greater restrictions for shareholder proposals. The Business Round Table had recommended a sliding scale for ownership starting at 0.15% for large companies and 1% for small companies. Stein, *supra* note 191.

205. *Id.*

206. For example, under the proposed amendment to Rule 14a-8, for a shareholder of ExxonMobil (which has 4.2 billion shares outstanding) to submit a proposal, the shareholder would have to own 42 million shares (worth US $3.4 billion). This would essentially limit the ability to submit shareholder proposals to seven holders. Gretchen Morgenson, *Meet the Legislation Designed to Stifle Shareholders*, N.Y. TIMES (June 16, 2017), https://www.nytimes.com/2017/06/16/business/wells-fargo-clawback-fair-choice-act-shareholders.html.

207. Mara Lemos Stein, *The Morning Risk Report: Seeking More Engagement on Environment*, WALL ST. J. (June 9, 2017 7:25 AM), https://blogs.wsj.com/riskandcompliance/2017/06/09/the-morning-risk-report-more-engagement-on-environment. Cydney Posner, *Are Shareholder Proposals on Climate Change Becoming a Thing?*, HARVARD LAW SCHOOL FORUM ON CORPORATE GOVERNANCE AND FINANCIAL REGULATION (Jun. 21, 2017), https://corpgov.law.harvard.edu/2017/06/21/are-shareholder-proposals-on-climate-change-becoming-a-thing/.

208. A recent study conducted by Schroders Global Investor found that millennials (aged 18-35) rank "ESG factors as equally important as investment outcomes when considering investment[] decisions" and that they were more likely to actively pull funds from companies with poor ESG records. *Schroders Global Investor Study 2016: ESG*, SCHRODERS (Nov. 28, 2016), http://www.schroders.com/en/media-relations/newsroom/all_news_releases/schroders-global-investor-study-2016-millennials-put-greater-importance-on-esg-factors.

209. Following the proxy season in 2016, a group of BlackRock shareholders filed a motion calling on BlackRock's board "to carry out a full review into the fund house's voting practices at annual general meetings." Attracta Mooney, *BlackRock's Environmental Voting Record Attacked*, FIN. TIMES (Nov. 26, 2016),

As well, Walden Asset Management has publicly stated that it is pressing Vanguard and other fund managers on climate change issues.[210] Although major institutional investors, such as BlackRock or Vanguard, have yet to file a shareholder proposal on ESG matters, if other shareholders are precluded from utilizing the shareholder proposal mechanism, it stands to reason that major institutional investors would face significant internal pressures to increase their engagement efforts and to publicly exert greater pressure on energy companies regarding climate-related matters, should companies fail to provide more substantive climate change risk disclosures in the future.[211]

Pressure also is being exerted on major banking institutions to address climate change risks and even to divest from financing fossil fuel projects.[212] In June 2017, the Bank of England stated it would be conducting an internal review of the banking sector to determine its exposure to climate risks.[213] In addition, in September 2017, 100 investors (managing US $1.8 trillion in assets) sent a letter to sixty-two CEOs of the world's largest banks, calling on banks to (1) provide greater disclosure as to how they are managing climate change risk; (2) publish a strategy that is in support of the goals of the Paris Agreement; and (3) to follow the reporting guidelines set out in the TCFD Recommendations.[214] In response, banks are developing due diligence policies and conceptual frameworks to be able to assess climate-related risks.[215] Most significantly, sixteen major banks, along with the United Nations Environment Programme Finance Initiative, are working together "to develop scenarios, models and metrics to enable scenario-based, for-

https://www.ft.com/content/c49e7898-b273-11e6-9c 37-5787335499a0. As well, the United Nations Principles for Social Investment stated that it would consider delisting signatories that "do not live up to the spirit of the initiative." Attracta Mooney, *Asset Managers Accused of Climate Change Hypocrisy*, FIN. TIMES (Sept. 25, 2016), https://www.ft.com/content/1833bc1e-800d-11e6-8e50-8ec15fb462f4; Olson, *supra* note 201.

210. Kerber, *supra* note 192.

211. James R. Copland & Margaret O'Keefe, *Proxy Monitor 2017, Finding 1: Climate-Change Proposals Break Through*, MANHATTAN INST. (June 27, 2017), http://www.proxymonitor.org/Forms/2017Finding1.aspx.

212. At the One World Summit, the World Bank announced that after 2019, it will no longer finance upstream oil and gas projects except in "exceptional circumstances" where upstream projects may be required in the poorest countries. Press Release, World Bank, World Bank Announcements at One Planet Summit (Dec. 12, 2017). In addition, BNP Paribas has stated that it would be divesting from oil sands projects while ING will no longer finance utilities after 2025 that are over 5% reliant on coal fired power. *One Planet Summit: A Round Up of New Fossil Fuel Policy Announcements,* BANKTRACK (Dec. 21, 2017), http://www.worldbank.org/en/news/press-release/2017/12/12/world-bank-group-announcements-at-one-planet-summit. Norway's Central Bank, Norges Bank, has advised its government that it should divest its US $1 trillion sovereign wealth fund of all oil and gas shares. *See generally* Joe Ryan & Anna Hirtenstein, *Norway Idea to Exit Oil Stocks is 'Shot Heard Around the World,'* BLOOMBERG (Nov. 16, 2017), http://business.financialpost.com/commodities/energy/divestment-by-worlds-largest-wealth-fund-would-be-us2-86b-hit-to-canadian-oil-and-gas.

213. Pilita Clark, *Bank of England to Probe Bank's Exposure to Climate Change*, FIN. TIMES (June 16, 2017), https://www.ft.com/content/ec4d3446-52a1-11e7-a1f2-db19572361bb.

214. Jon Hay, *Get Real on Climate Risk, Investors Tell Banks*, GLOBAL CAP. (Sept. 14, 2017), http://www.globalcapital.com/article/b14rc7y1xf9fzp/get-real-on-climate-risk-investors-tell-banks.

215. J. Kevin Healy and Becky L. Huinker, *The Changing Climate is Changing the Way Banks Assess Risks and Opportunities*, BRYAN CAVE (Feb. 28, 2017), https://www.bryancave.com/en/thought-leadership/the-changing-climate-is-changing-the-way-banks-assess-risks-and.html.

ward-looking assessment and disclosure of climate-related risks and opportunities" in efforts to implement the TCFD Recommendations.[216] This is a strong indication that the use of quantitative scenario analysis likely will develop into a regular financial reporting practice when assessing long-term risks and opportunities, and that banks will be seeking this information from companies when making future decisions regarding their financing activities in order to limit their own exposure to climate risks through their borrowers.[217] One cannot ignore that this could have an acute effect on the energy sector given that it is "capital intensive, [and] require[s] major financial investments in fixed assets and supply chain management."[218]

Climate-related shareholder proposals will continue to figure prominently for energy companies during the 2018 proxy season as shareholders continue to target companies to provide more substantive climate-related disclosures, and particularly to report on the company's 2-degree analysis and strategy.[219] Given that last year, 40% of shareholders at Kinder Morgan voted in favor of a shareholder resolution calling for a report on its 2-degree analysis and strategy, it will be interesting to see whether Kinder Morgan will agree to provide more substantive climate-risk disclosures that are in-line with this proposal, or if key institutional investors will vote against company management in the event they were to oppose a similar resolution that has been filed this year.[220] Although certain U.S. energy companies have continued to encourage their shareholders to vote against these proposals, as of April 2018, seven out of twenty shareholder resolutions pertaining to climate-related disclosures had been withdrawn "due to proactive dialogue" or commitment by the targeted company to provide the requested disclosure.[221]

Most notably in December 2017, the New York State Common Retirement Fund withdrew its shareholder proposal that it had filed with ExxonMobil after ExxonMobil agreed to "implement the shareholder request that the company analyze how worldwide efforts to adopt the Paris Agreement goals for reducing global warming might impact its business."[222] In its SEC Form 8-K filing, filed December 12, 2017, ExxonMobil released a statement that, after consultation and input

216. These banks include "ANZ, Barclays, BBVA, BNP Paribas, Bradesco, Citi, DNB, Itaú, National Australia Bank, Rabobank, Royal Bank of Canada, Santander, Société Générale, Standard Chartered, TD Bank Group and UBS." UNEP FIN. INITIATIVE, PILOT PROJECT ON IMPLEMENTING THE TCFD RECOMMENDATIONS, http://www.unepfi.org/banking/tcfd (last visited Feb. 24, 2018).

217. Jess Shankleman, *Banks Heed Carney's Call to Tackle Risks of Climate Change*, BLOOMBERG (July 11, 2017), https://www.bloomberg.com/news/articles/2017-07-11/carney-draws-bank-support-for-climate-risk-reporting-campaign.

218. Implementing the TCFD Recommendations, *supra* note 54.

219. According to Ceres' Engagement Tracker, eight such resolutions have been filed with energy companies for the 2018 proxy season. 2018 Engagement Tracker, *supra* note 200.

220. Proxy Monitor 2017 Score Card, *supra* note 177.

221. David Hasemyer, *3 Dozen Shareholder Climate Resolutions Target Oil, Gas and Power Companies*, INSIDE CLIMATE NEWS, https://insideclimatenews.org/news/07032018/shareholder-resolutions-climate-change-2-degrees-methane-lobbying-trump-administration. 2018 Engagement Tracker, *supra* note 200. Mercy Investment Services, 2018 Shareholder Resolutions, http://www.mercyinvestmentservices.org/socially-responsible-investing/corporate-engagement/current-shareholder-resolutions (last visited Mar. 12, 2018).

222. Press Release: NYS Comptroller DiNapoli: ExxonMobil Agrees to Assess Impacts of Climate Change, Office of the State Comptroller of New York, (Dec. 12, 2017), https://www.osc.state.ny.us/press/releases/dec17/121217.htm.

from major shareholders and proponents, its Board of Directors had reconsidered the 2017 shareholder proposal requesting greater climate risk disclosure and would seek to issue climate change disclosures in the future that would "include energy demand sensitivities, implications of two degree Celsius scenarios, and positioning for a lower-carbon future."[223]

In February 2018, ExxonMobil released its *Energy & Carbon Summary: Positioning for a Lower-Carbon Future* and its *Outlook for Energy: A View to 2040*. Both reports "include consideration of the impact on future energy demand from an analysis of multiple lower-carbon scenarios published by the Stanford University Energy Modeling Forum."[224] Based on its analysis of various 2°C scenarios, ExxonMobil concluded that it was well positioned even in a 2°C Scenario as there is "little risk" of its fossil fuel reserves being left in the ground, and that any of its undeveloped oil resources that would not be "attractive investments" represent only less than 5 percent of the company's value.[225]

Climate disclosure proponents have acknowledged that ExxonMobil's latest reports are a "marked improvement" from its previous reporting.[226] Although this disclosure is viewed as being a step in the right direction, these reports have been criticized for being too generalized and lacking specific details as to how ExxonMobil is managing its climate-related physical and transition risks.[227] ExxonMobil also has been criticized for relying on the assumption that lower emission

223. EXXON MOBIL CORP., SEC FORM 8-K (Dec. 12, 2017). It should be noted that following this statement, and in advance of ExxonMobil releasing these disclosures, Attorney General Healey submitted in a court filing that ExxonMobil's statement made "clear, that at a minimum, Exxon's prior disclosure to investors … may not have adequately accounted for the effect of climate change on its business and assets." Supplemental Memorandum of Law In Support of Attorney General Healey's Renewed Motion to Dismiss, Exxon Mobil Corporation v. Schneiderman. Such positions are not helpful in encouraging energy companies to provide more substantive climate-related disclosure; however, it stands to reason that absent evidence of past fraud, given the evolving nature of these disclosures, both in terms of scientific content and newly developing reporting practices, providing enhanced climate risk disclosures should not expose companies to liability for failing to provide such disclosures in the past. See SASB Legal FAQs, *supra* note 73. On the other hand, given that an increasing number of shareholders, banks and institutional investors now deem such disclosures to be material, and as industry standards are being created in relation to climate-related disclosures, moving forward there is a significant probability that any ongoing failure to consider and disclose current climate-related risks will result in increased liability risks in the future.

224. ExxonMobil, Press Release: ExxonMobil Releases Energy & Carbon Summary and Outlook for Energy (Feb. 2, 2018), http://news.exxonmobil.com/press-release/exxonmobil-releases-energy-carbon-summary-and-outlook-energy.

225. In their reports, ExxonMobil concluded that from 2016 to 2040, worldwide energy demand will grow by 25% (due to population growth and rise in living standards in developing countries), with carbon dioxide emissions peaking by 2040. At the same time, the carbon intensity of the global economy will be reduced by "energy efficiency gains and gradual reductions in the GHG intensity of the energy system." "Oil and natural gas [will] continue to supply about 55 percent of the worlds energy needs" and "oil [will] continue[] to provide the largest share of the energy mix due to demands from commercial transportation and the chemical sector." *Id. See* ExxonMobil 2018 Energy & Carbon Summary – Positioning for a Lower-Carbon Energy Future, http://cdn.exxonmobil.com/~/media/global/files/energy-and-environment/2018-energy-and-carbon-summary.pdf.

226. *Exxon Nudges in Right Direction on Climate Risk*, Carbon Tracker Blog (Feb. 12, ,2018), https://www.carbontracker.org/exxon-nudges-right-direction-climate-risk/.

227. Karen Savage, *Exxon Claims Climate Action Poses 'Little Risk' to Its Business*, CLIMATE LIABILITY NEWS (Feb. 5, 2018), https://www.climateliabilitynews.org/2018/02/05/exxon-climate-action-stranded-assets/.

technological developments will permit the continued use of fossil fuels, for not accounting for financial risk if these assumptions are overly-optimistic, and for failing to acknowledge their litigation risks.[228]

In its second climate change report, *Climate Change Resilience – A Framework For Decision Making,* released in March 2018, Chevron also concluded that environmental and carbon-pricing policies would not impact its business model and that given the quality and diversification of their reserves, there was a "very slim risk" of having stranded assets.[229] It is notable that Chevron made an effort to align its report with the TCFD Recommendations, and despite criticisms with respect to the adequacy of its disclosures, this effort was recognized by climate disclosure proponents.[230] It should be noted that Occidental Petroleum has indicated that it will be publishing a report on its climate change risks in June 2018.[231]

The initial willingness by these U.S. oil and gas majors to provide enhanced climate-risk disclosures indicates that they are recognizing the importance of providing this information to meet the demands of their institutional investors and stakeholders. The recent disclosures however, do fall short of the substantive disclosure and analysis envisioned by the TCFD Recommendations and will not satisfy these demands. Energy companies will need to provide quantitative assessments and more detailed information and analysis that support their conclusions as to their future position and outlook in a low-carbon economy. In any event, shareholders and institutional investors will continue to monitor energy companies to ensure that they are adhering to their stated commitments to provide more substantive climate risk disclosure, and will utilize the shareholder resolution and engagement process if they are not satisfied with the content and substance of future climate risk disclosures.[232]

## V. RECOMMENDATIONS

Moving forward, energy companies should acknowledge and understand that an increasing number of stakeholders now consider climate-related risks to be a material factor in their investment decisions and that the international community (including most G20 nations), along with U.S. local and state governments, are

Critics also pointed out that ExxonMobil had not conducted a sensitivity analysis of valuation to a range of prices and not disclosed their "long-term price assumptions along with comparison to modelled 2C prices and the valuation results." It is beyond the scope of this article to fully address and examine these critiques.

228. Brad Plumer and Hiroko Tabuchi, *Exxon Studies Climate Policies and Sees 'Little Risk' to Bottom Line*, The New York Times (Feb. 2, 2018) https://www.nytimes.com/2018/02/02/climate/exxon-global-warming.html.

229. Chevron Press Release, *supra* note 59. See Chevron, Climate Change Resilience – A Framework for Decision Making, https://www.chevron.com/-/media/shared-media/documents/climate-change-resilience.pdf.

230. Some of the criticisms regarding Chevron's report include that there was: a lack of an overall quantitative assessment on its major assets; a failure to disclose its internal carbon price analysis; a failure to provide sufficient detail as to the discounting of downside risks; and that stranded assets were narrowly defined and limited to whether there will be production of proven reserves rather than a recovery of capital investment. Andrew Grant, *Chevron Takes Tentative Steps on Asset-Level Climate Risk*, CARBON TRACKER, https://www.carbontracker.org/chevron-takes-tentative-steps/.

231. Anders Keitz, *Occidental to Produce Climate Risk Report in 2018*, The Street (Dec. 15, 2017), https://www.thestreet.com/story/14421477/1/occidental-to-produce-climate-risk-report-in-2018.html.

232. *See generally* ExxonMobil Gives in to Shareholders, *supra* note 197.

committed to the goals set out in the Paris Agreement and transitioning to a low-carbon economy. If energy companies continue to assert that it is inappropriate to classify climate-related risks as being "material" in relation to other future risks, then they jeopardize being dismissive of stakeholder concerns, while failing to address an important and relevant economic and sustainability issue.[233]

Energy companies should endeavor to have their executives and Boards participate fully in the engagement process with their stakeholders. This not only will allow energy companies to achieve a better understanding of investor concerns regarding climate risk, but enable energy companies to improve their level of communication and strengthen their relationship with stakeholders.[234] In doing so, this will provide energy companies an opportunity to ensure that, while being mindful of stakeholder concerns for greater transparency and disclosure, they can limit unrealistic demands and expectations that may not be in accordance with the company's best interests, and avoid a costly shareholder resolution process which also can impact negatively on the company's reputation and levels of public trust.[235]

In this context, the level of public trust also will depend largely on whether there is investor confidence in the quality of the financial disclosures that are being provided.[236] Energy companies need to recognize that their prior disclosure practices with respect to climate-related risks have been inadequate and that future investor confidence will depend on improving the quality and substance of their financial disclosures. Since international energy companies have begun to adhere to the disclosure principles in the TCFD Recommendations and already have undertaken or conducted a 2°C Scenario Analysis, American energy companies should become engaged in the development of industry specific climate-risk disclosure frameworks to account for future risks and opportunities and to maintain their competitiveness in the future.[237]

233. *See* Walter, *supra* note 4.

234. This is in line with the "New Paradigm" corporate governance framework that has been articulated by Martin Lipton. See Martin Lipton, *Corporate Governance: The New Paradigm*, HARVARD LAW SCHOOL FORUM ON CORPORATE GOVERNANCE AND FINANCIAL REGULATION (Jan 11, 2017), https://corpgov.law.harvard.edu/2017/01/11/corporate-governance-the-new-paradigm/ and Martin Lipton, *Engagement—Succeeding in the New Paradigm for Corporate Governance*, HARVARD LAW SCHOOL FORUM ON CORPORATE GOVERNANCE AND FINANCIAL REGULATION (Jan. 23, 2018), https://corpgov.law.harvard.edu/2018/01/23/engagement-succeeding-in-the-new-paradigm-for-corporate-governance/.

235. It is well recognized that the oil and gas industry suffers from poor public perception and that there is a lack of public trust, especially with respect to the approaches that energy companies have taken towards the environment and climate change. ERNST & YOUNG, *How Can Oil and Gas Fuel Tomorrow as Well as Today?* (2017), http://www.ey.com/Publication/vwLUAssets/oil-and-gas-perceptions-survey-pdf/$FILE/1703-2205763%20BMC%20Oil%20&%20Gas%20survey_v11_Web.pdf. *See also* Maciej Kolaczkowski & Roderick Weller, *The Oil and Gas Industry Has a Trust Problem—Can it Put That Right?*, WORLD ECON. FORUM (Apr. 13, 2016), https://www.weforum.org/agenda/2016/04/the-oil-industry-has-a-trust-problem-can-the-industry-put-that-right. Key leaders in the energy sector have acknowledged that energy companies need to be supportive of the transition to cleaner energy to avoid further erosion of public trust. *Shell CEO Urges Switch to Clean Energy as Plans Hefty Renewable Spending*, REUTERS (Mar. 9, 2017, 10:48 AM), https://www.reuters.com/article/us-ceraweek-shell-shell/shell-ceo-urges-switch-to-clean-energy-as-plans-hefty-renewable-spending-idUSKBN16G2DT.

236. Walter, *supra* note 4.

237. *Id.*

There is room for improvement with respect to the disclosure practices set out in the TCFD Recommendations, and several issues need to be addressed before viable industry standards are formalized or subsequently incorporated into mandatory financial disclosure requirements. Some of these issues include the need to find an appropriate balance of ensuring confidentiality of business information while providing adequate disclosure, setting out appropriate methodologies and assumptions that form the basis of a 2°C Scenario Analysis, deciding what other types of scenario analysis should be used in addition to the 2°C Scenario, and how to address potential liabilities arising from climate-related disclosures practices.[238] By participating in the formulation process, U.S. energy companies can attempt to clarify these issues and obtain outcomes that will address and take into consideration their positions and concerns. This especially will be important given the strong likelihood that standardized industry-based climate-risk disclosure practices will become a mainstream—if not mandatory—requirement in the future.

Finally, energy companies should recognize that there are benefits to having standardized climate risk disclosure practices. By formulating these disclosures, companies will be able to closely examine their operations and risk management strategies and explore solutions to mitigate these risks, thereby improving their future resilience and competitiveness.[239] In addition, by adhering to standardized climate-risk reporting practices, energy companies arguably would have a strong defense against any future legal claims involving these climate risk disclosure and accounting practices, thus protecting themselves from future liability and associated costs.

## VI. CONCLUSION

Notwithstanding that many financial investors now regard climate change risk to be a material factor, it is unlikely that the SEC will institute mandatory climate risk disclosure requirements during the current Administration. Nonetheless, companies—especially those in the energy sector—will continue to face increased pressures to take climate risk into account, and to disclose this information to their stakeholders and investors. International efforts on regulating climate risk disclosure and incorporating the TCFD Recommendations are well underway, which likely will lead to the development of standardized industry climate disclosure practices, thereby further increasing current demands and expectations from institutional investors and stakeholders for U.S. companies to provide similar levels of disclosure. Given the current political climate surrounding the issue of climate change, energy companies likely will face increased legal actions and state investigations if they fail to take measures to mitigate their impact on global warming and continue to provide inadequate disclosure regarding climate-related risk. Although energy companies historically have objected to having more substantive and meaningful financial disclosure of climate risk and may have obtained a temporary reprieve from the institution of SEC mandatory regulations, there will be

238. IHS Markit Report, *supra* note 53.

239. Gavin Dillingham, *Jumping the Gun on Carbon Asset Risk Disclosure?*, 750 ASTRODOMES (June 16, 2017), https://750astrodomes.com/2017/06/16/jumping-the-gun-on-carbon-asset-risk-disclosure.

continued demands for such disclosure in the future—especially given the endorsement and recognition of the TCFD Recommendations by international energy companies and their commitment to enhance climate risk disclosure practices. While the proposed TFCD Recommendations and the use of scenario analysis will be an evolving process, it is in the best interests of U.S. energy companies—and their stakeholders—to prepare themselves for future climate risk realities, and participate in the formulation of fair, realistic and viable industry standards for climate risk disclosure.