CLIMATE-RELATED DISCLOSURE AND LITIGATION RISK IN THE OIL & GAS INDUSTRY: WILL STATE ATTORNEYS GENERAL INVESTIGATIONS IMPEDE THE DRIVE FOR MORE EXPANSIVE DISCLOSURES?

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INTRODUCTION

The financial community's engagement on corporate governance and responsibility has grown to include a focus on how companies respond to climate change. Investors increasingly recognize climate-related risks and

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opportunities as relevant to the financial health of a company and to their own investment decisions. Investors are demanding more information from energy companies on expected climate-induced physical impacts and their plans for a future with a different energy mix. This growth in interest in climate-related disclosures initially coincided with regulatory and policy efforts in the U.S. and abroad to address climate change. These policy efforts were expected to impose substantial burdens on the energy industry.

The election of President Trump marked a sharp turn away from this expected trajectory. His Administration has instead worked to relieve industry of environmental regulations, particularly the energy industry, and stall efforts to address climate change. Trump's announced plan to exit the 2015 Paris Agreement shook the foundation for progress the landmark agreement had laid. As the federal government retreats on climate policy, U.S. political leaders at other levels have vowed to pick up the slack. Among them, state attorneys general (AGs) have significant powers to influence federal and corporate actors and have aimed their powers at energy industry targets, including a focus on the adequacy of oil and gas company climate disclosures.

Despite shifts in U.S. climate policy, investor interest in climate planning remains high. Large institutional and mainstream investors concerned about long-term economic return now raise the profile of calls for more detailed disclosure on the physical and transitional risks of climate change. The creation of the Task Force on Climate-Related Financial Disclosures (TCFD) by the G-20's Financial Stability Board (FSB) in 2015 likewise elevated efforts to improve the quality of corporate climate-related disclosures.

Yet uncertainties about regulatory efforts, in addition to legal and technical concerns, have hindered widespread adoption of consistent climate-related disclosure practices. Questions of when climate risks become legally material and how to treat scenario analysis in disclosures remain significant topics of conversation among corporate and financial actors. Meanwhile, state investigations of corporate climate disclosures illuminate a new challenge for companies. Relying on different legal principles, the parallel efforts of investors and the AGs could work at crosspurposes, potentially impeding improved disclosure of climate risks.

^{1.} For more information on the myriad deregulatory efforts under this Administration, see *Regulatory Rollback Tracker*, HARV. L. SCH. ENVTL. & ENERGY L. PROGRAM, https://eelp.law.harvard.edu/regulatory-rollback-tracker/ (last visited Apr. 27, 2019), as well as *EPA Mission Tracker*, HARV. L. SCH. ENVTL. & ENERGY L. PROGRAM, https://eelp.law.harvard.edu/epamission-tracker/ (last visited Apr. 27, 2019).

This Article explores the parallel legal regimes and actors pressuring energy companies for expanded climate disclosure and whether delicately balanced efforts to increase meaningful climate-risk disclosure are at risk. The Article starts by describing the evolution in investor focus on climate and provides background on the federal securities law that governs disclosures. This Article then discusses failed federal efforts to encourage meaningful disclosures of climate risks and explains the rise of state investigations in this area. Finally, the Article concludes by considering the tensions these parallel efforts create.

I. INVESTOR ENGAGEMENT ON CLIMATE-RELATED CORPORATE DISCLOSURES

Today's corporate responsibility regimes evolved out of the response to human rights abuses in supply chains in the 1990s.² Environmental, sustainability, and governance (ESG) concerns have grown to support a considerable community of corporate sustainability and ESG professionals.³ In the environmental space, recent ESG efforts have shifted from addressing regulatory compliance and sustainability within the communities in which a company operates to include the more expansive challenge of responding to climate change.⁴ The question of how the changing climate impacts business increased in importance as political leaders sought to take serious measures to avoid the worst climate outcomes—prompting companies and their stakeholders to look beyond the question of how to lessen a business's impact on its immediate environment to consider its impact on the climate as a whole and the climate's impact on the business.⁵

A. The Call for More Expansive Disclosures

One result of this shift in focus is that investors increasingly pressure companies to disclose climate-related risk information, hoping for insight

^{2.} Students Against Sweatshops, originating in the 1990s, initially targeted Nike for practices in overseas factories but expanded to many different companies. *See About*, UNITED STUDENTS AGAINST SWEATSHOPS, http://usas.org/about/ (last visited Apr. 27, 2019) (detailing the history of United Students Against Sweatshops).

^{3.} See Georg Kell, The Remarkable Rise of ESG, FORBES (July 11, 2018), https://www.forbes.com/sites/georgkell/2018/07/11/the-remarkable-rise-of-esg/#f22eaf16951f (chronicling the rise of ESG and noting that "thousands of professionals from around the world hold the job title 'ESG Analyst'").

^{4.} See id. (explaining that climate change has financial relevance for ESG as a current threat with "multi-billion-dollar economic consequences").

^{5.} *Id.* ("The rise of ESG investing can also be understood as a proxy for how markets and societies are changing and how concepts of valuation are adapting to these changes.").

into corporate planning for the physical and transitional risks of climate change.⁶ Concerned about the impact of climate-sensitive business operations on their investments and interested in exploring opportunities that could arise, the financial community recognizes that climate change impacts corporate planning, long-term operations, price and demand, and resilience of facilities and supply chains.⁷

Evidence of this interest abounds. The United Nation's (UN) Principles of Responsible Investment organization, started in 2006 to aid in incorporating ESG factors into investment and ownership decisions, has grown from 63 signatories to over 1,900, covering \$80 trillion in assets under management. That year the G-20's FSB established the TCFD and Mark Carney, Governor of the Bank of England, spoke of "Breaking the tragedy of the horizon" to Lloyd's of London. At that time, the U.S. was already enacting climate policy designed to make significant strides towards achieving its commitments. In June 2016, BlackRock published a document calling for "a consistent global framework that enables stakeholders and market participants to develop detailed ESG standards and best practice guidelines." Despite the shifts in U.S. climate policy following the change in administration in January 2017, investor interest in

^{6.} See, e.g., David S. Rauf, Powerful Investors Push Big Companies to Plan for Climate Change, SCI. AM. (May 3, 2018), https://www.scientificamerican.com/article/powerful-investors-push-big-companies-to-plan-for-climate-change/ (explaining that shareholders are successfully pushing businesses to address climate change and that "[n]early a dozen companies, Dominion Energy and Devon Energy among them, have agreed to produce reports on climate-related financial risks").

^{7.} See id. (noting that Wall Street now recognizes the risk of climate change).

^{8.} About the PRI, PRINCIPLES OF RESPONSIBLE INV., https://www.unpri.org/about-the-pri (last visited Apr. 27, 2019).

^{9.} Barbara Novick, Vice Chairman, BlackRock, Remarks at the World Economic Forum, Building Sustainable Markets: What Is Needed For A Transformation To A Sustainable Market Place? 1–2 (Sept. 24, 2018), https://www.blackrock.com/corporate/literature/publication/remarks-barbara-novick-building-sustainable-markets-092418.pdf.

 $^{10. \ \}textit{About the Task Force}, \ \mathsf{TASK} \ \mathsf{FORCE} \ \ \mathsf{ON} \ \ \mathsf{CLIMATE}\text{-}\mathsf{RELATED} \ \ \mathsf{FIN}. \ \ \mathsf{DISCLOSURES}, \\ \mathsf{https://www.fsb-tcfd.org/about/} \ (\mathsf{last\ visited\ Apr.\ 27,\ 2019}).$

^{11.} Mark Carney, Gov. of the Bank of England and Chairman of the Financial Stability Board, Speech at Lloyd's of London: Breaking the Tragedy of the Horizon – Climate Change and Financial Stability (Sept. 29, 2015), https://www.bis.org/review/r151009a.pdf.

^{12.} See Robinson Meyer, How Obama Could Lose His Big Climate Case, ATLANTIC (Sept. 29, 2016), https://www.theatlantic.com/science/archive/2016/09/obama-clean-power-plan-dc-circuit-legal/502115/ (noting that the Obama Administration promulgated the Clean Power Plan to implement the goals set at the Paris Agreement); Regulatory Rollback Tracker, supra note 1 (describing on separate pages examples such as the Bureau of Land Management Methane Waste Prevention Rule, the EPA VOC and Methane Standards, the Clean Power Plan, and regulation of Hydroflourocarbons).

^{13.} Barbara Novick, *supra* note 9, at 6 (referring to BlackRock's ViewPoint document, *Exploring ESG: A Practitioner's Perspective*).

corporate planning related to climate change—both its potential impacts and the prospect of longer-term climate mitigation policies—persists.¹⁴

Climate concerns no longer emanate exclusively from values investors seeking to further environmental agendas. The investment community has used a number of tools to encourage expanded disclosure of climate-related risks by energy companies, including: direct engagement by long-term institutional investors, voting in support of shareholder resolutions that require management to improve disclosure in some specified way, and shareholder suits alleging misleading disclosure after a potentially avoidable loss. BlackRock points to its investment stewardship activities as one way in which it engages companies on these issues. ¹⁵ All of these tools are geared towards influencing management to undertake actions that the proponents believe will result in long-term success and competitiveness of the business.

The investment community has exhibited a willingness to use these tools to address climate governance and disclosure in recent years. Large institutional investors acknowledge climate change as relevant to financial outcomes. Major asset managers have voted in support of efforts to improve corporate governance on climate. No longer appeased by general sustainability reports, investors seek detailed and expansive information backed up by data. In December 2017, BlackRock sent letters to corporate-governance teams urging them to report in accordance with the TCFD

Id.

^{14.} See Chris Taylor, The Trump White House Gave These Mutual Funds a Big Boost, FORTUNE (Sept. 7, 2017), http://fortune.com/2017/09/07/trump-esg-mutual-funds-investing/ (explaining that ESG investing remains active during the Trump Administration).

^{15.} Novick, supra note 9, at 4;

As stewards acting on behalf of clients, we encourage the adoption of sound business practices that are consistent with delivering sustainable long-term financial results for our clients through both constructive and continuous engagement with investee companies and proxy voting. Our approach to stewardship as a long-term investor is to be patient with companies to ultimately develop the mutual understanding that supports continued, effective dialogue paving the way for durable positive change over time.

^{16.} CalPERS and CalSTRS will begin reporting publicly on climate-related financial risk in their portfolios in 2020. Jennifer Thompson, *California Turns Up the Heat on Climate Change Disclosures*, FIN. TIMES (Sept. 29, 2018), https://www.ft.com/content/a4c8fffa-869a-3e76-8e05-e8acc572d293. New York City's pension funds are considering climate risks and opportunities in their portfolios and also committing to investing 2% of the funds (or \$4 billion) in climate change solutions over three years. Press Release, Office of New York City Comptroller, Mayor and Comptroller Announce Pension Fund Goal to Invest \$4 Billion in Climate Change Solutions by 2021 (Sept. 13, 2018) [hereinafter Press Release, New York City Comptroller], https://comptroller.nyc.gov/newsroom/mayor-and-comptroller-announce-pension-fund-goal-to-invest-4-billion-in-climate-change-solutions-by-2021/.

^{17.} Rauf, supra note 6.

recommendations and arguing that it will help achieve "the comparability and consistency of reporting" important to investors. 18 BlackRock voted in support of shareholder proposals asking companies to disclose more on climate in 2017 and released a document outlining how it engages on climate risk. 19 BlackRock's Investment Stewardship Engagement Priorities for 2018 highlighted climate risk disclosure as one of its five priorities, specifically pointing to the TCFD recommendations as the "relevant roadmap" for corporate disclosure. 20 In January 2017, State Street's letter to company boards noted it would be "increasingly focused on board oversight of environmental and social sustainability in areas such as climate change" and highlighted its votes in 2016 in support of shareholder resolutions on climate change initiatives.²¹ The letter included an attached document describing its framework for evaluating how companies incorporate sustainability into long-term strategy.²² Vanguard also announced in September 2017 its willingness to take public positions on topics such as climate disclosures even if it requires voting against management.²³ Over 2018, "six in 10 institutional investors have changed their approach to voting or have incorporated environmental, social and governance criteria."²⁴ California pension funds will begin reporting publicly on

^{18.} Emily Chasan, *BlackRock Wields its \$6 Trillion Club to Combat Climate Risks*, BLOOMBERG (Dec. 8, 2017), https://www.bloomberg.com/news/articles/2017-12-08/blackrock-wields-its-6-trillion-club-to-combat-climate-risks.

^{19.} How BlackRock Investment Stewardship Engages on Climate Risk, BLACKROCK (Mar. 2017), https://www.eenews.net/assets/2017/03/13/document_gw_05.pdf.

^{20.} BlackRock Investment Stewardship Engagement Priorities, BLACKROCK (Mar. 2018), https://www.blackrock.com/corporate/literature/publication/blk-stewardship-2017-2018-priorities-final.pdf [https://web.archive.org/web/20190409153656/https://www.blackrock.com/corporate/literature/publication/blk-stewardship-2018-priorities-final.pdf]. BlackRock has also published two documents on climate issues in investing. BLACKROCK INV. INST., THE PRICE OF CLIMATE CHANGE: GLOBAL WARMING'S IMPACT ON PORTFOLIOS (Oct. 2015), https://www.blackrock.com/corporate/literature/whitepaper/bii-pricing-climate-risk-us.pdf; BLACKROCK INV. INST., ADAPTING PORTFOLIOS TO CLIMATE CHANGE (Sept. 2016), https://www.blackrock.com/corporate/literature/whitepaper/bii-climate-change-2016-us.pdf.

^{21.} Letter from Ronald O'Hanley, State Street Global Investors, to Board Members (Jan. 26, 2017), https://www.ssga.com/investment-topics/environmental-social-governance/2017/Letter-and-ESG-Guidelines.pdf.

^{22.} Ia

Madeleine Cuff, Vanguard Names Climate Risk as Defining Investment Theme, GREENBIZ (Sept. 7, 2017), https://www.greenbiz.com/article/vanguard-names-climate-risk-defining-investment-theme.

^{24.} Huw van Steenis, Opinion, *Defective Data is a Big Problem for Sustainable Investing*, FIN. TIMES (Jan. 21, 2019), https://www.ft.com/content/c742edfa-30be-328e-8bd2-a7f8870171e4 (explaining that sustainable investment is now a vital part of successful investment, and that most institutional investors have altered their method of voting or have included ESG standards in the last 12 months, according to the marketing company Edelman).

climate-related financial risk in their portfolios in 2020,²⁵ and New York City's pension funds plan to direct \$4 billion in fund investments to climate change solutions over the next three years.²⁶

B. Emerging Challenges from Calls for Expanded Disclosures

In the midst of this swirl of public acknowledgment of the importance of climate in corporate governance, risk management, and disclosure practices, companies continue to find it challenging to grasp the range of needs and interests of a diverse financial community. Asset owners, asset managers, and the standards and ratings organizations that inform them have not converged on a unified concept of what climate-related disclosure for oil and gas companies means in practice.²⁷ Numerous organizations and efforts to inform the process have developed, along with separate voluntary reporting mechanisms and competing efforts to develop standards for reporting.²⁸ The Global Reporting Initiative developed a framework for reporting.²⁹ The CDP (formerly Carbon Disclosure Project) asks companies to provide disclosures through its form and then reports publicly on entities' emissions and other climate and environmental indicators.³⁰ The Sustainable Accounting Standards Board (SASB) is developing sets of industry-specific technical standards for disclosure of financially material climate and environmental information,³¹ and the Climate Disclosure Standards Board (CDSB) is developing standards for disclosure internationally,³² among numerous others weighing in on reporting and disclosure practices and asking companies to fill out questionnaires. "A proliferation in surveys and standards is an issue for companies, and it risks confusing investors, too The International Trade Centre identifies at

- 25. Jennifer Thompson, supra note 16.
- 26. Press Release, New York City Comptroller, supra note 16.
- 27. See Nina Chestney, Climate-Related Financial Disclosure Becoming More Mainstream: G20 Task Force, REUTERS (Sept. 26, 2018), https://www.reuters.com/article/us-climatechange-financial-disclosure/climate-related-financial-disclosure-becoming-more-mainstream-g20-task-force-idUSKCN1M61OM (finding that climate-related disclosures vary by industry).
- 28. See, e.g., About the Task Force, supra note 10 (discussing the Task Force's mission to develop "voluntary, consistent climate-related financial risk disclosures for use by companies").
- 29. See About GRI, GLOB. REPORTING INITIATIVE, https://www.globalreporting.org/information/about-gri/Pages/default.aspx (last visited Apr. 27, 2019) (describing the GRI Sustainability Reporting Standards as the first standards used for reports on sustainability).
- 30. About Us: Our Mission and Vision, CDP, https://www.cdp.net/en/info/about-us (last visited Apr. 27, 2019).
- 31. Standards Overview, SUSTAINABLE ACCT. STANDARDS BD., https://www.sasb.org/standards-overview/ (last visited Apr. 27, 2019).
- 32. About the Climate Disclosure Standards Board, CLIMATE DISCLOSURE STANDARDS BD., https://www.cdsb.net/our-story (last visited Apr. 27, 2019).

least 230 corporate sustainability standards initiatives in more than 80 sectors." ³³

The investment stewardship engagement efforts of large asset managers also involve specific requests regarding corporate disclosure practices.³⁴ Differing ideas within the investment and non-governmental organizations (NGOs) community persist about how to disclose. Some argue for incorporating most information directly into annual reports filed with the Securities and Exchange Commission (SEC) while others find standalone reporting adequate.³⁵ Some investors seek robust incorporation of climate issues into long-term risk management reflected in company reports, while other funds may simply desire comparable metrics within an industry that fulfill a checklist of ESG issues. This lack of alignment hinders understanding of what is decision-useful information for the investment community and how it will inform their decision making.

The investment community has also exhibited frustration with the lack of consistency and detail in corporate disclosures on ESG issues.³⁶ The numerous voluntary disclosure, ratings, and standards organizations and their varying quality and heterogeneity can be as challenging for investors to interpret and use as for companies to navigate.³⁷ Along the way, ratings tools such as Sustainalytics (which has now partnered with Glass Lewis on corporate governance data) that attempt to provide snapshots of how companies compare across an industry raise the stakes by providing an easy mechanism for investors to establish a threshold for investment though their

^{33.} van Steenis, supra note 24.

^{34.} See id. (explaining that managers controlling more than a quarter of the global assets under management seek to integrate sustainable investment principles into their practices).

^{35.} *Id.* (explaining that while sustainable investment measures provide investors with quality insight on the risks of investing, a popular new standard of voluntary ESG disclosure may build upon already established investment schemes and better inform markets).

^{36.} For example, BlackRock called on policy makers to establish a "consistent global framework" and also commented that:

[[]W]e encourage policymakers to provide guidance that recognizes the need to tailor reporting across diverse industries, because relevant ESG factors can vary primarily by industry, and also by geography, and even by specific company. While each framework has its own merits and some industry bodies are trying to address the lack of consistency, policy makers could encourage companies to provide clear and consistent data on material sustainability issues and contribute to greater standardization of reporting frameworks. I emphasize the importance of 'materiality' here, which means to focus the reporting on what is relevant for the particular business and its long-term commercial prospects, both in terms of risks and opportunities, and what is relevant for investors to make better investment decisions.

See Novick, supra note 9, at 6-7.

^{37.} Id. at 6.

efficacy and quality are questionable given the uneven state of disclosure practices.³⁸

The TCFD is an attempt to address the alignment dilemma. ³⁹ The FSB charged the TCFD with investigating the state of disclosures and recommending improvements, with the goal of aligning current practices and improving the quality of corporate climate-related disclosures. 40 In June 2017, the TCFD released a framework for improving climate-related financial reporting.⁴¹ The framework encouraged companies to incorporate as much information as possible into mandatory financial reporting, but acknowledged companies must consider the materiality thresholds applied to such reporting in their home jurisdictions. 42 TCFD's efforts have focused recent discussions of these issues among investors and companies.⁴³ Mainstream investors and voluntary reporting and rating organizations have signaled their support for the TCFD recommendations and companies have begun to incorporate the recommendations into their reporting and disclosure practices. 44 The TCFD's September 2018 Status Report assessed progress to date implementing its 2017 recommendations, and announced at the time that over 500 firms had committed to supporting them.⁴⁵

^{38.} Sustainalytics and Glass Lewis Team Up on Corporate Governance Data Services Offering, SUSTAINALYTICS (Oct. 22, 2018), https://www.sustainalytics.com/press-release/sustainalytics-glass-lewis-corporate-governance-data-services-offering/; Data Services: Corporate Governance Data, SUSTAINALYTICS, https://www.sustainalytics.com/esg-data/#cgrawdata (last visited Apr. 27, 2019).

^{39.} See About the Task Force, supra note 10 (establishing good alignment between firms and their investors as part of their mission).

^{40.} *Id*.

^{41.} TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES, FINAL REPORT: RECOMMENDATIONS OF THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (June 2017) [hereinafter *TCFD Recommendations*], https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf.

^{42.} Id. at 17.

^{43.} See, e.g., infra note 60 (describing recent sustainability reports by U.S. oil companies addressing TCFD disclosure recommendations).

^{44.} See infra note 60 and accompanying text (noting the support for TCFD Recommendations among rating agencies and corporations); See, e.g., James Murray, Investors Urged to Flex Muscle in Support of a Just Transition, BUSINESSGREEN (Feb. 4, 2019), https://www.businessgreen.com/bg/news-analysis/3070412/investors-urged-to-flex-muscle-in-support-of-just-transition (finding a trend of energy companies beginning to support climate-related resolutions); Hana Vizcarra, Shifting Perspectives: E&P Companies Talk Climate and the Energy Transition, HARV. L. SCH. ENVTL. & ENERGY L. PROGRAM (Mar. 26, 2019), https://eelp.law.harvard.edu/2019/03/shifting-perspectives-ep-companies-talking-climate-and-the-energy-transition-trends-in-disclosure-and-climate-strategy/ (noting a significant shift towards reporting and acknowledging climate change associated risks).

^{45.} TASK FORCE ON CLIMATE-RELATED DISCLOSURES, 2018 STATUS REPORT (Sept. 2018) [hereinafter *TCFD 2018 Status Report*], https://www.fsb-tcfd.org/wp-content/uploads/2018/08/FINAL-2018-TCFD-Status-Report-092518.pdf.

BlackRock's Barbara Novick noted in January 2019 that companies are also working to align with UN Sustainable Development Goals.⁴⁶

Energy companies have adjusted disclosure practices in response to investor pressures even though the lack of alignment within the financial community has left them guessing about how best to do so. Assessments conducted before TCFD released its recommendations found meager disclosures on climate issues. 47 Ceres reviewed SEC filings of S&P 500 companies following the 2010 SEC interpretive guidance on climate disclosure (discussed in detail in below). 48 Their analysis found companies did not discuss "company specific material information" nor "quantify[] risks or past impacts."49 Instead they used "boilerplate language of minimal utility to investors" to "briefly discuss[]" climate change. 50 Specifically looking at the oil and gas industry, Ceres noted that these companies "typically devoted a few paragraphs" to discussing climate change issues in their 2012 10-Ks and that there was a "high degree of variability" in their quality.⁵¹ A 2016 analysis of the SEC filings and sustainability reports of fifteen oil and gas companies (both domestic and international) found the disclosures in SEC filings "generally weak" but noted they "demonstrate[d] progress... even before the final [TCFD] report was issued" and that "some foundation is in place for companies to implement the TCFD's recommendations."52 In its 2018 status report, the TCFD conducted a cursory review of disclosures across various industries since the release of its recommendations.⁵³ It reported wide variety in disclosure across industries.⁵⁴ It also found minimal disclosure of forward-looking climate

46. See Novick, supra note 9, at 2.

We are also seeing a trend where companies and asset owners are aligning their business and investments with the UN Sustainable Development Goals (SDGs). According to the KPMG Survey of Corporate Responsibility Reporting (2017), 40% of the world's 250 largest corporations discuss the SDGs in their corporate reporting. In particular, European-based companies and consumer facing sectors (i.e., utilities, automotive, retail) are reporting on the SDGs.

Id.

- 47. See infra notes 48–55 and accompanying text.
- $\label{thm:coburn & Jackie Cook, Ceres, Cool Response: The SEC & Corporate Climate Change Reporting 4 (2014), https://www.ceres.org/sites/default/files/reports/2017-03/Ceres_SECguidance-append_020414_web.pdf.$
 - 49. Id. at 5.
 - 50. Id.
 - 51. Id. at 16, 18.
- 52. Robert G. Eccles & Michael P. Krzus, An Analysis of Oil & Gas Company Disclosures from the Perspective of the Task Force on Climate-Related Financial Disclosures 19–20 (Dec. 14, 2017) (unpublished manuscript), https://ssrn.com/abstract=3091232.
 - 53. TCFD 2018 Status Report, supra note 45, at 6.
 - 54. Id. at 14.

targets, resilience strategies, and financial impacts of climate change.⁵⁵ However, the energy industry seemed to be further along than others as an automated analysis of 270 energy companies (international in scope) found they "had the highest percentage of disclosures that appeared to align with five of the [TCFD's] recommended disclosures."⁵⁶ TCFD's manual review of 25 energy companies' disclosures found the companies primarily disclosed climate-related information through sustainability or other voluntary reports rather than mandatory financial filings.⁵⁷

TCFD established an Oil and Gas Preparer Forum composed of four European oil and gas companies (Eni, Equinor, Shell, and Total), coordinated by the World Business Council for Sustainable Development (WBCSD) that released a report in 2018 providing high-level description of how those companies implement the TCFD recommendations. The report presents their collective view of effective, TCFD-consistent disclosure, pointing to excerpts of their annual reports. U.S.-based oil and gas companies have focused less on incorporating additional information and data into annual reports and more on preparing tailored sustainability or climate-specific reports in response to the TCFD recommendations and investor interest.

^{55.} *Id.* at 13–14 (noting that the many companies who disclose climate-related information do not necessarily disclose the financial implications of climate change on the company).

^{56.} Id. at 30.

^{57.} Id.

^{58.} WORLD BUS. COUNCIL SUSTAINABLE DEVELOPMENT, CLIMATE-RELATED FINANCIAL DISCLOSURE ACROSS FOUR MAJOR OIL AND GAS COMPANIES: IMPLEMENTING THE TCFD RECOMMENDATIONS (2018), https://www.wbcsd.org/Programs/Redefining-Value/External-Disclosure/TCFD/News/In-depth-look-at-climate-related-financial-disclosure-across-four-major-oil-and-gas-companies.

^{59.} Id.

^{60.} Chevron released a report in 2018 addressing decision making in light of TCFD's disclosure recommendations. CHEVRON, CLIMATE CHANGE RESILIENCE: A FRAMEWORK FOR DECISION MAKING 43 (Mar. 2018), https://www.chevron.com/-/media/shared-media/documents/climate-changeresilience.pdf. It followed this with a 2019 updated report as well. CHEVRON, UPDATE TO CLIMATE CHANGE RESILIENCE: A FRAMEWORK FOR DECISION MAKING (Feb. 2019), https://www.chevron.com/-/media/shared-media/documents/update-to-climate-change-resilience.pdf. ExxonMobil also released a 2018 report in which it describes its approach to long-term planning with regards to climate. EXXONMOBIL, 2018 OUTLOOK FOR ENERGY: A VIEW TO 2040, at 2 (2018), https://corporate.exxonmobil.com/en/~/media/Global/Files/outlook-for-energy/2018-Outlook-for-Energy.pdf. Similarly, Occidental Petroleum has released a 2018 sustainability report, discussing TCFD's recommendations. OCCIDENTAL PETROLEUM CORP., CLIMATE-RELATED RISKS AND OPPORTUNITIES: POSITIONING FOR A LOWER-CARBON ECONOMY 2 (2018), https://www.oxy.com/ SocialResponsibility/overview/SiteAssets/Pages/Social-Responsibility-at-Oxy/Assets/Occidental Climate%20Report_2018.pdf. Hess primarily provides its climate-related disclosures in its sustainability report, with its most recent report being a report released in 2018. HESS CORP., HESS CORPORATION 2017 SUSTAINABILITY REPORT 37 (2018), http://www.hess.com/docs/default-source/sustainability/hess-2017-sustainability-report.pdf?sfvrsn=2. ConocoPhillips has a "TCFD Table" available on its website

U.S. energy companies do discuss climate in their FY 2017 and 2018 10-Ks, but, with some exceptions, this discussion is largely limited to risk factors such as potential regulation and active litigation involving the company. They remain under pressure to release more detailed information into their mainstream financial filings.⁶¹ They have taken other climate-

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that lists each TCFD recommendation with a link to what report, filing, or portion of its public-facing documents fulfill that specific disclosure recommendation. CONOCOPHILLIPS, *TCFD Table*, http://www.conocophillips.com/about-us/sustainability-approach/tcfd-table/ (last visited Apr. 27, 2019). ConocoPhillips also released its first climate-specific report in early 2019. CONOCOPHILLIPS, MANAGING CLIMATE-RELATED RISKS: BUILDING A RESILIENT STRATEGY FOR THE ENERGY TRANSITION (Feb. 2019), http://www.conocophillips.com/company-reports-resources/managing-climate-related-risks/. Many of these companies also include reports made to CDP or GRI on their websites. *See* Hana Vizcarra, *supra* note 44 (discussing trends in disclosure among oil and gas companies).

61. Chevron, ExxonMobil, Occidental Petroleum, Hess, and ConocoPhillips all include some discussion of climate-related issues in their financial filings to varying degrees. See ConocoPhillips, Annual Report (Form 10-K) (Feb. 20, 2018) (providing Conoco Phillips's annual report pursuant to the Securities Exchange Act, and detailing its financial impacts of climate issues, specifically that it has implemented a "corporate Climate Change Action Plan" that includes an emissions reduction target); ConocoPhillips, Annual Report (Form 10-K) (Feb. 19, 2019) (ConocoPhillips' filing includes the most detailed information in SEC reporting of the non-European companies reviewed. Their 10-K mentions climate change in multiple sections of the report and details its process for managing climate concerns. In addition to discussing potential GHG regulation and severe weather impacts as risk factors, the report notes climate change lawsuits involving the company, includes GHG emissions prices, legislation and regulation, sea level rise and other physical impacts of climate change as factors that could impact financial performance. It also outlines the Sustainable Development Risk Management Practice and Climate Change Action Plan developed to assess climate-related risks and track mitigation activities and describes internal carbon pricing and emissions reduction targets.); Exxon Mobil Corp., Annual Report (Form 10-K) (Feb. 28, 2018) (explaining that the risk of climate change resulted in numerous countries adopting regulatory frameworks to lessen GHG emissions, and that new regulations of such will increase costs and implement other hurdles for Exxon Mobil, however, the company states that its Outlook is consistent with the 2015 Paris Agreement); Chevron Corp., Annual Report (Form 10-K) (Feb. 22, 2018) (explaining that GHG regulations could result in negative economic impacts for Chevron, however, the company is committed to advancing energy efficiency in its daily operations, as well as complying with related GHG laws and regulations); Chevron Corp., Annual Report (Form 10-K) (Feb. 22, 2019) (noting Chevron joined OGCI and launched the Chevron Future Energy Fund to invest in technology to lower emissions in 2018, acknowledging the potential for physical risks such as sea level rise and severe storms to impact their operations, but also pointing to risk management systems designed to assess these risk and plan for resiliency, and explaining that GHG regulations could result in increased operational costs and reduced demand for Chevron's products); Occidental Petroleum Corp., Annual Report (Form 10-K) (Feb. 22, 2018) (detailing concerns about climate change and consequential regulations that may adversely alter Occidental's operations or results); Occidental Petroleum Corp., Annual Report (Form 10-K) (Feb. 21, 2019) (detailing concerns about climate change and further GHG emissions regulation that may adversely affect operations or results, including acknowledging increased interest by the investment community as well as the potential for catastrophic events such as extreme weather events); Hess Corp., Annual Report (Form 10-K) (Feb. 7, 2018) (addressing that new climate change agreements, regulations, and laws may result in future changes for Hess that are likely to increase costs for many operational aspects); Hess Corp., Annual Report (Form 10-K) (Feb. 21, 2019) (recognizing climate change initiatives as potentially resulting in significant operational changes and expenditures and reduced demand and noting lawsuits targeting fossil fuel producers for damage 2019]

focused steps as well. For example, ExxonMobil, Chevron, and Occidental Petroleum have joined the Oil and Gas Climate Initiative, an industry effort to address climate change by setting methane reduction targets and funding research designed to: (1) reduce methane leakage; (2) develop efficiency solutions that lower the carbon footprint of the energy, industrial, and transport sectors; and (3) develop carbon capture and recycling technologies. Other companies have also made individual research and development or investment commitments, and have set targets for reduction of methane emissions in operations or greenhouse gas (GHG) emissions across the company more broadly.

Even with their changes in disclosure practices thus far, companies remain under pressure to release more detailed metrics, data, and analysis, and incorporate more information into their mainstream financial filings. The TCFD itself acknowledged in its 2017 report that further work is necessary to align existing reporting frameworks, develop methodologies and available tools for scenario analysis, improve data availability and quality, and standardize metrics. Discussions among the investment community, companies, standards organizations, and the legal and academic communities continue to progress on aligning investor interests in disclosure with corporate outputs and standardizing expectations and best practices. As described in the next Part, securities law around disclosure is steeped in the loosely defined concept of materiality—a concept highly dependent on the views of investors.

II. CORPORATE DISCLOSURE REQUIREMENTS UNDER FEDERAL SECURITIES LAW

The legal framework around financial disclosure in U.S. securities law heightens the importance of understanding what institutional and other

allegedly caused by climate change; noting the company's commitment to complying with all GHG emissions mandates and responsible management of GHGs at its facilities).

^{62.} See OIL AND GAS CLIMATE INITIATIVE, AT WORK COMMITTED TO CLIMATE ACTION: A REPORT FROM THE OIL AND GAS CLIMATE INITIATIVE 27 (2018) (explaining that the Oil and Gas Climate Initiative intends to comply with the 2°C goal of the Paris Agreement by focusing on reducing both carbon and methane emissions, and initiating a carbon capture, use, and storage practice).

^{63.} See Hana Vizcarra, supra note 44 (listing examples of emissions reductions targets made by top oil and gas companies in the last year).

^{64.} TCFD Recommendations, supra note 41, at 32.

^{65.} See TCFD 2018 Status Report, supra note 45, at 3, 25 (providing a review of hundreds of companies' implementation of TCFD's suggested disclosure framework, explaining that in some jurisdictions, the legal framework has evolved to require companies with public debt or equity to disclose this information, and giving an example of a financial filing that recognizes academic research in favor of ESG integration in investment decisions in order to understand risks).

investors really want from climate-related disclosures. U.S. securities law requires certain disclosures from public companies and imposes liability for untrue statements, misleading investors, and omitting financially material information. The crux of the decision a company must make about what and when to disclose information in its annual reports is whether or not it is *material*—a definition highly dependent on determining what a reasonable investor would find useful.

A. The Securities Act and SEC Rules

U.S. securities law requires public companies to share certain information with investors and the public, and imposes liability for misleading investors in these disclosures. 66 The Securities Act of 1933 (The Securities Act) and the Securities Exchange Act of 1934 (The Exchange Act) are the statutory backbone of the U.S. securities law regime.⁶⁷ Later reforms have left their mark on corporate governance and disclosure requirements, including the Sarbanes-Oxley Act of 2002 and the Dodd-Frank Act of 2010, amending the original acts. 68 Companies offering securities for sale must disclose financial and other significant information as part of the offering and are prohibited from engaging in misrepresentation and fraud in the sale of securities.⁶⁹ These acts created the SEC and conferred it regulatory, oversight, and enforcement powers over public companies.⁷⁰ Under this legislative framework, the SEC requires that companies file, among other requirements: (1) registration statements and prospectuses for all securities sold in the U.S. (with some exemptions); (2) annual and other periodic reports (for companies with more than \$10 million in assets and with more than 500 owners); and (3)

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^{66.} Securities Act of 1933, 15 U.S.C. §§ 77a–77mm; The Securities Exchange Act of 1934, 15 U.S.C. §§ 78a–78kk; *The Laws That Govern the Securities Industry*, SEC. EXCH. COMM'N, https://www.sec.gov/answers/about-lawsshtml.html (last visited Apr. 27, 2019).

^{67.} See The Laws That Govern the Securities Industry, supra note 66 (stating that the Securities Act is frequently known as the "truth in securities" law, and that the Securities Exchange Act prohibits particular trading activities and empowers the SEC to enact certain disciplinary measures).

^{68.} *Id.* (providing that President Bush signed the Sarbanes–Oxley Act in 2002, which mandated reforms to strengthen corporate duties and financial disclosures; and that President Obama signed the Dodd–Frank Wall Street Reform and Consumer Protection Act in 2010, which reworked the U.S. regulatory system in areas such as consumer protection, trading, financial products, and corporate disclosure).

^{69.} Id.

^{70.} *Id.* (explaining that the Securities Exchange Act created the Securities Exchange Commission, as well as authorized this Commission with extensive authority over the securities industry to register, regulate, and supervise brokerage firms, transfer representatives, and clearing organizations).

materials provided to shareholders ahead of votes.⁷¹ False or misleading statements or omissions can lead to enforcement by the SEC or private actions by shareholders.

The concept of materiality is scattered throughout the acts. Individuals can sue if they purchased or sold a security in reliance on a misrepresentation or omission—that was material and made with the intent to deceive and caused an economic loss—and the SEC has enforcement powers for violations of securities law obligations. The Securities Act prohibits material misstatements and omissions in various sections and allows the SEC to take action to prevent its dissemination while also providing for private rights of action. The Exchange Act prohibits false or misleading statements of material fact and creates private rights of action for those who relied on such statements in the purchase or sale of a security, provides authority for the SEC to assess civil penalties, and authorizes fraud actions. Willful violations of these provisions can result in criminal

[U]nlawful for any person to make any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made, in the light of the circumstances under which they are made, not misleading, or to engage in any fraudulent, deceptive, or manipulative acts or practices" in tender offers or solicitation of security holders.

^{71.} *Id.* (stating that sold securities must be registered to provide crucial details such as descriptions of the company's properties, business, offered security, and management of the company, and that the Securities and Exchange Acts requires that companies file materials used to generate shareholders' votes with the Commission before solicitation).

^{72.} Nicholas G. Terris, *Some Liability Considerations Relating to ESG Disclosures*, K&L GATES (May 2017) (citing to *Lee v. Ernst & Young, LLP*, 294 F.3d 969, 976 (8th Cir. 2002) as an example) (on file with *Vermont Law Review*).

^{73.} Section 77d-1(c) authorizes a purchaser of securities to bring an action against the issuer for "material misstatements and omissions." 15 U.S.C. § 77d–1(c) (2012). Section 77h allows the SEC to take action when it finds a statement is incomplete or inaccurate "in any material respect" or suspend the registration if it "includes any untrue statement of a material fact or omits to state any material fact required to be stated." *Id.* § 77h(b), (d). Section 77j prohibits the untrue statement or omission of a material fact in connection with the purchase or sale of securities and allows the SEC to issue an order to prevent or suspend its use. *Id.* § 77j(b). Section 77k provides a private right of action for materially false or misleading statements or omissions in registration statements and Section 77l provides for a private right of action for such statements or omissions in a prospectus or other communication associated with the sale of securities. *Id.* §§ 77k, 77l. Section 77m limits the private actions under Sections 77k and 77l to one year from the discovery of an untrue statement or omission and within three years of the sale. *Id.* § 77m. Section 77x provides for fines or prison for any person who willfully makes an untrue statement of a material fact or misleading omission. *Id.* § 77x. However, the Act does include a safe harbor provision for forward-looking statements if they have meaningful cautionary statements or are immaterial. *Id.* § 77z–2(c).

^{74.} Section 78n(e) makes it:

Id. § 78n(e). Section 78o provides for punishment of brokers or dealers who willfully cause an application or registration to be filed with false or misleading statements of material facts or omissions of material facts. *Id.* § 78o(b). Section 78r creates liability for false or misleading statements of material fact and a cause of action for anyone who relied on such statements in the purchase or sale of a security.

penalties and prison.⁷⁵ Safe harbors exist for forward-looking statements that either include meaningful cautionary statements or are immaterial.⁷⁶

Not all the information companies must disclose is limited by materiality thresholds.⁷⁷ SEC regulations and disclosure forms also outline the statutes' disclosure requirements.⁷⁸ Some of the disclosure requirements most relevant to environmental disclosures include:

- Item 101 (Business Description—complying with environmental regulation): requiring a description of the business, including capital expenditures and "the material effects" of complying with provisions regulating "the discharge of materials into the environment, or otherwise relating to the protection of the environment." Filers must disclose "material estimated capital expenditures for environmental control facilities for the remainder of its current fiscal year and its succeeding fiscal year and for such further periods as the registrant may deem material."
- Item 103 (Disclosure of Legal Proceedings): requiring disclosure of "material pending legal proceedings, other than ordinary routine litigation incidental to the business." Instructions note this requirement generally excludes claims whose alleged damages will not exceed 10% of current assets but that environmental proceedings are not generally considered routine litigation incidental to the business and must be described if they are material; involve damages, potential monetary sanctions, capital expenditures, etc. that

Id. § 78r(a). Section 78u–2 gives the SEC authority to assess civil penalties for false or misleading statements or omission of material fact in any application for registration or required filing. Id. § 78u–2(a)(1). Section 78u–4 authorizes securities fraud actions for untrue statement of material fact or omission of material fact necessary to make the statement not misleading. Id. § 78u–4(a)(1). Section 78u–5 provides a safe harbor for forward-looking statements accompanied by meaningful cautionary statements. Id. § 78u–5(c). Section 78ff outlines penalties and prison for willful violation of these provisions. Id. § 78ff(a).

^{75.} See id. §§ 77x, 78ff (outlining criminal penalties for willful violations).

^{76.} See id. §§ 77z–2(c), 78u–5(c) (outlining safe harbor provisions).

^{77.} Business and Financial Disclosure Required by Regulation S-K, 81 Fed. Reg. 23,916, 23,925 (Apr. 22, 2016) (explaining that prescriptive disclosure requirements demand disclosure based on quantitative thresholds regardless of materiality). Of course, as has previously been discussed, information that does not meet a prescriptive disclosure threshold may still have to be disclosed if omitting it would make other disclosed information misleading.

^{78.} See 17 C.F.R. §§ 201, 229 (2018) (laying out instructions for filing required forms under the Securities Act and the Exchange Act).

^{79.} Id. § 229.101(c)(xii).

^{80.} *Id*.

^{81.} Id. § 229.103.

would exceed 10% of current assets, or a government authority is a party and it could result in sanctions of \$100.000 or more. 82

- Item 303 (Management Discussion and Analysis (MD&A)): requiring filers to describe "known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations" and "events that will cause a material change in the relationship between costs and revenues." Companies are to focus on "material events and uncertainties known to management that would cause reported financial information not to be necessarily indicative of future operating results or of future financial condition," such as matters that would impact future operations but have not impacted past or that have impacted the past but are not expected to impact future operations.
- Item 503 (Risk Factors): requires companies to discuss "the most significant factors that make the offering speculative or risky."

SEC Rule 408 compels companies to provide additional material information not specifically requested in these line-items if it is "necessary to make the required statements, in the light of the circumstances . . . not misleading." Rule 12b-20 has an essentially identical requirement. Rule 10b-5 extends liability for misstatements made outside of SEC filings such as in voluntary sustainability or climate reports. 88

^{82.} Id.

^{83.} Id. § 229.303(a)(2)(ii).

^{84.} Id. § 229.303(a).

^{85.} Id. § 229.503(a).

^{86.} *Id.* § 230.408(a).

^{87.} Id. § 240.12b-20.

^{88.} Id. § 240.10b-5.

It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any national securities exchange, (a) To employ any device, scheme, or artifice to defraud, (b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or (c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.

How and to what extent these disclosure requirements reach the type of climate-related information that investors and NGOs seek remains an active topic of discussion within the ESG community and between investors and companies. ⁸⁹ It is difficult to determine when climate-related risks cross the materiality threshold for required disclosure. For example, Item 303 requires disclosure of information "presently known to management and reasonably likely to have material effects on the registrant's financial conditions or results of operations" but "[i]t is not enough that it *should* have known of the existing trend" and it "ordinarily does not require companies to disclose projections or other forward-looking information." ⁹² It remains difficult to distill a general understanding of climate impacts on an industry as a whole down to impacts on a particular company in a way in which their financial materiality can be measured.

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B. The Meaning of Materiality

Despite being used throughout the acts, the securities statutes do not define the term "materiality." The SEC, however, has defined the term and adjusted it to align with the definition devised by the Supreme Court. ⁹³ The Supreme Court expressed the standard for materiality in the 1976 case *TSC Industries v. Northway*, finding omitted information material when there is "a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available." Over a decade later, the Court affirmed and clarified this concept, noting "materiality depends on the

^{89.} See, e.g., Mark Latham, Environmental Liabilities and the Federal Securities Laws: A Proposal for Improved Disclosure of Climate Change-Related Risks, 39 ENVTL. L. 647, 679, 702–03 (2009) (concluding that SEC environmental disclosure requirement framework is insufficient to cause meaningful climate change disclosures).

^{90.} Stratte-McClure v. Morgan Stanley, 776 F.3d 94, 101 (2d Cir. 2015) (quoting Management's Discussion and Analysis of Financial Condition and Results of Operations, Exchange Act Release No. 6835, 43 S.E.C. Docket 1330, 1989 WL 1092885, at *4 (May 19, 1989)).

^{91.} Indiana Pub. Retirement Sys. v. SAIC, Inc., 818 F.3d 85, 95 (2d Cir. 2016) (emphasis added).

^{92.} Terris, *supra* note 72; *see also* 17 C.F.R. § 229.303(a) ("Any forward-looking information supplied is expressly covered by the safe harbor rule for projections.").

^{93.} Rule 12b-2 defines "material" as limiting the disclosure required to "those matters to which there is a substantial likelihood that a reasonable investor would attach importance in determining whether to buy or sell the securities registered." 17 C.F.R. § 240.12b–2. *See also* Business and Financial Disclosure Required by Regulation S–K, Concept Release, 81 Fed. Reg. 23,916, 23,925 (Apr. 22, 2016) (explaining that the Commission changed the definition of materiality used in Rule 12b-2 in 1982 to that adopted by the by the Supreme Court in *TSC Industries, Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976)).

^{94.} TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976).

significance the reasonable investor would place on the withheld or misrepresented information." The SEC's definition simply restates the Court's standard without providing additional insight into its interpretation, thus, the "inattention of Congress, the SEC, and the FASB has left elaboration of materiality to the judiciary."

Determining whether information is material requires a case-specific approach with no bright-line rule to apply. SEC guidance emphasizes the holistic nature of a materiality inquiry that must account for both quantitative and qualitative considerations. Companies do not have a duty to disclose information not specifically requested, even if material, unless it is necessary to avoid misleading investors. However, omissions of material information can be actionable, as can material misrepresentation in voluntary reports. The financial impact of information does not determine materiality. SEC guidance has noted that the accounting practice of considering anything above 5% of the balance sheet total material can be instructive but not determinative. The potential for a misstatement to result in a significant market reaction can also overcome a presumption of immateriality.

Courts are wary of setting the threshold for materiality too low; not everything considered important by a reasonable investor reaches the level

^{95.} Basic, Inc. v. Levinson, 485 U.S. 224, 240 (1988).

^{96.} Kurt S. Schulzke & Gerlinde Berger-Walliser, *Toward a Unified Theory of Materiality in Securities Law*, 56 COLUM. J. TRANSNAT'L L. 6, 16 (2017).

^{97.} See Basic, 485 U.S. at 236 ("Any approach that designates a single fact or occurrence as always determinative of an inherently fact-specific finding such as materiality, must necessarily be over inclusive or underinclusive."). See also Matrixxx Initiatives, Inc. v. Siracusano, 563 U.S. 27, 30 (2011) ("We conclude that the materiality of adverse event reports cannot be reduced to a bright-line rule."); Litwin v. Blackstone Grp., 634 F.3d 706, 717 (2d Cir. 2011) (stating that the court has "consistently rejected a formulaic approach to assessing the materiality of an alleged misrepresentation" (quoting Ganino v. Citizens Utils. Co., 228 F.3d 154, 162 (2d Cir. 2000)); Schulzke & Berger-Walliser, supra note 96.

^{98.} See SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. 45,150, 45,151 (Aug. 19, 1999) (recommending consideration of qualitative factors and analysis of all relevant considerations when determining materiality).

^{99.} See Basic, 485 U.S. at 239 n.17 ("Silence, absent a duty to disclose, is not misleading under Rule 10b-5"); Terris, supra note 72 (describing the use of silence as a method to avoid disclosing information).

^{100.} See TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1978) (considering whether omitted information from a proxy statement was materially misleading and defining a material fact as a fact that a reasonable shareholder is substantially likely to consider important in deciding how to vote).

^{101.} SEC Staff Accounting Bulletin No. 99, 64 Fed. Reg. at 45,152 ("Evaluation of materiality requires a registrant and its auditor to consider *all* the relevant circumstances, and the staff believes that there are numerous circumstances in which misstatements below 5% could well be material. Qualitative factors may cause misstatements of quantitatively small amounts to be material....").

^{102.} Terris, supra note 72.

of materiality necessary to mandate inclusion in financial filings. ¹⁰³ This is particularly true when considering contingent events where companies must balance "the indicated probability that the event will occur and the anticipated magnitude of the event in light of the totality of the company activity." ¹⁰⁴ Cases where courts have found materially misleading statements or omissions often involve significant acute events, such as spills or accidents that provide strong evidence of the gap between the statement or omission and the reality. ¹⁰⁵ Although not the perfect parallel for inadequate disclosure of a company's planning or consideration of climate-related risks, such cases can provide insight into how the courts may perceive physical risks of climate change in this context. Claims that directly reference statements about climate-related decision making have already made it to the courtroom, but have not yet resulted in substantive application of the law regarding materiality to climate risks. ¹⁰⁶

The concept of the "reasonable investor" is key to determining materiality. Courts have said materiality is a term "within the jury's ordinary experience and understanding" and thus without need for further definition. ¹⁰⁷ Yet it remains a relatively fluid concept when viewed in relation to specific information. How the definition interacts with an emerging issue of interest in disclosure is key to determining when that issue crosses the materiality threshold.

Courts contend the reasonable investor standard is objective; a standard measured by the views of the mainstream market as a whole in which the

^{103.} *Basic*, 485 U.S. at 231 ("[A] minimal standard might bring an overabundance of information within its reach, and lead management simply to bury the shareholders in an avalanche of trivial information—a result that is hardly conducive to informed decisionmaking." (quoting *TSC Indus.*, 426 U.S. at 448).

^{104.} Id. at 238 (quoting SEC v. Tex. Gulf Sulphur Co., 401 F.2d 833, 849 (2d Cir. 1968)).

^{105.} See, e.g., In re Plains All Am. Pipeline, 307 F. Supp. 3d 583, 593 (S.D. Tex. 2018) (addressing the plaintiff's complaint of an oil spill off the California coast when the defendants respond with numerous statements of misrepresentations about scope of the oil spill and the economic effects on the oil and gas pipeline owner and operator); Reese v. Malone, 747 F.3d 557, 569–70 (9th Cir. 2014) (finding that plaintiffs sufficiently pled that defendants made material misstatements in alleging securities fraud); In re BP P.L.C. Sec. Litig., 922 F. Supp. 2d 600, 609, 640–41 (S.D. Tex. 2013) (discussing several misstatements regarding key safety measures in corporate sustainability reports, and elsewhere, found to be material).

^{106.} See Ramirez v. Exxon Mobil Corp., 334 F. Supp. 3d 832, 845–52, 857–59 (N.D. Tex. 2018) (holding that the plaintiffs sufficiently alleged material misstatements and loss causation, in claiming that oil company, ExxonMobil, committed securities fraud, allowing the plaintiffs to partly survive Exxon's motion to dismiss).

^{107.} United States v. Sayre, 434 Fed. App'x 622, 624 (9th Cir. 2011) (reasoning "the term 'reasonable investor' is a concept within the jury's ordinary experience and understanding," that does not need to be defined).

reasonable investor sits not as the "worst informed" nor the best. ¹⁰⁸ A reasonable investor is one of "ordinary intelligence," not a "scientific expert," who reads prospectuses, reports, and other information relevant to their investments. ¹⁰⁹ She should exercise due care in considering information, ¹¹⁰ "is presumed to have information available in the public domain," ¹¹¹ and "takes into account the customs and practices of the relevant industry." ¹¹² But objective does not mean invariable. In fact the reasonable investor's relationship to the whole of investors engaged in the market guarantees variability over time as "[t]he standard may vary . . . with the nature of the traders involved in the particular market." ¹¹³

Investors' increasing and persistent focus on climate concerns may represent a shift in what a reasonable investor considers important to the total mix of information. Presumptively reasonable investors considering climate-related information important to their voting decisions could indicate that such information has become more financially *material*. The

^{108.} United States v. Litvak, 889 F.3d 56, 65 (2d Cir. 2018) ("The reasonable investor in a market in which many individual investors trade will be deemed to be somewhat less schooled and sophisticated than a reasonable investor in a market . . . in which only institutions trade with the help of complex computer programs and professional traders [T]here must be evidence of a nexus between a particular trader's viewpoint and that of the mainstream thinking of investors in that market. Materiality cannot be proven by the mistaken beliefs of the worst informed trader in a market.").

^{109.} Alaska Elec. Pension Fund v. Pharmacia Corp., 554 F.3d 342, 347 (3d Cir. 2009).

^{110.} See FindWhat Inv'r Grp. v. FindWhat.com, 658 F.3d 1282, 1305 (11th Cir. 2011) ("A statement is misleading if 'in the light of the facts existing at the time of the [statement]...[a] reasonable investor, in the exercise of due care, would have been misled by it.' Thus, the 'appropriate primary inquiry' is 'into the meaning of the statement to the reasonable investor and its relationship to truth.'" (alterations in original) (quoting Sec. & Exch. Comm'n v. Tex. Gulf Sulphur Co., 401 F.2d 833, 862–63 (2d Cir. 1968))).

^{111.} Whirlpool Fin. Corp. v. GN Holdings, Inc., 67 F.3d 605, 610 (7th Cir. 1995).

^{112.} Omnicare, Inc. v. Laborers Dist. Council Const. Indus. Pension Fund, 135 S.Ct. 1318, 1330 (2015).

[[]W]hether an omission makes an expression of opinion misleading always depends on context. Registration statements as a class are formal documents, filed with the SEC as a legal prerequisite for selling securities to the public. Investors do not, and are right not to, expect opinions contained in those statements to reflect baseless, off-the-cuff judgments, of the kind that an individual might communicate in daily life. At the same time, an investor reads each statement within such a document, whether of fact or of opinion, in light of all its surrounding text, including hedges, disclaimers, and apparently conflicting information. And the investor takes into account the customs and practices of the relevant industry. So an omission that renders misleading a statement of opinion when viewed in a vacuum may not do so once that statement is considered, as is appropriate, in a broader frame.

SEC has recognized that such a shift could lead to additional social and environmental performance disclosure requirements. 114

Individual companies must navigate the somewhat subjective interpretation of materiality in our case law to avoid disclosure liability. While courts find substantial non-compliance with regulation material to reasonable investors, 115 it is not so clear when information on a company's approach to managing climate risks (beyond basic compliance with environmental regulation) is material. Whether the spike in investor focus on climate concerns will impact courts' understanding of the expectations of the reasonable investor remains to be seen. The investment community's internal divergence regarding what disclosure mechanisms and frameworks to use could cut against determinations that certain omissions are material even if the issues are considered generally important by investors. However, this discussion illustrates that it is no simple task to determine what specific information in a particular issue area a company should deem material for the purposes of SEC filings. Without consistent enforcement and guidance from the regulatory agency, courts' fact-based determinations of specific instances are the only guideposts a company has to rely on in making such determinations.

III. UNTAPPED SEC ENFORCEMENT POTENTIAL, CAN SHAREHOLDERS FILL IT?

The SEC has not effectively used its enforcement powers to foster meaningful disclosure in annual reports. In 2010, it issued guidance on disclosure of climate-related issues that discussed to what extent existing reporting requirements reach climate concerns. In it, the SEC distinguished between what must be disclosed—that is, items that are

^{114.} Business and Financial Disclosure Required by Regulation S-K, Concept Release, 81 Fed. Reg. 23,916, 23,971 (Apr. 22, 2016) ("The role of sustainability and public policy information in investors' voting and investment decisions may be evolving as some investors are increasingly engaging on certain ESG matters").

^{115.} Meyer v. Jinkosolar Holdings Co., Ltd., 761 F.3d 245, 252 (2d Cir. 2014) (holding "a trier of fact could find that the existence of ongoing and substantial pollution problems—here the omitted facts—was of substantial importance to investors" as "a reasonable investor could conclude that a substantial non-compliance would constitute a substantial threat to earnings").

^{116.} Leah A. Dundon, Climate Change Risks and Disclosure Obligations in an Age of Uncertainty, 14 ENVTL. DISCLOSURE COMMITTEE NEWSL., no. 3, Aug. 2017, at 3 ("The reality is that companies now make statements regarding climate risk across many channels, through both voluntary and mandatory reporting, making it more challenging to assess the consistency of such disclosures and avoid legal risk.").

^{117.} Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290, 6295 (Feb. 8, 2010).

considered financially material to the company—and what should be considered when making that materiality determination. ¹¹⁸ For example, in disclosing "known trends, events...[or] uncertainties" in Item 303 (MD&A disclosure), companies should remember that "[w]hile these materiality determinations may limit what is actually disclosed, they should not limit the information that management considers in making its determinations." ¹¹⁹ The SEC emphasized that "registrants are expected to consider all relevant information even if that information is not required to be disclosed." ¹²⁰

The guidance points to four types of information likely to trigger disclosure: the impacts of legislation and regulation, international accords, indirect consequences of regulation or business trends, and the physical impacts of climate change. ¹²¹ The SEC provides some detail on legislation-related disclosure and focuses on changes in demand for goods in relation to a company's carbon footprint, increased competition, and changes in energy demand in describing disclosure of indirect consequences of regulation or business trends. ¹²² Reputational risk is also mentioned as a potential indirect risk. ¹²³ In discussing physical risk of climate change, the SEC focuses on the impacts of severe weather on facilities, distribution systems, and supply chains as well as the potential for increased insurance claims and the impact of increased premiums and deductibles. ¹²⁴

The SEC's 2010 guidance listed ways that climate change can impact businesses. ¹²⁵ It did not provide any additional guidance on how to determine materiality in the context of climate-related information, instead it simply restated the materiality standard that *TSC Industries* defined and the SEC adopted in its regulations. Although the release indicated the Commission would consider additional guidance or rulemaking, ¹²⁶ no such additional guidance resulted. A promised roundtable on the subject never materialized and the Investor Advisory Committee charged with considering the need for additional action was temporarily disbanded in

^{118.} Id. at 6295-97.

^{119.} Id. at 6294-95.

^{120.} Id. at 6295.

^{121.} *Id.* at 6295–97; A Government Accountability Office report includes a good chart of the risks and examples provided in the SEC guidance. U.S. GOV'T ACCOUNTABILITY OFF., GAO-13-188, CLIMATE-RELATED RISKS: SEC HAS TAKEN STEPS TO CLARIFY DISCLOSURE REQUIREMENTS 9 (Feb. 2018), https://www.gao.gov/assets/700/690197.pdf.

^{122.} Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. at 6296.

^{123.} Id.

^{124.} Id. at 6297.

^{125.} Id. at 6290.

^{126.} Id. at 6297.

October 2010 as a result of the Dodd–Frank Act (and subsequently reformed). ¹²⁷ During this timeframe, the cap and trade legislation that had seemed so close to passing in 2009 and early 2010 fell apart, never reaching the President's desk. ¹²⁸

After the 2010 guidance, the Commission engaged with some registrants on the quality of their climate-related disclosures, but it did so gingerly. The small amount of prodding of a handful of individual companies did not produce substantial improvement in corporate climate disclosures. As previously discussed, a 2014 Ceres review of disclosures found little discussion of specific material information or quantification of impacts after the 2010 guidance was released. SEC staff sent a handful of comment letters to companies about their climate-related disclosures (25 letters to 23 companies from 2010 to 2013 out of more than 45,000 comment letters and 14 letters to 14 companies out of over 41,000 letters issued from 2014 to 2017). SEC staff has noticed little change in climate-related disclosures as a result of the 2010 guidance. Sec. 131

In 2016, the Commission issued a 341-page concept release for public comment seeking to "moderniz[e]" the Regulation S-K disclosure

^{127.} *Id.* (explaining that the IAC was "considering climate change disclosure issues as part of its overall mandate to provide advice and recommendations to the Commission"). *See* Melissa Klein Aguilar, *SEC Committee to Get a Makeover Due to Dodd-Frank*, COMPLIANCE WK. (Sept. 3, 2010), https://www.complianceweek.com/sec-committee-to-get-a-makeover-due-to-dodd-frank/18569.article (explaining that the June 2009 IAC disassembled for reason of differences in that committee and what Section 911 of the Dodd–Frank Act required for a committee); Press Release, SEC, SEC Announces Creation of Investor Advisory Committee (June 3, 2009), http://www.sec.gov/news/press/2009/2009-126.htm (discussing how the IAC was formed on June 3, 2009 to "[a]dvis[e] the Commission on matters of concern to investors in the securities markets; [p]rovid[e] the Commission with investors' perspectives on current, non-enforcement, regulatory issues; and [s]erv[e] as a source of information and recommendations to the Commission regarding the Commission's regulatory programs from the point of view of investors"). The IAC was reconstituted in 2012 according to the requirements of the Dodd–Frank Act. Dodd-Frank Wall Street Reform and Consumer Protection Act, 12 U.S.C. §§ 5301–5641 (2006).

^{128.} Amanda Reilly & Kevin Bogardus, 7 Years Later, Failed Waxman-Markey Bill Still Makes Waves, E&E DAILY (June 27, 2016), https://www.eenews.net/stories/1060039422 (explaining that, in 2016, the House had not passed legislation addressing a cap-and-trade system for GHG emissions in the passing seven years, and that the Senate refused to approve the Waxman-Markey bill, but it nevertheless brought important repercussions). See Bryan Walsh, Why the Climate Bill Died, TIME (July 26, 2010), http://science.time.com/2010/07/26/why-the-climate-bill-died/ (stating that Senate Majority Leader Harry Reid chose not to include a carbon cap on an ambitious climate bill).

^{129.} See supra text accompanying notes 47–51 (discussing review of S&P 500 companies' SEC filings following 2010 SEC interpretive guidance).

^{130.} U.S. GOV'T ACCOUNTABILITY OFF., GAO-18-188, CLIMATE-RELATED RISKS: SEC HAS TAKEN STEPS TO CLARIFY DISCLOSURE REQUIREMENTS 14 (2018).

^{131.} *Id.* at 15 (explaining that in the 2012 report to the Senate Committee on Appropriations examining climate-related disclosures after the 2010 guidance, the SEC found no notable changes).

requirements. The Concept Release included a section on "Public Policy and Sustainability Matters." The Commission requested feedback on "the importance of sustainability and public policy matters to informed investment and voting decisions," asking what disclosures are needed to understand a business and its financial condition and to inform investment and voting decisions. The release acknowledged the Commission had received comments urging increased ESG disclosure requirements, including several specifically mentioning climate change, as well as a few opposing direct requirements in this area. It included prompts for comment on whether to include ESG and climate in line-item requests, whether the SEC should adopt existing frameworks for disclosure, challenges registrants have in reporting, how disclosure outside of SEC filings impacts comparability, etc.

The 2016 concept release emphasized the role materiality plays in limiting disclosure. It pointed to an SEC conclusion in 1975 that it would only require social and environmental performance disclosure "if such information . . . is important to the reasonable investor—material information" ¹³⁷ and that not all registrants should have to report on such matters "unless appropriate to further a specific congressional mandate or unless, under the particular facts and circumstances, such matters are material." The SEC acknowledged "[t]he role of sustainability and public policy information in investors' voting and investment decisions may be evolving as some investors are increasingly engaging on certain ESG matters,"139 but made no assertions about whether this evolution may now warrant required disclosure. The Commission has not developed any

^{132.} See generally Business and Financial Disclosure Required by Regulation S–K, Concept Release, 81 Fed. Reg. 23,916 (Apr. 22, 2016) (providing a concept release as part of an initiative, by the Division of Corporation Finance, to facilitate public comment on modernizing business and financial disclosure requirements in Regulation S–K, and to initiate improvement requirement options for investor and registrant benefits).

^{133.} See id. at 23,969–70 (explaining that Congress recently mandated disclosure requirements to address certain public policy concerns such as conflict minerals, and that investors and interest groups want more disclosure of public policy and sustainability issues, however, in past years, the Commission concluded that registrants are not required to disclose matters relating to the environment unless material or required by a Congressional mandate).

^{134.} Id. at 23,970.

^{135.} Id.

^{136.} Id. at 23,972-73.

^{137.} Id. at 23,971 n.687.

^{138.} Id. at 23,970.

^{139.} Id. at 23,971.

proposals that address disclosures of climate information as a result of the concept release. 140

SEC's enforcement role with regard to disclosures is limited by the information it can review. The division of the agency that reviews disclosures for compliance with SEC rules does not have subpoena power, does not have access to the underlying information that companies consider in making their materiality determinations, and has little training in climate-related disclosure. They can review public information outside of the filings but have to refer potential violations of disclosure requirements to the Division of Enforcement for a formal order of investigation in order for the SEC to subpoena information from the company. Illustrating the unlikelihood that this process will result in a challenge to corporate statements on climate is the fact that the SEC reviewed Peabody Energy's filings after the New York Attorney General initiated an investigation into misleading climate disclosures (discussed in more detail below) but did not issue a comment letter or refer it for further action.

Shareholders themselves can act on misleading disclosures if it rises to the level of fraud. Act of 1934 and SEC Rule 10b-5 allow shareholders to pursue securities fraud claims. Under

^{140.} In 2017, the SEC released proposed amendments to Regulation S–K, primarily as a response to a mandate Fixing America's Surface Transportation Act but also reflecting "amendments developed as part of a broader review of the Commission's disclosure system." These amendments focused on "reduc[ing] costs and burdens" to companies, implementing staff recommendations included in a November 2016 report of recommendations, but did not address any of potential issues raised regarding ESG reporting in the concept release. Press Release, SEC, SEC Proposes Rules to Implement FAST—Act—Mandate to Modernize and Simplify Disclosure (Oct. 11, 2017), https://www.sec.gov/news/press-release/2017-192; see also FAST—Act—Modernization and Simplification of Reg. S–K, 82 Fed. Reg. 50,988 (proposed Nov. 2, 2017) (to be codified at 17 C.F.R. pts. 229, 230, 232, 239, 240, 249, 270, 274, 275) (suggesting amendments to modernize and simplify particular disclosure requirements of Regulation S–K to execute the FAST Act); U.S. SEC. & EXCH. COMM'N, REPORT ON MODERNIZATION AND SIMPLIFICATION OF REGULATION S-K (Nov. 23, 2016) (reporting the findings and determinations of the S–K study and suggesting recommendations).

^{141.} See U.S. GOV'T ACCOUNTABILITY OFF., supra note 130, at 17 (explaining that the SEC faces restrictions when evaluating disclosures because it depends on the companies' issuance of information).

^{142.} Id. at 17, 23.

^{143.} Id. at 17.

^{144.} *Id*.

^{145.} See The Securities Exchange Act of 1934, 15 U.S.C. § 78j(a)(1)–(c)(2) (providing the Act's primary anti-fraud provision). See also 17 C.F.R. § 240.10b (2018) (prohibiting the use of any "device, scheme, or artifice to defraud," and also imposing liability for any misstatement or omission of material fact).

^{146. 17} CFR § 240.10b-5 (2018).

It shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any national securities exchange, (a) To employ any device, scheme, or artifice to

10b-5, the shareholder must show the company made a material misrepresentation or omission known to the company in connection with the purchase or sale of a stock and that the shareholder, relying on it, suffered an economic loss that can be tied to the representation or omission—a steep hill to climb. Fraud actions related to environmental concerns have generally arisen after serious environmental incidents, such as BP after the Macondo oil spill. These actions cannot take the place of regular compliance reviews and enforcement by the Commission, instead providing a backstop after the fact.

Lax enforcement by the SEC has allowed for significant variability and lack of precision on climate and environmental concerns in financial filings and the barriers to shareholder enforcement are steep. Lax enforcement and minimal guidance by the SEC has allowed for significant variability and a lack of precision in disclosure. There is also a dearth of case law clearly establishing where the *reasonable investor* sits on the spectrum of concern for climate information. Companies are left without much guidance as to how new demands for more detailed climate-related disclosure fit into the materiality determination. The SEC and shareholders, however, are not the only actors that can challenge corporate disclosures. The next Part discusses the significant role that state AGs can play in this space.

IV. ATTORNEY GENERAL ENGAGEMENT WITH CORPORATE CLIMATE DISCLOSURE

Although federal securities law is the most direct avenue down which to pursue concerns regarding disclosure of climate-related risks, states also share in this responsibility. States have the power to pursue securities fraud actions via enforcement powers granted state AGs or a corporation commissioner in some states (or shared between the two) by state blue sky or consumer protection laws. AGs have increasingly coordinated on

defraud, (b) To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or (c) To engage in any act, practice, or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.

Id.

^{147.} *Id.*; *See BG Litig. Recovery I, LLC v. Barrick Gold Corp., 180 F. Supp. 3d 316, 322 (S.D.N.Y. 2016).*

^{148.} See In re BP P.L.C. Sec. Litig., 922 F. Supp. 2d 600, 609 (S.D. Tex. 2013) (discussing the impact of misrepresentations on BP investors in the wake of the oil spill).

^{149.} Joanne Spalding & Alejandra Núñez, Statutory Framework Underlying Exxon Investigations by the Attorneys General of New York and Massachussetts, 14 ENVTL. DISCLOSURE COMMITTEE NEWSL., no. 3, Aug. 2017, at 12, https://www.americanbar.org/content/dam/aba/

multi-state litigation and inserted themselves into national environmental law policy discussions in the last few decades.

In recent years, AGs have relied on their enforcement and investigatory powers to fill the gap left by lackluster SEC enforcement by investigating nondisclosure of climate-related risks by energy companies. Although still the purview of a small number of AGs, these investigations could have lasting impacts. AG interest in disclosure is now merging with the increasing tendency to coordinate multi-state litigation campaigns designed to influence federal policy on the environment and climate. Along the way, the purpose and approach to state securities investigations have shifted over time, raising new questions about how they will influence policymaking. The most recent efforts by AGs on climate-related disclosures are coinciding with increasing allegations of climate liability brought by individuals, cities, and at least one state. As will be discussed in the Conclusion, this trend could hinder the ongoing efforts by the financial community to encourage more expansive disclosure of climate risks.

A. The Role of State Attorneys General in Environmental Law

State AGs' relationship with federal environmental policy has evolved over time as their involvement in national policymaking has increased. Paul Nolette of Marquette University has tracked the rise of multi-state, coordinated litigation efforts by AGs and found it falls into three categories: "(1) policy-creating litigation that seeks settlements with national corporations establishing new regulatory responsibilities not otherwise required by law, (2) policy-forcing litigation that challenges regulatory inaction by federal agencies, and (3) policy-blocking litigation that attempts to thwart regulatory actions by federal policymakers." He observes that political polarization among AGs has increased in recent years, paralleling trends in Congress, and that their involvement in national policymaking via litigation has reflected this trend. AGs now use all three types of litigation

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publications/nr_newsletters/ed/201708-ed_joint.pdf (listing state consumer protection statutes authorizing state AGs to investigate unfair or deceptive acts or practices in the conduct of business).

^{150.} See David Hasemyer, Fossil Fuels on Trial: Where the Major Climate Change Lawsuits Stand Today, INSIDECLIMATE NEWS (Jan 6, 2019), https://insideclimatenews.org/news/04042018/climate-change-fossil-fuel-company-lawsuits-timeline-exxon-children-california-cities-attorney-general (explaining that there is a "wave of legal challenges that is washing over the oil and gas industry, demanding accountability for climate change").

^{151.} Cf. PAUL NOLETTE, FEDERALISM ON TRIAL: STATE ATTORNEYS GENERAL AND NATIONAL POLICYMAKING IN CONTEMPORARY AMERICA 3 (2015) (tracing the rise of AG involvement in national policymaking through multi-state litigation and its impact on a number of significant policy areas, including environmental law).

^{152.} Id. at 13-14.

(policy-creating, policy-forcing, and policy-blocking) to insert themselves in environmental policymaking with national impacts.

Modern environmental law, birthed in the late 1960s and early 1970s, expressly authorizes state involvement. Federal and state authorities share enforcement powers and program design responsibilities in a cooperative federalism model. But this modern environmental law is not without "historical legal roots." Prior to the burst of lawmaking in the 1970s, "environmental enforcement had been the nearly exclusive domain of state and local governments," who made efforts to control pollution through zoning and other local regulatory efforts as well as "enforcement based on nuisance and other common law theories."

The environmental statutes of the 1970s were "markedly different" from "earlier natural resources laws." The Clean Air Act, Clean Water Act, and other environmental statutes that still govern our environmental law regime were partially a response to the slow pace of state action. They established a primary role for the federal government but also invited states to actively participate in the management of environmental law. 160

^{153.} See RICHARD LAZARUS, THE MAKING OF ENVIRONMENTAL LAW 91–94 (Univ. of Chi. Press 2004) (discussing the beginnings of the federalism debate in environmental law).

^{154.} *Id.* at 44, 50 (noting the "oft-repeated fiction that environmental law spontaneously began in the late 1960s and early 1970s" and that the roots of these laws were "at least as likely to be found in the widespread social, urban justice movements concerned with public health in the United States, which led to the enactment of state and local legislation throughout the nineteenth and twentieth centuries" as to be found in natural resources law that developed over the eighteenth and nineteenth centuries).

^{155.} Hubert Humphrey III & LeRoy C. Paddock, *The Federal and State Roles in Environmental Enforcement: A Proposal for a More Effective and More Efficient Relationship*, 14 HARV. ENVTL. L. REV. 7, 7 (1990).

^{156.} See LAZARUS, supra note 153, at 51 (describing early 19th and early 20th century local efforts to control pollution and improve sanitation).

^{157.} Humphrey & Paddock, supra note 155, at 11.

^{158.} LAZARUS, supra note 153, at 50 (explaining these prior laws were based in property law principles).

^{159.} *Id.* (explaining these statutes relied on the "sovereign's police power to regulate private activities that adversely affect public health and welfare because of the impact of those activities on the natural environment notwithstanding property claims"); Humphrey & Paddock, *supra* note 155, at 11–12 (describing the states' difficulty in making progress on environmental concerns due to the limitations of their authorities under common law and state and local regulation).

^{160.} Humphrey & Paddock, *supra* note 155, at 12–14. By 1990, some AGs felt the 1970s legislation "lack[ed] any principled determination of the appropriate roles of the federal and the state governments" and that such allocation was "based largely on factors such as the lack of federal resources and the expanding number of regulated entities." *Id.* at 8.

States began to coordinate on multi-state environmental litigation in the 1980s to address concerns over acid rain. ¹⁶¹ These efforts largely broke down on regional lines with downwind, Northeastern states asking the federal government to enforce stricter emissions controls on upwind, Midwestern states whose pollution made it difficult for Northeastern states to comply with air quality standards. ¹⁶² New York AG Robert Abrams led the way with policy-forcing litigation. ¹⁶³ By the mid- to late-1980s, new environmental laws that developed in the wake of President Reagan's failed deregulatory agenda ¹⁶⁴ more strongly emphasized state enforcement roles. ¹⁶⁵ This reflected a general professionalization of state enforcement programs at the time that provided both state agencies as well as state AGs with more manpower to pursue enforcement agendas. ¹⁶⁶

AG involvement in environmental law has shifted in a partisan direction—pursuing policy-forcing and policy-creating litigation during the George W. Bush Administration and policy-blocking litigation during the Obama Administration. The National Association of Attorneys General, founded in 1907 in part to improve the quality of AG litigating, has since been joined by partisan associations. The Republican Attorneys General

^{161.} NOLETTE, *supra* note 151, at 111 (describing, in Chapter 6, the multistate air pollution control cases of the 1980s and how with President Reagan's deregulatory agenda and regional interests in Congress split there was little hope for a legislative fix to the problem).

^{162.} Id. at 111.

^{163.} Id. at 110-11.

^{164.} See LAZARUS, supra note 153, at 98–113 (describing the impact of President Reagan's deregulations on environmental law).

^{165.} See Humphrey & Paddock, supra note 155, at 25, 31 (noting "a dramatic federalization of enforcement in the 1970's and early 1980's and an apparent reversal of this trend in the last half of the 1980's"). In 1990, at least one AG lamented the lack of principles in the allocation of enforcement responsibilities between federal and state governments, calling it "haphazard" and "erratic" and called for explicit principles for divvying up enforcement responsibilities that carved out substantial state enforcement roles. Id. at 31, 36–44.

^{166.} *Id.* at 36 ("[I]n the twenty years since the federal government began assuming a heightened role in environmental enforcement, many state programs have been significantly strengthened. State budgets for environmental programs have increased substantially since 1982, even in the face of declining levels of federal grant assistance."); LAZARUS, *supra* note 153, at 115 (By the end of the 1980s, "[m]ost large municipalities also began to hire in-house environmental law experts, as did state agencies and federal agencies.").

^{167.} NOLETTE, *supra* note 151, at 117 ("During both the more pro-regulatory Clinton administration and the return of a deregulatory approach during the George W. Bush era, AGs created new avenues for pursuing stricter air pollution requirements on American industry. This included new policy-creating strategies building on the approach that had proved so successful in the tobacco litigation of the late 1990s."); *id.* at 31 (noting policy-blocking litigation became "particularly prominent during the Obama administration, with examples including the challenges to the Affordable Care Act and greenhouse gas regulations described in chapter 9 as well as a variety of challenges to federal financial policies and other environmental regulations").

^{168.} Id. at 33-34.

Association (RAGA) was formed in 1999 as GOP AGs soured on working with their Democratic colleagues due to their differences in opinion over the tobacco lawsuits of the late 1990s. The creation of RAGA was a natural outgrowth of the aggressively partisan approach to politics ushered in by Newt Gingrich's 1994 "Republican Revolution" and "Contract With America," and the "trickle-down polarization" that emerged from it to infect state politics and policy-making. Democrats eventually responded in kind, forming their own Democratic Attorneys General Association in 2002. 171

States whose interests align (generally on partisan lines) relative to a federal rulemaking now often team up to challenge actions to regulate or deregulate on environmental issues at the federal level. Groupings of conservative and liberal states have continued to self-organize to further broaden environmental regulatory or deregulatory agendas, increasingly so during the Obama Administration. Such political divides are

^{169.} Id. at 34, 191.

^{170.} Cf. McKay Coppins, The Man Who Broke Politics, ATLANTIC (Oct. 17, 2018), https://www.theatlantic.com/magazine/archive/2018/11/newt-gingrich-says-youre-welcome/570832/ ("During his two decades in Congress, he pioneered a style of partisan combat—replete with name-calling, conspiracy theories, and strategic obstructionism—that poisoned America's political culture and plunged Washington into permanent dysfunction."); NOLETTE, supra note 151, at 190 ("AG activism has reflected intensifying polarization apparent elsewhere in the political system. Although polarization increased after Republicans captured control of Congress in 1994, there has been a considerable surge in polarization throughout the political system since 2000. State governments have been no exception, as state-level political conflicts increasingly mirror national-level partisan splits. As late as George W. Bush's second term, one could speak of a distinction between the polarized national environment and a less polarized state-level politics. Reflecting a similar development among governors and other state-level institutions, however, the polarization on the national level has trickled down to the AGs. This trickle-down polarization is apparent in the way the national electoral patterns have become more apparent in the results of state level elections.").

^{171.} NOLETTE, supra note 151, at 34, 191.

^{172.} *Id.* at 160, 168–69 (discussing the various partisan AG collaborations under both the Reagan and the Obama Administrations).

^{173.} See Eric Lipton, Energy Firms in Secretive Alliance with Attorneys General, N.Y. TIMES (Dec. 6, 2014), https://www.nytimes.com/2014/12/07/us/politics/energy-firms-in-secretive-alliance-with-attorneys-general.html. Conservative AGs aggressively organized to push back against President Obama's environmental regulatory effects, often in tandem with the regulated industries. Id. One of the most prominent leaders of this effort was Oklahoma AG Scott Pruitt, who begame President Trump's first EPA Administrator. Id. See also NOLETTE, supra note 151, at 188, 202 ("[L]itigation during the Obama administration... was both broader and more partisan."). AGs have also increasingly teamed up with like-minded interests such as environmental groups and corporate interests. See id. at 202 ("With AGs pursuing policy goals increasingly divorced from state prerogatives, they have increasingly coordinated their efforts with other actors seeking similar policy goals."); See also Michelle Cottle, Golden State Warrior: California's New Attorney General, Xavier Becerra, Prepares to Battle Trump, ATLANTIC (May 2017), https://www.theatlantic.com/magazine/archive/2017/05/golden-state-warrior/521457/ ("During the Obama presidency, Texas Attorney General (now Governor) Greg Abbott and his successor, Ken Paxton, sued the federal government over everything from the Affordable Care Act to

understandably present when dealing with inherently political positions whose officials are subject to elections, particularly as partisan polarization moved into state governance. As Nolette noted: "By widening the entrepreneurial space available for AGs, federal institutions have encouraged the growth of national policymaking rivals whose actions frequently complicate the operation of national policy." AGs have filled this entrepreneurial space with policy-creating, policing-forcing, and policy-blocking litigation, all of which are active tools in the contemporary AG's toolbox.

Partisan organization among AGs has intensified in the wake of Trump's election, 175 as have efforts to address climate change through litigation. A coalition of states announced the formation of "AGs United for Clean Power" in 2016, committing to "aggressively protecting the recent progress the US has made in combatting climate change." ¹⁷⁶ The group of 25 jurisdictions announced it would pursue investigations into whether energy companies mislead the public about the dangers of climate change as well as efforts to encourage the EPA to limit carbon emissions. 177 In August 2017, New York University (NYU) School of Law launched the State Energy & Environmental Impact Center "dedicated to helping state attorneys general fight against regulatory roll-backs and other actions that undermine key clean energy, climate change, and environmental values and protections."178 The State Energy & Environmental Impact Center appears to have built upon, and perhaps largely absorbed, the coordinating duties for the 2016 coalition, providing additional support for states attempting to coordinate on environmental matters against the Trump Administration's

the president's transgender-bathroom directive to environmental regulations. Abbott once quipped that his job entailed going into the office, suing the federal government, and going back home. All told, Texas sued the Obama administration nearly 50 times—including a farewell filing on the president's second-to-last day in office."); See also Paul Nolette & Colin Provost, Change and Continuity in the Role of State Attorneys General in the Obama and Trump Administrations, 39 PUBLIUS: J. OF FEDERALISM, no. 3, 2018, at 469 (discussing how partisan groups have only increased under the Trump Administration, as compared to the Obama Administration).

- 174. NOLETTE, supra note 151, at 203.
- 175. Nolette & Provost, supra note 173.

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^{176.} Press Release, Climate Reality Project, Al Gore and New York Attorney General Eric Schneiderman Launch AGs United for Clean Power Coalition (Mar. 30, 2016), https://www.climaterealityproject.org/blog/al-gore-and-new-york-attorney-general-eric-schneiderman-launch-ags-united-clean-power-coalition.

^{177.} Id.

^{178.} Press Release, New York University, NYU Law Launches New Center to Support State Attorneys General in Environmental Litigation (Aug. 17, 2017), https://www.nyu.edu/about/news-publications/news/2017/august/nyu-law-launches-new-center-to-support-state-attorneys-general-i.html [hereinafter Press Release, N.Y.U.].

policies.¹⁷⁹ As we see below, these larger trends of increasingly partisan approaches to multi-state litigation and efforts to impact national policy can be seen in AG involvement with climate-related disclosure litigation as well.

B. AGs Now Targeting Environmental Outcomes with Non-Environmental Law

The ascension of Trump to the White House and the expectation of climate policy shifts prompted state actors of a certain political stripe to publicly commit to taking up the mantle of combating climate change and pursuing environmental enforcement after the 2016 elections. State and local leaders promised to make progress on environmental policymaking, combating climate change, and engaging with world leaders in the absence of federal leadership and have actively pursued such efforts. State AGs prominently participated in these public commitments, vowing not to shy away from challenging administration actions and have aggressively pursued environmental and climate action in addition to myriad other responses to the Trump Administration.

^{179.} See id. (explaining how the center funds environmental law fellowship positions in individual state AG offices, provides "legal, analytic, and communications support," and "facilitat[es] coordination across multiple offices of state attorneys general" on environmental law matters).

^{180.} See, e.g., "We Are Still In" Declaration (June 5, 2017), https://www.wearestillin.com/weare-still-declaration (showing a declaration made by multiple parties to support the Paris Agreement); Press Release, Global Climate Action Summit, Governor Brown Closes Global Climate Action Summit: Satellite" Launching Our Own Damn (Sep. https://www.globalclimateactionsummit.org/governor-brown-closes-global-climate-action-summitwere-launching-our-own-damn-satellite/ (announcing that California is planning on using satellite technology to "track climate change-causing pollutants with unprecedented precision and help the world dramatically reduce these destructive emissions"); Leslie Hook, Bloomberg Flies US Flag for Climate Change Action, FIN. TIMES (Dec. 3, 2018), https://www.ft.com/content/fcc16d5a-f49f-11e8-938a-543765795f99 (discussing Michael Bloomberg's role in starting We Are Still In); Rebecca Hersher, Mayors and Governors Rebut Trump Administration Position at Climate Summit, NPR (Dec. 12, 2018), https://www.npr.org/2018/12/12/676001283/mayors-and-governors-rebut-trump-administrationposition-at-climate-summit (describing how multiple leaders from the U.S. have decided to coordinate with other countries to work on efforts of the Paris Agreement).

^{181.} See, e.g., Cottle, supra note 173 ("Democratic attorneys general across the country are stepping up—and joining forces with one another—to act as a legal barricade against Trump's policies. Immediately upon being appointed, Becerra was welcomed to the fight by a number of his new colleagues, most notably New York Attorney General Eric Schneiderman, who is said to be picking apart Trump's business dealings. An effort of this magnitude requires 'teamwork,' Becerra says, with different states taking the lead on different issues."); Patrick McGreevy, California Has Sued the Trump Administration 38 Times. Here's a Look at the Legal Challenges, L.A. TIMES (July 22, 2018), https://www.latimes.com/politics/la-pol-ca-california-sues-trump-20180722-story.html ("With California leading the move from coal and oil to cleaner energy sources, it is no surprise that the most lawsuits filed by the attorney general — 21 so far — have challenged Trump administration proposals to

In addition to litigating the current Administration's deregulatory agenda, AGs are reaching for legal tools outside of the environmental statutes—such as state fraud, consumer protection, and "blue sky" laws—to investigate energy company nondisclosures of climate risks and pursue corporate liability for climate change. By turning up the pressure on companies, particularly energy companies, they hope to influence private sector actors' environmental stewardship and contribute to efforts to combat climate change.

New York has largely led state efforts to pursue energy companies for their climate risk disclosures, or lack thereof, due to the strength of its Martin Act. ¹⁸⁴ In place for nearly a century (it is a 1921 law, predating The Securities and Exchange Acts and creation of the SEC), the Martin Act grants broad authority to the New York AG to investigate and prosecute securities fraud. ¹⁸⁵ The Martin Act is the strongest of the country's "blue sky" laws—lacking an intent to deceive requirement, allowing for both civil and criminal charges, using an expansive definition of "fraud," and granting the AG broad investigatory and subpoena powers. ¹⁸⁶ The strength of the law combined with the presence of the stock exchange in New York City places the New York AG in perhaps the strongest position to enforce U.S. securities law outside of the SEC. ¹⁸⁷ New York's Martin Act provides the most expansive role for state enforcement, but New York is not alone in its ability to investigate. Other states' consumer protection and securities and

roll back environmental protections."); Annie Karni & Jennifer Medina, *Trump Administration Wants California to Pay Back \$2.5 Billion for High-Speed Rail*, N.Y. TIMES (Feb. 19, 2019), https://www.nytimes.com/2019/02/19/us/trump-cancels-california-high-speed-rail-grant.html ("Xavier Becerra, the California attorney general, has been a vociferous critic of the administration and has filed 46 lawsuits against it so far.").

^{182.} Jonathan Macey & Geoffrey Miller, *Origin of the Blue Sky Laws*, 70 TEX. L. REV. 347, 348–49 (1991) (explaining that "blue sky" laws refer to state statutes passed to deter and prosecute securities fraud, responding to early sales of worthless shares in non-existent or valueless entities).

^{183.} See, e.g., Press Release, N.Y. Att'y Gen., A.G. Schneiderman Secures Unprecedented Agreement with Peabody Energy to End Misleading Statements and Disclose Risks Arising from Climate Change (Nov. 9, 2015) [hereinafter Press Release, Agreement with Peabody], https://ag.ny.gov/press-release/ag-schneiderman-secures-unprecedented-agreement-peabody-energy-end-misleading (publicizing investigation of energy corporation for violation of New York's blue sky and anti-fraud laws).

^{184.} N.Y. GEN. BUS. §§ 352-359-H.

^{185.} Frank Razzano, The Martin Act: An Overview, 1 J. Bus. & Tech. L. 125, 125 (2006).

^{186.} See Nina Hart, Moving at a Glacial Pace: What Can State Attorneys General Do About SEC Inattention to Nondisclosure of Financially Material Risks Arising from Climate Change?, 40 COLUM. J. ENVTL. L. 99, 127–30 (2015) (explaining the New York AG's powers under the Martin Act, that the author states is known as "the most powerful [blue sky law] in the nation").

^{187.} Id.

financial fraud laws provide varying degrees of investigatory and prosecutorial powers. $^{188}\,$

Currently, the highest profile energy company climate investigations target ExxonMobil. New York filed suit against ExxonMobil on October 24, 2018, after three years of investigation, alleging a scheme to defraud investors. In the same month that the AGs United for Clean Power coalition emerged, Massachusetts invoked its consumer protection statute, Massachusetts General Laws Chapter 93A, to launch an investigation of ExxonMobil, and the U.S. Virgin Islands initiated an investigation as well. California AG Kamala Harris was reportedly investigating Exxon in 2016 and unconfirmed rumors continued of an investigation under AG Xavier Becerra.

ExxonMobil is not the only company whose environmental disclosures have become the target of state AGs. Martin Act investigations into disclosures have been en vogue across multiple New York AG terms and well before the 2016 elections. Former AG Andrew Cuomo initiated investigations in 2007 into the disclosures of four power producers and a coal producer as part of an effort to pressure the SEC into updating its guidance on environmental disclosures in mandatory financial filings. The AG who proceeded Cuomo, Eliot Spitzer, aggressively pursued

^{188.} See supra note 149 (citing an article that lists state consumer protection statutes authorizing state AGs to investigate unfair or deceptive acts or practices in the conduct of business).

^{189.} See infra text accompanying notes 190–92 (describing state investigations into ExxonMobil's climate disclosures).

^{190.} Press Release, N.Y. Att'y Gen., A.G. Underwood Files Lawsuit Against Exxonmobil for Defrauding Investors Regarding Financial Risk the Company Faces from Climate Change Regulations (Oct. 24, 2018), https://ag.ny.gov/press-release/ag-underwood-files-lawsuit-against-exxonmobil-defrauding-investors-regarding-financial.

^{191.} See Press Release, Mass. Att'y Gen., Attorney General's Office Exxon Investigation (Apr. 19, 2016), https://www.mass.gov/lists/attorney-generals-office-exxon-investigation (announcing the creation of a website with related documents to the court fights involved). Phil McKenna, Virgin Islands and Exxon Agree to Uneasy Truce Over Climate Probe, INSIDECLIMATE NEWS (July 7, 2016), https://insideclimatenews.org/news/06072016/virgin-islands-exxon-agree-climate-probe-subpoena-claude-walker-schneiderman-healey (explaining the U.S. Virgin Islands announced an investigation but ultimately withdrew a subpoena of ExxonMobil records); see Hasemyer, supra note 150 (providing more information on state probes into energy company climate disclosures).

^{192.} Ivan Penn, California to Investigate Whether Exxon Mobil Lied About Climate-Change Risks, L.A. TIMES (Jan. 20, 2016), https://www.latimes.com/business/la-fi-exxon-global-warming-20160120-story.html; Jennifer Dorroh, Becerra Will Not Confirm Climate Probe, Is 'Fully Aware of the Exxon Matter,' CLIMATE LIABILITY NEWS (Feb. 28, 2018), https://www.climateliabilitynews.org/2018/02/28/xavier-becerra-exxon-climate-investigation/.

^{193.} See Hart, supra note 186, at 104–06 (explaining the Cuomo investigation and his unprecedented use of the state Martin Act to investigate nondisclosures related to climate change).

financial firms for financial fraud via the Martin Act but it was Cuomo who made the leap to energy company climate disclosures. 194

Cuomo settled with Xcel in August and Dynegy in October of 2008, discontinuing his investigations in exchange for additional disclosure of material financial risks of climate change in the companies' 10-K filings, including information about regulation and legislation, litigation, and the physical impacts of climate change as well as committing to disclosures of carbon emissions and projected increases, climate strategies, and corporate governance. ¹⁹⁵ Cuomo reached a similar agreement with AES Corporation in November of 2009. ¹⁹⁶

The investigations into Peabody Coal and Dominion Resources, the last two of the five companies Cuomo targeted in 2007, did not result in swift conclusions. In 2013, then-New York AG Eric Schneiderman revived Cuomo's investigation into Peabody Coal with a new round of document requests, not agreeing to discontinue his investigation until 2015. Distinct from the prior agreements, the Peabody deal required the company to file revised disclosures with the SEC to correct those Schneiderman thought misled investors regarding the impact of climate change on its business. Peabody had previously stated it could not predict the impact on its business, despite contracting consultants to make such internal predictions. Schneiderman also argued Peabody presented an overly rosy

^{194.} See id. at 106–07 (explaining that Spitzer aggressively used the Martin Act to investigate corporations, obtaining large settlements against institutions like Merrill Lynch amongst other large financial organizations, and that before Spitzer's energetic use, the Martin Act was largely unutilized).

^{195.} See id. at 108–09 (explaining Cuomo's initial settlement with energy companies including settlement with Xcel Energy, which was among five other energy companies subpoenaed for allegedly failing to disclose climate change risks, and settlement with Dynegy, Inc., a producer and seller of electric energy). See also Press Release, N.Y. Att'y Gen., Cuomo Reaches Landmark Agreement with Major Energy Company, Xcel Energy, to Require Disclosure of Financial Risks of Climate Change to Investors (Aug. 27, 2008), https://ag.ny.gov/press-release/cuomo-reaches-landmark-agreement-major-energy-company-xcel-energy-require-disclosure (discussing the August 2008 settlement between Cuomo and Xcel); Press Release, N.Y. Att'y Gen., Attorney General Cuomo, Joined by Vice President Gore, Announces Agreement with Major Energy Company, Dynegy Inc. (Oct. 23, 2008), https://ag.ny.gov/press-release/attorney-general-cuomo-joined-vice-president-gore-announces-agreement-major-energy (discussing the October 2008 settlement between Cuomo and Dynegy).

^{196.} Press Release, N.Y. Att'y Gen, Attorney General Cuomo Announces Agreement with AES to Disclose Climate Change Risk to Investors (Nov. 19, 2009) [hereinafter Press Release, Agreement with AES], https://ag.ny.gov/press-release/attorney-general-cuomo-announces-agreement-aes-disclose-climate-change-risks-investors.

^{197.} See Press Release, Agreement with Peabody, supra note 183 (outlining the history and settlement between Schneiderman and Peabody).

^{198.} Assurance of Discontinuance, *In re* Peabody Energy Co., No. 15-242 (N.Y. 2015) [hereinafter Peabody Investigation 15-242], http://ag.ny.gov/pdfs/Peabody-Energy-Assurance-signed.pdf.

^{199.} Id.

view of the future for coal by only referring to a single IEA scenario in its disclosures. Schneiderman announced the settlement a few days after issuing a subpoena to ExxonMobil.²⁰⁰ The state has yet to announce an agreement with Dominion Resources, the last of the five companies.²⁰¹ In addition to the climate disclosure cases, Schneiderman pursued oil and gas producers for their failure to disclose financial risks related to environmental impacts of hydraulic fracturing.²⁰²

New York's Martin Act investigations of energy companies have evolved over time. AG Cuomo's disclosure investigations served as a lever to pressure the SEC to encourage more robust disclosures of climate-related information. He joined investor and environmental groups in petitioning the SEC to provide guidance on disclosing climate change risks under existing 2007 requirements while simultaneously flexing his enforcement muscle by opening investigations into corporate nondisclosure of such risks. Cuomo's petition also urged the SEC to make clear registrants needed to base their materiality assessments on data and calculations. Cuomo's 2008 and 2009 power company settlements attempted to establish a baseline for disclosures in the companies' 10-Ks on climate risks. These agreements were substantially the same, although the AES agreement, completed a year after the others, does offer additional materiality references and a clarification that physical impacts are those identified by the Intergovernmental Panel on Climate Change.

Schneiderman's later agreements have notable distinguishing features from Cuomo's earlier efforts. Schneiderman entered into agreements in October 2014 with Anadarko and EOG, both of which use hydraulic

^{200.} Bob Simison, New York Attorney General Subpoenas Exxon on Climate Research, INSIDECLIMATE NEWS (Nov. 5, 2015), https://insideclimatenews.org/news/05112015/new-york-attorney-general-eric-schneiderman-subpoena-Exxon-climate-documents.

^{201.} Dan Zegart, *Peabody Settles with NY Attorney General, Will Disclose More on Climate – But Not Much*, CLIMATE INVESTIGATIONS CTR. (Nov. 9, 2015), https://climateinvestigations.org/peabody_energy_investigation_in_late_stages_new_york_attorney_general_probe/.

^{202.} See Ashley Poon, An Examination of New York's Martin Act as a Tool to Combat Climate Change, 44 B.C. ENVTL. AFF. L. REV. 115, 125–26 (2017) (explaining that New York AG Eric Schneiderman utilized the Martin Act for financial matters including settlements with Bank of New York Mellon, JPMorgan Chase, and BlackRock, as well as environmental issues that include investigations into natural gas firms like Anadarko Petroleum Corp., EOG Resources, and ExxonMobil); Press Release, N.Y. Att'y Gen., A.G. Schneiderman Reaches Agreement with Natural Gas Developers to Increase Disclosure of Fracking Risks to Investors (Oct. 3, 2014) [hereinafter Press Release, Agreement with Anadarko & EOG], https://ag.ny.gov/press-release/ag-schneiderman-reaches-agreement-natural-gas-developers-increase-disclosure-fracking.

^{203.} Hart, supra note 186, at 104–09 (noting Cuomo followed up with additional petitions in 2008 and 2009).

^{204.} Id. at 104.

^{205.} See supra note 195 and accompanying text.

fracturing in the process of developing unconventional natural gas fields. ²⁰⁶ These agreements required more detailed disclosure than Cuomo's agreements. Cuomo's agreements limited the required disclosure of climate change impacts to that which the company found resulted in material financial risks, including a handful of examples such as sea level rise and changes in weather conditions that could lead to such material impact.²⁰⁷ Schneiderman's unconventional gas agreements outlined much more detailed environmental impacts companies must consider in their materiality determination, listing four specific areas: aquifer protection (risks associated with well construction of hydraulically fractured wells and efforts to reduce such risks through well integrity practices); chemical use, handling, and disclosure; water use and wastewater handling and disposal; and air emissions. 208 They also mandated disclosure of information whether or not it represented a material financial risk, that is, information outside the SEC disclosure requirements.²⁰⁹ This was a significant change from Cuomo's earlier agreements focused on encouraging disclosure within the limits of SEC requirements.

Cuomo's efforts could be considered policy-forcing—pursuing more stringent enforcement than the federal enforcement agency in an effort to encourage stricter federal enforcement and guidelines. Schneiderman's efforts, however, are more akin to policy-creating litigation like the tobacco and pharmaceutical lawsuits described in Nolette's book because they potentially require companies to disclose more than required under current law.

The differences likely owe to the distinct goals of the two AGs and differences in federal administrations at the time. In 2008–2009, Cuomo's effort on disclosures fit into a multi-pronged approach intended to pressure the SEC into providing guidance on disclosure of climate risks and more

^{206.} Press Release, Agreement with Anadarko & EOG, supra note 202.

^{207.} Assurance of Discontinuance at 3, *In re* Xcel Energy, No. 08-012 (N.Y. 2008), https://ag.ny.gov/sites/default/files/press-releases/archived/xcel_aod.pdf; Assurance of Discontinuance at 2, *In re* Dynegy, Inc., No. 08-132 (N.Y. 2009), https://ag.ny.gov/sites/default/files/press-releases/archived/dynegy_aod.pdf; Assurance of Discontinuance, *In re* AES Corp., No. 09-159, https://ag.ny.gov/sites/default/files/press-releases/archived/AES%20AOD%20Final%20fully%20 executed.pdf.

^{208.} Assurance of Discontinuance at 3–4, *In re* EOG Resources, Inc., No. 14-182 (N.Y. 2014), http://www.ag.ny.gov/pdfs/EOG%20AOD%20Final%2010-1-14%20Signed.pdf; Assurance of Discontinuance at 3–4, *In re* Anadarko Petroleum Corp., No. 14-183 (N.Y. 2014) [hereinafter Anadarko Investigation 14-183], http://www.ag.ny.gov/pdfs/Anadarko%20AOD%20signed.pdf.

^{209.} Anadarko Investigation 14-183, *supra* note 208 (requiring disclosure outside of SEC filings of aquifer protection efforts, information on chemical use and handling, information on water use and wastewater disposal, and efforts to minimize air emissions even if not financially material).

effectively enforce their disclosure requirements.²¹⁰ Schneiderman addressed disclosures four years after the SEC issued its guidance on climate risk disclosures, a period in which the SEC showed minimal interest in encouraging more expansive disclosure through enforcement.²¹¹

The Peabody agreement a year later went even further than Schneiderman's fracking agreements. In the Peabody agreement, the AG included findings (not admitted to by Peabody) of Peabody's alleged wrongdoing.²¹² Schneiderman found the company made market predictions for various legislative scenarios that predicted serious negative impacts on coal and the company, while it stated in its 10-Ks that it could not predict the impact of potential GHG regulation on its business.²¹³ The AG also found Peabody misrepresented IEA projections on the future demand for coal by referencing only IEA's Current Policy Scenario, which noted a potential worldwide increase in coal demand, but not discussing the drop in coal demand reflected in IEA's other scenarios. 214 These statements not only occurred in the company's filings with the SEC but also in statements in earnings calls, public statements, and statements to investors. ²¹⁵ In the earnings call, Peabody further misrepresented the meaning of IEA's scenario by stating "IEA and other observers project that coal will surpass oil as the world's largest energy source in the coming years" fundamentally misunderstanding, or misrepresenting, scenario analysis as a tool (what a single scenario represents). The litigation against ExxonMobil initiated by New York AG Barbara Underwood (based on the investigation conducted by Schneiderman) is the first such climate disclosure case to reach the litigation stage. It includes detailed allegations of securities fraud and misleading investors regarding its management of climate change risks.²¹⁷

The more aggressive stance AG Schneiderman took with Peabody reflects the company's cavalier attitude towards climate-related disclosures in presenting information devoid of context in the most favorable light

^{210.} See supra notes 184–88, 195–96, 203–05 and accompanying text (discussing the impact of New York's Martin Act and Cuomo's pressure on the SEC to give guidance on environmental disclosures).

^{211.} See supra notes 117-27 and accompanying text (overviewing the SEC guidance from 2010).

^{212.} Peabody Investigation 15-242, *supra* note 198, at 2–3.

^{213.} Press Release, Agreement with Peabody, supra note 183.

^{214.} Peabody Investigation 15-242, *supra* note 198, at 3-7.

^{215.} Id. at 7.

^{216.} Id.

^{217.} Complaint at 22–80, New York v. Exxon Mobil Corp., No. 452044/2018 (N.Y. Sup. Ct. Oct. 24, 2018), https://iapps.courts.state.ny.us/nyscef/ViewDocument?docIndex=j8vnhlprwzUg9Gnh5wTIIw==.

possible. However, the trend reflected in the changes in approach from the Cuomo disclosure investigations to those under Schneiderman and Underwood is one of increasingly aggressive approaches and a shift towards policy-creation. The Schneiderman and Underwood efforts aim to change the industry's response to climate change, not just improve its disclosures. The choice to move to litigation with Exxon is likely influenced by the current Administration as well as the company's defensive stance in reaction to climate-related lawsuits and investigations.

These myriad state efforts do not operate in silos. AGs often work together to share legal approaches and efforts like NYU's State Energy & Environmental Impact Center foster increased cooperation among AGs. ²¹⁸ The suit against Exxon could lead to additional publicly disclosed materials, which may encourage the spread of litigation. Massachusetts's investigation may yet lead to an agreement or litigation. As past experience shows, one AG's successful settlement or decision in court can cause a cascade of multi-state litigation.

The threat of litigation with civil and criminal liability potentially complicates companies' decision making process about what, where, and how to disclose climate-related information. It also emphasizes the importance of consistency across public communication platforms; information included in 10-K filings with the SEC should not contradict information included in separate sustainability or climate reports or any other public communications. AG's efforts to hook discrepancies between public disclosure and internal deliberations to corporate liability could create a perverse incentive for minimal disclosure, running counter to the investment community who is urging a *the more the better* approach to climate-related disclosures.

CONCLUSIONS: CONFLICT POTENTIAL IN PARALLEL INVESTOR AND ATTORNEY GENERAL EFFORTS

The two tracks pursued by the investment community and state AGs represent distinct approaches to improving the breadth and detail of information disclosed by oil and gas companies regarding the changing climate. In concert with external players, the investment community has pursued a policy of direct engagement, public pressure, and the occasional

^{218.} Health and Environmental Settlements Project, N.Y.U. SCH. L.: ST. ENERGY & ENVTL. IMPACT CTR., https://www.law.nyu.edu/centers/state-impact/settlements-project (last visited Apr. 27, 2019).

^{219.} See supra text accompanying notes 195–202 (discussing various settlements companies entered with the threat of litigation looming).

shareholder initiative to encourage and sometimes demand more extensive information. Although this process can at times be tense, the dialogue between shareholders and asset managers and corporate management ostensibly serves the purpose of improving corporate decision making and governance to the benefit of all involved. In contrast, state AGs are not constrained by concern for a company's financial health or a fiduciary duty to its shareholders. Rather, they are motivated by their duty to protect their citizens from fraud and savings lost to imprudent investments.

Beyond protective motivations, AGs also seek to further broader policy goals.²²³ But litigation as policymaking is a blunt instrument that often has unintended consequences as it skips the deliberative, collaborative information-gathering process of regulatory or legislative efforts.²²⁴ Investors have had success in influencing energy company disclosure practices.²²⁵ Aggressive litigation could undermine the ongoing, collaborative process that has evinced progress.²²⁶ But targeted AG efforts can also support successful shareholder engagement on climate disclosure.

As we have seen, a significant amount of ambiguity and uncertainty exists in how federal securities law applies to the type of disclosures sought by the investment community. Complicating the matter, the investment community itself has not coalesced around a firm set of guidelines for what oil and gas companies should disclose.²²⁷ Given the current lack of alignment, companies independently consider approaches and engage in ongoing dialogue with investor representatives, responding to their evolving expressions of need by adjusting disclosure practices year to

^{220.} See supra Part I (discussing the disclosure techniques the investment community uses).

^{221.} See supra Part II (discussing the benefit of improving the disclosure requirements and processes).

^{222.} See supra text accompanying notes 184–88 (discussing state anti-fraud laws impact on disclosure requirements).

^{223.} See supra Part IV.A (discussing the increasing involvement of AGs in national policy and, in particular, environmental policy).

^{224.} See supra note 151 at 104 ("[A] fundamental difficulty with the AG's policy-creating litigation. By seeking to reshape the existing national regulatory regime, AGs recalibrated the balance of concerns that propelled the creation of the original federal regulatory regime without consideration of how to deal with uninteded consequences."); see also supra Part IV.B (describing different legal tools used by AGs for disclosure requirements against fossil fuel companies).

^{225.} See supra Part I.B (describing changes in climate disclosure practices by oil and gas companies).

^{226.} See supra Part IV (describing effects of state investigation and litigation on companies' inclination to disclose information).

^{227.} See supra text accompanying notes 27–38 (explaining that the investment community has not unified on disclosure requirements and what they mean in practice).

year.²²⁸ This iterative process, coupled with increasing efforts to align disclosure and investor needs through efforts like the TCFD, can move the industry towards a cohesive set of best practices that provide the depth and comparability of information sought by investors and flexibility necessary for companies to disclose in accordance with the law.

Investigations that pressure companies to engage in fulsome disclosure practices, account for known trends, and plan for potential impacts are capable of kick-starting regulatory developments or establishing industry baselines, such as Cuomo's efforts in 2007–2009. This type of action could complement investor and NGO assertions that existing SEC rules require more detailed and substantive disclosure from investors, peeling back the materiality analysis curtain just enough to establish a baseline for corporate climate-related disclosure. Such efforts may also clarify how companies can disclose non-material information without conflicting with SEC requirements or risking an accusation of misleading investors.

But the current investigation and litigation trend also may threaten the investor-led iterative process. Not every potential concern or impact on a business that could result from climate change warrants disclosure as a financially material risk. Internal strategic planning should involve consideration of a wide array of potential outcomes, both physical and transitional. This is exactly the purpose of scenario analysis exercises. Those disclosed publicly should be both reasonably plausible and potentially material now or within a relevant timeframe. Otherwise, disclosure could be misleading. State investigations that are not guided by these principles run the risk of distorting the concept of materiality in shareholder communications in a game of gotcha and hindering investor efforts to encourage the next generation of corporate leaders to proactively incorporate climate into their governance.

State investigations that delve into robust internal processes for analyzing climate threats and impacts in order to identify internal documents and data points to compare with public and shareholder statements can be problematic. State Investigators may cherry-pick information on which to rely, and such investigations risk thwarting investor efforts to elicit more substantive details from companies on these issues and to encourage them to think more broadly about climate

^{228.} See supra text accompanying notes 47–57 (providing examples of companies that are independently responding to investor demands for more expansive disclosure and adjusting their disclosure practices in an adaptive manner).

consequences.²²⁹ Avoiding deceptive concealment of information and business health serves a noble purpose that benefits consumers and shareholders alike. New York's Peabody investigation certainly shows that current enforcement remains lacking. Yet open-ended inquiries into disconnects between external statements and expansive internal discussions also run the risk of chilling internal consideration of future climate scenarios and undermining the materiality threshold for financial disclosures.²³⁰

AG forays into climate-related disclosures are more likely to have a positive impact on the investor-led efforts to expand disclosures if they limit their efforts in targeted ways. A best-practice model for AG action would be to: (1) highlight inadequate disclosure and establish new baselines for disclosure; (2) engage with companies and acknowledge their disclosure challenges in the process; (3) pair investigatory efforts with a campaign to pressure the SEC to better enforce compliant climate disclosures, issue guidance that encourages more expansive disclosure, and consider additional prescriptive disclosure requirements; and (4) seek opportunities to create helpful case law on what a reasonable investor would deem important to know on climate-risks (and avoid pursuing cases that could create unhelpful case law). In order to avoid corporate backsliding, AGs should carefully consider whether particular claims are likely to encourage more open disclosure or discourage full internal consideration of climate risks and an adequate public description of them by companies. For example, pairing disclosure investigations with litigation assigning liability to companies for the effects of climate change on society risks shutting down productive avenues for disclosure improvements.

The current efforts in Massachusetts and New York remain in early stages. The long term impact on climate change discourse and corporate disclosure are as yet unclear. The enthusiastic concern state AGs demonstrate for climate change and corporate disclosure may yet produce progress, but it may also stunt nascent efforts to improve corporate practices. As states embark on these efforts they would do well to keep the delicate nature of the shareholder—manager relationship and the nature of the securities disclosure requirements in mind and think broadly about instituting a forward minded best practices policy for investigations into climate-related disclosures.

^{229.} See supra text accompanying notes 47–57, 184–88 (providing examples of responses to investor pressure and state investigations into whether companies mislead the public on climate change issues by way of differing statements between internal assessments and public disclosure).

^{230.} See supra text accompanying notes 218–19.