

CHOOSING TO “LOOK UP”: THE CASE FOR A SINGLE, MANDATED CLIMATE CHANGE DISCLOSURE FRAMEWORK

Abstract: As the Environment, Social, and Governance (ESG) movement enters the mainstream, investors are demanding more climate-related ESG disclosures from public companies so that they can determine if the companies they invest in are sustainable and resilient. On March 21, 2022, the Securities and Exchange Commission (SEC) proposed rule changes requiring companies to disclose certain climate-related risks in statements filed with the SEC. This proposal comes as no surprise given that current SEC Chairman Gary Gensler has pushed to mandate ESG disclosures via an integrated, standardized framework since his 2021 appointment. SEC actions also indicate a shift away from the status quo of varied ESG reporting approaches in favor of a single, mandated climate-related disclosure framework. For instance, on September 22, 2021, the SEC sent demand letters to various public companies asking them to provide more information on climate-related business risks and impacts. The SEC also established an ESG enforcement task force. This Note examines the history of the ESG movement through current SEC reporting requirements, focusing on the four most prominent ESG disclosure frameworks. This Note then evaluates the status quo and the advantages and disadvantages of departing therefrom in favor of a single, mandated climate-related disclosure framework. This Note argues that the proposed single, mandated climate-related disclosure framework is the preferred approach. This Note also argues that the SEC’s proposed draft rule fails to sufficiently address industry-specific disclosures and grants too much discretion to companies regarding how they report greenhouse gas emissions data.

INTRODUCTION

On July 26, 2017, Greater Pennsylvania Carpenters Pension Fund filed a class action securities lawsuit against Exxon Mobil Corporation (ExxonMobil), alleging that ExxonMobil made fraudulent and misleading climate-related disclosures to investors who purchased or acquired ExxonMobil’s stock between March 31, 2014 and January 30, 2017.¹ The alleged misleading disclosures

¹ Ramirez v. Exxon Mobil Corp., 334 F. Supp. 3d 832, 839, 841 (N.D. Tex. 2018) (holding that Exxon Mobil Corporation (ExxonMobil) made material misstatements regarding its use of proxy carbon costs in its business plans and climate change-related projects). The lead plaintiff, Greater Pennsylvania Carpenters Pension Fund, alleged that ExxonMobil’s public representations about how they were managing risks associated with climate change were inconsistent and materially misleading. *Id.* at 839. ExxonMobil is a major oil and gas company that engages in both upstream and downstream activities, from exploring, acquiring, and extracting raw oil and gas commodities to processing, refining, and distributing petroleum-based products. Consolidated Complaint for Violations of the Federal

began in early 2014, when ExxonMobil released two reports addressing shareholder concerns about global energy demand and supply, future climate change policy, and carbon asset risk.² In these two reports, ExxonMobil stated that it took potential government policy changes into account when applying a proxy carbon cost to financially project investments and outlooks.³ When a historic drop in oil and gas prices occurred in 2014, ExxonMobil regularly reassured their investors that ExxonMobil's first-rate investment and project management would allow the company to continue operations as usual and without abandoning any assets.⁴ In the 2015 Form 10-K that ExxonMobil filed with the Securities and Exchange Commission (SEC), the company failed to mention to its investors that its Rocky Mountain Dry Gas Operations were reduced, that

Securities Laws at 13, *Ramirez v. Exxon Mobil Corp.*, 334 F. Supp. 3d 832 (N.D. Tex. 2018) (No. 3:16-cv-03111-K). The title of this Note refers to *Don't Look Up*, an allegorical film about climate change that depicts how those in power react to climate change's impacts by willfully ignoring warnings, avoiding action, and misleading the public to protect their self-interests. *DON'T LOOK UP* (Hyperobject Industries & Bluegrass Films 2021) (portraying two astronomers who go through enormous and frustrating efforts to warn mankind of an approaching comet that will destroy planet Earth); Donna Lu, *'It Parodies Our Inaction': Don't Look Up, an Allegory of the Climate Crisis, Lauded by Activists*, THE GUARDIAN (Dec. 29, 2021), <https://www.theguardian.com/environment/2021/dec/30/it-parodies-our-inaction-dont-look-up-an-allegory-of-the-climate-crisis-lauded-by-activists> [<https://perma.cc/39AB-44C3>].

² *Ramirez*, 334 F. Supp. 3d at 839. ExxonMobil did not in fact volunteer to publish the first report, entitled "Energy and Carbon—Managing the Risks." Consolidated Complaint for Violations of the Federal Securities Laws, *supra* note 1, at 2–3. ExxonMobil published this report as consideration for the withdrawal of a proposed shareholder resolution that would require ExxonMobil to make more disclosures regarding the impact of climate change on ExxonMobil's future business operations. *Id.*

³ *Ramirez*, 334 F. Supp. 3d at 846. In both reports, ExxonMobil made numerous representations about embedding a proxy carbon cost into corporate planning and projections to reassure investors about the future viability of the company's hydrocarbon reserves. Consolidated Complaint for Violations of the Federal Securities Laws, *supra* note 1, at 3. The reports used a proxy cost of \$60 and \$80 per ton in 2030 and 2040, respectively. *Ramirez*, 334 F. Supp. 3d at 840. A proxy carbon cost is a virtual price imposed on carbon to account for the climate costs of burning fossil fuels. See ALISON CASSADY & GWYNNE TARASKA, PROXY CARBON PRICING: A TOOL FOR FISCALLY RATIONAL AND CLIMATE-COMPATIBLE GOVERNANCE 1 (2016) (describing the meaning and use of proxy carbon pricing). The purpose of factoring in a proxy carbon cost is to anticipate a price on carbon and incentivize private sectors to find greener alternatives for their business processes. *Id.*

⁴ *Ramirez*, 334 F. Supp. 3d at 840. In mid-2014, the price of oil plummeted, forcing many oil and gas companies to abandon oil and gas reserves worth more than \$200 billion as production costs exceeded profits. *Id.* Plaintiffs alleged these reassurances were materially misleading because ExxonMobil knew it was impossible to survive the significant drop in oil and gas prices without writing down or abandoning any assets. *Id.* See generally Marc Stocker, John Baffes & Dana Vorisek, *What Triggered the Oil Price Plunge of 2014–2016 and Why It Failed to Deliver an Economic Impetus in Eight Charts*, WORLD BANK BLOGS (Jan. 18, 2018), <https://blogs.worldbank.org/developmenttalk/what-triggered-oil-price-plunge-2014-2016-and-why-it-failed-deliver-economic-impetus-eight-charts> [<https://perma.cc/94HT-E45N>] (attributing the 2014 oil price plunge to efficiency gains in U.S. shale oil, oversupply of U.S. oil production, and low demand and growth in economies that import oil); Robert J. Samuelson, *Key Facts About the Great Oil Crash of 2014*, WASH. POST (Dec. 3, 2014), https://www.washingtonpost.com/opinions/robert-samuelson-key-facts-about-the-great-oil-crash-of-2014/2014/12/03/a1e2fd94-7b0f-11e4-b821-503cc7efed9e_story.html [<https://perma.cc/88BN-ZLZJ>] (describing the 40% drop in crude oil from \$115 a barrel to \$70 a barrel).

its Canadian Bitumen Operations were no longer considered proved reserves, and that its Kearl Operations were losing money.⁵ ExxonMobil further misled its shareholders and investors about its use of proxy carbon costs by using one proxy cost value in their internal documents and a different value in public disclosures.⁶ In light of these facts, in *Ramirez v. Exxon Mobil Corp.*, the U.S. District Court for the Northern District of Texas held that plaintiffs sufficiently demonstrated an intent to deceive, manipulate, or defraud and, thus, sufficiently pleaded a securities fraud claim under Section 10(b) of the Securities Exchange Act of 1934, which makes it unlawful to defraud shareholders through the misrepresentation or omission of material information.⁷

As the first class action, climate-related securities lawsuit against a major oil and gas company, *Ramirez* demonstrates a growing awareness of the financial impacts of climate change.⁸ Environment, Social, and Governance (ESG)-related litigation, primarily alleging false representations, misleading ESG statements, and fraudulent SEC filings, have increased rapidly in recent years.⁹

⁵ *Ramirez*, 334 F. Supp. 3d at 840. Per the Securities and Exchange Commission's (SEC) Form-10K requirements, when a reservoir no longer qualifies as a proved reserve, the company must disclose this fact. *Id.*; 17 C.F.R. § 229.1202(a)(2) (2021) (requiring the disclosure of reserves). SEC regulations also require that ExxonMobil report operations that are operating at a significant loss or that are impaired. *See* 17 C.F.R. § 229.1201(a) (requiring the disclosure of material information resulting from oil and gas producing activities).

⁶ *See Ramirez*, 334 F. Supp. 3d at 846 (alleging that ExxonMobil stated in its public reports that they applied a proxy carbon cost of \$60 per ton of carbon dioxide in 2030 and \$80 per ton in 2040, but used an actual proxy cost of \$40 per ton in 2030 in their internal documents).

⁷ *Id.* at 859. The Court found that there was enough evidence of the requisite scienter to state a securities fraud claim. *Id.* at 855. First, ExxonMobil's management team extensively reviewed and discussed the reports. *Id.* at 852. Second, the management team individually signed ExxonMobil's misleading Form 10-K and, thus, should have known about the proxy cost disparity. *Id.* at 854. Third, there was an alleged, yet significant, motive to maintain ExxonMobil's AAA credit rating to avoid the negative effects of a drop in credit rating on their \$12 billion public debt offering. *Id.* at 853; *accord* Securities Exchange Act of 1934 § 10(b), 15 U.S.C. § 78j(b) (stating that it is unlawful to defraud or deceive someone through the misrepresentation or omission of material information with respect to the sale or purchase of a security).

⁸ *See generally* *People v. Exxon Mobil Corp.*, 119 N.Y.S.3d 829, 833 (Sup. Ct. 2019) (raising allegations about how ExxonMobil is mismanaging its climate change risks). Post-*Ramirez*, a slew of lawsuits and investigations against ExxonMobil followed, all alleging that ExxonMobil made misleading climate-related disclosures to investors. *See* Press Release, Barbara D. Underwood, Attorney General, 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/2018/ag-underwood-files-lawsuit-against-exxonmobil-defrauding-investors-regarding> [<https://perma.cc/DLZ9-RF9Q>] (alleging that ExxonMobil misled investors with up to a \$1.5 billion stake, including the New York State Common Retirement Fund and New York State Teachers Retirement System, with regard to the risk that climate change regulations posed to its business); *Commonwealth v. Exxon Mobil Corp.*, No. 1984CV03333BLS1, 2021 WL 3488414, at *1 (Mass. Super. Ct. June 22, 2021) (suing ExxonMobil for misrepresenting and omitting material facts regarding the financial risks of climate change), *aff'd on other grounds*, 187 N.E.3d 393 (2022).

⁹ *See, e.g., Smith v. Keurig Green Mountain, Inc.*, No. 18-cv-06690-HSG, 2020 U.S. Dist. LEXIS 172826, at *1 (N.D. Cal. Sept. 21, 2020) (alleging that Keurig made a false representation when mar-

These lawsuits highlight the mounting investor pressure on companies to better manage and enhance transparency around systemic climate change risks.¹⁰ With increasing investor demand for more climate change disclosures, critical regulatory questions remain as to what should be disclosed and how.¹¹ The current patchwork of different disclosure frameworks and inconsistent disclosures among market participants adds to regulatory confusion.¹² Heeding a call to action, the SEC developed and drafted a single, mandated climate-related disclosure framework.¹³ Part I of this Note describes the evolution of climate-

keting their single-serve plastic coffee pods because less than 60% of recycling facilities will accept the pods given their size), *appeal denied*, No. 20-80139, 2020 U.S. App. LEXIS 37253 (9th Cir. Nov. 25, 2020); Verified Stockholder Derivative Complaint at 1–3, *Perri v. Croskrey*, No. 1:21-cv-01423-UNA (D. Del. Oct. 6, 2021) (filing a shareholder derivative action against Danimer Scientific for breaching fiduciary duties by failing to correct false and misleading statements and omissions of material fact that exaggerated their plastic product's biodegradability, and alleging violations of the Securities and Exchange Acts); Class Action Complaint at 1–3, *Swartz v. Coca-Cola Co.*, No. 3:21-cv-04643, 2021 WL 2459174 (N.D. Cal. June 16, 2021) (filing a class action complaint against Coca-Cola for unlawfully and deceptively advertising, marketing, and selling single-use plastic bottles labeled as "100% Recyclable" when the plastic caps and labels on the bottles were not recyclable).

¹⁰ See Robert G. Eccles & Svetlana Klimenko, *The Investor Revolution*, HARV. BUS. REV. (May–June 2019), <https://hbr.org/2019/05/the-investor-revolution> [<https://perma.cc/XD9H-VBUX>] (citing a 2018 study by Bank of America Merrill Lynch finding that firms with a more superior ESG track record produced higher financial returns and were less likely to experience stock price declines or bankruptcy). Investors believe that greater transparency and disclosure of a company's climate-related risks translate to greater business resilience, competitive strength, and long-term sustainable growth and opportunities. Kai H.E. Liekefett, Holly J. Gregory & Leonard Wood, *Shareholder Activism and ESG: What Comes Next, and How to Prepare*, HARV. L. SCH. F. ON CORP. GOVERNANCE (May 29, 2021), <https://corpgov.law.harvard.edu/2021/05/29/shareholder-activism-and-esg-what-comes-next-and-how-to-prepare> [<https://perma.cc/VT96-FRBR>]. Additionally, investors are also signaling their interest in climate change risk management via environmental shareholder proposals. See, e.g., Jason Halper, Sara Bussiere & Timbre Shriver, *Investors and Regulators Turning Up the Heat on Climate-Change Disclosures*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Oct. 4, 2021), <https://corpgov.law.harvard.edu/2021/10/04/investors-and-regulators-turning-up-the-heat-on-climate-change-disclosures> [<https://perma.cc/8F6X-S426>] (providing examples of investors who have pressed climate change concerns for years at companies using shareholder proposals). Examples include the California State Teacher's Retirement System, which formed a Green Initiative Task Force to make sustainability-themed investments in 2007, and Blackrock's two shareholder proposals requiring Berkshire Hathaway to issue climate risk management disclosures in 2021. *Id.*

¹¹ See Press Release, Allison Herren Lee, Acting Chair, U.S. Sec. & Exch. Comm'n, Public Input Welcomed on Climate Change Disclosures (Mar. 15, 2021), <https://www.sec.gov/news/public-statement/lee-climate-change-disclosures> [<https://perma.cc/2CHA-C6AR>] (releasing fifteen questions on climate-related disclosures and asking for public input regarding how to best require and regulate climate change disclosures).

¹² See Jennifer Laidlaw, *New Global Sustainability Board Aims to Cut Through Disclosure Confusion*, S&P GLOB. (Oct. 15, 2021), <https://www.spglobal.com/esg/insights/new-global-sustainability-board-aims-to-cut-through-disclosure-confusion> [<https://perma.cc/8TG7-59DW>] (explaining that the gross multitude of climate change disclosure frameworks and standards result in investor confusion and inconsistent disclosure reports).

¹³ See The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21334, 21334 (proposed Mar. 21, 2022) (detailing the proposed rule mandating climate-related disclosures); Gary Gensler, Chair, U.S. Sec. & Exch. Comm'n, Remarks at the Principles for Responsible Investment "Climate and Global Financial Markets" Webinar (July 28, 2021), <https://>

related disclosures from its inception, to the current state of reporting, and to the SEC's proposed uniform climate disclosure framework.¹⁴ Part II discusses the advantages and disadvantages of requiring a single, mandated climate-related disclosure framework.¹⁵ Finally, Part III argues that such a disclosure framework is the preferred approach and evaluates whether the SEC's proposed rule sufficiently addresses its disadvantages.¹⁶

I. THE EVOLUTION OF CLIMATE CHANGE DISCLOSURES

Nowadays, investors increasingly seek to invest in climate change-conscious and sustainable ventures.¹⁷ In turn, investors are demanding a comprehensive, standardized approach to climate change disclosures to help guide their investment decisions.¹⁸ Section A of this Part introduces the history, purpose, and significance of corporate social responsibility (CSR), ESG, and climate change disclosures.¹⁹ Section B provides an overview of the intersection between federal securities law and ESG disclosure requirements.²⁰ Section C describes the current landscape of climate change reporting and summarizes the similarities and differences between four of the most commonly used re-

www.sec.gov/news/speech/gensler-pri-2021-07-28 [https://perma.cc/UMH9-ZXC4] (discussing the SEC's priority of enhancing the current guidance and requirements for climate-related disclosures).

¹⁴ See *infra* notes 17–127 and accompanying text.

¹⁵ See *infra* notes 128–178 and accompanying text.

¹⁶ See *infra* notes 179–228 and accompanying text.

¹⁷ See generally Liekefett et al., *supra* note 10 (noting a record infusion of investor capital in environmentally and sustainably themed funds in 2020 due to a belief that a carbon transition plan is necessary for sustainable growth); *Global Consumers Seek Companies That Care About Environmental Issues*, NIELSEN (Nov. 9, 2018), <https://nielseniq.com/global/en/insights/analysis/2018/global-consumers-seek-companies-that-care-about-environmental-issues/#:~:text=In%20fact%2C%20a%20whopping%2081,counterparts%20aren't%20far%20behind.> [https://perma.cc/AGT5-4VA6] (finding that 81% of global respondents to a survey believe in corporate social responsibility and that companies should implement programs to improve the environment). In another survey of one thousand people over eighteen-years-old, 79% of individuals said they are likely to make investment decisions based on issues they care about. Subodh Mishra, *ESG Matters*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Jan. 14, 2020), <https://corpgov.law.harvard.edu/2020/01/14/esg-matters> [https://perma.cc/5CRM-BGHA].

¹⁸ See Eccles & Klimenko, *supra* note 10 (explaining how the lack of mandated and standardized climate-related disclosures makes it difficult for investors to assess a companies' sustainable performance because the reported information is not audited by a third party and derives from multiple data vendors with differing assessments).

¹⁹ See *infra* notes 23–48 and accompanying text. CSR refers to Corporate Social Responsibility, and embodies the idea that company managers should integrate social and environmental issues into business operations. *What Is CSR?*, U.N. INDUS. DEV. ORG., <https://www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr> [https://perma.cc/7AD6-Z5N4]. Environment, Social, and Governance (ESG) is a non-financial factor increasingly relied upon by investors to identify material risks and growth opportunities. *What Is ESG Investing?*, CFA INST., <https://www.cfainstitute.org/en/research/esg-investing> [https://perma.cc/7NCS-83C2].

²⁰ See *infra* notes 49–72 and accompanying text.

porting frameworks.²¹ Section D then discusses recent SEC actions that seek to enhance corporate climate change disclosures and the SEC's proposal to mandate a single climate-related disclosure framework.²²

A. The Historical Roots, Purpose, and Significance of ESG and Climate Change Disclosures

The historical roots of ESG began with the sixteenth-century concept of CSR.²³ CSR encompasses the idea that corporations are social enterprises and instruments for social development, with a general social responsibility and duty to their communities.²⁴ In the 1960s, with rising social concerns over rapid population growth, pollution, and resource depletion, interest in defining the substance of corporate responsibilities increased.²⁵ These concerns gave rise to the concept of modern-day CSR, which refers to the social responsibilities of businesses and the economic, legal, and ethical expectations for business conduct.²⁶

ESG is a subcategory of CSR and relies on metrics to assess a company's commitment to social and environmental responsibilities.²⁷ ESG's main con-

²¹ See *infra* notes 73–115 and accompanying text.

²² See *infra* notes 116–127 and accompanying text.

²³ See Mauricio Andrés Latapí Agudelo, Lara Jóhannsdóttir & Brynhildur Davíðsdóttir, *A Literature Review of the History and Evolution of Corporate Social Responsibility*, 4 INT'L J. CORP. SOC. RESP. 1, 3 (2019) (tracing the origins of CSR back to the English Crown, the expansion of English corporate law to the American colonies, and the integration of Christian philanthropic values into private businesses to address the social problems in existence at the time).

²⁴ See *id.* (providing an overview of the early beginnings of CSR). In the 1920s, society began to view business managers as trustees who balanced profit maximization with customer demand, labor force management, and community expectations, and this view gradually led society to impose social and economic responsibilities on companies. *Id.* After World War II, theoretical discussions took place regarding the social responsibilities of companies with the understanding that a businessman's decisions affected enough people to have a direct impact on the quality of life throughout society as a whole. *Id.*; HOWARD R. BOWEN, SOCIAL RESPONSIBILITIES OF THE BUSINESSMAN 3 (2013).

²⁵ See Agudelo et al., *supra* note 23, at 4 (detailing the initial set of corporate principles advanced by Howard Bowen, the father of CSR, and the subsequent literature advocating for the moral responsibility of corporations). During this period, certain societal events such as rapid population growth, pollution issues, resource depletion, and environmental movements propelled the idea of CSR. See *id.* (referencing popular literature such as Rachel Carson's *Silent Spring* (citing RACHEL CARSON, *SILENT SPRING* (1962))). Nevertheless, many skeptics remained unsure about CSR. *Id.* at 5. For example, Milton Friedman, a renowned economist and Nobel laureate, believed that a business's social responsibility was to increase its profits and that CSR activities were a waste of company resources. *Id.*

²⁶ Archie B. Carroll, *A Three-Dimensional Conceptual Model of Corporate Performance*, 4 ACAD. MGMT. REV. 497, 499 (1979). In 1979, Archie Carroll coined the final unified definition of CSR. Agudelo et al., *supra* note 23, at 6. Prior to the unified definition, there was uncertainty over the meaning of CSR given its liberal and unrestricted use. *Id.*

²⁷ Thomas Lee Hazen, *Social Issues in the Spotlight: The Increasing Need to Improve Publicly-Held Companies' CSR and ESG Disclosures*, 23 U. PA. J. BUS. L. 740, 745 (2021). ESG incorporates three distinct concerns of CSR: environmental, social, and governance. *Id.* at 745–46. The environmental aspect focuses on a company's environmental impact and sustainable goals. GLOB. COMPACT,

cept is that science-based metrics can provide more useful information to investors about a company's commitment to environmental issues.²⁸ Beginning in January 2004, ESG became an important non-financial consideration in the investment world when United Nations Secretary-General Kofi Annan invited Chief Executive Officers from major global financial institutions to jointly develop guidelines to integrate ESG issues into investment decisions and the business world.²⁹ The joint report that followed served as a springboard for Secretary-General Annan and major global financial institutions to promote the idea that ESG management is linked to long-term corporate success.³⁰ This joint report also significantly changed how investors account for climate change risks in their investment portfolios.³¹

Investors want greater ESG disclosures for three main reasons: (1) to determine which companies will produce long-term investment returns; (2) to force climate-related changes at the companies they invest in; and (3) for moral purposes, to reward and support companies that are contributing positively to environmental and social change.³² First, investors want to use ESG disclosures to identify companies with a greater focus on sustainability because they

WHO CARES WINS: CONNECTING FINANCIAL MARKETS TO A CHANGING WORLD 6 (2004), https://www.unepfi.org/fileadmin/events/2004/stocks/who_cares_wins_global_compact_2004.pdf [<https://perma.cc/D972-E83H>]. The social aspect focuses on social issues like diversity and inclusion, workplace safety, public health, community relations, and human rights issues. *Id.* The governance aspect focuses on corporate governance like accountability, accounting and disclosure practices, independent auditors, executive compensation, compliance monitoring, and anti-corruption and bribery issues. *Id.*

²⁸ Hazen, *supra* note 27, at 745. ESG's metric-driven premise is different from that of CSR, which involves a general description of a company's social values independent from any use of metrics. Thomas Lee Hazen, *Corporate and Securities Law Impact on Social Responsibility and Corporate Purpose*, 62 B.C. L. REV. 851, 854 (2021).

²⁹ See GLOB. COMPACT, *supra* note 27, at vii (documenting the history and collaboration behind the Global Compact's *Who Cares Wins* report); 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> [<https://perma.cc/4VSF-QE4L>] (recounting ESG's origins and history).

³⁰ See GLOB. COMPACT, *supra* note 27, at 9 (arguing that CSR and ESG will become increasingly important over time to businesses). Many studies establish that stronger ESG issue management is a good indicator of a company's ability to handle risk. *Id.* Additionally, companies that successfully manage diverse ESG issues can boost shareholder value by identifying emerging risks early, building positive reputations, and reducing regulatory intervention and costs. *Id.* at 9, 12.

³¹ See Gillian Lofts, *Who Cares Wins in the Brave World of ESG*, FIN. TIMES (Nov. 18, 2018), <https://www.ft.com/content/64ce9225-0c55-3256-967c-5fae6622c637> [<https://perma.cc/DN3A-PJX7>] (recounting how the *Who Cares Wins* report inspired the Principles of Responsible Investing, and subsequently encouraged companies to factor in ESG considerations when evaluating company value and risk); Caroline Flammer, Michael W. Toffel & Kala Viswanathan, *Shareholders Are Pressing for Climate Risk Disclosures. That's Good for Everyone*, HARV. BUS. REV. (Apr. 22, 2021), <https://hbr.org/2021/04/shareholders-are-pressing-for-climate-risk-disclosures-thats-good-for-everyone> [<https://perma.cc/87LG-YE99>] (describing how investors hate uncertainty and are willing to pay extra to invest in companies that are more transparent when disclosing their climate-related risks).

³² See *infra* notes 33–48 and accompanying text (detailing the reasons why investors want to see more ESG disclosures from companies).

believe these investments will have greater long-term economic value.³³ Investors are increasingly recognizing the urgency of climate change and its future impact on global markets.³⁴ For instance, climate change can materially affect a company's financial value by disrupting supply chains, operations, and natural resource production.³⁵ Climate-related financial liabilities also present themselves in increased environmental compliance costs, heightened environmental litigation risks, and reputational costs.³⁶ Generally, studies show that when companies voluntarily adopt sustainability policies and disclose more ESG information they significantly outperform their peers in the long run.³⁷

³³ See 2020 *Global Sustainable Investing Survey*, BLACKROCK, <https://www.blackrock.com/corporate/about-us/blackrock-sustainability-survey> [<https://perma.cc/VS4L-LEEM>] (surveying 425 investors representing \$25 trillion in assets and finding that 54% of global respondents consider sustainable investing essential to investment strategies and outcomes). Survey respondents also expressed an interest in doubling their sustainable assets in the next five years from 18% in 2020 to 37% in 2025. *Id.*

³⁴ See PHILIPP HILDEBRAND, JEAN BOIVIN & JESSICA TAN, LAUNCHING CLIMATE-AWARE ASSET CLASS RETURN EXPECTATIONS 3 (2021), <https://www.blackrock.com/us/individual/literature/whitepaper/climate-aware-investing.pdf> [<https://perma.cc/UVH8-JJTQ>] (discussing a shift in investments toward sustainable assets and investor expectation of a transition toward a low-carbon economy). The effects of human-induced climate change—rising sea levels, increased damage from storm surges, and extreme heat waves, to name a few—will likely have a significant impact on our economic activity. See KATE GORDON, RISKY BUSINESS: THE ECONOMIC RISKS OF CLIMATE CHANGE IN THE UNITED STATES 2–5 (2014), https://riskybusiness.org/site/assets/uploads/2015/09/RiskyBusiness_Report_WEB_09_08_14.pdf [<https://perma.cc/NW43-LDM2>] (explaining that damage to coastal property due to rising sea levels and increased storm surges can significantly affect agricultural production, energy demand, labor productivity, and public health).

³⁵ Roshaan Wasim, Note, *Corporate (Non)disclosure of Climate Change Information*, 119 COLUM. L. REV. 1311, 1317 (2019). Estimates of financial impact from climate change include \$106 billion worth of coastal property below sea level within the United States by 2050, \$42 billion in average annual losses from changing hurricane activity and storm surges, a 3% productivity slowdown of outdoor workers due to extreme heat, greater demand which will necessitate construction that increases power generation capacity by ninety-five gigawatts, and a potential 50–70% loss in produce yields. GORDON, *supra* note 34, at 3–5.

³⁶ See, e.g., *Ramirez v. Exxon Mobil Corp.*, 334 F. Supp. 3d 832, 840 (N.D. Tex. 2018) (holding that ExxonMobil misrepresented calculations of proxy carbon costs to investors and failed to disclose impaired operations and operations that had been operating at a loss); *People v. Exxon Mobil Corp.*, 119 N.Y.S.3d 829, 833 (Sup. Ct. 2019) (finding that ExxonMobil deceived New York investors and led them to believe that the company was adequately managing the risks of climate change regulation to its business when, in reality, it was not); *Commonwealth v. Exxon Mobil Corp.*, No. 1984CV03333BLS1, 2021 WL 3488414, at *1 (Mass. Super. Ct. June 22, 2021) (suing ExxonMobil for misrepresenting and failing to disclose material facts regarding climate change risks to Massachusetts investors), *aff'd on other grounds*, 187 N.E.3d 393 (2022); see also Kishanthi Parella, *Reputational Regulation*, 67 DUKE L.J. 907, 958–59 (2018) (arguing that reputational sanctions can influence organizational change through the resulting pressure applied by concerned stakeholders).

³⁷ See Robert G. Eccles, Ioannis Ioannou & George Serafeim, *The Impact of Corporate Sustainability on Organizational Processes and Performance*, 60 MGMT. SCI. 2835, 2836 (2014) (comparing ninety companies with substantial environmental policies against ninety comparable companies without ESG policies, and finding that the more sustainability-oriented companies perform better when considering return on equity and assets and have better brands and reputations). Long-term investors and pension funds often consider thirty years to be the time frame for management of a future portfolio.

Moreover, as sustainable and climate-oriented investments achieve higher financial returns, the investment rationale for increased ESG disclosures gains more salience.³⁸ In turn, greater quantities of investors will begin integrating climate-related ESG factors into their decision-making to participate in the higher returns of more sustainable and resilient companies.³⁹

Second, investors want greater ESG disclosures to force climate-related changes at the companies they already invest in.⁴⁰ Investors today are looking for greater transparency in a company's climate-related activities in order to combat and mitigate the impacts of climate change.⁴¹ In the eyes of many institutional investors, a transition to a green economy conforming with Paris Agreement goals is inevitable.⁴² In recent proxy seasons, more shareholders are submitting shareholder proposals related to environmental actions, demanding that companies adopt measures to address climate change or lower

lio. See CHRISTOPHER WATTS, *THE COST OF INACTION: RECOGNISING THE VALUE AT RISK FROM CLIMATE CHANGE* 3 (2015), <https://static.aviva.io/content/dam/aviva-corporate/documents/social-purpose/pdfs/thoughtleadership/EIU-cost-of-inaction.pdf> [<https://perma.cc/FR4J-QS6A>] (noting the importance of factoring climate change risks into investment portfolios).

³⁸ Andrew Hopkins, *Asset Owners Say Integration of ESG Has Significantly Improved Returns*, *State Street Global Advisors Study Shows*, BUS. WIRE (Apr. 19, 2017), <https://www.businesswire.com/news/home/20170419006214/en/Asset-Owners-Integration-ESG-Significantly-Improved>Returns> [<https://perma.cc/6ZH2-VLNK>] (finding in a global survey that 68% of 475 institutions said that considering ESG factors had substantially increased their investment returns, and that 80% of asset owners already apply ESG considerations to their investment portfolio).

³⁹ See generally VERONICA POOLE & KRISTEN B. SULLIVAN, *TECTONIC SHIFTS: HOW ESG IS CHANGING BUSINESS, MOVING MARKETS, AND DRIVING REGULATION* 7 (2021), https://www.iasplus.com/en-ca/publications/other/tectonic-shifts-how-esg-is-changing-business-moving-markets-and-driving-regulation/at_download/file/DI_tectonic-shifts.pdf [<https://perma.cc/CML4-VBP4>] (noting that shareholders are looking to identify companies with strong ESG values and integration of such values into their business operations).

⁴⁰ See Marc Treviño, June M. Hu & Joshua L. Levin, *2021 Proxy Season Review: Shareholder Proposals on Environmental Matters*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Aug. 11, 2021), <https://corpgov.law.harvard.edu/2021/08/11/2021-proxy-season-review-shareholder-proposals-on-environmental-matters> [<https://perma.cc/6UDY-BALS>] (noting that since 2018 the number of investor proposals pushing for more climate-related reporting has increased); Flammer et al., *supra* note 31 (finding that an increase in environment-related shareholder proposals encourages companies to willingly disclose more climate change risk information).

⁴¹ POOLE & SULLIVAN, *supra* note 39, at 7; see WATTS, *supra* note 37, at 2 (finding that \$43 trillion in assets—or 30% of manageable assets—are at risk due to climate change).

⁴² See generally HILDEBRAND ET AL., *supra* note 34, at 2 (expecting the green transition to encompass increased use of carbon taxes, sustainable infrastructure spending, and renewable energy subsidies). Investors only have two options left: they can either be a part of the green transition to a low carbon world and see high future growth, or they expect a significant loss if no actions are taken toward mitigating climate change. *Id.* (citing research by the BlackRock Investment Institute). The Paris Agreement is an international treaty with legal effect that is signed by 194 countries and promotes climate change mitigation and adaptation. Paris Agreement, Dec. 12, 2015, T.I.A.S. No. 16-1104; *Paris Agreement—Status of Ratification*, U.N. CLIMATE CHANGE, <https://unfccc.int/process/the-paris-agreement/status-of-ratification> [<https://perma.cc/6MBX-W577>].

emissions.⁴³ Climate-driven activist investors are also playing a role in shaking up large companies by voting in environmentally oriented board members and requiring the company to revamp its climate risk management and disclosures to investors.⁴⁴

Finally, some investors feel morally obligated to invest in companies that mitigate their negative environmental impact and want greater ESG disclosures so that they can make such investment decisions effectively.⁴⁵ These investors believe that integrating ESG factors into investment decisions serves as a proxy for more sustainable markets and better societal outcomes.⁴⁶ Surveys and studies indicate that the growth in ESG investing is due to investors' desire to align corporate goals with social and moral considerations.⁴⁷ This growing demand for ESG investing can be attributed to an evolving view of the fiduci-

⁴³ Treviño et al., *supra* note 40 (noting that a record twelve environmental proposals were passed in 2021, and that eleven of them were climate-related, receiving up to 98% shareholder support). The passed proposals requested increased climate-related disclosure, increased information on greenhouse gas emissions, and the adoption of lower emission targets. *Id.* Proxy season is the period where large publicly-traded companies hold their annual shareholder meetings to go over the company's financial performance and vote on issues outlined in a proxy statement. *Welcome to Proxy Season: A Primer on Proxy Statements and Shareholder Meetings*, FINRA (Mar. 25, 2016), <https://www.finra.org/investors/insights/welcome-proxy-season-primer-proxy-statements-and-shareholder-meetings> [<https://perma.cc/PQ4L-GNGB>]. Shareholder proposals are proposals submitted by a shareholder or a group of shareholders who want to change the way a company does business. *Id.*

⁴⁴ See, e.g., Michael J. de la Merced, *How Exxon Lost a Board Battle with a Small Hedge Fund*, N.Y. TIMES (May 28, 2021), <https://www.nytimes.com/2021/05/28/business/energy-environment/exxon-engine-board.html> [<https://perma.cc/AKW6-EK6J>] (describing how Engine No. 1, a small activist investor, gained enough prominent shareholder backers to successfully fill at least two board seats with nominees who pledge to push ExxonMobil toward cleaner energy); Stanley Reed, *Third Point, an Activist Investor, Is Calling for a Breakup of Royal Dutch Shell*, N.Y. TIMES, <https://www.nytimes.com/2021/10/28/business/third-point-shell-breakup.html> [<https://perma.cc/X3MA-NZER>] (Nov. 15, 2021) (noting that Third Point, a hedge fund and activist investor, acquired a \$750 million stake in Shell and is pushing Shell to detach its oil and gas business from its renewable energy initiatives); Tim Quinson, *Climate Activists Poised to See Big Gains in 2022*, BLOOMBERG (Jan. 26, 2022), <https://www.bloomberg.com/news/newsletters/2022-01-26/climate-activists-poised-to-see-big-gains-in-2022> [<https://perma.cc/QK33-AEBE>] (expecting shareholder activists to press larger companies to shrink carbon footprints, set science-based emission reduction targets, and pursue more environmentally conscious goals).

⁴⁵ See Eccles & Klimenko, *supra* note 10 (finding that high-net-worth individuals are demanding more and more sustainable investing strategies from their asset managers because they want their investments to make a positive difference in the world). In a nationally representative survey, 79% of individuals said they are likely to make investment decisions on issues they care about. Mishra, *supra* note 17.

⁴⁶ See GLOB. COMPACT, *supra* note 27, at 21 (finding that institutional investors are encouraging companies to provide more disclosures and transparency); Kell, *supra* note 29 (noting that an increasing number of U.S. and EU investors see ESG integration as a component of their fiduciary duties).

⁴⁷ See RICCARDO BOFFO & ROBERT PATALANO, ESG INVESTING: PRACTICES, PROGRESS AND CHALLENGES 17 (2020), <https://www.oecd.org/finance/ESG-Investing-Practices-Progress-Challenges.pdf> [<https://perma.cc/2KQR-H7FC>] (finding that the primary motivators behind ESG investments are moral and social considerations rather than financial returns).

ary duty that companies owe to society beyond their duty to obtain financial returns for shareholders.⁴⁸

B. The Intersection of Federal Securities Laws and Climate Change Disclosure Requirements

Federal securities laws focus on providing transparency and full disclosure to protect investors and allow them to make informed investment decisions.⁴⁹ The Securities Act of 1933 requires companies offering public securities—known as issuers—to provide investors with full disclosure of material facts about the company.⁵⁰ The Securities Exchange Act of 1934 protects investors by requiring public companies to issue periodic public reports.⁵¹ These companies must file quarterly reports on Form 10-Q, annual reports on Form 10-K, and interim reports on Form 8-K for certain events that occur in any month.⁵² Substantively, the SEC requires the reporting of information deemed material—namely, information about the company that a reasonable investor would consider significant.⁵³

⁴⁸ See Eccles & Klimenko, *supra* note 10 (noting an increasing legal consensus that ignoring climate change risks is a violation of fiduciary duty).

⁴⁹ See Hazen, *supra* note 27, at 752 (referencing Justice Brandeis’s observation that “sunlight is the best disinfectant” in relation to federal securities laws (citing LOUIS DEMBITZ BRANDEIS, *OTHER PEOPLE’S MONEY AND HOW THE BANKERS USE IT* 92 (1914))). In 2018, former SEC Chairman Jay Clayton remarked that “[d]isclosure is at the heart of . . . the SEC’s approach to both capital formation and secondary liquidity.” See Jay Clayton, Chairman, U.S. Sec. & Exch. Comm’n, Remarks at Meeting of the Investor Advisory Committee (Dec. 13, 2018), <https://www.sec.gov/news/public-statement/clayton-remarks-investor-advisory-committee-meeting-121318> [<https://perma.cc/H2KB-SRFD>].

⁵⁰ See Securities Act of 1933, ch. 38, 48 Stat. 74 (stating that the purpose of the Act is “to provide full and fair disclosure” as to the nature of securities sold in interstate and international commerce and to prevent fraud in such sales). The Securities Act of 1933 governs primary market transactions involving a company issuing securities directly to investors. See generally STEPHEN J. CHOI & A.C. PRITCHARD, *SECURITIES REGULATION: CASES AND ANALYSIS* 38 (5th ed. 2019) (summarizing federal securities regulation).

⁵¹ See Securities Exchange Act of 1934 § 13(a), 15 U.S.C. § 78m(a) (requiring companies to file annual and quarterly reports); 17 C.F.R. § 240.13a-1 (2021) (imposing periodic reporting requirements on companies with securities listed on a national securities exchange and on companies that issue securities under a registration statement required by the Securities Act of 1933).

⁵² See 17 C.F.R. §§ 249.308, .308a, .310. Details of specific line-item disclosures required in these reports are found in Regulation S-K. See generally *id.* pt. 229 (denoting standard instructions for filing forms under the Securities Act of 1933 and Securities Exchange Act of 1934).

⁵³ Securities Exchange Act Rule 3b-6(d), 17 C.F.R. § 240.3b-6(d) (defining the materiality requirement as whether the plaintiff can objectively establish a substantial likelihood that the misstatement or omission of fact was important). The materiality requirement is an SEC rule and is also embedded in securities law through statute and case law. See, e.g., Securities Act of 1933 § 17(a)(2), 15 U.S.C. § 77q(a)(2) (prohibiting a person from offering or selling any securities “by means of any untrue statement of a material fact or any omission to state a material fact”); Securities Exchange Act of 1934 § 18(a), 15 U.S.C. § 78r(a) (imposing liability for material misstatements and omissions in filings with the SEC); *Matrixx Initiatives, Inc. v. Siracusano*, 563 U.S. 27, 37 (2011) (holding that Section 10(b) of the Securities Exchange Act makes it unlawful for a person to make material misrepresentations or omissions in connection with the purchase or sale of a security).

The Supreme Court maintains that the test for materiality cannot be distilled into a bright-line rule and depends on the facts of the case.⁵⁴ This case-by-case approach raises questions over whether ESG issues are material.⁵⁵ The investment community, and some SEC officials, are starting to recognize the materiality of climate-related ESG issues.⁵⁶ Courts, too, are taking notice of the potential materiality of ESG disclosures.⁵⁷ Until recently, the SEC deliberately remained noncommittal regarding the materiality of climate disclosures.⁵⁸ Additionally, as climate change will significantly impact future economic activity and global markets, directors and officers have a fiduciary duty to disclose these risks to shareholders.⁵⁹

⁵⁴ See *Matrixx Initiatives, Inc.*, 563 U.S. at 30–31 (holding that adverse reports linking Matrixx’s nasal gel product to a loss of smell were material to a reasonable investor based on the unique facts of the case); *Basic Inc. v. Levinson*, 485 U.S. 224, 236, 250 (1988) (concluding that omissions of preliminary merger discussions were material given the events and circumstances).

⁵⁵ See, e.g., *Carvelli v. Ocwen Fin. Corp.*, 934 F.3d 1307, 1320 (11th Cir. 2019) (holding that statements about a company’s future expected compliance with state regulations are not material); *Retail Wholesale & Dep’t Store Union Loc. 338 Ret. Fund v. Hewlett-Packard Co.*, 845 F.3d 1268, 1278 (9th Cir. 2017) (holding that an officer’s alleged violation of a company’s ethics code was immaterial because the company’s statements promoting its code of ethics “were transparently aspirational” and did not imply or reasonably suggest that the code was actually followed).

⁵⁶ See, e.g., Allison Herren Lee, Comm’r, U.S. Sec. & Exch. Comm’n, *A Climate for Change: Meeting Investor Demand for Climate and ESG Information at the SEC* (Mar. 15, 2021), <https://www.sec.gov/news/speech/lee-climate-change> [<https://perma.cc/S8L6-ERBD>] (discussing the need for climate and ESG disclosures); David Katz & Laura A. McIntosh, *Corporate Governance Update: ESG and the COVID-19 Crisis*, HARV. L. SCH. F. ON CORP. GOVERNANCE (May 31, 2021), <https://corpgov.law.harvard.edu/2020/05/31/corporate-governance-update-esg-and-the-covid-19-crisis/> [<https://perma.cc/B7ZT-6RJ2>] (finding that ESG issues have a material impact on short-term and long-term financial returns); see also Hazen, *supra* note 27, at 760 (finding that ESG risks, such as corporate fraud, diversity considerations, and environmental catastrophes like oil spills, can be financially material).

⁵⁷ See, e.g., *In re Vale S.A. Sec. Litig.*, No. 19 CV 526, 2020 WL 2610979, at *12 (E.D.N.Y. May 20, 2020) (holding that defendants materially misrepresented the company’s dam risk management, sustainability policies, and safety standards in their public filings); *Loritz v. Exide Techs.*, No. 2:13-cv-2607-SVW-Ex., 2014 WL 4058752, at *6–7 (C.D. Cal. Aug. 7, 2014) (holding that plaintiffs sufficiently alleged a securities law violation where Exide failed to disclose the severity of arsenic emissions from its manufacturing plant).

⁵⁸ Compare Press Release, Allison Herren Lee, *supra* note 11 (issuing a statement asking for public comments on whether climate change disclosures are material), with David A. Katz & Laura A. McIntosh, *SEC Regulation of ESG Disclosures*, HARV. L. SCH. F. ON CORP. GOVERNANCE (May 28, 2021), <https://corpgov.law.harvard.edu/2021/05/28/sec-regulation-of-esg-disclosures> [<https://perma.cc/FCH6-68R3>] (noting that the SEC Acting Chair did not utilize the words “financial” or “material” when detailing the purpose of potential new climate change disclosure regulations).

⁵⁹ Cynthia A. Williams, Sarah Barker & Alex Cooper, *Directors’ Fiduciary Duties and Climate Change: Emerging Risks*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Dec. 8, 2021), <https://corpgov.law.harvard.edu/2021/12/08/directors-fiduciary-duties-and-climate-change-emerging-risks> [<https://perma.cc/XS22-GCAM>]; see *Fiduciary Duty*, BLACK’S LAW DICTIONARY (11th ed. 2019) (defining fiduciary duty as “[a] duty of utmost good faith, trust, confidence, and candor owed by [an agent] . . . to the beneficiary”). Directors and officers owe the fiduciary duties of loyalty and care to shareholders. Williams et al., *supra*. The duty of loyalty requires officers to act in the best interests of the com-

Federal securities laws already require some climate-related disclosures.⁶⁰ In 2010, the SEC issued the Commission Guidance Regarding Disclosure Related to Climate Change (2010 Climate Change Disclosure Guidance) in order to clarify what climate-related information must be disclosed under existing rules and regulations.⁶¹

The SEC's 2010 Climate Change Disclosure Guidance calls attention to three rules most likely to require climate change disclosures—specifically, Item 101, Item 103, and Item 503(c) of Regulation S-K.⁶² First, Item 101 generally requires a company to describe its business by disclosing information about its business development, organizational form, products, services, customers, and competitive position.⁶³ More specifically, Item 101 expressly requires disclosures of costs expended to comply with environmental laws.⁶⁴ Therefore, material costs associated with sustainable investments and new technologies that reduce greenhouse gas emissions must be disclosed pursuant to Item 101.⁶⁵ Second, Item 103 requires companies to disclose any material, pending legal proceedings to which it is a party; this includes environmental

pany, whereas the duty of care requires officers to act with diligence and in accordance with prevailing standards. *Id.*; see *Duty*, BLACK'S LAW DICTIONARY, *supra* (defining "duty of care and skill").

⁶⁰ See, e.g., *SEC Interpretation: Management's Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures*, U.S. SEC. & EXCH. COMM'N (May 18, 1989), <https://www.sec.gov/rules/interp/33-6835.htm> [<https://perma.cc/75FV-64QC>] (interpreting regulations to require a company with Superfund sites to disclose its cleanup of hazardous wastes and potential environmental liabilities); see also *infra* notes 62–69 (outlining current SEC disclosure requirements that are tied to climate change disclosures).

⁶¹ Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290, 6293 (Feb. 8, 2010) (to be codified in 75 C.F.R. pts. 211, 231, 241) (describing current disclosure rules that may require disclosures related to climate change). Critics argue that the SEC's 2010 interpretative guidance came three years too late, and only after a group of large institutional investors petitioned the SEC for such a guidance. See Rick E. Hansen, *Climate Change Disclosure by SEC Registrants: Revisiting the SEC's 2010 Interpretative Release*, 6 BROOK. J. CORP. FIN. & COM. L. 487, 487 (2012). The long wait for this guidance was due to the ongoing debate regarding whether the SEC should play a role in addressing climate change disclosures. *Id.* Prior to the 2010 Commission Guidance, the last time the SEC issued guidance on environmental disclosure in SEC filings was in 1971. Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. at 6292.

⁶² Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. at 6293–94; see also 17 C.F.R. pt. 229 (2021) (codifying Regulation S-K, which lays out detailed reporting requirements, such as these item disclosures, for SEC filings).

⁶³ Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. at 6293; see 17 C.F.R. § 229.101 (providing instructions for completing Item 101, which requires a description of the business).

⁶⁴ See 17 C.F.R. § 229.101(c)(1)(xii) (requiring companies to disclose material financial effects that may result from compliance with federal, state, and local environmental laws). Additionally, smaller companies may also need to disclose climate change-related information under Item 101(h)(4)(xi). See *id.* § 229.101(h)(4)(xi) (requiring disclosure of compliance-related costs for federal, state, and local environmental laws).

⁶⁵ *Id.* § 229.101(c)(1)(xii), (h)(4)(xi).

litigation matters deemed material to the business.⁶⁶ As climate litigation increases, companies will need to determine whether proceedings and potential subsequent damages are material and thus require disclosure.⁶⁷ Lastly, Item 503(c), concerning risk factors, requires companies to disclose significant factors that may make an investment speculative or risky.⁶⁸ Risk factor disclosures related to climate change may include existing or upcoming climate change regulations and policies that could materially affect a company's business.⁶⁹

Beyond material information, there is currently no express SEC mandate for companies to disclose climate-related information.⁷⁰ Therefore, corporate climate-related disclosures are mostly voluntary.⁷¹ Because climate-related disclosures are voluntary, companies have the freedom to choose the substance, form, metrics, and auditing methods for these disclosures.⁷²

⁶⁶ See *id.* § 229.103 (providing instructions for disclosing legal proceedings). Companies must also disclose legal actions under government investigation. *Id.* Instruction 5 of Item 103 details what constitutes material environmental proceedings, such as those involving damages that exceed 10% of a company's current assets, or those where a governmental authority is a party to the proceeding and monetary sanctions are involved. *Id.*

⁶⁷ Cf. JOANA SETZER & CATHERINE HIGHAM, GLOBAL TRENDS IN CLIMATE CHANGE LITIGATION: 2021 SNAPSHOT 10, 12 (2021) (finding that by May 2021, 1,387 climate change lawsuits seeking to develop climate policies, generate public awareness, or alter private sector behaviors had been filed in U.S. courts).

⁶⁸ See 17 C.F.R. § 229.503(c) (requiring companies to explain how potential risks can affect the company or its securities).

⁶⁹ Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290, 6296 (Feb. 8, 2010) (to be codified in 75 C.F.R. pts. 211, 231, 241). Companies in certain industries, such as the energy or transportation sectors, will face different risks from climate change legislation given how sensitive their industry is to greenhouse gas emission targets. *Id.* Companies may also need to disclose risk factors relating to international agreements or treaties that address climate change, such as the Kyoto Protocol. *Id.*

⁷⁰ See Caroline Flammer, Michael W. Toffel & Kala Viswanathan, *Shareholder Activism and Firms' Voluntary Disclosure of Climate Change Risks* 2 (Glob. Econ. Governance Initiative, Working Paper No. 034, 2019), <https://www.bu.edu/gdp/files/2019/12/Flammer-WP-Climate-Risk-Disclosure.pdf> [<https://perma.cc/3AZP-7YEG>] (explaining that the SEC "merely recommends," but does not mandate, that companies disclose their climate change risks). *Contra* 17 C.F.R. § 229.101(c)(1)(xii), (h)(4)(xi); *id.* § 229.103; *id.* § 229.503(c) (requiring only the disclosure of material climate-related information).

⁷¹ Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. at 6292 (explaining the status quo of voluntary environmental disclosure initiatives, such as the Global Reporting Initiative (GRI) and the Carbon Disclosure Project (CDP)). Because climate-related disclosures are voluntary, investors typically find more climate-related information outside of SEC disclosure documents. *Id.*

⁷² See Dave Michaels, *SEC Wants More Climate Disclosures. Businesses Are Preparing for a Fight.*, WALL ST. J. (June 21, 2021), <https://www.wsj.com/articles/climate-fight-breeds-as-sec-moves-toward-mandate-for-risk-disclosure-11624267803> [<https://perma.cc/XD22-73KK>] (quoting the managing director of Pacific Investment Management Company as saying that companies can "cherry-pick" which disclosure format to adhere to given the many disclosure framework choices on the market). As climate-related disclosures are also voluntary, these disclosures are likely to be unreliable

C. The Current Landscape of ESG Disclosures: A Patchwork of Different Frameworks

In 2000, only a handful of companies disclosed their environmental performance.⁷³ Today, close to ninety-three percent of the world's largest companies report and disclose ESG information, even going so far as to cite ESG on their earnings calls.⁷⁴ Because ESG disclosures remain voluntary and non-standardized, companies have more than a hundred different ESG reporting frameworks to choose from when they decide to report ESG information.⁷⁵ Different organizations create and promulgate their own ESG frameworks.⁷⁶ These approaches vary in the depth of reporting recommended, the location of disclosures, and the selection of third-party standards.⁷⁷ The four most prominent and commonly used ESG frameworks are the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), the Carbon Disclosure Project (CDP), and the Task Force on Climate Related Financial

because regulators are not reviewing the accuracy of these disclosures. *See id.* (noting that regulators rarely review the content of these filed disclosures).

⁷³ *See* Mishra, *supra* note 17 (recounting a 2019 study by the GRI finding that only a small group of companies disclosed their environmental performance when the GRI first launched its guidelines).

⁷⁴ *See id.* (reporting that in Quarter 3 of 2019, thirty-one S&P 500 companies referenced ESG on their earnings calls, which was more than in previous quarters).

⁷⁵ *See* U.S. SEC. & EXCH. COMM'N, RECOMMENDATION FROM THE INVESTOR-AS-OWNER SUBCOMMITTEE OF THE SEC INVESTOR ADVISORY COMMITTEE RELATING TO ESG DISCLOSURE 4 (2020) (finding more than 125 ESG frameworks in existence in 2016). Because there is no express SEC mandate to disclose climate-related information, many different ESG scoring, rating, and disclosure systems exist to meet the high investor demand for increased disclosure. *Id.*; *see also* Betsy Atkins, *Demystifying ESG: Its History & Current Status*, FORBES (June 8, 2020), <https://www.forbes.com/sites/betsyatkins/2020/06/08/demystifying-esgits-history—current-status> [<https://perma.cc/25XH-W7PQ>] (explaining that a variety of ESG frameworks exist because it is difficult to standardize ESG reporting for different industry sectors).

⁷⁶ SUSTAINABLE INSIGHT CAP. MGMT., WHO ARE THE ESG RATING AGENCIES? 2 (2016), <https://www.sicm.com/docs/who-rates.pdf> [<https://perma.cc/7VN8-67ED>]. Industry observers estimate that the many research and ratings providers will consolidate into a dominating handful. *Id.*

⁷⁷ *See* U.S. SEC. & EXCH. COMM'N, *supra* note 75, at 5 (describing how some companies choose to publish long, stand-alone ESG reports while others choose to report ESG information in their annual reports); Michaels, *supra* note 72 (describing how companies can opportunistically pick and choose which ESG disclosure framework to adhere to given the multitude of options). Companies can also choose between different third-party standards, such as those offered by the GRI, the Sustainability Accounting Standards Board (SASB), the CDP, or the Task Force on Climate Related Financial Disclosures (TCFD). *See infra* notes 80–115 and accompanying text (summarizing the four most commonly used ESG frameworks).

Disclosures (TCFD).⁷⁸ Subsection 1 of this Section discusses the GRI, Subsection 2 the SASB, Subsection 3 the CDP, and Subsection 4 the TCFD.⁷⁹

1. The GRI Framework

The GRI launched in 1997 following public outrage over the environmental damage caused by the Exxon Valdez oil spill.⁸⁰ The GRI is an independent international organization that sets the GRI standards—the world’s most widely used ESG sustainability reporting standards.⁸¹ The GRI standards reporting framework is organized into three series: (1) universal standards for all organizations, (2) sector standards for specific industries, and (3) topic standards for disclosures relevant to a particular topic.⁸² The universal standards focus on general disclosures about a company’s sustainability policies, reporting procedures, operations, employees, governance, and stakeholder engagement.⁸³ In addition to the gen-

⁷⁸ Ellen Weinreb, *The Backstory and Purpose Behind 5 Leading ESG Reporting Frameworks*, GREENBIZ (Mar. 25, 2020), <https://www.greenbiz.com/article/backstory-and-purpose-behind-5-leading-esg-reporting-frameworks> [<https://perma.cc/G89C-W2HC>]. According to experts, the high volume of different ESG reporting frameworks is a sign of progress in the sustainability movement. *Id.* As new environmental issues surface and as businesses better understand the depth of their impacts on the environment, these ESG reporting frameworks will continue to evolve and improve over time. *Id.*

⁷⁹ See *infra* notes 80–115 and accompanying text (comparing and contrasting the four most commonly used ESG frameworks).

⁸⁰ *Our Mission & History*, GRI, <https://www.globalreporting.org/about-gri/mission-history> [<https://perma.cc/2QNJ-N7E7>]. The GRI exists to increase corporate accountability and promote responsible environmental conduct. *Id.* On March 24, 1989, an oil tanker ran ashore on Prince William Sound in Alaska, dumping eleven million gallons of oil into the surrounding water, a catastrophe known as the Exxon Valdez oil spill. *Exxon Valdez*, NAT’L OCEANIC ATMOSPHERIC ADMIN., <https://darrp.noaa.gov/oil-spills/exxon-valdez> [<https://perma.cc/XZ5Y-MQGC>] (Aug. 17, 2020) (describing the devastating impact on local wildlife, industries, and communities).

⁸¹ See ANNA KROTOVA, GLOBAL REPORTING INITIATIVE: THE ROLE OF PRIVATE SECTOR REPORTING IN ENABLING THE POST-2020 BIODIVERSITY FRAMEWORK IMPLEMENTATION 1, 2 (2020), <https://www.cbd.int/doc/presentations/tc-imrr/GRI.pdf> [<https://perma.cc/3UTS-QGV4>] (reporting that 75% of the largest 250 companies in the world use GRI standards, and that there are more than 51,300 reports filed in the GRI Sustainability Disclosure Database). Beginning in 2016, the GRI slowly transitioned from providing guidelines to establishing global standards, known as the GRI standards, for sustainability reporting. *Our Mission & History*, *supra* note 80.

⁸² See GLOB. SUSTAINABILITY STANDARDS BD., CONSOLIDATED SET OF THE GRI STANDARDS 2021, at 8 (2022) (requiring all companies using the GRI standards to report on all three series). Companies need to report all of the requested information in the universal standards. *Id.* at 9. For industry sector standards, companies only need to report the requested information specific to their industry. *Id.* For topic standards, companies only need to report information on topics deemed material to their business. *Id.*

⁸³ *Id.* at 45. The organization and reporting practice category requires disclosure of details relating to the company’s sustainability reporting, such as the reporting period and frequency of such disclosures, external auditing of reporting, and the extent of senior executive involvement in the reporting. *Id.* at 48–52. The activities and workers category requires disclosure of the organization’s value chain, products and services, as well as supply chain. *Id.* at 53–59. The governance category requires disclosures regarding committee members, stakeholder views, roles of executives involved in sustainable development initiatives, and senior executive involvement in reviewing and approving sustaina-

eral disclosures, each company must also identify and disclose how it is managing its most significant environmental impacts.⁸⁴ Beyond the universal standards, GRI offers disclosure standards for forty different industries, focusing on high-impact ones.⁸⁵ Disclosure requirements for industry sectors include information relating to greenhouse gas emissions; climate adaptation strategies; operational sites owned in proximity of areas of high biodiversity; waste generation and management; and water usage, withdrawal, and discharge.⁸⁶

2. The SASB Framework

Founded in 2011, the SASB is a nonprofit organization that provides an ESG disclosure framework.⁸⁷ Over 170 countries use the SASB framework, amounting to over one million standards downloaded.⁸⁸ A study by the Value Reporting Foundation found that more than half of S&P Global 1200 companies, representing seventy percent of global market capitalization, report climate-related disclosures using SASB standards.⁸⁹

There are several differences between GRI and SASB.⁹⁰ Unlike the GRI which provides universal standards for all companies, SASB standards include

bility reporting. *Id.* at 60–73. The strategy, policies, and practices category requires disclosures on the company’s sustainable growth strategy, policies, and practices, as well as its processes to remediate negative impacts. *Id.* at 74–86. Finally, the stakeholder engagement category requires disclosure of how the company engages with its stakeholders and in collective bargaining with employees. *Id.* at 87–90.

⁸⁴ *Id.* at 112 (requiring companies to identify their most significant environmental impacts, describe actions taken to prevent or mitigate these impacts, and explain how they track the effectiveness of their actions).

⁸⁵ See GLOB. SUSTAINABILITY STANDARDS BD., GRI SECTOR PROGRAM—REVISED LIST OF PRIORITIZED SECTORS 3, 5–7 (2020), <https://www.globalreporting.org/media/mqznr5mz/gri-sector-program-list-of-prioritized-sectors.pdf> [<https://perma.cc/B9KC-V2L8>] (breaking down the forty industry sectors into the following categories: basic materials industries, such as oil and gas, coal, agriculture, and fishing; industrial companies, such as construction, chemicals, and automotive; transport, infrastructure, and tourism companies, such as airlines, shipping, and packaging; and other services and light manufacturing companies, such as retail, restaurants, and household durables).

⁸⁶ See GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 136 (identifying disclosure items required for the oil and gas industry sector).

⁸⁷ *About Us*, SASB STANDARDS, <https://www.sasb.org/about> [<https://perma.cc/AD35-9LSG>].

⁸⁸ SASB STANDARDS, <https://www.sasb.org> [<https://perma.cc/525A-TH4Z>].

⁸⁹ *More Than Half of S&P Global 1200 Now Disclose Using SASB Standards*, GLOBENEWSWIRE (Sept. 22, 2021), <https://www.globenewswire.com/news-release/2021/09/22/2301122/0/en/More-Than-Half-of-S-P-Global-1200-Now-Disclose-Using-SASB-Standards.html> [<https://perma.cc/9XXA-FDUM>]; see also Rebecca Bar, *Five ESG Disclosure Practices Valued by Investors*, SASB STANDARDS (May 25, 2021), <https://www.sasb.org/blog/five-esg-disclosure-practices-valued-by-investors> [<https://perma.cc/QY7S-YRUP>] (noting the exponential increase in the number of companies using SASB standards to report sustainability disclosures in 2020). Notable companies that use SASB standards for ESG reporting include Verizon, Medtronic, Gap, and JetBlue. *Perspectives & Case Studies*, SASB STANDARDS, <https://www.sasb.org/company-use/case-studies> [<https://perma.cc/2TZ6-Z5UN>].

⁹⁰ *Compare, e.g.*, SASB STANDARDS, *supra* note 88 (defining material information as that which is financially material, and having different disclosure requirements for different industry sectors),

up to seventy-seven different industry-specific standards and identified materiality issues.⁹¹ SASB's industry break down is also narrower than GRI's.⁹² In contrast with GRI's long list of environmental disclosure requirements, SASB only requires disclosures on a small number of topics and metrics that are directly relevant to each industry.⁹³ Finally, SASB defines "material" differently than GRI does: SASB focuses on what is financially material, whereas GRI's materiality definition covers all significant impacts on the environment.⁹⁴ Given these differences, many companies are starting to use both SASB and GRI as complements to one another.⁹⁵

3. The CDP Framework

The CDP is an international not-for-profit charity that provides a global environmental disclosure framework that companies can use to manage and

with GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 85, at 5–7 (requiring a universal set of disclosures for all industries).

⁹¹ SASB STANDARDS, *supra* note 88. SASB standards identify a subset of ESG issues most financially relevant and significant to each industry and help companies disclose financially material sustainability information to investors. *Id.* The seventy-seven industry categories broadly break down into consumer goods, extractives and minerals processing, finance, food and beverage, health care, infrastructure, renewable resources and alternative energy, resource transformation, services, technology and communications, and transportation. SUSTAINABILITY ACCT. STANDARDS BD., SASB'S SUSTAINABLE INDUSTRY CLASSIFICATION SYSTEM (SICS) (2018), <https://www.sasb.org/wp-content/uploads/2018/11/SICS-Industry-List.pdf> [<https://perma.cc/5FDL-GHP9>].

⁹² Compare GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 5–7 (categorizing sectors together under a broad industry category, such as grouping oil and gas, coal, and food manufacturing under the same basic materials industry umbrella), with SUSTAINABILITY ACCT. STANDARDS BD., *supra* note 91 (breaking down the oil and gas industry classification into: "Oil & Gas—Exploration & Production," "Oil & Gas—Midstream," "Oil & Gas—Refining & Marketing," and "Oil & Gas—Services").

⁹³ Compare, e.g., GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 136 (listing a total of twenty-two disclosure topics relevant to the oil and gas industry), with SUSTAINABILITY ACCT. STANDARDS BD., OIL & GAS—MIDSTREAM: SUSTAINABILITY ACCOUNTING STANDARD 7 (2018), https://www.sasb.org/wp-content/uploads/2018/11/Oil_Gas_Midstream_Standard_2018.pdf [<https://perma.cc/A5XU-UJKB>] (listing a total of twelve disclosure items relevant to the oil and gas midstream industry sector).

⁹⁴ Compare GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 131 (defining materiality as topics that have the most "significant impact[] on the economy, environment, and people, including their human rights"), with *About Us*, *supra* note 87 (defining materiality as sustainable information that is "financially material" or "reasonably likely to affect the financial performance of the typical company in an industry").

⁹⁵ See *SASB Standards & Other ESG Frameworks*, SASB STANDARDS, <https://www.sasb.org/about/sasb-and-other-esg-frameworks> [<https://perma.cc/4UAG-LRKQ>] (listing ArcelorMittal, PSA Group, Diageo, and Nike as examples of companies using both the GRI and SASB ESG standards). In July 2020, SASB and GRI announced a collaborative work plan to help companies use both standards together. GRI & SASB, A PRACTICAL GUIDE TO SUSTAINABILITY REPORTING USING GRI AND SASB STANDARDS 5 (2021), <https://www.globalreporting.org/media/mlkjpnl1/gri-sasb-joint-publication-april-2021.pdf> [<https://perma.cc/88PA-QSTA>].

disclose their environmental impact.⁹⁶ CDP started in 2000 and focuses solely on environmental reporting.⁹⁷ To date, over 13,000 companies and 680 investors with \$130 trillion in assets use CDP's framework to disclose environmental information.⁹⁸ In addition to providing a disclosure framework, CDP analyzes the disclosures submitted by companies and scores them every year.⁹⁹

Unlike SASB and GRI, CDP focuses solely on environmental impact.¹⁰⁰ CDP formats its disclosure framework in the form of questionnaires, and divides the framework into three sets of questionnaires: climate, water, and deforestation.¹⁰¹ Like the GRI, CDP provides both general disclosure topics and sector-specific disclosure topics for high-impact sectors.¹⁰² Although the CDP and GRI frameworks mostly align, GRI adopts a broader approach, whereas

⁹⁶ CDP, <https://www.cdp.net/en/info> [<https://perma.cc/NK4C-7Z4J>]. CDP also markets its environmental disclosure framework to cities and governments. *Id.*

⁹⁷ See *What We Do*, CDP, <https://www.cdp.net/en/info/about-us/what-we-do> [<https://perma.cc/AA7P-WB22>] (focusing solely on environmental disclosures, and not considering governance or social issues). *Contra* GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 53–73 (requiring companies to also disclose information on social and governance issues, such as annual compensation ratios, risk management delegation, and employee numbers and statuses).

⁹⁸ *What We Do*, *supra* note 97; *accord Companies Worth \$15 Trillion Revealed on CDP 2020 'A List' of Environmental Leaders*, CDP (Dec. 8, 2020), <https://www.cdp.net/en/articles/media/companies-worth-15-trillion-revealed-on-cdp-2020-a-list-of-environmental-leaders> [<https://perma.cc/YU39-J97C>] (recognizing companies using the CDP framework that are leading in environmental disclosures). Notable companies using the CDP framework include AstraZeneca, Mitsubishi Electric, HP Inc., and Levi Strauss & Co. *Companies Worth \$15 Trillion Revealed on CDP 2020 'A List' of Environmental Leaders*, *supra*.

⁹⁹ *Companies Scores*, CDP, <https://www.cdp.net/en/companies/companies-scores> [<https://perma.cc/8EC8-E4B3>] (providing company grades from A to D- based on disclosure responses on topics related to climate change, forests, and water security). The company scores are designed to incentivize action and change. *Id.*

¹⁰⁰ See *What We Do*, *supra* note 97 (identifying climate, forests, and water security as the three most significant factors in environmental disclosures); SASB STANDARDS, *supra* note 88 (providing a broader disclosure scope than environmental issues); GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 131 (requiring disclosure on information relating to the economy, environment, and human rights); see also *Climate Change*, CDP, <https://www.cdp.net/en/climate> [<https://perma.cc/K9J3-89L8>] (finding that companies identified \$53 billion in savings using CDP disclosures); *Water*, CDP, <https://www.cdp.net/en/water> [<https://perma.cc/8Y8G-A8VE>] (citing findings by the United Nations that there will be a global 40% shortage of water by 2030); *Our Forests Work*, CDP, <https://www.cdp.net/en/forests> [<https://perma.cc/NZ52-M47Y>] (finding that companies using CDP's framework reported \$30 billion in potential losses as a result of deforestation).

¹⁰¹ *Guidance for Companies*, CDP, <https://www.cdp.net/en/guidance/guidance-for-companies> [<https://perma.cc/89EJ-2DQ9>].

¹⁰² Compare GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 8 (requiring all companies using the GRI standard to report on general and industry-specific information), with CDP, CDP CLIMATE CHANGE 2022 QUESTIONNAIRE 4–5 (2022) [hereinafter CDP CLIMATE CHANGE 2022 QUESTIONNAIRE] (listing fifteen modules in the general climate change questionnaire and additional questions for sixteen high-impact industry verticals from agricultural commodities to transportation equipment manufacturers), and CDP, CDP WATER SECURITY 2022 QUESTIONNAIRE 5–6 (2022) (listing ten modules in the general water questionnaire and additional questions for five high-impact industries such as food, electric utilities, oil and gas, chemicals, and metals and mining).

CDP requires more specific and detailed disclosures.¹⁰³ Additionally, CDP has a deforestation questionnaire to help companies disclose deforestation risks—a component that the GRI framework lacks.¹⁰⁴ Finally, similar to the collaboration between SASB and GRI, CDP is also commonly used with TCFD, another ESG framework, to fully align their required disclosures.¹⁰⁵

4. The TCFD Framework

In 2015, the Financial Stability Board established the TCFD to develop recommendations for more effective climate-related disclosures.¹⁰⁶ The TCFD published its final recommendations and disclosure framework in 2017, structuring the disclosure framework around four themes: governance, strategy, risk management, and metrics and targets.¹⁰⁷ Specifically, the metrics and targets

¹⁰³ Compare GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 36 (requiring only generalized broad disclosures), with CDP CLIMATE CHANGE 2022 QUESTIONNAIRE, *supra* note 102, at 34, 39, 46 (requiring specific disclosures, such as the company's emissions target details, estimated carbon emissions savings for projects, and explanations for why the company does not have an emissions target in the next five years). See generally GRI & CDP, LINKING GRI AND CDP: HOW ARE THE GRI SUSTAINABILITY REPORTING STANDARDS AND CDP'S 2017 CLIMATE CHANGE QUESTIONS ALIGNED? 11–35 (2019), <https://www.globalreporting.org/media/zrtnajcx/gri-standards-and-cdp-2017-climate-change-linkage-document.pdf> [<https://perma.cc/HKH3-EBHX>] (providing a side-by-side comparison of CDP requirements and GRI requirements).

¹⁰⁴ GRI & CDP., *supra* note 103, at 3; accord CDP, CDP FORESTS 2022 QUESTIONNAIRE 8, 13, 21 (2022) (requiring companies to disclose information relating to the production of their commodities, the land area used for production, and negative forest-related impacts).

¹⁰⁵ See *Why Disclose as a Company*, CDP, <https://www.cdp.net/en/companies-discloser> [<https://perma.cc/9C34-44BQ>] (noting that the CDP's framework is comparable to the TCFD's framework); *How CDP Is Aligned to the TCFD*, CDP, <https://www.cdp.net/en/guidance/how-cdp-is-aligned-to-the-tcf>d [<https://perma.cc/V4HE-AG2V>] (claiming that CDP's environmental database and climate questionnaire are most aligned with the TCFD framework, as CDP's questionnaire contains over twenty-five TCFD-aligned questions).

¹⁰⁶ *About*, TASK FORCE ON CLIMATE-RELATED FIN. DISCLOSURES, <https://www.fsb-tcf.org/about> [<https://perma.cc/2ETM-Z75A>]. The G20 Finance Ministers and Central Bank Governors approached the Financial Stability Board and asked them to evaluate how companies can better understand and disclose carbon-related assets and climate-related risks. TASK FORCE ON CLIMATE-RELATED FIN. DISCLOSURES, TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES: OVERVIEW 6 (2021) [hereinafter TCFD: OVERVIEW], https://assets.bbhub.io/company/sites/60/2020/10/TCFD_Booklet_FNL_Digital_March-2020.pdf [<https://perma.cc/BQT5-H5NX>]. Michael R. Bloomberg, the founder of Bloomberg L.P., chairs the TCFD, which is governed by thirty-one members from across the G20. *Id.* at 8–9. The G20, also known as the Group of Twenty, refers to the world's twenty largest economies that collaborate and coordinate on topics such as global trade, health, and climate. James McBride, Anshu Siripurapu & Noah Berman, *What Does the G20 Do?*, COUNCIL ON FOREIGN RELS., <https://www.cfr.org/backgrounder/group-twenty> [<https://perma.cc/JSG5-AT7G>] (Nov. 10, 2022); TASK FORCE ON CLIMATE-RELATED FIN. DISCLOSURES, RECOMMENDATIONS OF THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES, at iii (2017) [hereinafter TCFD RECOMMENDATIONS], <https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf> [<https://perma.cc/Y7YK-RKC9>] (noting that the task force members come from a mix of large banks, non-financial companies, consulting firms, and pension funds).

¹⁰⁷ TCFD RECOMMENDATIONS, *supra* note 106, at iv. The governance theme concerns the company's oversight and management of climate-related risks. TCFD OVERVIEW, *supra* note 106, at 17.

theme concerns the disclosure of metrics such as Scope 1, Scope 2, and Scope 3 greenhouse gas emissions.¹⁰⁸ Scope 1 emissions are emissions from company-owned sources, Scope 2 emissions are indirect emissions from bought energy, and Scope 3 emissions are indirect emissions in the upstream and downstream value chain of the company.¹⁰⁹ As of March 2021, there are over 2,000 TCFD supporters, amounting to a market capitalization of over \$19.8 trillion.¹¹⁰

The TCFD recommendations share a lot of similarities with other disclosure frameworks.¹¹¹ Like the GRI standards, the TCFD recommendations include both general and sector-specific guidance to assist companies with their environmental disclosures.¹¹² The TCFD's sector-specific guidance closely mirrors the SASB's, referencing and overlapping with many of SASB's metrics.¹¹³ Finally, CDP and TCFD are similar because CDP redesigned its framework to align with TCFD's recommendations.¹¹⁴ For instance, CDP and TCFD share twenty-five similar climate change-related disclosures, and CDP's water and forest questionnaires take inspiration from TCFD's recommendations.¹¹⁵

The risk management theme concerns the disclosure of the company's processes for identifying, assessing, and managing climate-related risks. *Id.* The strategy theme concerns the disclosure of climate-related risks and opportunities identified over the short, medium, and long term, as well as the company's consideration of the impact of climate-related risks and scenarios. *Id.*

¹⁰⁸ TCFD OVERVIEW, *supra* note 106, at 17. According to the Greenhouse Gas Protocol Corporate standard, a company's greenhouse gas emissions are classified into three scopes. *FAQ, GREENHOUSE GAS PROTOCOL*, https://ghgprotocol.org/sites/default/files/standards_supporting/FAQ.pdf [<https://perma.cc/K4FA-PE69>].

¹⁰⁹ *FAQ, supra* note 108.

¹¹⁰ TCFD OVERVIEW, *supra* note 106, at 33, 35 (reporting that the top five TCFD-using countries are Japan, the United Kingdom, the United States, France, and Australia). Notable companies using TCFD recommendations include 3M, American Airlines, AmerisourceBergen, Schlumberger, Coca-Cola, and many others. *Supporters, TASK FORCE ON CLIMATE-RELATED FIN. DISCLOSURES*, <https://www.fsb-tcfid.org/supporters> [<https://perma.cc/JR59-REML>].

¹¹¹ *See, e.g.,* TCFD RECOMMENDATIONS, *supra* note 106, at 13 (requiring general and sector-specific disclosures); GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 8 (requiring universal and industry-specific disclosures); SASB STANDARDS, *supra* note 88 (requiring sector-specific disclosures as well and similar metrics); *How CDP Is Aligned to the TCFD*, *supra* note 105 (noting the similarities between the CDP and TCFD).

¹¹² *See* TCFD RECOMMENDATIONS, *supra* note 106, at 13 (requiring companies to disclose information as specified in the sector-specific guidance and supplemental guidance). The specific industry sectors are further broken into financial sectors and several non-financial sectors, such as energy, transportation, materials and buildings, and agriculture, food, and forest products. *Id.* at 15.

¹¹³ *See* SUSTAINABILITY ACCT. STANDARDS BD., CONVERGING ON CLIMATE RISK: CDSB, THE SASB, AND THE TCFD 16–17 (2017), https://www.cdsb.net/sites/default/files/sasb_cdsb-tcfid-converging-onclimaterisk-091317-web.pdf [<https://perma.cc/Y3FU-FUA2>] (providing examples of how TCFD and SASB share many similar metrics). For example, both SASB and TCFD require companies in the automobile sector to report on zero emission or hybrid vehicles sold, the amount of total waste generated from manufacturing, and the average percent recyclability of vehicles sold. *Id.* at 16.

¹¹⁴ *How CDP Is Aligned to the TCFD*, *supra* note 105.

¹¹⁵ *Id.* For instance, both CDP and TCFD ask companies to report on the following: how the “board[] over[sees] . . . climate-related issues,” how companies assess their “portfolio’s exposure to

D. The SEC's Proposal for a Single, Mandated Climate-Related Disclosure Framework

Over the past fifty years, the SEC debated whether ESG disclosures are material and therefore should be mandated and incorporated into the SEC disclosure regime.¹¹⁶ In 2020, the SEC's Investor Advisory Committee issued a formal recommendation finding that ESG information is material and that the SEC should incorporate ESG reporting into its disclosure regime.¹¹⁷ In early 2021, following these recommendations and further pressure from investors, the SEC took action to mandate a single climate-related disclosure framework.¹¹⁸ First, in March 2021, the SEC created a Climate and ESG Task Force to identify material misstatements in corporate climate-risk disclosures and to evaluate and pursue tips, referrals, and whistleblower complaints on ESG-related issues.¹¹⁹ Second, on March 15, 2021, the SEC sought input from in-

climate-related risks and opportunities,” and how companies “define short-, medium- and long-term time horizons[.]” CDP, CDP TECHNICAL NOTE ON THE TCFD 17–18 (2022).

¹¹⁶ See U.S. SEC. & EXCH. COMM'N, *supra* note 75, at 1 & n.2 (noting the SEC's periodic issuance of press releases, staff reports, and guidance on ESG disclosures from 1971 to 2019).

¹¹⁷ See *id.* at 7 (recommending that the SEC update climate change disclosure requirements for issuers “to include material, decision-useful, ESG factors”). Section 911 of the Dodd-Frank Act established the Investor Advisory Committee to advise the SEC on regulatory priorities, regulation of securities products, effectiveness of disclosures, and actions to safeguard investor interests. Dodd-Frank Wall Street Reform and Consumer Protection Act § 911, 15 U.S.C. § 78pp(a).

¹¹⁸ See Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290, 6290 (Feb. 8, 2010) (to be codified in 75 C.F.R. pts. 211, 231, 241) (providing the SEC's first interpretative guidance on climate change disclosures); see also Dieter Holger & Kimberly Chin, *SEC Opens Review of Corporate Climate Change Disclosures*, WALL ST. J. (Feb. 24, 2021), <https://www.wsj.com/articles/sec-opens-review-of-corporate-climate-change-disclosures-11614215912> [<https://perma.cc/TVB2-MBYA>] (recounting statements made by SEC leadership that the SEC is looking to update its 2010 guidance on climate disclosures by adopting a more comprehensive framework that is “consistent, comparable, and reliable”). Since his appointment in 2021, SEC Chairman Gary Gensler has prioritized the development of a mandatory SEC climate risk disclosure rule so that investors can benefit from greater “clarity,” “consistency,” and “comparability.” See Gensler, *supra* note 13 (outlining Gensler's plan to increase the transparency and accessibility of climate risk disclosures so that investors can benefit from “consistency and comparability”).

¹¹⁹ See Press Release, U.S. Sec. & Exch. Comm'n, SEC Announces Enforcement Task Force Focused on Climate and ESG Issues (Mar. 4, 2021), <https://www.sec.gov/news/press-release/2021-42> [<https://perma.cc/ZZG4-MXZA>] (announcing the establishment of a Climate and ESG Task Force within the SEC's Division of Enforcement). The Task Force consists of twenty-two individuals from the SEC's general and specialized enforcement offices. *Id.* The SEC's Division of Enforcement investigates potential federal securities law violations and litigates the SEC's civil enforcement proceedings. *About the Division of Enforcement*, U.S. SEC. & EXCH. COMM'N, <https://www.sec.gov/enforce/Article/enforce-about.html> [<https://perma.cc/BK7Y-3AZY>]. Although silent to date, many believe that the Task Force will soon begin vigorously pursuing ESG-related violations, with a specific emphasis on greenwashing. See Kevin Muhlenhoff & Holly Wilson, *SEC Enforcement Related to ESG Investing Likely to Increase in 2022*, JDSUPRA (Jan. 7, 2022), <https://www.jdsupra.com/legalnews/sec-enforcement-related-to-esg-6849948> [<https://perma.cc/7MC4-CVQZ>] (detailing the Task Force Chair's prioritization of bringing enforcement actions related to greenwashing). Greenwashing is the act of branding something as sustainable when it is not, thus misleading consumers. Beth Timmins, *Climate Change:*

vestors, companies, and industry experts by asking fifteen questions on climate-related disclosures during the statutorily required public comment period.¹²⁰ These fifteen questions revolved around how the SEC could best regulate, review, and enforce the reliability of climate change disclosures.¹²¹ Generally, the majority of commenters expressed support for mandated SEC disclosures, but differed in their opinions regarding the method for these disclosures.¹²² After consolidating these public comments, on March 21, 2022, the

Seven Ways to Spot Businesses Greenwashing, BBC (Nov. 8, 2021), <https://www.bbc.com/news/business-59119693> [<https://perma.cc/7MG4-6MLZ>].

¹²⁰ See Press Release, Allison Herren Lee, *supra* note 11 (encouraging public market participants, academics, data providers, and other experts to answer the set of fifteen questions regarding SEC-mandated climate disclosures). The comment period ended on June 14, 2021, and garnered over 5,800 comments from a diverse array of ESG interest groups, including institutional investors, government officials, large tech companies, and standard-setting nonprofit organizations. See Mario Olczykowski & Lee Reiners, *Summary of Comment Letters for the SEC's Climate Risk Disclosure RFI*, DUKE DEP'T ECON., <https://econ.duke.edu/dfe/climate-risk/2021/07/summary-comment-letters-secs-climate-risk-disclosure-rfi> [<https://perma.cc/PG3A-P8X3>] (summarizing a large sample of the comments that represented diverse interests from large asset managers such as BlackRock, State Street, and Vanguard; large financial institutions like Bank of America and Deutsche Bank; large tech companies like Microsoft, Uber, and Apple; and standard-setting organizations like The Partnership for Carbon Accounting Financials, the SASB, and the Climate Disclosure Standards Board).

¹²¹ See Press Release, Allison Herren Lee, *supra* note 11 (requesting public input on the best approach to mandating climate-related disclosures). The SEC's solicitation of public comments also sparked congressional interest and the introduction of the Climate Risk Disclosure Act of 2021. See Climate Risk Disclosure Act of 2021, S. 1217, 117th Cong. (2021) (introducing a bill directing the SEC to mandate annual climate change risk disclosures for companies that issue securities).

¹²² Olczykowski & Reiners, *supra* note 120. Large companies, such as Alphabet, eBay, Facebook, Salesforce.com, Microsoft, and Walmart, recommend a mandatory climate-related disclosure guided by materiality. Alphabet Inc., Amazon.com Inc., Autodesk, Inc., eBay Inc. et al., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 1–2 (June 11, 2021), <https://www.sec.gov/comments/climate-disclosure/c1112-8907252-244227.pdf> [<https://perma.cc/HL6H-AQ5H>]. Compare Deutsche Bank, Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 3 (June 11, 2021), <https://www.sec.gov/comments/climate-disclosure/c1112-8906897-244213.pdf> [<https://perma.cc/LP2F-ZRYH>] (advocating against adopting quantitative metrics in the framework due to the insufficient science and methodology behind current quantitative climate metrics), with AllianceBernstein L.P., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 2–3 (June 9, 2021), <https://www.sec.gov/comments/climate-disclosure/c1112-8901034-241853.pdf> [<https://perma.cc/LQA3-5WJZ>] (pushing for additional metrics, such as carbon footprint and weighted average carbon density, to be disclosed). Commenters also differed regarding whether to file these disclosures with the SEC or to furnish them separately. Compare Edison Elec. Inst. & Am. Gas Ass'n, Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 3 (June 2, 2021), <https://www.sec.gov/comments/climate-disclosure/c1112-8861705-240106.pdf> [<https://perma.cc/TF4A-FLTC>] (calling for disclosures that are furnished in a separate climate report to the SEC as opposed to within an annual or quarterly document filed with the SEC), with Cal. State Tchrs. Ret. Sys., N.Y. State Common Ret. Fund, Or. State Treasury, Minn. State Bd. Inv. et al., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 2 (June 11, 2021), <https://www.sec.gov/comments/climate-disclosure/c1112-8905906-244090.pdf> [<https://perma.cc/T5JQ-DVM3>] (arguing for annual or quarterly filing of climate disclosures with the SEC).

SEC proposed a draft climate-related disclosure framework, hereafter referred to as the SEC's proposed rule.¹²³

Under the SEC's proposed rule, instead of voluntary disclosures, a company would be legally required to disclose information about its oversight and governance of climate-related risks, as well as material climate change impacts to its business, in registration statements and annual reports.¹²⁴ The SEC's proposed rule mandates that companies disclose greenhouse gas emission information, and includes provisions detailing which companies need to report Scope 3 emissions.¹²⁵ Additionally, instead of allowing companies to escape third-party review, the proposed rule requires larger companies to include an attestation report from an independent party to ensure the reliability of their emissions disclosures.¹²⁶ Finally, instead of allowing companies the discretion to choose which framework to follow, the proposed rule requires companies to use a specified framework, which is modeled after two commonly used existing frameworks: the TCFD framework and the Greenhouse Gas Protocol framework, which is a commonly used greenhouse gas accounting standard that provides guidance on how to calculate Scope 1, 2, and 3 greenhouse gas emissions.¹²⁷

¹²³ Press Release, U.S. Sec. & Exch. Comm'n, SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors (Mar. 21, 2022), <https://www.sec.gov/news/press-release/2022-46> [<https://perma.cc/T866-BHU5>] (announcing the proposed climate-related disclosure framework). The SEC is also requesting public comments on this new climate-related disclosure rule. See The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21334, 21334 (proposed Mar. 21, 2022).

¹²⁴ See Press Release, U.S. Sec. & Exch. Comm'n, *supra* note 123 (mandating that companies disclose both short-term and long-term climate change impacts on the business model, strategy, outlook, and financial statements of a company); The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21345 (requiring companies to disclose their climate change governance, process for identifying and assessing climate-related risks, the material impact of climate-related events and transition activities, Scope 1 and 2 greenhouse gas emissions, and climate-related targets, goals, and transition plans). A registration statement is a document to be filed with the SEC any time a company is offering or selling securities to the public and contains information about the company's business, operations, risk factors, and governance. *What Is a Registration Statement?*, U.S. SEC. & EXCH. COMM'N, <https://www.sec.gov/smallbusiness/goingpublic/registration-statement> [<https://perma.cc/RH36-9DFS>] (July 22, 2022). The proposed draft rule also requires companies to include a new section entitled "Climate-Related Disclosure" in their annual Form 10-K report. The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21348.

¹²⁵ Press Release, U.S. Sec. & Exch. Comm'n, *supra* note 123. For instance, only companies that have set goals related to reducing Scope 3 emissions will be legally required to report it. *Id.*

¹²⁶ *Id.*; The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21345 n.122 (requiring companies that have an aggregate worldwide market value of common equity held by non-affiliates of \$75 million and who have been public for at least one year to include an attestation form certifying their greenhouse gas emission disclosures).

¹²⁷ The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21343–45. Additionally, as many companies are reporting or have committed to reporting with the TCFD framework, the SEC believes that modeling the single mandated disclosure framework after the TCFD would increase the convenience, "consistency," and "comparability" of climate disclosures. *Id.* at 21347; see *About Us*, GREENHOUSE GAS PROTOCOL, <https://ghgprotocol.org/about-us>

II. THE ADVANTAGES AND DISADVANTAGES OF A SINGLE, MANDATED CLIMATE-RELATED DISCLOSURE FRAMEWORK

Despite varying opinions regarding how the SEC should mandate climate-related disclosures, there is consensus that imperfect data availability and the patchiness of the current, voluntary disclosure regime are major drawbacks to ESG investing.¹²⁸ Section A of this Part discusses the advantages of a single, mandated climate-related disclosure framework, such as the SEC's proposed rule.¹²⁹ Section B discusses the disadvantages of such a framework.¹³⁰

A. The Advantages of a Single, Mandated Climate-Related Disclosure Framework

The SEC comment letters illustrate that many are in favor of a single, mandated climate-related disclosure framework.¹³¹ Proponents highlight several advantages of such a framework—namely, that it would (1) increase transparency and allow investors to make better-informed investment decisions, (2) increase consistency and allow market participants to more easily compare climate risks and sustainability efforts across companies, (3) increase the truthfulness of disclosures, and (4) drive more ambitious sustainability goals with science-based measurements.¹³²

First, proponents argue that a single, mandated climate-related disclosure framework will likely increase public transparency regarding the business risks of climate change.¹³³ Proponents believe that it is vital for investors to have access to a substantial amount of climate risk information upon which to base their investment and voting decisions.¹³⁴ Additionally, they believe that the current lack of a single, mandated climate-related disclosure framework results

[<https://perma.cc/PTV3-CC2F>] (noting that about 92% of Fortune 500 companies used the Greenhouse Gas Protocol standard in 2016).

¹²⁸ See WATTS, *supra* note 37, at 5 (calling for more guidance on streamlining information and admissions on climate risks so that regulators and institutional investors can more adequately address these risks and “avoid sleepwalking into a climate crisis”); Eccles & Klimenko, *supra* note 10 (finding that the biggest obstacle to more ESG investing is the lack of standardized sustainability reporting by companies).

¹²⁹ See *infra* notes 131–155 and accompanying text.

¹³⁰ See *infra* notes 156–178 and accompanying text.

¹³¹ Gensler, *supra* note 13.

¹³² See *infra* notes 133–155 and accompanying text (listing the advantages that come with a single, mandated climate-related disclosure framework).

¹³³ See Gensler, *supra* note 13 (proposing to provide greater clarity and more information on climate risk disclosures).

¹³⁴ See U.S. SEC. & EXCH. COMM’N, *supra* note 75, at 6 (explaining that disclosure is the core focus of the SEC’s approach to capital formation and secondary liquidity, and that the SEC’s key responsibility is to ensure investors have sufficient information to facilitate well-informed decision making).

in disclosures that are highly variable in quality and quantity.¹³⁵ After the SEC issued the 2010 Climate Change Disclosure Guidance, one comprehensive study of multiple corporate climate disclosures found that many companies either failed to include anything on climate change or had very little discussion of material issues related to climate change in their annual filings with the SEC.¹³⁶ Therefore, an SEC mandate would ensure that investors are better able to assess the resiliency and progress of a larger portfolio of companies.¹³⁷

Second, proponents argue that a single, mandated climate disclosure framework will likely improve consistency and comprehensiveness, allowing investors to more adequately understand and compare climate risks and goals across companies.¹³⁸ Because the SEC has not updated their climate disclosure interpretative guidance for more than a decade, company executives retain enormous discretion over what they disclose to the public and their investors.¹³⁹ Proponents argue that companies take advantage of the current voluntary disclosure regime by “cherry-pick[ing]” which climate risk disclosure

¹³⁵ See BEN THOMAS, UNDERSTANDING U.S. CLIMATE RISK DISCLOSURES 3 & n.8 (2021), <https://riskcenter.wharton.upenn.edu/wp-content/uploads/2021/04/Climate-Disclosures-Primer.pdf> [<https://perma.cc/SNS5-Z2XV>] (citing a 2020 study of 12,000 companies indicating that less than 20% of these companies reported climate-related information in their SEC filings, and a 2017 report indicating that companies used “‘boilerplate’ language” more than 50% of the time); TCFD RECOMMENDATIONS, *supra* note 106, at 1 (reporting that sparse information on the financial implications around climate-related aspects of a business obstructs an investor’s ability to incorporate ESG factors into their decision). Additionally, proponents believe that limited information on future climate change risks can misprice assets, misallocate capital, and disturb the financial stability of markets. TCFD RECOMMENDATIONS, *supra* note 106, at 1.

¹³⁶ See JIM COBURN & JACKIE COOK, COOL RESPONSE: THE SEC & CORPORATE CLIMATE CHANGE REPORTING 13 (2014), https://www.ceres.org/sites/default/files/reports/2017-03/Ceres_SEC_guidance-append_020414_web.pdf [<https://perma.cc/9FYQ-9XDT>] (noting that only 59% of S&P 500 companies included any mention of climate change in their annual Form 10-K filings with the SEC in 2013). Studies showed that most S&P 500 companies disclosed significantly more detailed information in voluntary climate reporting than in mandatory SEC annual or quarterly filings. *Id.* at 5.

¹³⁷ See MADISON CONDON, SARAH LADIN, JACK LIENKE, MICHAEL PANFIL & ALEXANDER SONG, MANDATING DISCLOSURE OF CLIMATE-RELATED FINANCIAL RISK 40 (2021) (explaining that a mandatory climate risk disclosure framework for public companies would promote “informed investing, sustainable growth, and a more resilient economy”).

¹³⁸ See Gensler, *supra* note 13 (arguing that investors who seek to compare companies will benefit from a more consistent and comprehensive SEC integrated disclosure); U.S. SEC. & EXCH. COMM’N, *supra* note 75, at 6 (“The concepts of materiality, comparability, flexibility, efficiency and responsibility . . . are the linchpins of [the SEC’s] approach.” (quoting Clayton, *supra* note 49)).

¹³⁹ See CONDON ET AL., *supra* note 137, at 16 (arguing that the SEC’s “‘principles-based’ approach” gives company executives greater flexibility to determine the materiality of certain information and to pick the method for reporting such disclosures). “Principles-based” disclosure focuses on disclosing a concept, whereas “[l]ine-item disclosure” provides a “bright-line, quantitative . . . threshold” to identify required disclosures with. *Id.*; see also Nat’l Ass’n of Mfrs., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 3 (June 8, 2021), <https://www.sec.gov/comments/climate-disclosure/cl112-8895803-241279.pdf> [<https://perma.cc/R8VL-H2ML>] (arguing that certain ESG metrics are more important to a given business than others, and that there is little consistency among companies and industries as to what ESG-related information might be material).

framework to follow.¹⁴⁰ The result is inconsistent public information that investors cannot easily comprehend or compare.¹⁴¹ For instance, each third-party framework provider uses different information sources, metrics, and weighting methods to conduct its analysis.¹⁴² Proponents therefore believe that a single, mandated climate-related disclosure framework would promote consistency and standardization regarding what and where information is disclosed, as well as how investors receive climate-related information.¹⁴³ Mandating the requirements and standards for climate risk disclosures would reduce the burden on investors and issuers by concentrating all the information in a designated location and reducing the number of options, standards, and criteria.¹⁴⁴

Third, proponents argue that a single, mandated climate disclosure framework could increase the reliability and truthfulness of disclosures, particularly if disclosures are filed with the SEC.¹⁴⁵ Filing with the SEC creates a private right of action for material omissions and misrepresentations.¹⁴⁶ Recall that in *Ramirez v. Exxon Mobil Corp.*, untrue and misleading facts and omissions relating to ExxonMobil's climate change risk management in the company's Form 10-K led to a finding of securities fraud under the Securities Exchange Act of 1934.¹⁴⁷ Therefore, mandating disclosures using a single framework filed with

¹⁴⁰ See Michaels, *supra* note 72 (describing how companies “cherry-pick” the disclosure frameworks that paint them in the best light).

¹⁴¹ See *Joint Statement of Commissioners Robert J. Jackson, Jr. and Allison Herren Lee on Proposed Changes to Regulation S-K*, U.S. SEC. & EXCH. COMM’N (Aug. 27, 2019) [hereinafter *Joint Statement of Commissioners*], <https://www.sec.gov/news/public-statement/statement-jackson-lee-082719> [<https://perma.cc/54B9-KW2C>] (stating that inconsistent climate reporting undermines comparability across investments).

¹⁴² See U.S. SEC. & EXCH. COMM’N, *supra* note 75, at 4 (noting that the significant quantity of ESG-data providers creates a substantial burden for companies and investors as the providers vary in information sources, analyses, and outcomes); see also *supra* notes 80–115 and accompanying text (comparing and contrasting four of the most commonly used climate change disclosure frameworks).

¹⁴³ See U.S. SEC. & EXCH. COMM’N, *supra* note 75, at 4 (stressing the importance of quality data for investment analyses, and defining quality data as data that is consistent and comparable across companies).

¹⁴⁴ See *Joint Statement of Commissioners*, *supra* note 141 (attributing inconsistent information to more time-consuming and expensive investment analyses).

¹⁴⁵ See, e.g., Climate Risk Disclosure Lab, Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 19 (June 14, 2021), <https://www.sec.gov/comments/climate-disclosure/c112-8915583-244824.pdf> [<https://perma.cc/QJX3-QJ3Q>] (advocating for filing disclosures with the SEC as opposed to simply furnishing ESG reports, which do not impose strict liability and could potentially mislead the public). Under the Securities Exchange Act, it is unlawful for companies to make any untrue statement of material fact, omit necessary facts, or mislead the public. 17 C.F.R. § 240.10b-5 (2021).

¹⁴⁶ See Securities Exchange Act of 1934 § 18(a), 15 U.S.C. § 78r(a) (imposing liability for false and misleading statements in any annual, quarterly, or other documents filed with the SEC); 17 C.F.R. § 240.12b-20 (requiring companies to disclose any additional material information that may be necessary to make required statements not misleading).

¹⁴⁷ 334 F. Supp. 3d 832, 841 (N.D. Tex. 2018) (alleging that ExxonMobil made material misstatements about its proxy carbon costs when formulating its business plans and projects with climate change implications).

the SEC will allow the SEC to more effectively enforce and investigate these disclosures.¹⁴⁸ This encourages companies to report reliable and truthful climate disclosures to avoid securities fraud liability.¹⁴⁹ Proponents believe that investors will gain confidence in the accuracy of the reported information if they are assured that the SEC reviewed and scrutinized such information.¹⁵⁰

Fourth, proponents argue that mandating climate disclosures may also incentivize companies to reduce their environmental impact, adopt more sustainable changes, and better manage future climate change risks.¹⁵¹ They believe that a single, mandated climate-related disclosure framework will likely solve the collective action problem among the corporations competing for investors.¹⁵² They argue that such a framework will level the playing field by assuring companies competing for investors that other companies are also disclosing.¹⁵³ Such a framework will also likely allow companies to compete for investment by improving their sustainability goals, reducing their climate change impacts, and preparing them to better manage future risks.¹⁵⁴ Furthermore, proponents believe that companies seeking to mitigate identified climate change risks will also be more likely to reduce resource consumption, invest in new energy sources, and begin the transition toward more sustainable operations.¹⁵⁵

¹⁴⁸ See Press Release, U.S. Sec. & Exch. Comm'n, *supra* note 119 (creating a task force within the SEC's Division of Enforcement to investigate fraudulent misstatements in these disclosures).

¹⁴⁹ See Amanda Iacone, *SEC's Lee Eyes ESG Audit Mandate, Floats U.S. Standard Setter*, BLOOMBERG TAX (Mar. 15, 2021), <https://news.bloombergtax.com/financial-accounting/secs-lee-eyes-esg-audit-mandate-floats-u-s-standard-setter> [<https://perma.cc/U79G-U7DJ>] (opining that greenhouse gas emission disclosures should undergo external audits like financial statements); Gensler, *supra* note 13 (calling for companies that advertise themselves as "green" and "sustainable" to disclose the criteria and underlying data used to determine the applicability such a label).

¹⁵⁰ See *The Investor's Advocate: How the SEC Protects Investors, Maintains Market Integrity, and Facilitates Capital Formation*, U.S. SEC. & EXCH. COMM'N [hereinafter *Investor's Advocate*], <https://permanent.fdlp.gov/LPS113935/LPS113935/www.sec.gov/about/whatwedo.shtml.htm> [<https://perma.cc/5GK4-B4VR>] (Jan. 20, 2010) (explaining the SEC's role in protecting investors, facilitating transparent information disclosures, and overseeing fair dealing and anti-fraud disclosures). The SEC's enforcement authority ensures the agency's effectiveness in overseeing and protecting investors; the SEC brings hundreds of civil enforcement actions against individuals and companies for infractions such as insider trading, misleading investors, and disclosing fraudulent information. *Id.*

¹⁵¹ See CONDON ET AL., *supra* note 137, at 27 (arguing that an improved mandatory disclosure regime can also benefit companies).

¹⁵² *Id.* at 28. Managers are often given short-term incentives to keep high share prices and credit ratings, and thus are less inclined to report negative climate risk information. *Id.*; see also Cary Coglianese, *Solving Climate Risk Requires Normative Change*, WHARTON RISK MGMT. & DECISION PROCESSES CTR., <https://riskcenter.wharton.upenn.edu/climate-risk-solutions-2/solving-climate-change-requires-normative-change-2> [<https://perma.cc/FP7S-TY3L>] (describing climate change as "a collective action problem on steroids" because every individual contributes to it directly).

¹⁵³ See CONDON ET AL., *supra* note 137, at 28 (explaining that a universal disclosure requirement assures competitors that they will not be at a disadvantage for disclosing).

¹⁵⁴ See *id.* (arguing that comprehensible and comparable disclosures will allow companies to consider their strategic responses to climate risk and benchmark their performance against peer companies).

¹⁵⁵ See Coglianese, *supra* note 152 (arguing that regulation is necessary to incentivize companies to assume the costs necessary to reduce and manage climate change risks).

B. The Disadvantages of a Single, Mandated Climate-Related Disclosure Framework

Not everyone is in favor of a single, mandated climate-related disclosure framework because it could (1) potentially lead to less publicly available climate information, (2) lack the promised comprehensiveness, and (3) increase the cost of doing business for smaller companies.¹⁵⁶

First, there is a risk that a single, SEC-mandated climate disclosure framework will actually result in less disclosed information due to fears of potential securities fraud liability.¹⁵⁷ In responding to the SEC questionnaire, many commenters expressed concern that mandating new, nonmaterial climate-related disclosures would expose companies to increased risks of civil litigation despite good-faith and well-intentioned efforts.¹⁵⁸ To avoid the liability imposed by information filed with the SEC, companies may choose to only disclose what is minimally required.¹⁵⁹ The potential increased liability from climate-related disclosures could translate to companies being more cautious

¹⁵⁶ See, e.g., Alphabet Inc. et al., *supra* note 122, at 2 (criticizing the push to file climate-related disclosures with the SEC); Patrick Morrissey, W. Va. Att’y Gen., Treg R. Taylor, Alaska Att’y Gen., Mark Brnovich, Ariz. Att’y Gen., Leslie Rutledge, Ark. Att’y Gen. et al., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 3 (June 14, 2021), <https://www.sec.gov/comments/climate-disclosure/cll12-8915606-244835.pdf> [<https://perma.cc/B8KM-8LM4>] (arguing that an SEC mandate to compel disclosures violates the First Amendment because the SEC does not have a compelling government interest in requiring climate-related disclosures); French Hill, Member of Cong., Andy Barr, Member of Cong., Tedd Budd, Member of Cong., John Rose, Member of Cong. et al., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 2 (June 3, 2021), <https://www.sec.gov/comments/climate-disclosure/cll12-8873201-240110.pdf> [<https://perma.cc/QJ9G-U48D>] (arguing that a single, mandated framework would be a misguided approach for an issue as complex as climate change); see *infra* notes 157–178 and accompanying text (listing the disadvantages that come with a single, mandated framework).

¹⁵⁷ See TSC Indus. v. Northway, Inc., 426 U.S. 438, 448–49 (1976) (warning that a company’s fear of exposing itself to liability may induce the company to disclose either less information or to overload and bury shareholders with inconsequential information); cf. Securities Exchange Act of 1934 § 18(a), 15 U.S.C. § 78r(a) (imposing liability for false and misleading statements in any annual, quarterly, or other documents filed with the SEC); 17 C.F.R. § 240.12b-20 (2021) (requiring companies to disclose any additional material information that may be necessary to make required statements not misleading).

¹⁵⁸ See, e.g., Bank Pol’y Inst., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 2–3 (June 9, 2021), <https://www.sec.gov/comments/climate-disclosure/cll12-8901041-242153.pdf> [<https://perma.cc/3F5M-AVBB>] (advising the SEC to create safe harbors for climate disclosures that protect a company’s good-faith efforts from the risk of civil litigation); Elad L. Roisman, Comm’r, U.S. Sec. & Exch. Comm’n, Speech: Putting the Electric Cart Before the Horse: Addressing Inevitable Costs of a New ESG Disclosure Regime (June 3, 2021), <https://www.sec.gov/news/speech/roisman-esg-2021-06-03> [<https://perma.cc/2FVT-TSEA>] (expressing concern about the inevitable rise in costs related to private securities regulation and advocating for the creation of safe harbors to reduce liability).

¹⁵⁹ See Bank Pol’y Inst., *supra* note 158, at 2–3 (highlighting that the risks of investigation and civil litigation could result in companies disclosing less climate-related information).

with the information they disclose, opting instead to disclose less.¹⁶⁰ Critics therefore argue that mandating disclosures subject to the scrutiny of securities regulations will reduce the transparency within these statements.¹⁶¹

Second, critics argue that a one-size-fits-all framework may be less comprehensive than expected because it does not accurately reflect the disclosures relevant to different industries.¹⁶² For example, an accurate environmental view of agricultural companies requires emphasis on water shortage risks; for oil and gas companies, it requires valuation metrics of oil reserves in a carbon-restrained world; and for commercial banks, it requires metrics on the management of carbon embedded in loan portfolios.¹⁶³ Critics believe that because the impacts of climate change are so broad, the nature and scope of climate change disclosures should depend on a company's business model and operations.¹⁶⁴ A single set of government-mandated metrics could potentially lead to unfair treatment of companies in different sectors because they fail to properly account for industry context.¹⁶⁵ Therefore, companies against a one-size-fits-all

¹⁶⁰ See Olczykowski & Reiners, *supra* note 120 (finding that many companies prefer furnishing climate information on their own, as opposed to filing climate information in annual or quarterly SEC documents, because it protects them from undue liability); Alphabet Inc. et al., *supra* note 122, at 2 (proposing that the new regime require furnishing climate-related disclosures outside traditional SEC filing documents to avoid subjecting companies to undue liability).

¹⁶¹ See Bank Pol'y Inst., *supra* note 158, at 2 (noting that potential liability can be a key factor in disincentivizing climate disclosures).

¹⁶² See Roisman, *supra* note 158 (advocating for flexibility in sources and methodologies as opposed to having one rigid climate disclosure framework); PricewaterhouseCoopers LLP, Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 1 (June 10, 2021), <https://www.sec.gov/comments/climate-disclosure/c112-8905928-244100.pdf> [<https://perma.cc/KU6M-DVHA>] (encouraging the SEC to develop reporting standards that account for differences across industries and jurisdictions); Jim Tyson, *Companies Oppose One-Size-Fits-All SEC Climate Disclosure Rule: Survey*, CFO DIVE (Aug. 5, 2021), <https://www.cfodive.com/news/companies-oppose-one-size-fits-all-sec-climate-disclosure-rule-survey/604547> [<https://perma.cc/2FXA-HNWX>] (finding that most companies think the SEC should design its climate-related disclosure framework to accommodate different industries).

¹⁶³ See Sustainability Acct. Standards Bd., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 3 (May 19, 2021), <https://www.sec.gov/comments/climate-disclosure/c112-8819945-238161.pdf> [<https://perma.cc/7KXC-VKK2>] (advocating for industry-specific, climate-related disclosures); Friends of the Earth, Amazon Watch & Rainforest Action Network, Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 4 (June 11, 2021), <https://www.sec.gov/comments/climate-disclosure/c112-8907267-244247.pdf> [<https://perma.cc/ZV9N-XN5J>] (describing how companies with tropical commodity supply chains face risks that are currently not being addressed by upper management). SEC Chair Gensler has also expressed an interest in mandating distinct metrics for specific industries, such as banking, insurance, and transportation. Gensler, *supra* note 13.

¹⁶⁴ See, e.g., Hill, Member of Cong. et al., *supra* note 156, at 2 (arguing that a single and universal mandate applied to all sectors would mislead investors because climate change is so complex and its impacts are fundamentally different across industries).

¹⁶⁵ See *id.* (contending that a single uniform mandate would confuse investors because the climate risks faced, for example, by a software company, a cruise line, and an oil and gas company, are not comparable).

framework believe that they should retain the discretion, as experts of their own industry, to decide which climate risks are material and thus should be disclosed.¹⁶⁶ Moreover, some argue that ESG factors are not meant to be readily comparable across industries, and that, as such, a single set of metrics will constrain decision-making and impede innovative thinking.¹⁶⁷ Critics are also concerned that a centrally managed set of climate disclosure metrics will induce reliance on the SEC, thus preventing further research into better ways that companies can calculate climate change risks.¹⁶⁸

Third, critics argue that mandating climate change disclosures will burden smaller companies with increased data-gathering costs and potential lawsuits.¹⁶⁹ Commenters express concern that promulgating a new climate change disclosure rule will increase both direct and indirect compliance costs, especially for smaller companies.¹⁷⁰ Direct compliance costs include expenses necessary to collect and analyze the data, as well as to prepare, file, certify, and disseminate the disclosure reports.¹⁷¹ Indirect costs may include the costs of litigation if forward-looking disclosures are too optimistic, or if factual disclosures indicate bad news about a firm's climate risk mismanagement.¹⁷² For example, in one case involving ExxonMobil, the New York Attorney General demanded up to \$1.6 billion in restitution for failure to disclose the financial costs of climate change to investors.¹⁷³ Overall, during the past ten years,

¹⁶⁶ See *id.* (arguing that the SEC should not dictate a climate change disclosure regime based on what the SEC believes is material to every company). Instead, the investor community itself should decide what is material to them. *Id.*; see also Sustainability Acct. Standards Bd., *supra* note 163 (stating that the private sector has the expertise and resources necessary to set standards that will be helpful to investors).

¹⁶⁷ See Hester M. Peirce, *Rethinking Global ESG Metrics*, U.S. SEC. & EXCH. COMM'N (Apr. 14, 2021), <https://www.sec.gov/news/public-statement/rethinking-global-esg-metrics> [<https://perma.cc/UGU5-TWFL>] (expressing concern that common disclosure metrics will stifle innovation and hamper the ability of markets to seek new ways of compiling climate information).

¹⁶⁸ See *id.* (expressing concern that homogenizing metrics will lead to a global dependency on the SEC's set of metrics); Hill, Member of Cong. et al., *supra* note 156, at 2 (same).

¹⁶⁹ See Roisman, *supra* note 158 (explaining that smaller companies with limited resources will face proportionally greater costs when it comes to compiling and reporting these new legally required disclosures).

¹⁷⁰ See *Commenters Weigh in on SEC Climate Disclosures Request for Public Input*, DAVIS POLK (July 6, 2021), <https://www.davispolk.com/insights/client-update/commenters-weigh-sec-climate-disclosures-request-public-input> [<https://perma.cc/FQ9C-AAFW>] (finding that opinions differ on whether the costs of the SEC's proposed rule may outweigh its benefits).

¹⁷¹ Hans B. Christensen, Luzi Hail & Christian Leuz, *Mandatory CSR and Sustainability Reporting: Economic Analysis and Literature Review*, 26 REV. ACCT. STUD. 1176, 1187 (2021).

¹⁷² *Id.* at 1188.

¹⁷³ See *ExxonMobil Prevails in Landmark \$1.6 Billion Trial Over Climate Change Disclosures*, PAUL WEISS (Dec. 10, 2019), <https://www.paulweiss.com/practices/litigation/litigation/news/exxon-mobil-prevails-in-landmark-16-billion-trial-over-climate-change-disclosures?id=30337> [<https://perma.cc/A6XX-856F>] (describing the trial court's rejection of the New York Attorney General's claims that disclosures were misleading). The New York Attorney General calculated the \$1.6 billion damages based on an expert witness's methodology. *People v. Exxon Mobil Corp.*, 119 N.Y.S.3d 829, 845

shareholders have filed a greater number of securities class action claims and companies are paying higher costs to defend and settle such claims.¹⁷⁴

Cost also plays a role in the argument that the SEC may not have the legal authority to promulgate a mandatory framework.¹⁷⁵ Critics argue that this additional cost could be a potential problem when it comes time for the SEC to promulgate a new climate change disclosure framework.¹⁷⁶ Because the SEC is required to conduct a cost-benefit analysis when promulgating a new disclosure requirement, if these costs outweigh the benefits, the SEC may lack the authority to mandate and enforce a single framework.¹⁷⁷ Critics argue that the money these companies will spend on climate-related disclosure compliance could be better spent on environmental initiatives that actually reduce greenhouse gas emissions.¹⁷⁸

III. CHOOSING A SINGLE, MANDATED FRAMEWORK AND SOLUTIONS TO ENHANCE SUCH A FRAMEWORK

Both proponents and critics agree that the current patchwork of climate change disclosure frameworks is unsustainable.¹⁷⁹ Taking into consideration the

(Sup. Ct. 2019). The demanded \$1.6 billion in restitution were based on damages resulting from a price decline for ExxonMobil's shares after corrective disclosures were made. *See id.* (illustrating the potentially high costs of climate change-related securities fraud lawsuits).

¹⁷⁴ *See* CHUBB, FROM NUISANCE TO MENACE: THE RISING TIDE OF SECURITIES CLASS ACTION LITIGATION 5 (2019), <http://news.chubb.com/download/From+Nuisance+to+Menace+-+The+Rising+Tide+of+SCAs+-+Chubb.pdf> [<https://perma.cc/3L2F-AVXP>] (surveying securities class action lawsuits in the past decade and finding that the median cost of a securities class action settlement in 2018 was \$13 million). Additionally, one in ten S&P 500 companies has been the target of a securities class action lawsuit. *Id.* at 2.

¹⁷⁵ *See* Mario Olczykowski & Lee Reiners, *Where the Rubber Meets the Road: How Can an SEC Climate Risk Disclosure Rule Survive Cost-Benefit Analysis?*, DUKE DEP'T ECON., <https://econ.duke.edu/dfe/climate-risk/2021/08/where-rubber-meets-road-how-can-sec-climate-risk-disclosure-rule-survive> [<https://perma.cc/Z6C2-5SDK>] (arguing that the SEC could face a legal challenge to its climate risk disclosure framework if the costs associated with mandating a disclosure framework exceed the benefits).

¹⁷⁶ *See* 15 U.S.C. § 77b(b) (requiring that the SEC consider "whether an action is necessary or appropriate in the public interest" during its rulemaking process).

¹⁷⁷ *See, e.g.,* Bus. Roundtable v. SEC, 647 F.3d 1144, 1148 (D.C. Cir. 2011) (holding that the SEC failed to assess the economic effects associated with a new rule because it did not sufficiently quantify the potential costs or perform a cost-benefit-analysis of implementing the proposed rule).

¹⁷⁸ *See, e.g.,* Pat Toomey, U.S. Sen., Richard Shelby, U.S. Sen., Mike Crapo, U.S. Sen., Tim Scott, U.S. Sen. et al., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 2 (June 13, 2021), <https://www.sec.gov/comments/climate-disclosure/c112-8911330-244285.pdf> [<https://perma.cc/BCX4-T3B3>] (arguing against a single, mandated climate disclosure framework). Critics argue against the SEC's authority to issue such a framework, claiming that it is the job of Congress to do so. *Id.* at 2–3. The same critics are also skeptical that the proposed framework will help reduce greenhouse gas emissions. *Id.* at 2.

¹⁷⁹ *See, e.g.,* Microsoft Corp., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 2 (June 14, 2021), <https://www.sec.gov/comments/climate-disclosure/c112-8914472-244721.pdf> [<https://perma.cc/CG8G-YAY3>] (supporting the SEC's objective to develop a consistent

advantages and disadvantages of a single, mandated climate-related disclosure framework, the benefits of such a framework are greater than those of the current hodgepodge approach.¹⁸⁰ Section A of this Part analyzes the reasons why a single, mandated climate-related disclosure framework is the preferred future approach and whether the SEC's proposed rule promotes the comprehensiveness, truthfulness, and comparability of climate change disclosures.¹⁸¹ Section B evaluates whether the current draft of the proposed rule sufficiently addresses the disadvantages of a single, mandated climate-related disclosure framework.¹⁸²

A. The SEC's Proposed Single, Mandated Climate-Related Disclosure Framework Is the Preferred Approach

Between the current state of varied frameworks and the SEC's proposed rule, the single, mandated climate-related disclosure framework is the preferred approach because it will likely promote increased comprehensiveness, truthfulness, and comparability.¹⁸³

First, the SEC's proposed framework addresses the current issue of comprehensiveness.¹⁸⁴ The current voluntary disclosure regime is problematic because there are too many third-party ESG frameworks, resulting in inconsistent metrics that make it difficult for investors to comprehend the disclosed information.¹⁸⁵ The wide variety of disclosures lessens an investor's ability to in-

and comparable climate change disclosure framework); Walmart, Inc., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 1 (June 11, 2021), <https://www.sec.gov/comments/climate-disclosure/cll12-8911753-244396.pdf> [<https://perma.cc/92PC-U9MN>] (same). In a comment letter to the SEC, the American Gas Association and Edison Electric Institute pushed for a change from our current ESG disclosure framework to meet evolving investor needs. See Edison Elec. Inst. & Am. Gas Ass'n, *supra* note 122, at 3 (agreeing that everyone should continue to adapt and innovate on existing rules and standards).

¹⁸⁰ See Eccles & Klimenko, *supra* note 10 (explaining that the current hodgepodge climate-related disclosure regime is not helpful to investors and creates an obstacle to increased ESG investing); WATTS, *supra* note 37, at 5 (calling for more guidance on streamlining information and climate risk admissions so that regulators and institutional investors can appropriately address these risks sooner rather than later).

¹⁸¹ See *infra* notes 183–203 and accompanying text.

¹⁸² See *infra* notes 204–228 and accompanying text.

¹⁸³ See Olczykowski & Reiners, *supra* note 120 (finding that most commenters support the SEC's efforts to develop a mandatory climate-related disclosure, and that many already disclose climate-related risks in some shape or form).

¹⁸⁴ See COBURN & COOK, *supra* note 136, at 5 (finding that many companies were still not meeting SEC guidance requirements even after the SEC issued its 2010 Climate Disclosure Guidance because these company disclosures did not discuss sufficient material information and were not quantifying risks or past environmental impacts).

¹⁸⁵ See generally TCFD RECOMMENDATIONS, *supra* note 106, at 1 (reporting that investors who rely on climate-related disclosures frequently cite inconsistencies in disclosure practice, non-useful boilerplate language, and non-comparable reporting as major obstacles to incorporating climate-related risks into investment and lending decisions).

corporate climate-related financial risks into their investment decisions.¹⁸⁶ The SEC's proposed framework, which outlines some level of disclosure guidance, would likely standardize information and ensure that disclosures are of a certain quality.¹⁸⁷

It is also likely that the SEC's proposed framework would enhance the comprehensiveness of existing metrics by streamlining efforts to further enhance existing science-backed metrics.¹⁸⁸ A common concern among critics was that quantitative metrics are not fully developed and involve insufficient science and varying methodologies.¹⁸⁹ Currently, third-party ESG disclosure frameworks often refresh their methodologies and metrics, making it both costly and confusing for companies to keep up.¹⁹⁰ Therefore, central management of environmental metrics by the SEC would allow these metrics to be developed and realized in a more efficient manner.¹⁹¹ Thus, SEC management of such metrics would prevent companies from constantly refreshing or reassessing their climate risk disclosure methods every time a third-party framework provider comes up with a new method of calculation.¹⁹²

¹⁸⁶ *Id.*

¹⁸⁷ See THOMAS, *supra* note 135, at 3 (finding that even in 2020, very few companies reported any climate change risks in their SEC filings, and that more than 50% of reporting companies used "'boilerplate' language"). The SEC's new task force dedicated to climate and ESG issues will help guide the required quality of these disclosures. Press Release, U.S. Sec. & Exch. Comm'n, *supra* note 119.

¹⁸⁸ See Climate Risk Disclosure Lab, *supra* note 145, at 7 (explaining that companies are currently disclosing some quantifiable disclosure metrics, but that it is difficult to determine exactly which metrics are more useful than others); Olczykowski & Reiners, *supra* note 120 (noting how certain companies remain perturbed by the unproven, insufficient science and methodologies behind quantitative climate-related disclosures).

¹⁸⁹ See Olczykowski & Reiners, *supra* note 120 (summarizing the concerns of large companies regarding reporting quantitative metrics that are vaguely defined, such as Scope 3 indirect emissions, both up and down the value chain); TCFD RECOMMENDATIONS, *supra* note 106, at 32 (calling for further research and analysis to better define carbon-related assets and climate-related issues).

¹⁹⁰ See, e.g., *Standards Development*, GRI, <https://www.globalreporting.org/standards/standards-development> [<https://perma.cc/853Z-9W5V>] (describing that the GRI standards are revised every three years); TASK FORCE ON CLIMATE-RELATED FIN. DISCLOSURES, IMPLEMENTING THE RECOMMENDATIONS OF THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES 3 (2021), https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf [<https://perma.cc/FQV7-9KW2>] (amending and superseding the 2017 TCFD disclosure framework in this Annex).

¹⁹¹ See *Climate Data & Metrics*, MSCI, <https://www.msci.com/our-solutions/esg-investing/climate-solutions/climate-data-metrics> [<https://perma.cc/35C8-34M8>] (providing an example of one organization that offers over 900 climate change metrics for companies to consider); see also The Vanguard Group, Inc., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 3 (June 11, 2021), <https://www.sec.gov/comments/climate-disclosure/cll12-8906800-244148.pdf> [<https://perma.cc/9UXG-29HB>] (acknowledging that climate risk understanding will continue to mature with more scientific and technological advancements, and that disclosure requirements can adapt to future enhancements).

¹⁹² See U.S. SEC. & EXCH. COMM'N, *supra* note 75, at 1 (arguing that third-party ESG-data providers and their multiple frameworks and methodologies may not always be consistent, reliable, or material).

Second, the SEC's proposed framework also addresses the current concern about truthfulness in climate-related disclosures.¹⁹³ Investor confidence in disclosures is a significant component of efficient capital markets, and a disclosure framework must have independent auditing or assurances to guarantee the credibility and reliability of climate disclosures.¹⁹⁴ Because climate change risk disclosures are currently voluntary, the SEC does not thoroughly review the accuracy of these disclosures.¹⁹⁵ Therefore, filing disclosures with the SEC would allow the agency to investigate, audit, and impose liabilities regarding the content of these disclosures.¹⁹⁶ The SEC can also question the accuracy of these disclosures and demand more information.¹⁹⁷ The proposed rule enhances the truthfulness of these disclosures by requiring certain larger companies to include an attestation report by an independent third party to verify their Scope 1 and Scope 2 emissions.¹⁹⁸

¹⁹³ See Eccles & Klimenko, *supra* note 10 (explaining that current disclosures are rarely subject to proper audit by a third party); Iacone, *supra* note 149 (calling for external auditing of climate disclosures to enhance the reliability of the disclosed information).

¹⁹⁴ See Mary Jo White, Chair, U.S. Sec. & Exch. Comm'n, Speech at the National Association of Corporate Directors Leadership Conference 2013: The Path Forward on Disclosure (Oct. 15, 2013), <https://www.sec.gov/news/speech/spch101513mjw> [<https://perma.cc/9HR8-459C>] (stating that the disclosures allow capital markets to thrive because they enable investors to evaluate companies and confidently invest); PricewaterhouseCoopers LLP, *supra* note 162, at 2 (stating that auditor independence is necessary to prove the credibility of non-financial climate disclosures).

¹⁹⁵ See Kirstin K. Gruver, Brook J. Detterman, Allyn L. Stern, Leah A. Dundon & Lauren A. Hopkins, *SEC Pushes for More Robust Climate Disclosures*, NAT'L L. REV. (Sept. 29, 2021), <https://www.natlawreview.com/article/sec-pushes-more-robust-climate-disclosures> [<https://perma.cc/BE38-DF5U>] (noting that the SEC has yet to bring significant enforcement action in connection with climate-related disclosures).

¹⁹⁶ See Securities Exchange Act of 1934 § 18(a), 15 U.S.C. § 78r(a) (imposing liability for false and misleading statements in any annual, quarterly, or other documents filed with the SEC); 17 C.F.R. § 240.12b-20 (2021) (requiring companies to disclose material information that may be necessary to make required statements not misleading); see also *Investor's Advocate*, *supra* note 150 (describing the SEC's responsibility to protect investors and investigate fraudulent disclosures through civil enforcement actions).

¹⁹⁷ See *Sample Letter to Companies Regarding Climate Change Disclosures*, U.S. SEC. & EXCH. COMM'N, <https://www.sec.gov/corpfin/sample-letter-climate-change-disclosures> [<https://perma.cc/TT74-ME9Y>] (Sept. 22, 2021) (providing a sample letter selectively sent out to companies regarding climate change disclosures in their annual Form 10-K filings). On September 22, 2021, the SEC's Division of Corporation Finance issued letters to various companies about climate-related disclosures in their annual Form 10-K filings, asking for more information regarding the consideration they gave to climate-related disclosures; the material effects of transition risks and physical risks related to climate change; and the indirect consequences of climate-related risks and increased regulation. *Id.*

¹⁹⁸ See The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21334, 21346 (proposed Mar. 21, 2022) (requiring the filing of the attestation report with the registration statement and annual reports). The proposed rule provides minimum attestation report requirements and requires the company to include information about the legitimacy of the independent third party attesting the report. *Id.*

Third, the SEC's proposed framework ensures greater cross-company comparability.¹⁹⁹ The current voluntary disclosure regime, which grants significant discretion and flexibility to companies, results in inconsistent information that is unhelpful to investors.²⁰⁰ Furthermore, by basing its proposed rule on the TCFD framework, the SEC ensured that the common terminology and metrics used to describe climate-related risks and opportunities remain consistent and comparable.²⁰¹ Therefore, the SEC's proposed framework would standardize the disclosure of information and metrics and allow for easier comparisons across these reports.²⁰² Such a framework also creates one system under which companies can more easily benchmark progress against peer companies.²⁰³

B. The SEC's Proposed Framework Addresses the Disadvantages, but Remains Too Flexible

Although a single, mandated disclosure framework can help investors make more informed investment decisions and incentivize companies to better manage future climate change risks, such a framework must factor in its disadvantages and provide solutions through regulatory design.²⁰⁴ The SEC's proposed rule addresses many of these disadvantages, but some of its provisions fall short or run contrary to the goal of creating a consistent and comparable mandatory climate disclosure framework.²⁰⁵

¹⁹⁹ See Gensler, *supra* note 13 (noting the high investor demand for more consistent and comparable climate change risk disclosures).

²⁰⁰ See *Joint Statement of Commissioners*, *supra* note 141 (stating that inconsistent information hinders an investor's ability to compare investments and thus makes investments more expensive); Michaels, *supra* note 72 (describing how companies select which ESG disclosure framework to adhere to based on their own self-interest).

²⁰¹ The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21349 (seeking to reduce the burden on registrants instead of introducing a brand-new framework with different terminology and metrics).

²⁰² See, e.g., GRI & CDP, *supra* note 103, at 5, 11–35 (pinpointing the disclosure differences between the broader GRI framework and the narrower CDP framework, and noting that the CDP framework differs from the GRI framework in that the CDP focuses only on climate, water, and deforestation impacts).

²⁰³ See CONDON ET AL., *supra* note 137, at 28 (arguing that comparable disclosures will allow companies to better benchmark their performance against peer companies, potentially incentivizing further actions to reduce climate change risks).

²⁰⁴ See *supra* notes 156–178 and accompanying text (listing disadvantages of mandated climate risk disclosures, such as less publicly available climate information, less comprehensive disclosures than expected, and increased costs imposed on smaller companies).

²⁰⁵ See *infra* notes 206–225 and accompanying text (analyzing whether the SEC proposed rule adequately addresses the potential disadvantages of a single, mandated climate-related disclosure framework).

The SEC's proposed rule addresses the potential disadvantage of companies disclosing less information by introducing a safe harbor provision.²⁰⁶ As discussed in Part II.B, companies may only disclose what is minimally required so as to avoid potential liability for misstatements and omissions.²⁰⁷ To address this disadvantage, commenters advocated for safe harbors to protect the good-faith efforts of companies disclosing climate-related risk.²⁰⁸ Commenters argue that safe harbors could protect resource-constrained companies unable to reasonably obtain climate-related information in their value chain, which is required for Scope 3 emissions.²⁰⁹ Additionally, safe harbor protections can incentivize companies to disclose more substantive and accurate climate risks in forward-looking statements.²¹⁰ The SEC's proposed rule extends a safe harbor for Scope 3 emissions disclosure and further exempts Scope 3 emission reporting for smaller companies.²¹¹ Additionally, the proposed rule aims to encourage disclosure by allowing companies to use a reasonable estimate of greenhouse gas emissions if actual reported data is not available in the fourth fiscal quarter.²¹²

²⁰⁶ See The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21346 (listing a Scope 3 emissions safe harbor rule and exempting smaller companies from Scope 3 emissions disclosures to reassure companies concerned about securities fraud liability).

²⁰⁷ See *supra* note 157–161 and accompanying text (explaining the high standard of liability that applies if companies file climate-related disclosures with the SEC because it is unlawful under the Securities Exchange Act of 1934 to report untrue facts and misleading material statements or to omit material information).

²⁰⁸ See Roisman, *supra* note 158 (advocating for a safe harbor consideration for companies that are using good-faith efforts to disclose as much climate-related risk as possible). Such safe harbors already exist under the Securities Act of 1933, and a new SEC disclosure rule could extend a safe harbor for ESG disclosures specifically. See Securities Act of 1933 § 27A(c)(1)(A), 15 U.S.C. § 77z-2(c)(1)(A) (providing a safe harbor from liability for forward-looking statements); Boris Feldman, *Navigating the Safe Harbor for Forward-Looking Statements*, THE REPORTER (Jan. 3, 1996), https://www.borisfeldman.com/Safe_Harbor.htm [<https://perma.cc/4UQ5-MW9H>] (explaining that a company that falls within the safe harbor provision must satisfy two criteria: (1) the statement must be forward-looking, and (2) the company must impart statements about factors that could cause results to differ from those in the forward-looking statements).

²⁰⁹ See Bank of Am. Corp., Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 10 (June 13, 2021), <https://www.sec.gov/comments/climate-disclosure/cll12-8914492-244735.pdf> [<https://perma.cc/98LF-23CC>] (pointing to Rule 409 of the Securities Act and Rule 12b-21 of the Securities Exchange Act, which provide relief from disclosure obligations for information that is unknown and not available to companies).

²¹⁰ See *id.* (arguing for safe harbors so that companies will be more willing to disclose climate-related information that comes from third parties).

²¹¹ The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21346. An exempt smaller company is defined as a company that is not an investment company or asset-backed issuer and that had annual revenues less than \$100 million or a public float below \$250 million. *Id.* at 21346 n.143.

²¹² See *id.* at 21346 (stating that estimated emissions data can be used for a company's fourth fiscal quarter in addition to actual emissions data for the first three quarters). This proposed provision is intended to address the concerns regarding timely completion of greenhouse gas emission calculations. *Id.* at 21387.

The SEC's proposed rule also addresses the unequal burden and cost imposed on smaller companies trying to comply with a single, mandated disclosure framework.²¹³ Commenters advocated for a phased-in approach for climate-related disclosures to allow smaller companies more time to comply with the proposed rule.²¹⁴ The SEC's proposed rule includes a phased-in implementation period to accommodate the burden faced by smaller companies.²¹⁵ Specifically, the rule grants a one-year phase-in period for all companies and a three-year phase-in period for smaller companies.²¹⁶

Unfortunately, the SEC's proposed rule prevents different industries from accurately capturing their climate-related risks and runs the risk of being too rigid.²¹⁷ Critics suggested using existing third-party climate disclosure frameworks that contain different industry-specific metrics for up to seventy-seven industries, such as the SASB framework.²¹⁸ Nevertheless, the SEC's proposed rule fails to provide industry-specific metrics or disclosures, and chooses instead to provide a general guideline applicable to all companies.²¹⁹ The proposed rule only acknowledges that different industries will experience different material impacts and climate change risks.²²⁰ Even though the SEC is considering metrics for the banking, insurance, and transportation industries, the SEC's proposed rule does not provide specific disclosure guidance for indus-

²¹³ See *supra* notes 169–174 and accompanying text (explaining that mandated climate-related disclosures will burden smaller and growing companies with increased costs from preparing these disclosures and from potential securities fraud lawsuits).

²¹⁴ See Roisman, *supra* note 158 (expressing interest in seeing a phased-in disclosure regime with an extended implementation period for smaller companies); Retail Indus. Leaders Ass'n, Comment Letter on Public Input Welcomed on Climate Change Disclosures, at 13 (June 12, 2021), <https://www.sec.gov/comments/climate-disclosure/c1112-8911533-244349.pdf> [<https://perma.cc/E3GD-EHPC>] (advocating for long phase-in implementation to give companies more time to gather, analyze, and verify their climate change disclosures). An extended implementation period for smaller and more vulnerable companies would allow them to learn how larger companies are disclosing. Roisman, *supra* note 158.

²¹⁵ See The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21346 (listing the different phase-in periods for large-, mid-, and small-sized companies).

²¹⁶ *Id.* Furthermore, all companies receive an additional one-year phase-in period for Scope 3 emission disclosures. *Id.*

²¹⁷ See *supra* notes 162–168 and accompanying text (explaining that a one-size-fits-all single disclosure framework could be misleading to investors because material climate-related risks and impacts will vary across industries).

²¹⁸ See, e.g., PricewaterhouseCoopers LLP, *supra* note 162, at 1 (suggesting the addition of supplemental disclosures to a general disclosure framework); see also Sustainability Acct. Standards Bd., *supra* note 163, at 3 (stating that different industries vary in terms of the types of climate-related physical, transitional, and regulatory risks).

²¹⁹ See The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21347 (focusing on general disclosure requirements, such as governance, impacts, risk management, emission metrics, and climate-related goals, instead of industry-specific requirements).

²²⁰ See *id.* at 21354, 21378 (providing examples of how an oil company and electric utility company will differ in their disclosures when it comes to reporting on material transition risks).

tries that either contribute most to climate change or are most vulnerable to climate change.²²¹

Furthermore, the proposed rule chooses to address the issue of rigidity by granting flexibility in the methodology used to calculate greenhouse gas emissions.²²² The proposed rule acknowledges that emission standards are evolving and grants companies the discretion to adopt new standards and approaches that may be more relevant to their specific industry.²²³ Unfortunately, this approach undermines the consistency and comparability of a single, mandated climate disclosure framework, making it difficult for investors to understand which companies are more successfully lowering their emissions data.²²⁴ This approach also grants companies too much leeway, and will likely result in sub-standard disclosures that vary in quality and quantity.²²⁵

Nevertheless, despite these shortcomings, a single, mandated disclosure framework is better than the status quo because its disadvantages can be resolved through strong regulatory design.²²⁶ A well-designed framework draws on the benefits of the status quo to solve the drawbacks of a mandatory system, while simultaneously eliminating the problems of the varied system.²²⁷ This is

²²¹ See Gensler, *supra* note 13 (expressing the SEC's interest in developing sector-specific disclosures for the banking, insurance, and transportation industries); The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21345 (failing to provide specific industry parameters in the new climate change disclosure rule); Nicholas Duva, *7 Industries at Greatest Risk from Climate Change*, CNBC (Oct. 22, 2014), <https://www.cnbc.com/2014/10/22/7-industries-at-greatest-risk-from-climate-change.html> [<https://perma.cc/A6B4-S2PQ>] (finding that the industries facing the greatest climate-change risks are insurance, agriculture, energy, beverage, commercial fishing, and skiing); Hannah Ritchie & Max Roser, *Emissions by Sector*, OUR WORLD IN DATA (2020), <https://ourworldindata.org/emissions-by-sector> [<https://perma.cc/Q388-XCQP>] (reporting that the industries that contribute most to climate change are energy, industrial and manufacturing, waste, and agriculture).

²²² See The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21387 (granting companies discretion to choose their methodology, but requiring them to also disclose the reasoning, approach, and assumptions used when selecting which methodology to use). Companies are required to report changes on a year-by-year basis to help investors compare emissions data over time. *Id.*

²²³ See *id.* at 21377 (stating that the proposed draft rule does not force companies to adhere to the Greenhouse Gas Protocol standard for calculating emissions).

²²⁴ See *id.* at 21387 (assuming investors will easily comprehend how different methodologies can be compared against each other); *supra* notes 138–144 (discussing the benefits of consistency and comparability).

²²⁵ See THOMAS, *supra* note 135, at 3 (describing how the lack of specific disclosure requirements results in disclosures that are “boilerplate,” sparse, and inconsistent).

²²⁶ See *supra* notes 206–225 and accompanying text (addressing the potential disadvantages of a single SEC-mandated framework and suggesting solutions, such as safe harbor provisions, supplemental industry-specific disclosures, and phased-in implementation).

²²⁷ See, e.g., GLOB. SUSTAINABILITY STANDARDS BD., *supra* note 82, at 112 (enhancing climate-related disclosures by supplementing general disclosures with sector-specific questions); *About Us*, *supra* note 87 (requiring detailed sector-specific disclosures of financially material climate-related information); CDP CLIMATE CHANGE 2022 QUESTIONNAIRE, *supra* note 102, at 4–5 (providing detailed additional questionnaires for high-impact industries); see also *supra* notes 206–225 and accom-

especially evident as the SEC continues to request and analyze public comments before placing its proposed rule into effect.²²⁸

CONCLUSION

Climate change concerns are becoming more pressing and investors are increasingly aware of the financial impacts of future climate change risks on businesses and global markets. Currently, climate-related disclosures are voluntary and companies can choose the method and metrics of how they report. This variability has spawned hundreds of different ESG disclosure frameworks by third parties. In 2021, the SEC proposed a rulemaking agenda to mandate a single climate-related disclosure framework. Such a framework would increase transparency, consistency, and clarity, allowing investors to make better informed investment decisions. In contrast, such a framework may also decrease the amount of reported public information, be less comprehensive, reduce the flexibility of enhanced metrics in the future, and increase the cost of doing business for smaller companies. Nevertheless, a single, mandated climate disclosure framework, such as the SEC's proposed rule, is the preferred approach because it is possible to design the framework to overcome these disadvantages through mechanisms like safe harbor provisions, supplemental industry-specific disclosures, and phased-in implementation. Therefore, although the SEC's proposed rule does include safe harbor provisions and phased-in implementation, it does not sufficiently address industry-specific disclosures and grants too much flexibility and discretion by allowing companies to use any methodology when calculating their greenhouse gas emissions data.

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panying text (suggesting methods to address the potential problems associated with a single, mandated disclosure framework).

²²⁸ See Press Release, U.S. Sec. & Exch. Comm'n, *supra* note 123 (granting a thirty-day comment period on the proposed draft rule); The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21334, 21346 (encouraging the public to submit comments on the proposed draft rule).