UCLA

UCLA Journal of Environmental Law and Policy

Title

The SEC and Climate Risk

Permalink

https://escholarship.org/uc/item/8vd7x1k3

Journal

UCLA Journal of Environmental Law and Policy, 40(1)

Author

Benjamin, Lisa

Publication Date

2022

DOI

10.5070/L540157648

Copyright Information

Copyright 2022 by the author(s). All rights reserved unless otherwise indicated. Contact the author(s) for any necessary permissions. Learn more at https://escholarship.org/terms

The SEC and Climate Risk

Lisa Benjamin

Abstract

The time has never been better for the Securities and Exchange Commission (SEC) to regulate climate change disclosures; however, the agency has a poor track record in mandating climate and other specialized disclosures from public corporations. Its 2010 guidance on climate-related disclosures was sparsely enforced. Its 2012 conflict minerals rule was partially invalidated by the courts, and in 2019 and 2020, the agency failed to include climate disclosures when modernizing rules and guidelines on corporate disclosures. These past failures were due to agency inertia, which was facilitated by a combination of a lack of political feasibility, strong business resistance to specialized disclosures (despite investor enthusiasm), and rising judicial hostility to the SEC. These past failures should not dictate agency approaches to climate disclosures moving forward. Regulating climate change is high on the agenda of the Biden Administration. Investors are demanding that public corporations be more transparent about climate-related risks. The SEC is starting to act, issuing a call for public input on climate-related disclosures and enhancing its focus on climate-related disclosure in public company filings.

These political, investor, and agency shifts are primarily due to the rising awareness of the potential systemic nature of the risks of climate change to financial systems, both in the U.S. and internationally. This article assesses the policy feasibility of climate-related disclosure rules. It argues that past SEC failures can and should inform SEC rulemaking on climate change disclosures moving forward. Regulating climate disclosures benefits not only investors and capital markets, but also companies, due to the systemic nature of climate risk. This article argues that robust cost-benefit analysis and industry-specific, flexible but firm regulatory approaches will improve policy feasibility.

ABOUT THE AUTHOR

Lisa Benjamin is an assistant professor of law at Lewis & Clark Law School. I would like to thank the participants of the AALS Joint Session 'What Can Securities Regulation Contribute to Environmental Law, and Vice Versa?', participants of the Natural Resources Law Teachers Institute Worksin-Progress Session of the Rocky Mountain Mineral Law Foundation, the 14th Annual Lutie A. Lytle Black Women Law Faculty Workshop and Writing

© 2022 Lisa Benjamin

Retreat, and participants at the AALS 'New Voices in Administrative Law' session. I would also like to thank Bryan Camp, John Dernbach, George Foster, William Funk, Sarah Haan, Virginia Harper Ho, Sanford Lewis, Michael Vandenbergh, Cynthia Williams and David Zaring for their comments, and Kate McCallum for her excellent research assistance.

TABLE OF CONTENTS

Inte	RODUCTION	2
I.	SHIFTING POLITICAL, INVESTOR, BUSINESS AND JUDICIAL LANDSCAPES.	6
	A. Shifting Political Landscapes	6
	B. Rising Investor Concern	10
	C. Business Resistance	
	D. Judicial Hostility	16
II.	SEC INERTIA ON SPECIALIZED DISCLOSURES	19
	A. The 2010 SEC Guidance on Climate Change	21
	B. The Dodd-Frank Conflict Minerals Rule	24
	C. The SEC "Disclosure Effectiveness Initiative," Petitions for ESG	
	and Climate Rulemaking, and 2019–2020 Regulatory Reforms	27
III.	THE SEC AND CLIMATE RISK	31
	A. Physical and Transition Risks of Climate Change	33
	B. Climate Change as Systemic Risk	37
	C. The SEC's Role in Regulating Climate Risk	40
	D. The 2021 SEC Call for Comments on Climate-Related Financial	
	Disclosures	43
IV.	THE RISKS AND BENEFITS OF RULEMAKING ON CLIMATE DISCLOSURES.	47
	A. The Risks and Benefits of Rulemaking	48
	B. Cost-Benefit Analysis	51
	C. Constitutional Issues	54
	D. Flexible But Firm Rules	57
Cox	ICH HISTON	60

Introduction

Historically, the Securities and Exchange Commission (SEC) has been unsuccessful at regulating climate-related financial disclosures. A 2017 report by the Sustainability Accounting Standards Board (SASB) found that despite the wide-spread adoption of sustainability disclosures by companies, almost half of these disclosures contained boilerplate and vague statements, and less than one-third of disclosures contained any performance metrics. A 2020

^{1.} Sustainability Accounting Standards Board, The State of Disclosure 14 (2017), https://www.sasb.org/wp-content/uploads/2019/08/StateofDisclosure-Report-web112717–1. pdf [https://perma.cc/RC4J-B72D]; see also Sustainability Accounting Standards Board, Climate Risk Technical Bulletin 2021 Edition 19 (2021), https://www.sasb.org/wp-content/

report by the U.S. Government Accountability Office (GAO) found that while most companies disclosed sustainability information, the metrics used differed, and so the disclosures were not comparable, clear, or useful for investors.² For example, most public companies' disclosures reviewed by GAO differed in their reporting of carbon dioxide, disclosing direct (Scope 1), indirect (Scope 2), value chain (Scope 3) and/or reductions in emissions.³

The SEC's hesitancy to effectively manage climate disclosures stems from three interrelated factors. The first is lack of political feasibility. Climate change is one of the most politically sensitive issues in the United States, and, until recently, mandating climate disclosures by public corporations has never been a high political priority. While the SEC is an independent agency, its regulatory reluctance on this issue has persisted through both Republican and Democratic administrations. The second factor is a clash of voices between public companies resisting calls for more climate-related disclosure, and investors, many of whom want increased disclosure from the public companies they invest in. While investors have repeatedly expressed a strong desire for clearer and better disclosures, the SEC has not catered to those concerns. Instead, the SEC focused on the entities it directly regulates — public companies. The agency has acceded to businesses, and industry's general resistance to mandated disclosures. Businesses have generally resisted agency initiatives to impose mandatory environmental, social, and governance (ESG) disclosures, especially climate disclosures. This resistance is particularly strong in public corporations that issue securities and are subject to the SEC's regulatory regime ("issuers"). Many issuers do not want to disclose the risks that climate change poses to their business as this may make investors more reluctant to invest in them and therefore decrease their share price. Issuers at greater risk of climate impacts have an inherent incentive to hide or obscure climate-related risks, making regulation requiring uniform disclosures all the more important. The third and final factor is rising judicial hostility to the expanded remit of the SEC, and recently to independent agencies more broadly. These three factors have contributed to past agency inertia on climate disclosures.

This article explores existing barriers to the SEC in creating a mandatory climate change disclosure regime. It also identifies opportunities for effective rulemaking on the issue. It recommends that the SEC issue flexible but firm rules mandating climate-related disclosures from issuers, which are industry specific and that also include a robust cost-benefit analysis. While many barriers have shifted and investor enthusiasm has increased recently, it is likely that any rule that mandates disclosures will be challenged in the courts. This

uploads/2021/05/Climate-Risk-Technical-Bulletin2021–042821.pdf [https://perma.cc/BRF9-NFQZ] (providing more detailed rules around disclosure in response to the 2017 findings).

^{2.} U.S. Gov't Accountability Off., GAO-20–530, Public Companies: Disclosure of Environmental, Social and Governance Factors and Options to Enhance Them 17–18, 32 (2020), https://www.gao.gov/assets/gao-20–530.pdf [https://perma.cc/S3MC-R6R4].

^{3.} *Id.* at 26, 32.

article provides recommendations as to how these remaining barriers can be overcome or mitigated, particularly regarding judicial review. While a number of authors have addressed SEC action on ESG disclosures,⁴ this article focuses exclusively on climate-related disclosures and assesses the policy feasibility of mandatory rules on climate-related financial disclosures, as this is the first element of ESG disclosures that the SEC appears willing to tackle. The costs and benefits of climate-related financial disclosures are also easier to identify and articulate, making them a reasonable starting point for the SEC to address. Even if the SEC does not choose this regulatory option, this article adds to the policy process literature specifically on climate disclosures, suggesting ways to frame cost-benefit analysis on climate disclosures.

This article moves the debate forward by focusing on the risks and benefits of SEC rulemaking in this area, incorporating a selection of comments (both positive and negative) received by the SEC in the 2021 call for public input around climate-related financial disclosures. It identifies the SEC as the most appropriate agency to regulate climate disclosure, despite its past failures. It explores unsuccessful attempts over the past decade by the SEC to regulate climate and social disclosures, including the SEC 2010 guidance on climate-related disclosures, the SEC 2012 rule requiring disclosure of use of conflict minerals, and the SEC's modernization of general corporate disclosures in 2019–2020. It applies lessons from those past attempts, and proposes recommendations that could mitigate persisting barriers.

Despite past failures in this area, political and financial approaches to the risks of climate change have shifted dramatically in the past few years to varying degrees. Climate change is a major policy priority for the Biden Administration. Many businesses, particularly institutional investors, express a strong desire for uniform climate disclosure regulation. Some issuers (sometimes referred to interchangeably as public corporations in this article) even express enthusiasm for climate disclosures, although some prefer a voluntary disclosure regime, and only a few support a mandatory rule. Generally, however, business resistance to climate-disclosure rulemaking, and judicial hostility, remain important factors for the SEC to consider. Despite the risks of rulemaking, this article argues that the time has never been better for the SEC to use rulemaking to regulate climate change disclosures.

This is particularly so due to the escalating risks of climate change to financial actors and systems. Several authors have advocated over the years for ESG disclosure rules by the SEC.⁵ This article adds to these calls but highlights

^{4.} See, e.g., Cynthia A. Williams & Donna M. Nagy, ESG and Climate Change Blind Spots: Turning the Corner on SEC Disclosure, 99 Tex. L. Rev. 1453 (2021); Virginia Harper Ho, Modernizing ESG Disclosure, U. Ill. L. Rev. (forthcoming 2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3845145 [https://perma.cc/LBX4-KWTF].

^{5.} Cynthia A. Williams, *The Securities and Exchange Commission and Corporate Social Transparency*, 112 HARV. L. REV. 1197 (1999); Jill E. Fisch, *Making Sustainability Disclosure Sustainable*, 107 Geo. L.J. 923, 950–51 (2019); Virginia Harper Ho, *Disclosure*

some of the internal failings by the SEC over the years, as well as some of the pitfalls facing the agency as a result of past agency failures and recent judicial decisions, and then provides some recommendations. These recommendations may improve the odds of successful regulatory efforts going forward for climate-related financial disclosures.

This Article proceeds as follows. Part I establishes a taxonomy of shifting political, business, and judicial landscapes on climate risk regulation. Political and investor shifts are due in large part to increased concern about the financial risks of climate change. Part II charts agency inertia of the SEC on specialized disclosures. It fleshes out examples of the hurdles and agency approaches identified in Part I that have contributed to agency inertia. The 2010 SEC guidance on climate change was rarely enforced by the agency. The 2012 conflict minerals rule and the agency's 2020 proposal regarding Regulation S-K disclosures demonstrate persistent business resistance and judicial hostility, including the Supreme Court's recent decision in AFPF v Bonta which demonstrates increasing judicial hostility towards disclosure regimes.⁶ Part III advocates for SEC regulatory action despite the risks identified in Part II. This Part focuses on the systemic character of climate risks, and the important role that the SEC plays as a regulatory bulwark against future escalation of climate change to a systemic financial risk. It also analyzes a selection of public responses to the recent SEC call for comments on climate disclosures in 2021, illustrating investor enthusiasm but also continuing business resistance. Part IV weighs the risk and benefits of a rule mandating climate-related disclosures, and it also suggests some strategies and recommendations that may prove useful to navigating these barriers and harnessing rising political and investor enthusiasm for regulating climate-related disclosures while also mitigating countervailing issuer and judicial hostility. It advocates for robust cost-benefit analysis, a flexible yet firm regulatory approach that incorporates industry specific rules, and

Overload? Lessons for Risk Disclosure and ESG Reporting Reform from the Regulation S-K Concept Release, 65 VILL. L. REV. 67 (2020); Virginia Harper Ho, Nonfinancial Risk Disclosure and the Costs of Private Ordering, 55 Am. Bus. L.J. 407 (2018) (arguing that the current model of nonfinancial risk disclosure based on the principles of materiality and leaving investor access to information solely to private ordering mechanisms such as obtaining information through voluntary reporting and private standard setting organizations is ineffective, costly to investors, issuers and regulators, and undermines the mission of the SEC); Hana V. Vizcatra, Entering a New Era in Climate-Related Disclosures and Financial Risk Management in the U.S. (2021), http://eelp.law.harvard.edu/wp-content/uploads/Vizcarra-ALI2021-ClimateFinanceRiskOutlook.pdf [https://perma.cc/BJ8U-FC42]; Condon, Market Myopia's Climate Bubble Utah L. Rev. 1 (forthcoming 2021), https://papers. ssrn.com/sol3/papers.cfm?abstract_id=3782675 [https://perma.cc/W8NA-JJA5]; Daniel C. Esty & Quentin Karpilow, Harnessing Investor Interest in Sustainability: The Next Frontier in Environmental Information Regulation, 36 YALE J. ON Reg. 625 (2019) (suggesting a mandatory environmental, social and governance (ESG) reporting requirement); Melissa K. Scanlan, Climate Risk is Investment Risk, 36 J. Env't. L. & LITIG. 1 (2021).

6. Americans For Prosperity Foundation v Bonta, 594 U.S. ___ (2021).

is in keeping with existing international standards, thereby increasing policy feasibility.

I. SHIFTING POLITICAL, INVESTOR, BUSINESS AND JUDICIAL LANDSCAPES

Climate-related disclosures by public corporations did not receive much political attention in the U.S. until the Biden Administration. During the previous Democratic and Republican administrations, the issue was never a political priority. This is partly related to investors and financial regulators' lack of focus on the financial-related risks of climate change. The escalating financial risks of climate change have affected political approaches to the issue, with the Biden Administration closely tracking scientific and investor approaches to climate disclosures.

A. Shifting Political Landscapes

The election of President Obama in 2008 marked a significant shift in U.S. climate policy. Before taking office, then President-elect Obama declared to a group of U.S. governors that his presidency would "mark a new chapter in America's leadership on climate change that will strengthen our security and create millions of new jobs in the process." When he took office, however, climate change ultimately took a back seat to President Obama's key priorities of managing the fallout from the 2008 financial crisis and healthcare reform. Eight years later, President Obama's climate legacy is hotly contested. Critics point to his failure to enact cap-and-trade legislation and the granting of permits to drill for oil in the Arctic, while supporters celebrate the success of the 2015 Paris Agreement and the range of regulations passed by the EPA and other federal agencies.

When it came to the SEC and other financial regulatory agencies, the focus of the Obama Administration was squarely on addressing regulatory gaps and oversight issues to repair the damage to the U.S. economy and financial system from the 2008 financial crisis.¹⁰ The SEC's 2010 interpretive guidance on climate change disclosure was prompted not by the White House, but instead by a rulemaking petition filed in 2007 by investor groups, NGOs, and senior

^{7.} John M. Broder, *Obama Affirms Climate Change Goals* N.Y. Times (Nov. 18, 2008), https://www.nytimes.com/2008/11/19/us/politics/19climate.html [https://perma.cc/9DTX-KAVN].

^{8.} Cass R. Sunstein, *Changing Climate Change*, 2009–2016, 42 Harv. Env't. L. Rev. 231, 245 (2018).

^{9.} See Christopher J. Bailey, Assessing Obama's Climate Change Record, 28 Env't Pol. 847, 847–48 (2019); David Bookbinder, The Obama Climate Legacy, Niskanen Ctr. (Apr. 11, 2017), https://www.niskanencenter.org/greenwashing-obama-climate-legacy [https://perma.cc/C8SV-SXCX].

^{10.} Remarks on Financial Regulatory Reform, 1 Pub. Papers 843 (June 17, 2009), available at https://www.govinfo.gov/content/pkg/PPP-2009-book1/pdf/PPP-2009-book1-doc-pg843–2.pdf [https://perma.cc/2XW3-H6MC].

government officials from California, New York, Vermont, and nine other states.¹¹ President Obama did not publicly announce his support for or offer any opinions on this issue. Nevertheless, the SEC's vote in favor of the petition was led by its new Chair, Mary Schapiro, whom President Obama appointed on his first day in office—January 20, 2009.

In 2017, almost immediately after taking office, President Trump submitted a notice to withdraw the United States from the Paris Agreement and started to unwind domestic regulation and policies on climate change. Many of these policies had been pursued via Executive Action under the Obama Administration and so were easily undone by the incoming Administration.¹² The U.S. departure from the Paris Agreement had a negative effect on international efforts to mandate climate-related disclosures within the Group of 20 or G-20 (an intergovernmental forum of finance ministers and central bank governors from the world's largest economies).¹³ President Trump appointed Jay Clayton as Chair of the SEC in 2017 as part of the Administration's deregulatory agenda for financial firms and markets.¹⁴ In his statement announcing the nomination of Clayton, President Trump expressed a desire to undo the many regulations that he believed stifled investment in American businesses.¹⁵ During Clayton's tenure, the SEC did not issue any new rules on climate-related disclosures, and, in fact, issued a number of regulations which restricted shareholder voting, and which limited investors' ability to request climate risk disclosures.16

^{11.} Petition for Interpretive Guidance on Climate Risk Disclosure, California Public Employees' Retirement System, et al., Petition for Rulemaking, (Sec. Exch. Comm'n, Sept. 18, 2007), https://www.sec.gov/rules/petitions/2007/petn4–547.pdf, [https://perma.cc/7UPB-P2MX].

^{12.} See Chris Wold, Climate Change, Presidential Power, and Leadership: "We Can't Wait," 45 Case W. Res. J. Int'l L. 303, 304–07 (2012) (noting that even though the Obama Administration demonstrated some progressive action on climate change, the issue was not pursued with sufficient urgency and the action that was taken was done primarily through executive action which is vulnerable to changing administrations).

^{13.} Ciara Linnane, *Trump Administration Stymies Push for Improved Climate-Risk Disclosure Among Companies*, MarketWatch (Jul. 31, 2017, 3:26 PM), https://www.marketwatch.com/story/trump-administration-stymies-push-for-better-climate-risk-disclosure-2017–07–24 [https://perma.cc/8B99-UW2R].

^{14.} Brian V. Breheny, et al, *Trump's Focus on Deregulation Could Shape SEC Priorities in 2017*, Skadden (Jan. 30, 2017), https://www.skadden.com/insights/publications/2017/01/trumps-focus-on-deregulation-could-shape-sec-prior [https://perma.cc/E4MP-7KSS]; Marcy Gordon, *SEC Chair Clayton Leaving Post as Top Financial Regulator*, AP News (Nov. 16, 2020), https://apnews.com/article/joe-biden-donald-trump-financial-markets-jay-clayton-financial-crisis-6ae5762ae1edd38cc34f4857934751e2 [https://perma.cc/A2AP-8ANV].

^{15.} Renee Merle, *Trump to Tap Wall Street Lawyer Jay Clayton to Head SEC*, Wash. Post (Jan. 4, 2017, 11:40 AM), https://www.washingtonpost.com/news/wonk/wp/2017/01/04/trump-to-tap-wall-street-lawyer-jay-clayton-to-head-sec [https://perma.cc/HCU5-SXUB].

^{16.} See e.g. Press Release, Sec. Exch. Comm'n, SEC Adopts Amendment to Modernize Shareholder Proposed Rule (Sept. 23, 2020), https://www.sec.gov/news/press-release/2020–220 [https://perma.cc/238X-J5VJ] (among other things, raising the threshold

The political landscape on climate change shifted dramatically with the Biden Administration. Climate change has been high on President Biden's agenda since the early days of his Presidential campaign in 2019, when he announced an ambitious plan to address climate change and environmental justice. The President's goal is to "ensure the U.S. achieves a 100% clean energy economy and reaches net-zero emissions no later than 2050." On his first day in office, President Biden both re-joined the Paris Agreement and signed Executive Order 13990, which directed agencies to immediately commence work to confront the climate crisis. One week later, President Biden signed Executive Order 14008, which incorporated the goal to achieve net-zero emissions by 2050, originally laid out in President Biden's campaign, and set out a whole-of-government approach to climate change policy. It also established a federal government policy to "drive assessment, disclosure, and mitigation of climate pollution and climate-related risks in every sector of our economy."

Executive Order 14008 also mandated action by financial regulators. It called for the preparation of a Climate Finance Plan focusing on international climate finance.²¹ The final version of this plan was published on April 22, 2021.²² It called for a large-scale increase in international climate finance, noted that the U.S. Treasury will work with U.S. regulators to support and guide the International Financial Reporting Standards Foundation, the International Organization of Securities Commissions (IOSC), and the Financial Stability Board (FSB) towards shaping consistent, comparable and reliable climate-related financial disclosures including through recommendations and international standards.²³ Finally, Executive Order 14008 directed the Secretary of the Treasury to participate in international fora and institutions working on

amount and duration of ownership of shareholding for shareholder proposals to be included in proxy statements); Public Statement of Sec. Exch. Comm'n Commissioner Robert J. Jackson Jr., Statement on Proposals to Restrict Shareholder Voting (Nov. 5, 2019), https://www.sec.gov/news/public-statement/statement-jackson-2019–11–05-open-meeting [https://perma.cc/3XRY-L3Z7] (critiquing the amendment as reducing the accountability of CEOs and corporate management to investors).

^{17.} Valerie Volcovici, *Biden Unveils \$1.7 Trillian Climate Plan to End U.S. Carbon Emissions by 2050* Reuters (June 4, 2019) https://www.reuters.com/article/us-usa-election-biden-climate/biden-unveils-1–7-trillion-climate-plan-to-end-u-s-carbon-emissions-by-2050-idUSKCN1T515R [https://perma.cc/584F-K97W].

^{18.} Exec. Order No. 13990, Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, 86 Fed. Reg. 7037 (Jan. 20, 2021).

^{19.} Exec. Order No. 14008, Tackling the Climate Crisis at Home and Abroad, 86 Fed. Reg. 7619, 7622 (Jan. 27, 2021).

^{20.} Id.

^{21.} Id. at 7620.

^{22.} THE WHITE HOUSE, U.S. INTERNATIONAL CLIMATE FINANCE PLAN 12 (Apr. 22, 2021), https://www.whitehouse.gov/wp-content/uploads/2021/04/U.S.-International-Climate-Finance-Plan-4.22.21-Updated-Spacing.pdf [https://perma.cc/47J8-UGAP].

^{23.} Id. at 12.

managing climate-related risks.²⁴ This international collaboration is important, as the U.S. has fallen behind its allies on the issue of climate-related disclosures.

On May 20, 2021, President Biden signed an executive order addressing climate-related financial risk, declaring it the policy of his Administration to advance "consistent, clear, intelligible, comparable, and accurate disclosure of climate-related financial risk". In setting out the new policy, Executive Order 14030 comments that the failure of financial institutions to appropriately and adequately account for and measure climate-related financial risks threatens the competitiveness of U.S. companies and markets, the life savings and pensions of U.S. workers and families, and the ability of U.S. financial institutions to serve communities. The Order specifically includes the enhancement of climate-related disclosures by regulated entities, supporting the SEC's recent call for comments on whether corporate disclosure rules should be expanded to explicitly address climate-related risks.

As an independent agency, the SEC is not directly subject to Executive Orders except to the extent permitted by law, and so despite this high level of activity at the executive level, there has been no change in regulatory requirements on climate disclosures at the SEC as of yet. There is no federal regulation that explicitly mandates disclosure on climate-related risks by public corporations. Instead, public corporations (issuers) disclose climate-related risks if they consider them to be material to their business. The current policy gap in the U.S. on climate disclosures is not mirrored abroad, particularly in the EU, where disclosure of ESG indicators, including those related to climate, is becoming a regulatory requirement.²⁸ Other jurisdictions have moved ahead

^{24.} Exec. Order No. 14008, 86 Fed. Reg. at 7620. The Treasury Secretary Chairs the Financial Stability Oversight Council (FSOC), which includes the Chair of the SEC, and can call for agency rulemaking in specific areas as part of the FSOC's mandate to constrain excessive risk in the financial system.

^{25.} Exec. Order No. 14030, Climate-Related Financial Risk, 86 Fed. Reg. 27967, 27967 (May 20, 2021).

^{26.} *Id*.

^{27.} *Id.* at 27968; Madeleine Boyer & Stacey Sublett Halliday, *President Biden Issues Federal Direction on Disclosure of Climate-Related Financial Risk*, NAT'L L. REV. (May 25, 2021), https://www.natlawreview.com/article/president-biden-issues-federal-direction-disclosure-climate-related-financial-risk?amp [https://perma.cc/P6WV-VP8K].

^{28.} For example, in 2017, the High-Level Expert Group on Sustainable Finance issued their key recommendations to clarify investor duties and extend associated time horizons of investments, and to bring greater focus to ESG factors. The Action Plan outlines ten reforms in three key areas, and is geared towards reorienting private capital to more sustainable investments. It also aims to manage financial risks stemming from climate change, resource depletion, environmental degradation and social issues. One of these key areas is Mainstreaming Sustainability into Risk Management, and includes the recommendation to clarify institutional investors' and asset managers' duties, and to reduce the pressure for short-term performance by increased transparency. See, Action Plan: Financing Sustainable Growth, COM (2018) 97 final (Aug. 3, 2018). The EU 10-point Action Plan for sustainable finance was followed by three key pieces of legislation to promote private sector investment in sustainable development. These include a Unified EU Green Classification System or

with mandating climate disclosures, and so with no uniform disclosure regulations, the U.S. is out of step with its major counterparts in other leading capital markets.²⁹ Policy gaps are not costless. Lack of uniform risk disclosure around climate change could lead to increasing climate litigation.³⁰ Policy gaps could also lead to unilateral and uneven investor responses to climate litigation and climate-related risks more broadly.

B. Rising Investor Concern

Since the conclusion of the Paris Agreement in 2015, investors have paid more attention to the financial risks of climate change. These concerns have only escalated as the physical and transitional risks of climate change have increased. Scientific reports, which continue to warn of impending catastrophic climate-impacts, have been absorbed by many in the financial sector, particularly institutional investors. The recent 2021 IPCC report expresses clear alarm around the potential impacts of climate change, and the increasingly narrow window available to mitigate its most severe impacts.³¹ Some institutional investors are unilaterally requiring climate information and climate action from the corporations they invest in.

Financial-related concerns over climate change became an international priority with the September 2015 speech by Mark Carney, the then Governor of

- 29. See Virginia Harper Ho, Nonfinancial Risk Disclosure and the Costs of Private Ordering, 55 Am. Bus. L.J. 407, 424 (2018).
- 30. There has been significant scholarly work on climate litigation around the globe, see, e.g., David Markell & J.B. Ruhl, An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?, 64 Fla. L. Rev. 15 (2012); U.N. Env't Programme, The Status of Climate Change Litigation: A Global Review (2017), http://columbiaclimatelaw.com/files/2017/05/Burger-Gundlach-2017-05-UN-Envt-CC-Litigation.pdf [https://perma.cc/BNT5-JPLH]; R. Henry Weaver & Douglas A. Kysar, Courting Disaster: Climate Change and the Adjudication of Catastrophe, 93 Notre Dame L. Rev. 295 (2017); Michael C. Blumm & Mary Cristina Wood, "No Ordinary Lawsuit": Climate Change, Due Process and The Public Trust Doctrine, 67 AM. U. L. Rev. 1 (2017); Jacqueline Peel & Hari M. Osofsky, Climate Change Litigation: Regulatory Pathways to Cleaner Energy (2015); Lisa Benjamin, The Road to Paris Runs Through Delaware: Climate Litigation and Directors' Duties, 2020(2) Utah L. Rev. 313 (2020) (noting an earlier "first wave" of climate litigation in the United States against corporations floundered and failed, but noting a second wave of corporate climate litigation, even if not successful in courts, could implicate directors' duties).
- 31. Intergovernmental Panel on Climate Change, Summary for Policymakers, in Climate Change 2021: The Physical Science Basis 1, 5, 10 (Valérie Masson-Delmotte et al. eds., 2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM. pdf [https://perma.cc/9X8K-7YBZ] ("It is unequivocal that human influence has warmed the atmosphere, ocean and land." and "It is virtually certain that hot extremes (including heatwaves) have become more frequent and more intense across most land regions since the 1950s.").

[&]quot;Taxonomy," legislation requiring that corporations and investors disclose to their clients the impact of sustainability (ESG factors) on financial returns and the impact of their investment decision on sustainability (applicable from March 2021), and finally Climate Benchmarks and Benchmarks' ESG Disclosures (creating a new category of low-carbon benchmarks, which provides investors with better information on the carbon footprint of their investments).

the Bank of England, to insurers at Lloyds of London.³² Dubbed an "unlikely climate champion" as a former Goldman Sachs banker,³³ Carney highlighted the enormous risks that climate change posed to UK investors. Carney's speech was couched in the language of risk, and set out the broad and systemic risks that climate change poses to financial systems and financial stability, as well as the critical role that financial policy makers have in addressing these systemic risks.³⁴ The timing and location of his speech were as important as its contents. His speech preceded the conclusion of the Paris Agreement on Climate Change in December 2015 and ushered in the formation by the Financial Stability Board of the G20 of the Task Force on Climate-related Financial Disclosures (TCFD) in 2015.35 As a member of the FSB, the SEC contributed to the formation of the TCFD guidance, and so is familiar with its requirements. The TCFD guidance on climate-related disclosures has quickly become the international standard for public corporations around the world, supported by thousands of asset owners, central banks, financial regulators, and institutional investors.³⁶ One of those supporters is BlackRock, which issued significant statements in the past two years regarding its shifting expectations on climate disclosures from the corporations it invests in.

BlackRock is the world's largest asset management firm, and one of the "big three" indexed funds in the United States. In January 2020, BlackRock released its annual letter to CEOs from Larry Fink, as well as a letter from BlackRock's Executive Committee to BlackRock's clients. Both letters centered on the risks of climate change. In his letter to CEOs, Larry Fink noted that climate change has become a defining factor in companies' long-term prospects.³⁷ Fink also noted that climate risk is compelling investors to reassess core assumptions about modern finance. While markets have been slow to reflect climate risk, he believes that a fundamental reshaping of finance is about to occur. Citing reports from the Intergovernmental Panel on Climate Change, Fink stated that the risks of climate change are now investment risks,

^{32.} Mark Carney, Governor of the Bank of Eng. & Chairman of the Fin. Stability Bd., Breaking the Tragedy of the Horizon – Climate Change and Financial Stability, Speech Given at Lloyd's of London, at 11, (Sept. 29, 2015), https://www.bankofengland.co.uk/speech/2015/breaking-the-tragedy-of-the-horizon-climate-change-and-financial-stability [https://perma.cc/H5VS-5NRV].

^{33.} Ed King, *Mark Carney, the Unlikely Climate Champion*, CLIMATE HOME NEWS (Dec. 15, 2016, 4:53pm) https://www.climatechangenews.com/2016/12/15/mark-carney-the-unlikely-climate-champion [https://perma.cc/V6GN-FVA8].

^{34.} Lisa Benjamin, Companies and Climate Change: Theory and Law in the United Kingdom 173–174 (2021).

^{35.} Id. at 173.

^{36.} Support the TCFD, TASK FORCE ON CLIMATE-RELATED DISCLOSURES, https://www.fsb-tcfd.org/support-tcfd [https://perma.cc/L9TP-5JMG] (last visited Oct. 24, 2021).

^{37.} Letter from Larry Fink, Chairman & Chief Exec. Officer, BlackRock, Larry Fink's 2020 Letter to CEOs: A Fundamental Reshaping of Finance (2020), https://www.blackrock.com/corporate/investor-relations/2020-larry-fink-ceo-letter [https://perma.cc/4T5J-34L9].

and that climate risks are driving a profound reassessment of capital allocation. The letter states that every government, company, and shareholder must confront climate change.

A significant section of the 2020 letter emphasizes the need for improved climate disclosure for shareholders, particularly the need for a widespread and standardized approach to reporting. In order to make sustainability the new standard for investing, BlackRock identified three major issues that must be addressed: the need for a common framework on environmental, social, and governance investing, transparent data, and objective metrics that can empower asset owner choice. In assessing international jurisdictional approaches, the BlackRock policy note highlights that the U.S. stands apart from other jurisdictions by not having prescribed regulations on ESG disclosures. Instead, the U.S. relies on the SEC principles-based materiality threshold. The BlackRock policy states that different jurisdictional approaches can cause confusion, and a cohesive and better-aligned set of standards would be useful to investors.

The 2020 BlackRock letter to CEOs was prescriptive about climate disclosures. It asked companies that BlackRock invests in to publish disclosures in line with the Sustainability Accounting Standards Board standards and disclose climate risks in line with the TCFD guidance. In particular, the letter asked companies to disclose their plans for operating under a scenario where the parties to the Paris Agreement reach the treaty's goal of limiting global warming to well below two degrees, as expressed by the TCFD guidelines. If a company fails to make robust disclosures, BlackRock will assume that companies are not adequately managing climate risk. BlackRock also believes that directors should be held accountable for lack of appropriate disclosures, and it stated its intention to vote against the management and directors of companies that are not making sufficient progress on sustainability-related disclosures. In the absence of federal regulations, BlackRock decided to take action and impose its own disclosure requirements voluntarily, announced through this letter in 2020. In his 2022 letter, Fink stressed the financial benefits of ESG investing and stakeholder capitalism.41

BlackRock was a founding member of the TCFD, and the same month as the letter was issued to CEOs, BlackRock joined Climate Action 100+, an investor-led coalition designed to pressure the largest polluting companies to reduce their emissions. Of course, there is no certainty regarding whether or

^{38.} Barbara Novick et al., Towards a Common Language for Sustainable Investing, BlackRock Public Policy 3 (Jan. 2020), https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-towards-a-common-language-for-sustainable-investing-january-2020. pdf [https://perma.cc/W35N-7PH2].

^{39.} *Id*. at 5.

^{40.} Id. at 6.

^{41.} Letter from Larry Fink, Chairman & Chief Exec. Officer, BlackRock, Larry Fink's 2022 Letter to CEOs: The Power of Capitalism (2022), https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter.

how BlackRock will implement these approaches, and BlackRock had been criticized for not acting more aggressively and supporting climate-related shareholder proposals.⁴² In addition, there are valid concerns regarding investors unilaterally taking up the mantel of regulators in this way.⁴³

In May 2021, Black Rock supported a startling move by activist hedge fund investor Engine No. 1 to replace several ExxonMobil directors with Engine No. 1's candidates.⁴⁴ On May 26, 2021, Engine No. 1's nominees were elected by ExxonMobil shareholders, who were dissatisfied with disappointing financial returns, the corporation's lack of action on climate change, and the lack of disclosure over climate-related risks facing the firm. 45 Engine No. 1 also urged the corporation to pledge to reduce its emissions to net-zero by 2050, warning that this was "not just a climate issue but a fundamental investor issue—no different than capital allocation or management compensation—given the immense risk to ExxonMobil's current business model in a rapidly changing world."46 A similar call to action—framed as a non-binding shareholder proposal—won the support of the majority of investors in Chevron on May 26, 2021 as well.⁴⁷ While the Chevron proposal does not include an emissions reduction target, it illustrates investors' growing frustration regarding the lack of climate action by these public corporations. It also illustrates rising investor concern about the lack of disclosure by these firms in light of the significant risks climate change poses to their businesses. These recent events are part of a long line of investor-led initiatives on climate change, illustrating mounting concern by investors over the financial impacts of climate change. Investors are clamoring for more and better information by issuers on climate-related risks, but not all issuers are enthusiastic about making these disclosures.

C. Business Resistance

Despite the high levels of risk involved, requiring disclosure of climate-related risks from public corporations remains a challenging regulatory issue. Public corporations systematically underreport the risks that climate

^{42.} Attracta Mooney, *BlackRock Accused of Climate Change Hypocrisy*, Fin. Times (May 17, 2020), https://www.ft.com/content/0e489444–2783–4f6e-a006-aa8126d2ff46 [https://perma.cc/655K-REDV].

^{43.} Madison Condon, Externalities and the Common Owner, 95 WASH. L. REV. 1 (2020).

^{44.} Svea Herbst-Bayliss, *BlackRock Backs 3 Dissidents to Shake up Exxon Board – Sources*, Reuters (May 25, 2021, 12:36 PM) https://www.reuters.com/business/energy/exclusive-blackrock-backs-three-director-nominees-challenging-exxons-board-2021–05–25 [https://perma.cc/3NZV-6VBY].

^{45.} Steven Mufson, *The Fight for the Soul – and the Future – of ExxonMobil*, Wash. Post (May 22, 2021, 4:00 AM) https://www.washingtonpost.com/climate-environment/2021/05/21/exxon-faces-shareholder-revolt-over-climate-change [https://perma.cc/B5H5-P7HM].

^{46.} Id.

^{47.} Chevron Investors Back Proposal for more Emissions Cuts, Reuters (May 26, 2021, 11:44 AM) https://www.reuters.com/business/energy/chevron-shareholders-approve-proposal-cut-customer-emissions-2021–05–26 [https://perma.cc/RT22-L4HX].

change poses to their businesses. This resistance stems from two factors. The first is that assessing the risks of climate change to any particular business is complex. Climate change is a classic collective action problem, and a "super wicked" policy problem.⁴⁸ Climate science is complex and involves elements of risk, probability, and uncertainty. There are uncertain temporal delays between emissions and their effects. Climate science relies on models that anticipate various societal and political trajectories, and there is always some uncertainty on the potential severity of impacts.

The second factor is that disclosure of climate risks could harm investment opportunities in the businesses that disclose these risks. Certain issuers are extremely vulnerable to climate-related risks, and so they may not want to disclose these risks to investors. Firm managers are incentivized not to disclose negative information that may reduce share prices and their executive compensation. They may overemphasize, and potentially greenwash, their positive climate activities but underemphasize the risks posed to their businesses from climate change. Business resistance to disclosure is compounded by agency reluctance to regulate climate disclosures.

The SEC's approach to climate disclosures shifted with the most recent change in administration. In early 2021, the SEC solicited comments on its existing policies on climate-related disclosures.⁵⁰ The agency also announced its intention to enhance monitoring and enforcement of climate-related risks and created a Climate and ESG Task Force in the Division of Enforcement of the SEC.⁵¹ Prior to this recent activity, the agency had been slow to react to investor concerns highlighted above. This is in part due to continuous business resistance to mandatory disclosure requirements.

Responses and comments from industry actors to any proposed climate disclosure rulemaking are important. While many businesses, such as

^{48.} Richard J. Lazarus, Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future, 94 Cornell L. Rev. 1153, 1159 (2009).

^{49.} Kevin Crowley, *Chevron 'Greenwashing' Targeted in Complaint Filed with FTC*, Bloomberg (Mar. 16, 2021, 5:00 AM), https://www.bloomberg.com/news/articles/2021–03–16/chevron-greenwashing-targeted-in-complaint-filed-with-u-s-ftc [https://perma.cc/Q6B3–9PFH]; *see also* Harper Ho, *supra* note 5, at 441 (citing from behavioral literature that overconfidence, optimism, and hubris sway managers to dismiss potential risks); Benjamin et al., 'Climate-Washing Litigation: Legal Liability for Misleading Climate Communications' (2022) Climate Social Science Network.

^{50.} 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/9UAM-86HY].

^{51.} Press Release, SEC, 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/6W27-Q2LY].

Amazon⁵² and Shell,⁵³ have announced net-zero emission reduction targets, the willingness of these same businesses to disclose the risks that climate change poses to them remains questionable. What corporations say matters,⁵⁴ but what they do matters even more. Not all market actors will be on board. Some businesses support voluntary disclosures, others prefer the existing materiality thresholds, and some support mandatory disclosure regimes. Moving forward, it will be important to not only require the disclosure of climate-related risks by corporations, but also to monitor and penalize false and misleading statements by corporations on climate action. The SEC should play a role in regulating corporate statements on climate risks where those statements may injure investors.

Issuers are economically and politically influential. Large market actors may exert influence not only over the executive branch, but also over independent agencies through the comments they submit to agency regulatory proposals or through litigation contesting the remit of any rulemaking promulgated by the SEC. In fact, the SEC and its independent agency status have been the subject of high-profile cases at both the D.C. Circuit (brought by trade associations closely linked to fossil-fuel-intensive firms),⁵⁵ and, most recently, at the Supreme Court.⁵⁶ Thus, corporate and judicial hostility to agency action remain potential obstacles going forward for the SEC in any climate-related disclosure efforts.

Despite potential obstacles, regulating climate risks is important, and standardized disclosure requirements can be useful for corporations and the general investing public.⁵⁷ Assessing agency prospects for success in this area provides an important piece of the climate solutions puzzle. The absence of uniform agency regulation and lack of enforcement by the SEC means that corporations often publish vague, boilerplate statements about climate change and climate risk. These disclosures provide little to no useful information to investors about the levels of risks that climate change may pose to the businesses they invest in. This means investors cannot make clear, informed choices that avoid or at least mitigate some of the most catastrophic impacts of climate

^{52.} See, e.g., Amazon Sustainability, ABOUT AMAZON https://sustainability.aboutamazon. com [https://perma.cc/WCH8-79ZM] (last visited Oct. 25, 2021) (announcing a net-zero carbon target by 2040 and powering the entire business with renewable energy by 2025).

^{53.} See, e.g.,, Our Climate Target, Shell (last visited Oct. 25, 2021) https://www.shell.com/energy-and-innovation/the-energy-future/our-climate-target.html [https://perma.cc/C82U-TBLJ] (announcing a net-zero emissions target by 2050).

^{54.} See generally Lisa M. Fairfax, The Rhetoric of Corporate Law: The Impact of Stakeholder Rhetoric on Corporate Norms, 31 J. Corp. L. 675 (2006).

^{55.} Nat'l Ass'n of Mfrs. v. S.EC. (NAM III), 800 F.3d 518 (D.C. Cir. 2015).

^{56.} Free Enter. Fund v. Pub. Co. Accounting Oversight Bd., 561 U.S. 477 (2010); Seila Law, LLC v. Consumer Fin. Protection Bureau, 140 S. Ct. 2183 (2020).

^{57.} See Vizcarra, supra note 5, at 2 (noting that in the absence of federal regulatory mandates requiring line-item climate-related disclosures have led to a plethora of private standards that are confusing and lead to investor dissatisfaction).

change. Regulation is designed to cure or remediate information assymetries in markets, and climate-related disclosure is a classic example of information assymetries that harm the investing public. Investors should be fully informed of the risks facing the companies they invest in. This is particularly the case with systemic risks such as climate change, which can damage the integrity of capital markets as a whole. The existing regulatory gap also means capital can be misallocated, delaying the transition away from fossil fuels, and intensifying and worsening the impacts of climate change.

Escalating climate risks are bad for investors, capital markets, and issuers. Well regulated markets, conversely, provide benefits to all market participants, and the public. In the ten years since the publication of the original SEC guidance on climate-related disclosures, the risks of climate change have only escalated in the U.S. and around the world, and so this regulatory void is not costless. The SEC has a variety of regulatory tools available to it to address climate disclosures. It could enforce the existing 2010 guidance, issue updated guidance, and/or promulgate a new rule requiring climate disclosures; however, regulatory action—such as rulemaking—may encounter resistance from issuers, and so agency action on climate disclosures is likely to be subject to judicial review.⁵⁸ As a result, recent pronouncements by the Supreme Court on the status of independent agencies are relevant to any SEC action on climate-related disclosures.

D. Judicial Hostility

For many years, courts deferred to the expertise and independent status of the SEC, and so the agency enjoyed a significant amount of deference in its rulemaking and prosecutorial initiatives.⁵⁹ This level of respect was bolstered by judicial deference constructs such as *Chevron* and *Auer* deference.⁶⁰ Judicial pushback to the administrative state generally, and to the SEC specifically, began in the 1980s.⁶¹ This pushback was illustrated through a series

^{58.} Maintaining the status quo and leaving disclosures to private ordering would allow regulated entities to decide whether climate change is a material risk to their businesses using a principles-based approach, rather than a more prescriptive line-item disclosure basis, but see Margaret E. Peloso, An Approach for Investors, Companies, 37 Env't. F. 27, 27 (2020) (recommending a focus on firm resilience instead by investors and the corporations they invest in) and Michael P. Vandenbergh, Disclosure of Private Environmental Governance Risks, Wm. & Mary L. Rev. (forthcoming 2021), (identifying the risks that the proliferation of private environmental governance and climate initiatives pose in disclosure regimes which do not require their disclosure).

^{59.} Roberta S. Karmel, *Little Power Struggles Everywhere: Attacks on the Administrative State at the Securities and Exchange Commiss*ion, 72 ADMIN. L. Rev. 207, 209 (2020); *see also* SEC v. Chenery Corp., 332 U.S. 194 (1947) (where the Court provided significant deference to the SEC to decide whether it would use rulemaking or adjudication).

^{60.} Karmel, *supra* note 59, at 209–10 (*Chevron* deference has traditionally been applied by courts to agency interpretation of statutory provisions, and *Auer* deference to agency interpretation of regulations.

^{61.} Id. at 210.

of cases at the D.C. Circuit, and also more recent Supreme Court cases, questioning the legitimacy of independent agencies. Decreased deference to the SEC is attributed to increased politicization of the courts and the expanded regulatory remit of the SEC, primarily through the Dodd-Frank Act.⁶² cases, combined with changing judicial attitudes to deference owed to agencies more broadly, increase the risks of rulemaking for the SEC on climate disclosures.

The SEC reflects some of the usual hallmarks of an independent agency. It was established during the New Deal era, and it was structured in order to ensure agency expertise and insulation from presidential control. The original goal of many of the structural features of these early independent agencies was to ensure expert, impartial decision making. The SEC was established with a multimember Commission with partisan balance. The Chair is appointed by the President, the agency has broad litigation authority, and its five Commissioners enjoy implicit protection from removal. Despite its assumed independence, the agency has been involved in a number of high-profile cases regarding the status of independent agencies at the Supreme Court. While they did not undermine the SEC's independent status directly, these cases illustrate rising judicial hostility to independent agencies more broadly.

The SEC's enabling statute, the Securities Exchange Act of 1934,65 omits one of the key hallmarks of an independent agency: explicit for-cause removal protection. Nevertheless, the SEC has long been considered by legislators, courts, and legal scholars to be an independent agency whose commissioners enjoy implied removal protection.66 Two decisions of the Supreme Court placed this assumption in some doubt, with the majority in each case taking a limited approach to Congress's ability to restrict the President's removal power and casting doubt on whether a for-cause removal protection should be recognized absent express statutory language.

In Free Enterprise Fund,⁶⁷ the Court held unconstitutional and severed explicit for-cause removal provisions protecting the removal of members of the Public Company Accounting Oversight Board (PCAOB), an administrative body created to oversee regulation of accounting practices related to securities markets. The Court described this structure as "dual for-cause

^{62.} Id. at 231.

^{63.} See Kirti Datla & Richard L. Revesz, Deconstructing Independent Agencies (and Executive Agencies) 98 CORNELL L. Rev. 769, 772 (2013).

^{64.} *Id.* at 772, 819–20 (identifying several indicia of independent agencies but refuting any hard, binary division of agencies into independent and executive, illustrating many agencies enjoy a spectrum of these indicia. The authors also note that Chairs of independent agencies will often align the agenda of the agency with that of the administration for a number of reasons, being reappointment, access to political rewards, placement in higher level positions, so the appointment of the Chair by the President can be a very effective tool of control).

^{65.} Securities Exchange Act of 1934, 15 U.S.C. § 78a et seq.

^{66.} The SEC is not an Independent Agency, 126 Harv. L. Rev. 781, 781.

^{67.} Free Enter. Fund v. Pub. Co. Acct. Oversight Bd., 561 U.S. 477 (2010).

limitations," contrary to the vesting of executive power in the President under Article II of the Constitution and in contravention of the Constitution's separation of powers.⁶⁸

Although the very finding of "dual for-cause limitations" in *Free Enterprise Fund* suggests the Court accepted the independence of the SEC, some commentators argue that this issue was not squarely raised and thus remains unsettled.⁶⁹ In his dissent, Justice Breyer took issue with this assumption of independence, noting that it is "certainly not obvious that the SEC Commissioners enjoy 'for cause' protection," suggesting that taking away the power of removal should require "very clear and explicit language" and not "mere inference or implication."

A decade later in *Seila Law*,⁷¹ the Supreme Court again considered the validity of a for-cause removal provision concerning an administrative body, the Consumer Finance Protection Bureau (CFPB). The majority of the Court found this agency structure "lacks a foundation in historical practice and clashes with constitutional structure by concentrating power in a unilateral actor insulated from Presidential control," thereby violating the separation of powers.⁷² The decision in *Seila Law* signals growing judicial hostility to the independent status of agencies such as the SEC, although there were many statements in the judgment that implicitly assumed the independence of the SEC. While the court showed great skepticism toward independent agencies generally, if an agency is a multimember one and does not wield significant executive power, it is probably safe, for now, from the judicial scrutiny evidenced towards the PCAOB and CFPB.⁷³

Financial agencies are often granted more independence by Congress than normal executive agencies, in order to allow them to make prudent decisions in the short-term that may be necessary but politically unpopular. Political insulation also allows financial regulatory agencies to avoid capture by influential market actors, and so enables them to protect vulnerable segments of the population.⁷⁴

The independent agency status of the SEC is particularly important in the context of climate-related disclosures. The goal of political insulation for independent agencies also serves a broader social utility function—it enables the agency to protect the public, particularly vulnerable segments of the public, by avoiding or minimizing regulatory capture.⁷⁵ This is particularly relevant

^{68.} Id. at 492.

^{69.} The SEC Is Not An Independent Agency, supra note 66, at 781–82.

^{70.} See Free Enter. Fund., 561 U.S. at 546.

^{71.} Seila L. LLC v. Consumer Fin. Prot. Bureau, 140 S. Ct. 2183 (2020).

^{72.} Id. at 2192.

^{73.} Cass R. Sustein & Adrian Vermule, *Presidential Review: The President's Statutory Authority Over Independent Agencies*, 109 Geo. L.J. 637, 639 (2021).

^{74.} Karmel, *supra* note 59, at 211–12.

^{75.} Rachel Barkow, Insulating Agencies: Avoiding Capture Through Institutional

where agencies are dealing with collective action problems where the public is often out-resourced in the political process by well-financed and politically influential special interests. Financial institutions in particular should strive for long-term financial stability and economic growth, which may require unpopular short-term action. Independent agencies such as the SEC may be better able to calculate and cater for low-probability but high-risk catastrophic events that may materialize as a result of climate change. Rising judicial hostility also contributed to agency inertia on rulemaking in general, and in particular on climate and social disclosures.

II. SEC INERTIA ON SPECIALIZED DISCLOSURES

If left unchecked, climate impacts could have significant and cascading impacts across firms and segments of the financial sector. It could rise to the level of a systemic risk, with catastrophic financial and social impacts. Taking advantage of these collective action problems, many public corporations have sown confusion about climate change in an effort to defer or delay regulatory action on climate.⁷⁹ This has also led to confusion on the part of investors as well, further delaying climate action.⁸⁰ Independent agencies, such as the SEC, are important regulatory bulwarks against the escalation of climate risk to systemic-level risks. Past failures to regulate this issue are instructive for agency action moving forward.

The SEC regulates the issuance and trading of stocks, bonds, and other securities in order to protect the investing public and promote the integrity

Design, 89 Tex. L. Rev. 15, 17 (2010); see also Lisa Schultz Bressman & Robert B. Thompson, The Future of Agency Independence, 63 VAND. L. Rev. 599 (2010) (arguing that while independent agencies have long been dominant in financial policy, in fact political oversight and hybrid regulatory relationships with other agencies dilute this binary definition).

^{76.} Barkow, supra note 75, at 19.

^{77.} Id. at 29.

^{78.} Bressman & Thompson, *supra* note 75, at 670 (often called the "tail" or "fat tail" of climate change risk); *see* Michael E. Mann, *The 'Fat Tail' of Climate Change Risk*, HUFFINGTON POST (Sept. 11, 2015, 9:01 AM), https://www.huffpost.com/entry/the-fat-tail-of-climate-change-risk_b_8116264 [perma.cc/7MFU-NQBR]).

^{79.} The Union of Concerned Scientists also enumerate the decades-long campaign described in internal corporate documents carried out by a handful of carbon-major corporations such as Chevron, BP, Shell, ConocoPhillips, ExxonMobil and Peabody Energy to deceive the American public by distorting the realities and risks of climate change, block policies designed to hasten the transition to clean energy, and carry out a coordinated campaign to spread climate misinformation in order to maintain their profitability. See generally Kathy Mulvey & Seth Shulman, The Climate Deception Dossiers: Internal Fossil Fuel Memos Revealed Decades of Corporate Disinformation 1 (2015), https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf [https://perma.cc/TYH3-HB2L] (providing a summary of seven "deception dossiers" of internal company and trade association documents that have been leaked to the public as part of a coordinated campaign to allegedly spread climate misinformation and block climate action); Condon, supra note 5.

^{80.} Condon, supra note 5, at 1.

of capital markets.⁸¹ Investor protection is one of its traditional mandates, as well as the promotion of efficiency, competition and capital formation.⁸² Full and fair disclosure of financial information by regulated entities is considered central to achieving the mandates of the SEC,⁸³ and its statutory mandate to require disclosure is broad.⁸⁴

Disclosure requirements have primarily revolved around financial materiality grounded in a principle-based approach of materiality. Issuers themselves decide whether a risk is material enough to be disclosed. The SEC requires that social and environmental issues be disclosed by issuers. Despite its clear mandate, however, the SEC has a patchy record regulating issues of climate risk. This Part charts past agency failures to effectively regulate climate and specialized disclosures, which can be connected to business resistance and judicial hostility, or simply agency unwillingness to enforce its own guidance and rules to cater for climate risks.

Regulation S-K forms the foundation of mandatory disclosure requirements at the SEC. The key issue in disclosure requirements is whether the information subject to the disclosure meets a threshold of materiality. This principle-based approach is triggered by what an issuer considers to be material. Information has been defined as material if there is a substantial likelihood that a reasonable investor would consider it important in deciding how to vote or make an investment decision. So Since the 1970s, the SEC has maintained disclosure rules regarding environmental liabilities that have a financial impact on issuers. In 2010, the SEC issued guidance informing issuers how and when climate risks may have to be disclosed as material risks. The 2010 guidance was grounded in this principles-based disclosure approach. Also in 2010, under the Dodd-Frank Act, the agency was mandated by Congress to regulate investigation and disclosure of conflict minerals. In 2020, the SEC modernized corporate disclosures, omitting any mention of climate change. All

^{81.} Anne M. Khademian, *The Securities and Exchange Commission: A Small Regulatory Agency with a Gargantuan Challenge*, 62 Pub. Admin. Rev. 515, 518 (2002).

^{82.} Securities Act of 1933, 15 U.S.C. § 77b(b); Securities Exchange Act of 1934,15 U.S.C. § 78c(f).

^{83.} Id. at 515.

^{84.} The SEC can promulgate rules for regulating disclosure "as necessary or appropriate in the public interest" or for "the protection of investors": Securities Act of 1933, 15 U.S.C. § 77b(b); Letter from Jill E. Fisch, Professor of Business Law, University of Pennsylvania Law School, on behalf of Securities Law Professors, to Gary Gensler, Chair SEC, Request for Input on Climate Change Disclosure (Jun. 11, 2021).

^{85.} Basic Inc. v. Levinson, 485 U.S. 224 (1988).

^{86.} See Exchange Act Release No. 33–5170, 36 FR 13989 (July 19, 1971) (regarding environmental disclosures).

^{87. 2010} SEC Comm'n Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290, 6296 (interpreting 17 C.F.R. pts 211, 231, 241) (hereinafter SEC 2010 Climate Change Guidance).

^{88.} Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. § 1502; Securities Exchange Act of 1934, 17 C.F.R. § 240.13p–1.

three of these regulatory initiatives were unsuccessful in regulating specialized disclosures, even though the 2010 Guidance was agency initiated and the conflict minerals rule originated from a Congressional mandate to the SEC.

A. The 2010 SEC Guidance on Climate Change

In 2010, the SEC issued interpretive guidance on climate change disclosures.⁸⁹ The guidance was an interpretive release that did not create any new legal obligations or amend existing legal obligations for regulated entities. The guidance instead clarified that climate-related disclosures could appear under several existing obligations of disclosure under the SEC regime.⁹⁰ The guidance resulted from lobbying efforts by a coalition of environmental groups, politicians, and investors. 91 A formal petition was submitted to the SEC in 2007 and a hearing in the Securities, Insurance, and Investment Subcommittee of the Senate Banking Committee led to the Financial Services Appropriations Bill, which called on the SEC to issue guidance for publicly traded companies to assess and disclose risks from climate change. 92 It took several years for the SEC to respond, and the guidance was approved by only a slight majority of SEC commissioners. At the time, the SEC was under increased scrutiny due to the fallout of the 2008 financial crisis. Commissioner Luis A. Aguilar publicly acknowledged the clear failure of the financial sector in 2008 to allocate capital in economically productive ways and the need to regulate systemic risk.⁹³

The 2010 guidance identified several areas where disclosure obligations may arise, specifically in the description of the business, legal proceedings, risk factors, and the Management's Discussion and Analysis of Financial Condition and Results of Operations. Hem 101 of Regulation S-K requires an issuer to describe its business and that of its subsidiaries. The 2010 guidance noted that in relation to any GHG control mechanisms, Item 101 may require disclosure of any material estimated capital expenditures for environmental control facilities for the remainder of an issuer's current fiscal year and its succeeding fiscal year and for any further periods.

Litigation risks must also be disclosed under Item 103 of Regulation S-K. 95 Item 103 requires affected companies to disclose any "material pending legal

^{89.} SEC, supra note 87.

^{90.} *Id.* at 12–16.

^{91.} Graham Erion, *The Stock Market to the Rescue? Carbon Disclosure and the Future of Securities-Related Climate Change Litigation* 18 Rev. Eur. Comp. & Int'l Env't. L. 164, 167 (2009).

^{92.} Id.

^{93.} Luis A. Aguilar, Comm'r, Speech at the ABA Systemic Risk Panel: Regulatory Reform That Optimizes the Regulation of Systemic Risk (Apr. 16, 2010), https://www.sec.gov/news/speech/2010/spch041610laa.htm [https://perma.cc/4EPD-5C2U].

^{94.} Lorraine Malonza, SEC Climate Change Disclosures: Effects on Businesses, 26(4) Fin. Executive 64, 64 (2010).

^{95. 17} C.F.R. § 229.103 (2021).

proceedings."⁹⁶ It excludes the disclosure of routine litigation incidental to the business. Litigation is not considered routine where it involves proceedings that are material to the business or financial condition of the registrant, proceedings that primarily include a claim for damages or involve potential monetary sanctions or capital expenditures, or where a governmental authority is a party to the proceedings that involve potential monetary sanctions.

Investment risks must be disclosed under Item 503(c) of Regulation S-K, which requires a registrant to include, where appropriate, a discussion of the most significant factors that make an investment in the registrant speculative or risky. The disclosure should clearly state the risk and specify how the particular risk affects the particular issuer. According to the 2010 guidance, this could include any existing or pending legislation or regulation that relates to climate change at the state or federal level and could impact registrants in the energy sector more than others.⁹⁷ The guidance recommends that companies should avoid disclosing generic risk factors and focus instead on specific risks.

The final area where climate risks could be disclosed is under the Management's Discussion and Analysis of Financial Condition and Results of Operations (most commonly referred to as MD&A) under Item 303. MD&A is designed to provide an explanation, in narrative form, of the company's financial statements. Within this context, the MD&A has three overarching objectives: enhance overall financial disclosure, provide insights into the quality and potential variability of the company's earnings and cash flow, and generally provide investors with a view of the company through the eyes of management. The MD&A should include historical and prospective material disclosures that enable investors to assess the financial condition and results of operations of the issuer, and, in particular, the issuer's future prospects. The MD&A should also disclose non-financial information that bears on an issuer's financial condition and operating performance.⁹⁸

In the MD&A, issuers must also disclose known trends, events, demands, commitments, and uncertainties that are reasonably likely to have a material effect on the financial condition or operating performance of the issuer. 99 The 2010 guidance confirms that the time horizon of a known trend, event, or uncertainty may be relevant to an issuer's assessment of the materiality of the matter and whether the impact is reasonably likely. 100

^{96.} *Id.*; see also SEC 2010 Climate Change Guidance, supra note 87, at 6293.

^{97.} Id. at 6296.

^{98.} Id. at 6295.

^{99.} The SEC confirmed that reasonably likely is a lower disclosure standard than "more likely than not." 2002 SEC Release No. 33–8056: Comm'n Statement About Mgmt's Discussion and Analysis of Fin. Condition and Results of Operation 3746, 3747–48 [67 FR 3746].

^{100.} SEC 2010 Climate Change Guidance, supra note 87, at 6294.

As a result, the MD&A analysis will turn upon the issuer's own interpretation of the principle of materiality. The Basic v. Levinson¹⁰¹ definitions of contingent or speculative events are cited in the guidance in regard to materiality. In particular, identification and disclosure of material events will involve the balancing of both the indicated probability that the event will occur against the anticipated magnitude of the event in light of the totality of the corporation's activity. 102 The SEC has specifically stated that Item 303 on MD&A disclosure is more proactive and based on a "reasonably likely standard." If it is not reasonably likely that a known trend, demand, commitment, event, or uncertainty is likely to come to fruition, then no disclosure is required. If it is reasonably likely to come to fruition, management must then determine whether the legislation or regulation, if enacted, is reasonably likely to have a material effect on the registrant, its financial condition, or the results of operations. Unless management determines that a material effect is not reasonably likely, a disclosure is required. As a result, even if there is uncertainty as to the exact nature of the impacts of climate change or the timing of regulatory changes, the magnitude of climate-related events and the high regulatory costs mean that climate risks should, in theory, be disclosed. 103 While the 2010 guidance anticipates most climate-related disclosure will take place in the MD&A, Harper Ho, a prominent academic in the area of securities and ESG risks, notes the narrative form of this category of issuer disclosure makes it unsuitable for detailed climate-related risk disclosure, and very difficult for investors to compare to other corporate disclosures on climate risk. 104

The SEC 2010 guidance was supposed to enhance consistency among regulated entities regarding climate-related disclosures, but instead issuers have largely ignored the guidance based on the notion that climate change is too speculative to disclose. Studies conducted several years after the guidance was issued noted that many investors still did not consider climate risks as material risks, and so issuers did not disclose them. The SEC itself rarely enforced its own guidance, with declining levels of comment letters sent to public corporations from 2010 onwards. Between 2010 and 2013, the SEC sent comment letters to twenty-three public companies regarding the quality of (or lack of) their climate-related disclosures. Between 2014 and 2017, the SEC sent

^{101.} Basic Inc. v. Levinson, 485 U.S. 224 (1988).

^{102.} SEC 2010 Climate Change Guidance, *supra* note 87, at 6294 (quoting Basic Inc. v. Levinson, 485 U.S. 224, 238 (1988) (quoting SEC v. Texas Gulf Sulfur Co., 401 F. 2d 833, 849 (1968))).

^{103.} Erion, *supra* note 91, at 166.

^{104.} Harper Ho, Disclosure Overload?, supra note 5, at 103.

^{105.} Roshaan Wasim, Corporate (Non)Disclosure of Climate Change Information, 119 Colum. L. Rev. 1311, 1332 (2019).

^{106.} JIM COBURN & JACKIE COOK, CERES, COOL RESPONSE: THE SEC & CORPORATE CLIMATE CHANGE REPORTING: SEC CLIMATE GUIDANCE & S&P 500 REPORTING: 2010–2013 (Feb. 2014) (noting that 40 percent of S&P 500 firms did not include any climate related disclosure at all in their 10-K filings in 2013).

comment letters to fourteen public companies, and since 2017, the SEC sent comment letters to only three public companies.¹⁰⁷ Until the Biden Administration took office, the SEC did not enforce the guidance.¹⁰⁸ This may be due to lack of expertise within the agency to assess whether climate-related disclosures are in fact misleading, or it could be due to agency reluctance to enforce its own guidance. While the agency does have some experience promulgating a rule in relation to social harms, business resistance and judicial hostility to the conflict minerals rule proved to be its undoing.

B. The Dodd-Frank Conflict Minerals Rule

The conflict minerals rule was issued in response to a Congressional mandate to the SEC issued under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. However, the rule faced significant resistance from industry and many judicial hurdles were erected, leading to its ultimate demise within the agency. The Dodd-Frank Act included a mandate to the SEC to issue regulations requiring firms using so-called "conflict minerals" to investigate and disclose the origin of those minerals.¹⁰⁹ These minerals include gold, tin, tantalum, and tungsten that originated in or in countries bordering the Democratic Republic of the Congo (DRC). The minerals are used in many products, and so a number of manufacturers through the National Association of Manufacturers (NAM) trade association objected to this requirement for specialized disclosure. Several directors of fossil fuel corporations, such as ExxonMobil and Shell, sit on NAM's board of directors. 110 NAM also funded the formation of the Main Street Investors Coalition, which advocates against mandatory ESG and climate-related disclosures.¹¹¹ The Coalition was a vocal supporter of Trump-era regulations that made it more difficult for investors

^{107.} Colin P. Myers, A Renewed Focus on the SEC's Guidance RegardingDisclosure Related to Climate Change Am. BAR Ass'n (Apr. 12, 2021), https://www.americanbar.org/groups/environment_energy_resources/publications/ed/20210412-a-renewed-focus-on-the-secs-guidance-regarding-disclosure [https://perma.cc/6LGJ-D72X].

^{108.} See Acting Chair Herren Lee, Statement on the Review of Climate-Related Disclosure (Feb. 24, 2021), https://www.sec.gov/news/public-statement/lee-statement-review-climate-related-disclosure.

^{109.} Dodd-Frank Wall Street Reform and Consumer Protection Act. § 1502.

^{110.} Condon, supra note 5, at 38.

^{111.} Main Street Investors Coalition, Leading National Associations Announce Launch of First-of-its-Kind Investor Coalition, Cision (May 22, 2018, 09:00 AM) https://www.prnewswire.com/news-releases/leading-national-associations-announce-launch-of-first-of-its-kind-investor-coalition-300652366.html [https://perma.cc/2FPF-7F9J]; Nell Minow, The Main Street Investors Coalition is an Industry-Funded Effort to Cut Off Shareholder Oversight, HARV. L. SCH. F. ON CORP. GOVERNANCE (Jun. 14, 2018) https://corpgov.law.harvard.edu/2018/06/14/the-main-street-investors-coalition-is-an-industry-funded-effort-to-cut-off-shareholder-oversight [https://perma.cc/NN6V-H6YQ]; James McRitchie, NAM: Stop Supporting 'Main Street Investors' Coalition Say Real Investors, CORPGOV.NET (Jan. 23, 2019) https://www.corpgov.net/2019/01/nam-stop-supporting-main-street-investors-coalition-say-real-investors [https://perma.cc/J4F7-EN6D].

to request and obtain climate-related risk information.¹¹² The congressional mandate under § 1502 of the Dodd-Frank Act was designed to reduce financial support for mining activities that were run by armed rebel groups in the DRC. Removing financial support for those groups was intended to reduce the violence and promote peace and security in a country ravaged by war.

The Conflict Minerals Regulations that the SEC promulgated in 2012 only applied to issuers with products that relied on conflict minerals. It required those issuers to conduct a reasonable country of origin inquiry and to conduct due diligence on the chain of custody. If the issuer found it could not rule out the use of conflict minerals, it had to publish a statement on its website that its products were not DRC-conflict-free. NAM objected to the rule, in particular based on the lack of evidence provided by the SEC of the benefits of the rule to the DRC. The District Court entered summary judgment for the SEC, but NAM appealed. The appeal was affirmed in part and reversed in part by the Court of Appeals and remanded back to the SEC.¹¹³

The Court of Appeals, in its original 2014 decision, dismissed prior D.C. Circuit decisions that required stringent cost-benefit analysis by the agency, finding the SEC had appropriately limited the costs of the final rule. NAM had not disputed the costs of the rule, only its alleged benefits. The Court of Appeals, in 2014, found the SEC had exhaustively considered its own data, as well as cost estimates submitted during the comment period, and so it was reasonable for the SEC not to be able to quantify the benefits of the rule; however, the rule failed on First Amendment grounds instead.

After a series of concurrent decisions regarding restrictions on commercial speech, in particular consideration of the *Zauderer* test¹¹⁵ regarding the constitutionality of compelled speech, the D.C. Circuit reheard the decision *en banc* in 2015.¹¹⁶ The rule failed again on First Amendment grounds, but the 2015 decision did focus on the specialized nature of the disclosure requirement and its social, rather than investor, protection aims.¹¹⁷ The SEC itself acknowledged in the preamble of its rule that the rule requiring socially based disclosures was unlike any disclosure rules the SEC normally issues, as it was not designed to protect investors.¹¹⁸ Perhaps due to its international and humanitarian aims, it

^{112.} Condon, supra note 5, at 38.

^{113.} Nat'l Ass'n of Mfrs. et al. v. SEC, 748 F.3d 359 (D.C. Cir. 2014), overruled by Am. Meat Inst. v. United States Dep't of Agric. (AMI), 760 F.3d 18 (D.C. Cir. 2014).

^{114.} Id. at 369.

^{115.} Zauderer v. Office of Disc. Counsel, 471 U.S. 626 (1985) considered in *AMI*, 760 F.3d 18.

^{116.} NAM III, 800 F.3d 518. For a discussion of the series of decisions on commercial speech, which provoked the rehearing, see Recent Cases, First Amendment—Compelled Commercial Disclosures—D.C. Circuit Limits Compelled Commercial Disclosures To Voluntary Advertising, 129 Harv. L. Rev. 819 (2016).

^{117.} NAM III, 800 F.3d 521.

^{118.} There was in fact some agency hesitation from the SEC Chair and critique of the mandate provided to the SEC under § 1502 of the Dodd-Frank Act, see Sean Griffith et al.,

was difficult for the SEC to quantify the benefits of the rule, but the costs were estimated to be very high, ranging between U.S. \$3–4 billion in the first year.

The Court considered the applicability of the *Zauderer v. Office of Disci*plinary Counsel case regarding compelled speech¹¹⁹ and whether it should be applied in cases other than voluntary commercial advertising, as done in *Amer*ican Meat Inst. v. U.S. Department of Agriculture (AMI).¹²⁰

Although it ultimately held that the test in Zauderer did not apply in this case, the Court proceeded to an analysis in the alternative of the test as an alternative ground for its decision to demonstrate that even where it is applied and intermediate scrutiny may apply, the statute and regulations violate the First Amendment. Step one of the test in Zauderer, as outlined in AMI, requires the identification and assessment of the adequacy of government interest motivating the disclosure requirement by businesses. The Court accepted the SEC's description of the government's interest to be the amelioration of the humanitarian crisis in the DRC, and it deemed this to be a sufficient interest. Step two requires an evaluation of the effectiveness of the measure in achieving the aim. It was here that the Court found there was a lack of evidence regarding the benefits of the rule, meaning the rule failed step two. The Court found the benefits cited were purely speculative compared to the high level of costs involved.¹²¹ The Court found there was evidence to the contrary—that forced disclosure would lead miners in the DRC to lose their jobs and flee to join the rebel camps. The SEC had the burden, under step two, to demonstrate the measure it adopted would in fact alleviate the alleged harm to a material degree. 122

The court was particularly troubled by the requirement of the rule that issuers had to tell their consumers that their products were ethically tainted, thus compelling, in the court's view, issuers to confess to "blood on its hands" with no concrete evidence of the benefits of the rule. The Court invalidated the part of the rule requiring this statement, and the rule was remanded back to the SEC; however, the SEC, which was skeptical of the rule to begin with,

The Securities and Exchange Commission – the Next 80 Years, The Fifteenth Annual A.A. Sommer, Jr. Lecture on Corporate, Securities & Financial Law at the Fordham Corporate Law Center, 20 FORDHAM J. CORP. & FIN. L. 623, 629 (2015) (critiquing the attribution of achieving socio-political issues such as conflict minerals and extractive resources to the SEC, which sapped the bandwidth of the agency).

^{119.} Zauderer v. Office of Disc. Counsel, 471 U.S. 626 (1985) cited in *NAM III*, 800 F.3d 522–26.

^{120.} AMI, 760 F.3d 18 (D.C. Cir. 2014).

^{121.} NAM III. 800 F.3d 525.

^{122.} *Id.* at 527. The court may also have been troubled by the expanded remit of the SEC granted by the Dodd-Frank Act, as it imposed too much on state-based jurisdictions over corporations writ-large, *see* Karmel, *supra* note 59, at 231, *c.f.* Carliss N. Chatman, *The Corporate Personhood Two-Step*, 18(3) Nev. L.J. 811 (2018) (arguing that even state jurisprudence omits a critical approach of corporations as entities).

^{123.} NAM III, 800 F.3d 530.

never updated or comprehensively enforced the rule.¹²⁴ This business resistance to agency action on social disclosures, combined with judicial hostility to agency action and agency inertia, led to the SEC failing to enforce any remaining parts of its guidance. This case may be very relevant to any judicial review of an SEC rule on climate-related disclosures because these disclosures may be considered compelled commercial speech. The recent *AFPF v Bonta* Supreme Court decision is relevant in this context and is covered in Part IV below. A brief look at recent business responses to the 2019 and 2020 petitions to the SEC on ESG disclosures will also be instructive for the agency moving forward, before recommendations are provided in the Conclusion.

C. The SEC "Disclosure Effectiveness Initiative," Petitions for ESG and Climate Rulemaking, and 2019–2020 Regulatory Reforms

The SEC has a patchy record regulating ESG and climate disclosures. In the past 10 years, it has effectively ignored calls for regulatory reform in this area. More recently, the SEC issued three calls for public input into updating and modernizing public companies' disclosure requirements under Regulation S-K. In 2014, the then newly appointed Chair Mary Jo White began a "Disclosure Effectiveness Initiative" to identify and reform corporate disclosure requirements, following a report on disclosure regulations prepared by the SEC for Congress in December 2013. The SEC sought public input on this initiative and received over 9,000 comments in response. These public comments then informed the SEC's Concept Release on Business and Financial Disclosure Required by Regulation S-K, published in 2016.

The 2016 Concept Release sought further public input on modernizing disclosure requirements under Regulation S-K, this time setting out 340

^{124.} In 2017 the SEC announced it was halting enforcement of some of the rule, see Sarah N. Lynch, *SEC Halts Some Enforcement of Conflict Minerals Rule Amid Review*, Reuters (Apr. 7,2017,12:23 PM), https://www.reuters.com/article/us-usa-sec-conflictminerals/sec-halts-some-enforcement-of-conflict-minerals-rule-amid-review-idUSKBN1792WX [https://perma.cc/NG4C-TAGA]. The new administration may invigorate enforcement or amendment of this rule, see Dynda A. Thomas, *New Day for the US Conflict Minerals Rule*, NAT'L L. Rev. (Jan. 21, 2021), https://www.natlawreview.com/article/new-day-us-conflict-minerals-rule [https://perma.cc/N4B5-Y2SU].

^{125.} See Spotlight on Disclosure Effectiveness, U.S. Sec. & Exch. Comm'n. (Dec. 13, 2016), https://www.sec.gov/spotlight/disclosure-effectiveness.shtml [https://perma.cc/Z8YB-YLEF]; Report on Review of Disclosure Requirements in Regulation S-K, U.S. Sec. & Exch. Comm'n. (Dec. 2013), https://www.sec.gov/news/studies/2013/reg-sk-disclosure-requirements-review. pdf [https://perma.cc/P75P-X92W]; Thomas White, SEC Disclosure Iniative Encounters Resistance on Capitol Hill, JD Supra (Jul. 1, 2016), https://www.jdsupra.com/legalnews/sec-disclosure-initiative-encounters-85830.

^{126.} Comments on Disclosure Effectiveness, U.S. Sec. & Exch. Comm'n. https://www.sec.gov/comments/disclosure-effectiveness/disclosureeffectiveness.shtml [https://perma.cc/KY58-CHXD].

^{127.} Business and Financial Disclosure Required by Regulation S-K, Release No. 33–10064,81 Fed. Reg. 23915 (Apr. 13, 2016).

questions for consideration relating to existing business and financial disclosure rules, eight of which touched on ESG issues, asking whether they were considered material to investors. Two analyses of the more than 26,500 comments received in response to the 2016 Concept Release (including over 375 unique responses) found that a large majority focused on ESG issues, calling on the SEC to improve how companies disclose ESG information in their public filings. Nevertheless, when the SEC released new rules in 2018 and 2019 for the "Modernization and Simplification of Regulation S-K", it did not introduce any changes to the rules governing how companies provide disclosure of ESG or climate issues or risks. 129

In October 2018, academics Cynthia Williams and Jill Fisch submitted a rulemaking petition explicitly calling for the SEC to develop mandatory rules for ESG disclosure. This petition was signed by investor groups and associated organizations representing more than \$5 trillion in assets under management, including three state treasurers and the California Public Employees' Retirement System (CalPERS). The SEC received over 4,000 comments in response to this petition, including 94 unique responses, of which 93 were in support, with a particular focus on the need for rules governing disclosure of companies' political donations. In August 2019, the SEC received another petition concerning climate change disclosures, asking it to take action to prevent false and misleading statements by issuers on climate change.

The SEC did not publicly respond to either petition, nor were the petitions mentioned when the SEC published another set of proposed rules in August 2019 to modernize the description of business, legal proceedings, and risk factor disclosures required under Regulation S–K ("2019 proposed rules"). The 2019 proposed rules set out a "principles-based" approach

^{128.} Harper Ho, *supra* note 5, at 73; Tyler Gellasch, *Towards a Sustainable Economy: A Review of Comments to the SEC's Disclosure Effectiveness Concept Release*, 15 (Sept. 2016), https://www.ussif.org/Files/Public_Policy/Comment_Letters/Sustainable_Economy_Report.pdf [https://perma.cc/CP5W-CFH8].

^{129.} Harper Ho, *supra* note 5, at 69; *see also* Disclosure Update and Simplification release No. 10532, 83 Fed. Reg. 50,148 (Oct. 4, 2018) (to be codified at 17 CFR pts. 210, 229–30, 240, 249 & 274) and FAST Act Modernization and Simplification of Regulation S-K, 84 Fed. Reg. 12,674 to be codified at 17 CFR pts. 229–30, 239–40, 249, 270 & 274–75 (Apr. 2, 2019).

^{130.} Letter from Cynthia A. Williams et al., to Brent J. Fields, Secretary, SEC, Petition for a Rulemaking on Environmental, Social, and Governance Disclosure (Oct. 1, 2018), https://www.sec.gov/rules/petitions/2018/petn4–730.pdf [https://perma.cc/U84R-KL4K].

^{131.} Comments on Request for Rulemaking on Environmental, Social, and Governance (ESG) Disclosure, U.S. Sec. & Exch. Comm'n., https://www.sec.gov/comments/4–730/4–730. htm [https://perma.cc/76FG-RBGH].

^{132.} Letter from Steve Milloy, to Vanessa Countryman, Acting Secretary, SEC, Petition for Action Regarding Misleading Climate Disclosures (Aug. 13, 2019), https://www.sec.gov/rules/petitions/2019/petn4-751.pdf [https://perma.cc/NR88-VH3G].

^{133.} Modernization of Regulation S-K Items 101, 103, and 105, 84 Fed. Reg. 44,358 (proposed Aug. 23, 2019) (to be codified at 17 C.F.R. 229, 239 & 240).

to broad categories of disclosure information, allowing companies to determine the materiality of information, rather than prescribing specific line-item disclosure requirements. The SEC sought public comments on the 2019 proposed rules, receiving almost 3,000 in response, with 98 unique comments. ¹³⁴ Several comments criticized the "principles-based" approach adopted by the SEC as rolling-back, rather than advancing, disclosure requirements, potentially leading to "a lack of consistency and comparability in issuer disclosures" particularly in respect of ESG and climate-related risks. ¹³⁵ Nevertheless, the final version of the rules released in late 2020 omitted any mention of climate change. ¹³⁶ In January 2020, the SEC issued an additional proposed rule and related interpretive guidance on the modernization of disclosure requirements under Regulation S-K. ¹³⁷ Both the proposed rule and guidance were silent on the issue of climate change.

The omission of climate and ESG disclosure factors is often attributed to agency concern expressed by issuers of over-disclosure, and the fear that this will overload investors with non-material information. Investors, conversely, seem concerned with under-disclosure by issuers. Harper Ho conducted an exhaustive analysis of over 300 comments received by the agency in response to the 2016 Concept Release. Her analysis reveals very different positions put forward by issuers and investors. Most investors' comments focused on under-disclosure of material information by issuers, ¹³⁸ while the majority of issuers' comments asserted that ESG disclosure would overburden investors. ¹³⁹ Issuers were divided on the materiality of ESG issues, although the majority agreed that certain ESG factors were material. ¹⁴⁰ The issuers that identified ESG factors as material were more likely to find that requiring the disclosure of ESG factors should fall within the authority of the SEC. ¹⁴¹ Investors, on the

^{134.} Comments on Proposed Rule: Modernization of Regulation S-K Items 101, 103, and 105 U.S. Sec. & Exch. Comm'n., https://www.sec.gov/comments/s7-11-19/s71119.htm [https://perma.cc/D7KH-8JXB].

^{135.} See Letter from Fiona Reynolds, Chief Executive Officer, Principles for Responsible Investment, to Vanessa Countryman, Sec'y, SEC (Oct. 30, 2019), https://www.sec.gov/comments/s7-11-19/s71119-6368809-196430.pdf [https://perma.cc/DD7J-4WM6]; see also Letter from Thomas L. Riesenberg, Director of Legal and Regulatory Policy, Sustainability Accounting Standards Board, to Vanessa Countryman, Sec'y, SEC (Jan. 22, 2020), https://www.sec.gov/comments/s7-11-19/s71119-6682134-205446.pdf [https://perma.cc/3ZGX-MLYK].

^{136.} Modernization of Regulation S-K Items 101, 103, and 105, 85 Fed. Reg. 63,726 (Oct. 8, 2020).

^{137.} Commission Guidance on Management's Discussion and Analysis of Financial Condition and Results of Operations, Release Nos. 33–10751; 34–88094 (Jan. 30, 2020).

^{138.} Harper Ho, *supra* note 5, at 74.

^{139.} Id. at 119.

^{140.} Id. at 116-17.

^{141.} Id.

other hand, uniformly affirmed the SEC's authority in this area to mandate ESG disclosure.¹⁴²

The SEC itself was similarly split on the omission of ESG and climate-related disclosures in its 2020 proposal and guidance. The then SEC Chairman, Jay Clayton, issued a statement regarding the SEC proposals.¹⁴³ A significant section of his statement refers to ESG and climate-related disclosure efforts. His comments note that in his view, the 2010 guidance is sufficient, although he conditioned his comments by stating they may change in light of various factors, including actions by policymakers, actions by market participants, and the availability of new information more generally. He noted one of the major issues associated with climate-related disclosures is the forward-looking nature of disclosures, which are often based on estimates and assumptions that are complex, uncertain, and issuer- and industry- specific. Clayton did note that the SEC was engaging with international counterparts in both bilateral and multilateral forums, including with the Task Force on Climate-Related Disclosures through the Financial Stability Board, of which the SEC is a member. Commissioner Clayton was publicly skeptical about the role the SEC should play in this area. In a 2019 interview, he stated that the SEC should not initiate a rulemaking that standardizes ESG disclosures, as that would contravene the SEC's mandate.¹⁴⁴ He also noted that such an approach would be contrary to the long-standing commitment to a materiality-based disclosure regime and could effectively (and inappropriately) substitute the SEC's judgment for the issuer's judgment on operational matters.

Commissioner Hester M. Peirce was also outspoken in support of the exclusion of climate change and ESG indicators. Commissioner Peirce based her statement on her support for the maintenance of a materiality-focused approach. Peirce noted that calls for an SEC disclosure regime stemmed from "an elite crowd pledging loudly to spend virtuously other people's money." In Peirce's view, the existing principle-based materiality threshold worked well, as it served to assess risks through the prism of a reasonable investor, focusing on the long-term financial value of the firms they invest in. To depart from this test, according to Peirce, would lead to information overload, increased costs, and litigation risks, as well as reduced investment returns,

^{142.} Id.

^{143.} Chair Jay Clayton, Statement on Proposed Amendments to Modernize and Enhance Financial Disclosures; Other Ongoing Disclosure Modernization Initiatives; Impact of the Coronavirus; Environmental and Climate-Related Disclosure, U.S. Sec. & Exch. Comm'n. (Jan. 30, 2020), https://www.sec.gov/news/public-statement/clayton-mda-2020-01-30 [https://perma.cc/X8J4-CVC9].

^{144.} Eve Tahmincioglu, SEC Chief Takes on Short-Termism and ESG' Directors & Boards, Directors & Boards (2019), https://www.directorsandboards.com/articles/single secchief-takes-short-termism-and-esg [https://perma.cc/GB6Z-87MC].

^{145.} Commissioner Hester M. Pierce, *Statement on Proposed Amendments to Modernize and Enhance Financial Disclosures*, U.S. SEC. & EXCH. COMM'N. (Jan. 30, 2020), https://www.sec.gov/news/public-statement/peirce-mda-2020-01-30 [[https://perma.cc/74AL-G22R].

reduced attractiveness of public capital markets, and a misallocation of capital. However, in the context of the systemic risks of climate change, this approach is arguably inadequate.

In contrast, SEC Commissioner Allison Heron Lee publicly critiqued the lack of updated guidance on climate change and the disregard for the "overwhelming" requests from investors that were submitted through comment letters and petitions for rulemaking. 147 Lee stated that investors were asking the SEC to require consistent, reliable, and comparable disclosures of the risks and opportunities related to sustainability measures, particularly climate risk. Commissioner Lee noted that the existing, broad, principles-based "materiality" standard (outlined above) has not produced sufficiently detailed disclosures to ensure that investors receive consistent, reliable, and comparable disclosures, 148 and she advocated for more action from the SEC on this issue. These public statements pointed to a heated debate within the SEC in 2020 on the issue of climate-related disclosures. ¹⁴⁹ After the 2020 election, Allison Heron Lee became the Acting Chair of the SEC. At the same time, the agency began to focus its regulatory efforts on climate-related disclosures. The agency's approach to climate-related disclosures has changed dramatically. Part III demonstrates the critical role that the SEC can play in requiring transparency by issuers on the risks that climate change poses, and why this type of regulatory action is so important.

III. THE SEC AND CLIMATE RISK

This Part illustrates the systemic nature of climate risk and why it is important for the SEC to regulate these types of risks. While the SEC is ostensibly an independent agency, it is not entirely insulated from executive influence, and perhaps more importantly, from the influence of market actors. Any change in direction by these political and market actors in connection with climate disclosures will be important for agency action going forward. These shifts in approaches are primarily due to the escalating risks of the negative impacts of climate change (or climate risks). It is no longer a question of whether public companies will disclose climate-related risks, but how they will disclose them.¹⁵⁰ This Part also assesses comments from the public, focusing on investors and issuers, in response to the SEC's 2021 recent call for comments on climate-related disclosures.

^{146.} Id.

^{147.} Commissioner Allison Herren Lee, 'Modernizing' Regulation S-K: Ignoring the Elephant in the Room, U.S. Sec. & Exch. Comm'n. (Jan 30, 2020), https://www.sec.gov/news/public-statement/lee-mda-2020-01-30 [https://perma.cc/4YPR-F69U].

^{148.} Id.

^{149.} Cydney Posner, SEC Debate on Climate Disclosure Regulation Gets Heated, Cooley PubCo (Feb. 6, 2020), https://cooleypubco.com/2020/02/06/sec-debate-climate-disclosure-regulation [https://perma.cc/H762-XZC].

^{150.} Vizcarra, supra note 5.

The risks of climate change are extremely high, not only to the general public but to financial entities, including those regulated by the SEC. Many of these entities are public corporations, so the financial risks of climate change extend to the investors in those corporations. Investors in public corporations are primarily pension funds or mutual funds, and so climate risks threaten the financial stability of many Americans' investment portfolios. Although the levels and probabilities of risk are uncertain and could be better, or (more likely) worse,¹⁵¹ than expected, climate change is estimated to cost between US \$4 to \$43 trillion by the end of the century, and the risks are so great they could threaten international fiscal stability.¹⁵² Climate-related risks are usually categorized as physical risks from climate-related impacts, liability risks

^{151.} See Intergovernmental Panel on Climate Change [IPCC], Climate Change 2007 SYNTHESIS REPORT 5 (Lenny Bernstein et al. eds, 2008), https://www.ipcc.ch/site/assets/ uploads/2018/02/ar4 syr full report.pdf [https://perma.cc/6SCF-4M4B] ("There is very high confidence that the net effect of human activities since 1750 has been one of warming."); Intergovernmental Panel on Climate Change [IPCC], Climate Change 2014 Synthesis REPORT SUMMARY FOR POLICYMAKERS 2, 4, 8 (2014), https://www.ipcc.ch/pdf/assessmentreport/ar5/syr/AR5_ SYR_FINAL_SPM.pdf [https://perma.cc/AV2R-87QJ] (providing a report on a number of environmental factors including: atmospheric concentrations of carbon dioxide, methane and nitrous oxide [being] unprecedented in at least the last 800,000 years;" "[w]arming of the climate system is unequivocal;" and "[c]ontinued emission of greenhouse gases will cause further warming and long-lasting changes . . . increasing the likelihood of severe, pervasive and irreversible impacts for people and ecosystems."), [hereinafter IPCC, CLIMATE CHANGE 2014]; Kendra Pierre-Louis, Ocean Warming Is Accelerating Faster Than Thought, New Research Finds, N.Y. TIMES (Jan. 10, 2019), https:// www.nytimes.com/2019/01/10/climate/ocean-warming-climate-change.html [https://perma. cc/YW28-DZDW] ("[T]he world's oceans are warming far more quickly than previously thought "); Brett Molina, 'Dangerous' Antarctic Glacier Has a Hole Roughly Two-Thirds Area of Manhattan, Scientists Warn, USA Today (Jan. 31, 2019, 7:38 AM), https://www. usatoday.com/story/tech/news/2019/01/31/thwaites-glacier-antarctica-melting-could-impactsea-levels-nasa/2729840002 [https://perma.cc/G3R6-3ZAU] ("Thwaites has been described as one of the world's most dangerous glaciers because its demise could lead to rapid changes in global sea levels."); Intergovernmental Panel on Climate Change [IPCC], Summary FOR POLICYMAKERS, IN CLIMATE CHANGE AND LAND: AN IPCC SPECIAL REPORT ON CLIMATE Change, Desertification, Land Degradation, Sustainable Land Management, Food SECURITY, AND GREENHOUSE GAS FLUXES IN TERRESTRIAL ECOSYSTEMS, (Valérie Masson-Delmotte et al. eds., 2019), https://www.ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM_ Updated-Jan20.pdf [https://perma.cc/CWC4-9YJ6] (stating with high confidence that since the pre-industrial period, the land surface air temperature has risen nearly twice as much as the global average temperature and that climate change, including increases in frequency and intensity of extremes, has adversely impacted food security and terrestrial ecosystems as well as contributed to desertification and land degradation in many regions).

^{152.} Mark Carney, in his position as the Governor of the Bank of England, highlighted the potential risks of climate change to both industries and international fiscal stability. He noted that climate change could negatively affect between four to forty-three trillion dollars of global assets by the end of the century. See The Economist Intelligence Unit, The Cost of Inaction: Recognizing the Value At Risk from Climate Change (2015), https://eiuperspectives.economist.com/sites/default/files/The%20cost%20of%20inaction_0.pdf [https://perma.cc/6X2E-MYLK].

from litigation, and transition risks fom changing regulatory requirements.¹⁵³ As these risks become clearer over time, governments and businesses are becoming increasingly concerned about the risks climate change poses to financial systems.

A. Physical and Transition Risks of Climate Change

Climate change poses physical and transition risks to societies, firms, and financial systems. However, measuring and managing climate risk is complex, partly because climate science itself is complex. Climate science relies on models and forecasts, and the level of severity of impacts of climate change can be uncertain. Some risks, such as physical risks due to sea level rise, can be easier to anticipate and measure based on climate models. More frequent and severe weather events such as floods, droughts, and storms can do physical damage to critical infrastructure and to assets owned by individuals and firms. Standard & Poor has concluded that corporate physical assets are increasingly in harm's way as the impacts of climate change intensify over time. Decreases in housing prices could have impacts on the real economy, possibly making some risks and properties uninsurable. Certain sectors are more at risk than others. For example, the insurance industry is increasingly concerned about the risks of climate change. The real estate industry may also be neg-

^{153.} Mark Carney's 2015 speech to insurers in Lloyds of London stated that the risks of climate change are threefold: physical risks to insured assets, liability risks from litigation, and transition risks, including financial risks from changing regulatory requirements to transition to a lower-carbon economy. He also highlighted the role of initial lawsuits against pension fund managers of carbon major companies in elevating long-term risks of climate change and their implications for fiduciary duties. His speech at Lloyds of London in 2015 was the precursor to the establishment of the Task Force on Climate-Related Financial Disclosures by the G20. Nina Chestney, *G20 Task Force Issues Framework for Climate-Related Financial Disclosure*, Reuters (June 28, 2017, 11:08 PM), https://www.reuters.com/article/us-climatechange-financial-disclosure/g20-task-force-issues-framework-for-climate-related-financial-disclosure-idUSKBN19K0JW [https://perma.cc/39VU-TXW2].

^{154.} Guatam Naik and Rick Lard, Corporate Physical Assets Increasingly in Harm's Way as Climate Change Intensifies, S&P GLOBAL SUSTAINABLE 1 (2021).

^{155.} Thor Benson, *The Climate Crisis is Poised to Make Huge Swaths of America Totally Uninsurable*, Daily Beast (Sept. 15, 2019, 5:00 A.M.), https://www.thedailybeast.com/climate-redlining-could-soon-make-millions-of-us-homes-totally-uninsurable [https://perma.cc/REN8-3YKM] (referring to "climate redlining" affecting coastal properties as well as properties vulnerable to wildfires); Max J. Rudolph, 12th Annual Survey of Emerging Risks 8 (Mar. 2019), https://www.soa.org/globalassets/assets/files/resources/research-report/2019/12th-emerging-risk-survey.pdf (noting that 22 percent of actuaries stated that climate change was their top emerging risk); Christopher Flavelle, *Climate Change And the Nightmare Scenario for Florida's Coastal Homeowners*, Ins. J. (Apr. 20, 2017), https://www.insurancejournal.com/news/southeast/2017/04/20/448504.htm [https://perma.cc/P6P7-Y5W4].

^{156.} Deloitte, Analysis: How Insurance Companies Can Prepare for Risk From Climate Change, https://www.deloitte.com/us/en/pages/financial-services/articles/insurance-companies-climate-change-risk.html [https://perma.cc/JK4V-RQSG].

atively affected.¹⁵⁷ The energy and utilities industries often site production, refinement, and distribution operations in coastal areas that are vulnerable to sea-level rise, storm surges, and flooding.¹⁵⁸ Utilities infrastructure are also vulnerable to heat, as illustrated by the recent bankruptcy and US \$13.5 billion settlement paid by Pacific Gas & Electric due to its role in the California wild-fires.¹⁵⁹ As Madison Condon, a scholar whose work focuses on climate risks, points out, much of the capital stock of infrastructure in the U.S. was built to withstand temperature and weather extremes based on historical models, and these models no longer hold in the context of climate-related extremes.¹⁶⁰ The power outages in Texas in early 2021 due to unanticipated weather extremes are a prime example of this.¹⁶¹

Despite the level of physical risks facing firms, markets are not accurately incorporating these risks into firm value. Bolton and Kacperczyk, carbon pricing and finance experts, found that even in countries exposed to greater damages from climate disasters, there was no significant difference in carbon premiums, suggesting that carbon premiums do not reflect the physical risks of climate change. This is partly due to a lack of precise, asset-level data that investors need in order to accurately assess the physical risk facing a firm's assets. Information currently disclosed in financial reports is often disclosed at the aggregate level, and specific disclosures such as the levels of energy and water used and needed by firms to operate and the locations and levels of exposure of assets, are often missing from these reports. In addition, even if investors are aware of the risks facing a firm due to climate change, they may hold on to

^{157.} Christopher Flavelle, *Rising Seas Threaten an American Institution: The 30-Year Mortgage*, N.Y. Times, June 19, 2020, https://www.nytimes.com/2020/06/19/climate/climateseas-30-year-mortgage.html [https://perma.cc/N3RZ-29CB].

^{158.} Craig Zamuda, et al. 2018: Energy Supply, Delivery, and Demand. In Impacts, Risks, and Adaptation in United States: Fourth National Climate Assessment, Volume II U.S. Global Change Research Program, Washington, DC, USA, 176.

^{159.} Ivan Penn, *PG&E*, *Troubled California Utility*, *Emerges from Bankruptcy* N.Y. Times (July 28, 2020), https://www.nytimes.com/2020/07/01/business/energy-environment/pge-bankruptcy-ends.html [https://perma.cc/TMB3–7Z9V].

^{160.} Condon, supra note 5, at 5.

^{161.} Roshanak Nateghi, *The Texas Blackouts Showed How Climate Extremes Threaten Energy Systems Across the US*, The Conversation (Mar. 2, 2021, 8:24 AM) https://theconversation.com/the-texas-blackouts-showed-how-climate-extremes-threaten-energy-systems-across-the-us-155834 [https://perma.cc/8YC8–56VY]; Alex Klass, *Lawfare Podcast: Alex Klass on the Texas Energy Crisis*, (Feb. 23, 2021), https://www.lawfareblog.com/lawfare-podcast-alex-klass-texas-energy-crisis [https://perma.cc/VGG2–9SUC]; *see also* Danielle Stokes, *Zoning for Climate Change*, 106 Minn. L. Rev. (forthcoming 2021)) (citing the opportunities in the Biden Administration to restructure zoning laws to promote renewable energy infrastructure that can withstand climate extremes).

^{162.} Patrick Bolton & Marcin Kacpercyzk, *Global Pricing of Carbon-Transition Risk*, (Dec. 10, 2020), https://www.frbsf.org/economic-research/files/Transition-Risk_Bolton-12–17–20.pdf [https://perma.cc/NJG7-U3H2].

^{163.} Condon, supra note 5, at 5.

^{164.} Id.

these risky investments, knowing that climate-skeptics or uninformed investors will maintain demand for the investment, at least in the immediate future. This behavior can exacerbate existing, short-term investment habits and delay the much needed transition of capital away from fossil fuel industries, further illustrating the need for uniform climate-related disclosures.

Corporations are failing to account for climate risk, particularly physical risks. Quantitative research conducted by Goldstein looked at 1,630 large companies' voluntary reporting on climate change to investors, focusing on physical risks. The report concludes that companies were not adequately characterizing climate risk in their voluntary reporting or adequately preparing for its impacts. The authors found that the potential magnitude of the financial impacts of climate risk was a key blind spot for companies. Directors and managers were also failing to account for indirect and systemic characteristics of climate risk. Corporations are focusing only on a narrow view of climate risk, perhaps in part due to a predisposition to short-term thinking, the tendency to heavily discount future costs, and the potential of disclosure of climate risks to lead to a corporate disadvantage in the short term.

Climate change also involves transition risks, which are particularly acute for fossil-intensive industries and firms. Policy shifts at the national and international level stemming from the Paris Agreement could lead to a transition to a green economy. New policy imperatives, even voluntary commitments to net-zero emissions by corporations, may lead to significant shifts in asset values and higher costs of doing business, particularly for fossil fuel companies.¹⁷¹ Transition risks include climate liability risks from climate litigation efforts, as well as technology, market changes, and reputational risks. Cash flows at highly exposed firms could decrease as these firms incur higher costs from emissions abatement and possible litigation.¹⁷² These higher costs could lead

^{165.} Id. at 40.

^{166.} Allie Goldstein et al., *The Private Sector's Climate Change Risk and Adaptation Blind Spots*, 9 Nature Climate Change 18, 18 (2018).

^{167.} *Id*.

^{168.} *Id.* It should be noted that the insurance industry has been one of the first movers on climate action, due to their high exposure. *See, e.g.*, Allianz Group & World Wildlife Fund, CLIMATE CHANGE AND INSURANCE: AN AGENDA FOR ACTION IN THE UNITED STATES, UNIVERSITY OF MARYLAND 3 (2006), http://www.climateneeds.umd.edu/pdf/AllianzWWFreport.pdf [https://perma.cc/CSQ7-MALT].

^{169.} Goldstein et al., *supra* note 166, at 20–21, 23. While the authors focused only on physical risks, they compared the estimated price tag of climate change in the trillions of dollars with the aggregate financial risks reported from companies which only amounted to tens of billions of dollars.

^{170.} Id. at 23.

^{171.} BANK OF ENGLAND, CLIMATE CHANGE: WHAT ARE THE RISKS TO FINANCIAL STABILITY?, https://www.bankofengland.co.uk/knowledgebank/climate-change-what-are-the-risks-to-financial-stability [https://perma.cc/7TUN-HAKZ] (last visited Jul. 13, 2021).

^{172.} Bolton & Kacperczyk, supra note 162, at 12.

to credit defaults or firms going out of business.¹⁷³ Reputational risks, including social backlash, could lead to higher discount rates for firms.¹⁷⁴ Bolton and Kacperczyk note that transition risks may already be reflected in markets, although transition risks may not always be linked to exposure to physical risks.¹⁷⁵ Due to their nature, and the inherent uncertainty in regulatory and policy shifts, transition risks can be more difficult to value, measure, and disclose for firms.

Without significant mitigation and adaptation efforts, climate change will negatively affect financial systems around the world. The risks of climate change are estimated to impact a significant portion of global assets, negatively impacting global fiscal stability, with up to 30 percent of global manageable assets at risk.¹⁷⁶ Between now and the end of the century, this could lead to between four to forty-three trillion dollars' worth of assets at risk.¹⁷⁷ A report by SASB in 2021 stated that climate-related risks are now present in 68 of 77 industries, comprising approximately US \$45.1 trillion or 89 percent of U.S. equities by market capitalization.¹⁷⁸

Most industries and firms will be affected by climate change in some way, and action on climate change requires a reallocation of capital. An abrupt devaluation of assets as a result of non-linear climate impacts could lead to pro-cyclical crystallization of losses and a tightening of financial conditions—a Minsky moment—which in itself could jeopardize fiscal stability.¹⁷⁹ A climate-friendly capital re-allocation should ideally take place in a phased and orderly fashion to avoid a "climate Minsky" moment.¹⁸⁰ Public corporations can be an important part of the energy transition. As Vandenbergh and Gilligan note, private environmental governance and corporate activities can achieve major greenhouse gas emission reductions. They estimate that private action could reduce emissions by roughly 1,000 million tons of CO2 per year between 2016–2025.¹⁸¹ In order for this to occur, investors must be informed of

^{173.} Id.

^{174.} Id.

^{175.} Id.

^{176.} Global manageable assets are the total stock of assets held by non-bank financial institutions. *See* The Economist Intelligence Unit, *supra* note 152, at 4.

^{177.} Id. at 2; Goldstein et al., supra note 166, at 18.

^{178.} Sustainability Acct. Standards Bd., Climate Risk Technical Bulletin 5 (2021 ed. Apr. 2021) https://www.sasb.org/knowledge-hub/climate-risk-technical-bulletin/ [https://perma.cc/2WM5-NXLJ].

^{179.} Carney, *supra* note 32, at 13. A Minsky moment refers to the onset of market collapse due to a sudden shift or decline in market sentiment, named after the economist, Hyman Minsky's, credit cycle.

^{180.} Lisa Benjamin & Stelios Andreadakis, Corporate Governance and Climate Change: Smoothing Temporal Dissonance to a Phased Approach, 40 Bus. L. Rev. 146 (2019).

^{181.} Michael P. Vandenbergh & Jonathan M. Gilligan, *Beyond Gridlock*, 40 COLUM. J. ENVTL. Michael P. Vandenbergh & Jonathan M. Gilligan, *Beyond Gridlock*, 40 COLUM. J. ENVT. L. 217, 220 (2015) (identifying private environmental governance as actions by private organizations performed without government collaboration, delegation or outsourcing).

the climate risks facing the firms they invest in. More information on climate risks should, in theory, allow investors to re-allocate their capital appropriately, and it should reduce the costs to investors of submitting shareholder proposals and attempting to compare vague corporate statements regarding climate-related financial risks. Therefore, mandating climate related disclosures will benefit investors and firms, as well as the general public.

The world is entering uncharted territory where stable climatic conditions can no longer be assumed. The risks of climate change are escalating, and climate change will affect most countries and societies in unexpected and often non-linear ways. Impacts will be felt across economies, and they will likely be differentiated across, and even within, industries and amongst firms. These impacts will necessarily have consequences for financial systems, firms and—of course—investors and the companies they invest in.

B. Climate Change as Systemic Risk

The risks of transition to a low-carbon economy are so great that the Financial Stability Board determined that if the re-pricing of assets occurs at an abrupt rate, it could negatively impact global financial stability. Financial institutions, such as banks and other lending agencies, are particularly exposed. These entities provide capital to firms and are often interconnected, so significant impacts in one or several of these institutions can have significant impacts on other capital providers. Impacts on large, complex, and interconnected financial institutions could transmit financial stress throughout the financial system, impacting firms that may not traditionally be considered vulnerable to climate risks. Climate change has now transitioned from an ethical, voluntary issue into a material financial risk for most firms and thus for most investors.

Due to the ubiquity of climate risks across financial systems, investors cannot diversify away from this risk.¹⁸⁴ The level and scale of these risks vary

In the existing government gridlock, Vandenbergh and Gilligan explain that while private actions are a second-best option to government action, these activities are critical and could reduce emissions by roughly 1,000 million tons of CO2 per year between 2016–2025. See id. at 160; Michael P. Vandenbergh, The Drivers of Corporate Climate Mitigation, in The Environmental Forum 29 (2018); Michael P. Vandenbergh, Private Actors: Part of the Problem, Part of the Solution, in Environmental Forum 48 (2017); see Hari M. Osofsky et al., Energy Re-Investment, 94 Ind. L.J. 595, 638 (2019).

- 182. Financial Stability Board, Proposal for a Disclosure Task Force on Climate-Related Risks 1 (Nov. 9, 2015), http://www.fsb.org/wp-content/uploads/Disclosure-task-force-on-climate-related-risks.pdf [https://perma.cc/48JL-D2Z4].
- 183. Gregg Gelzinis & Graham Steele, *Climate Change Threatens the Stability of the Financial System*, Center for American Progress 2 (Nov. 21, 2019, 12:01 AM), https://www.americanprogress.org/issues/economy/reports/2019/11/21/477190/climate-change-threatens-stability-financial-system [https://perma.cc/9CPD-ZVUZ].
- 184. Sustainability Acct. Sstandards Bd., Climate Risk Technical Bulletin 1, 8–9 (2016 ed. Oct. 2016), https://www.eenews.net/assets/2016/10/20/document_cw_01.pdf [https://perma.cc/XZ95-J5Y9].

and can be specific, systematic, and systemic. Specific risks attach to certain industries or even corporations due to their locations, physical infrastructure, business models, technology, or corporate preparedness.¹⁸⁵ Climate risks can also be systematic, as they are inherent to entire markets and are un-diversifiable.¹⁸⁶ Finally, climate risks can be systemic, and they can trigger the collapse of an entire market or financial system.¹⁸⁷

There is no one definition of systemic risk in relation to the financial system. Other than an understanding that systemic risk involves widespread impact, there is little agreement on the type of trigger events or nature of activities that could cause a market meltdown.¹⁸⁸ Lack of a coherent definition leads to problems in effectively regulating systemic risk. 189 After the 2008 financial crisis, Steven Schwarcz, a distinguished professor in law and business, suggested a wider definition, identifying several events and impacts that could be classified as systemic risks. 190 These include cascading and cumulative losses that ignite successive losses within markets or financial institutions, a modest shock that causes volatility in asset prices and significant decreases in corporate liquidity and potential bankruptcies, or a default by one large market participant, which could cause repercussions for other market participants due to the interlocking nature of the financial markets, such as the banking industry. 191 In all three scenarios, there are different triggers and consequences. The loss of availability of capital or increased cost of capital are the two most serious and direct consequences of systemic risk, and they justify its regulation. 192

Due to increased disintermediation, banks are no longer the only sources of capital to industry, and so systemic risk must be approached from not only an institutional, but also a market perspective. 193 Modern finance theory posits that to the extent that a risk affects markets, it can be protected against through the diversification of investments. This theory may not apply in the context of systemic risks. Systemic risks cannot be diversified away, and so institutional investors with a broad range of diversified investments in particular are

^{185.} Id. at 8.

^{186.} Id.

 $^{187.\ \}textit{Id.}\ at\ 9; U.S.\ Commodities\ Futures\ Trading\ Commission, \textit{Managing\ Climate\ Risk\ in\ the\ U.S.\ Financial\ System\ (2021),\ https://www.cftc.gov/sites/default/files/2020-09/9-9-20\%20\ Report\%20of\%20the\%20Subcommittee\%20on\%20Climate-Related\%20Market\%20\ Risk\%20-\%20Managing\%20Climate\%20Risk\%20in\%20the\%20U.S.\%20Financial\%20\ System\%20for\%20posting.pdf.$

^{188.} Aguilar, supra note 93.

^{189.} Traci M. Pribbenow, Comment, *Back in the Saddle Again: But Which Way Do We Go From Here? A View of Agency Suggestions for Systemic Risk Regulation* 60 CASE W. RSRV. L. REV. 559, 560 (2010).

^{190.} Steven L. Schwarcz, Systemic Risk, 97 Geo. L.J. 193, 196–97 (2008).

^{191.} Id. at 198.

^{192.} Id. at 198-99.

^{193.} Id. at 200.

vulnerable to systemic risks.¹⁹⁴ These types of investors may not be able to shift their investments out of vulnerable asset classes to avoid economy-wide impacts, as these would affect their entire portfolio of assets.¹⁹⁵ Schwarcz advocates for a more integrated approach to systemic risk that focuses on critical financial intermediaries such as banks, but also focuses on markets and institutions that are not critical financial intermediaries but that may become vulnerable to, or trigger systemic risks.¹⁹⁶

Efficiency should not be the only motivation for regulating financial markets, as systemic risks pose risks to the entire financial system (as opposed to specific risks within the financial system); therefore, social impacts such as poverty, health impacts, crime, and wider social breakdown should also be considered when regulating systemic risks.¹⁹⁷ Climate change itself poses systemic risks to financial systems, imposes risks to critical social indicators, such as health and public safety, and exacerbates poverty and economic inequality; therefore, it is a systemic risk that should be regulated.

While climate-related disclosures are not a panacea to regulating and mitigating climate risk, mandating climate risk disclosures is an important tool in managing climate change and reducing emissions more broadly. If investors are aware of the risks facing their investments, they can use that information to participate in firm management to avoid, or at least minimize, climate-related risks. Efforts by hedge fund Engine No. 1 to appoint its nominees to the board of directors of ExxonMobil is a prime example of investor behavior targeted at firms to incentivize more climate-related management behavior. Investors could also diversify their investments away from fossil-fuel intensive firms, and towards more climate-friendly products, services, and firms. The net-zero energy transition will require an estimated US \$5 trillion in investment over the coming decades, with institutional investors expected to play a key role.¹⁹⁸ Conversely, lack of accurate climate disclosures can lead to mispricing of risk and misallocation of capital. This can hinder climate action and continue to

^{194.} *Id*.

^{195.} It should be noted that there are limitations to the universal owner theory, in that investors may not be invested in entire economy-wide initiatives and so may not undertake socially optimal climate approaches but only climate approaches which benefit their investments, see Condon, supra note 43, at 5. In addition, institutional investors may not coordinate to keep the size of the economy within planetary limitations, see Benjamin J. Richardson, Putting Ethics into Environmental Law: Fiduciary Duties for Ethical Investment, 46 Osgoode Hall L.J. 243, 251 (2008).

^{196.} Schwarcz, *supra* note 190, at 202.

^{197.} Id. at 207.

^{198.} Michael Holder, *The Net-Zero Energy Transition Requires a \$5.2 Trillion Investment*, GreenBiz (May 24, 2021), https://www.greenbiz.com/article/net-zero-energy-transition-requires-52-trillion-investment [https://perma.cc/9HK8-3CYK]; Int'l Energy Agency, Net Zero by 2050: A Roadmap For The Global Energy Sector 81 (4th rev. 2021), https://www.iea.org/reports/net-zero-by-2050 [https://perma.cc/GUR4-R26W].

subsidize fossil fuel investments, thereby exacerbating the impacts of climate change and contributing to the escalation of climate risk to a systemic risk.¹⁹⁹

C. The SEC's Role in Regulating Climate Risk

In 2011, SEC Chairman Mary L. Shapiro separated systemic risk into two areas that are relevant for the SEC. The first being a risk of a sudden, nearterm systemic seizure or cascading failure. The second type of risk being a longer-term risk that financial systems will unintentionally favor large, systematically important institutions over smaller, more nimble competitors, reducing the system's ability to innovate and adapt to change. In relation to financial systemic risk, Alan Greenspan noted that "[i]t is generally agreed that systemic risk represents a propensity for some sort of significant financial system disruption. Nevertheless, after the fact, one observer might use the term "market failure" to describe what another would deem to have been a market outcome that was natural and healthy, even if harsh." Therefore, declines or extinctions of certain businesses in a capitalist-motivated "creative destruction" and not be included in a definition of systemic risk, provided the decline of such businesses or even industries do not have a system-wide knock on effect.

Investors rely on SEC filings as well as firm statements on climate change to assess risks, including systemic risks. One report estimated that 82 percent of asset managers relied on SEC filings, and 72 percent relied on sustainability reports of companies;²⁰³ therefore actions by the SEC on this issue are both relevant and important for investors. Investors need decision-useful information on the risks facing firms due to climate change, particularly where climate risks are or will become a material financial issue for companies. An ideal approach to systemic risk would be to manage it *ab initio*, in order to eliminate the risk of systemic collapse.²⁰⁴ Climate-related risk disclosures can have such a pro-

^{199.} Condon, supra note 5, at 44.

^{200.} Mary L. Shapiro, Chairman, U.S. Sec. & Exch. Comm'n, Remarks Before the Money Markets Funds and Systemic Risk Roundtable (May 10, 2011), https://www.sec.gov/news/speech/2011/spch051011 mls.htm [https://perma.cc/5JAX-EHZB].

^{201.} George G. Kaufman, *Bank Failures, Systemic Risk, and Bank Regulation*, 16 CATO J. 17,21 n.5 (1996) (quoting Alan Greenspan, Chairman, Bd. of Governors of the Fed. Rsrv. Sys., Remarks at a Research Conference on Risk Measurement and Systemic Risk, Washington, D.C. 7 (Nov. 16, 1995)).

^{202.} Joseph Schumpeter coined this term referring to the "process of industrial mutation . . . that incessantly revolutionizes the economic structure *from within*, incessantly destroying the old one, incessantly creating a new one" in Capitalism, Socialism and Democracy 82–83 (Routledge) (1994).

^{203.} KIRSTEN SNOW SPALDING, CERES, INVESTORS ANALYZE CLIMATE RISKS AND OPPORTUNITIES: A SURVEY OF ASSET MANAGERS' PRACTICES 1–2, 16 (2010), https://motherjones.com/files/Ceres_AssetMgrSurvey_Jan2010.pdf [https://perma.cc/59W5-EKW5].

^{204.} Schwarcz, *supra* note 190, at 214.

phylactic effect²⁰⁵ and are important tools in managing systemic risks, such as climate change.²⁰⁶

Climate-related disclosures can provide strong incentives to companies to take proactive steps to minimize and manage climate risks, and they are often part of larger environmental, social, and governance disclosure efforts. Disclosures can reduce asymmetric information between market participants. Disclosure's purpose is to level the playing field between issuers and investors and to reduce information asymmetries. This in turn promotes investor confidence in capital markets, which thus enables growth, access to capital, and protection of the public. It should be noted that disclosure is not a panacea, however, as market participants are likely to be motivated by self-preservation and not systemic risk management. For example, where climate-related disclosures highlight risks and would attract increased scrutiny from shareholders, the press, or regulators, I firms may not want to fully disclose climate-related risks. Disclosure does not prevent risky products being placed on the market, Disclosure does not prevent risky products being placed on the market, Disclosure to make their own decisions regarding these risks.

As a result, clear and consistent disclosure obligations would be useful for investors and firms. SEC regulatory action in this area would be a critical piece of the carbon transition puzzle. While climate-related disclosures would not fix the problem of climate change (only emissions reductions or removals can do that), disclosures can highlight systemic risks to investors and provide a roadmap for investors to start a phased transition of capital away from fossil-fuel-intensive industries and towards renewable and climate-safe investments, if they so choose. There is an argument that disclosures can motivate issuers themselves to transition away from fossil fuel investments as capital and insurance become scarcer due to investor flight;²¹³ therefore disclosure of the risks of climate change can highlight to issuers the risks of continuing in fossil fuel industries and may benefit both issuers and investors. Conversely, there is an argument that investors that continue to invest in fossil fuels may reap benefits, at least in the short term.²¹⁴ Either way, disclosures can highlight

^{205.} Id.

^{206.} Id.

^{207.} Erion, *supra* note 91, at 165.

^{208.} Hillary A. Sale, *Disclosure's Purpose* 107 GEo. L.J. 1045, 1045–46 (2019).

^{209.} Id. at 1046.

^{210.} Schwarcz, *supra* note 190, at 218.

^{211.} John R. Robinson et al., *Determinants of Disclosure Noncompliance and the Effect of the SEC Review: Evidence from the 2006 Mandated Compensation Disclosure Regulations*, 86 Acct. Rev. 1415, 1421 (2011).

^{212.} Sale, *supra* note 208, at 1048.

^{213.} Matt Levine, Opinion, *Someone Is Going to Drill the Oil*, Bloomberg: Money Stuff (Jul. 8, 2021, 9:44 AM), https://www.bloomberg.com/news/newsletters/2021–07–08/money-stuff-someone-is-going-to-drill-the-oil [https://perma.cc/PEP2-X8CT].

^{214.} Id.

the risks of fossil fuel investments and allow investors—and issuers—to make climate-informed choices.

Financial stability is more than just the avoidance of systemic risk. It also encapsulates the impacts of market failures on market participants globally.²¹⁵ As a result, managing systemic risk is beneficial for market participants, including investors. The International Organization of Securities Commissioners (IOSCO) has highlighted the unique perspective that securities regulators around the world have in maintaining the integrity of securities markets. IOS-CO's Objectives and Principles of Securities Regulation sets out 38 Principles of securities regulation, which are based upon three objectives of securities regulation: protecting investors, ensuring fair, efficient, and transparent markets, and reducing systemic risk.²¹⁶ In a February 2021 press release, IOSCO stated the urgent need for globally consistent, comparable, and reliable sustainability disclosure standards.²¹⁷ IOSCO's Sustainable Finance Taskforce issued a report in June 2021 that charted a "climate first" approach, which established a prototype of a climate-related financial disclosure standard using the TCFD recommendation as its foundation.²¹⁸ Securities regulators around the world are implementing and sometimes mandating climate-related financial disclosures, and the U.S. is increasingly out of step with its global allies on this issue. The SEC sits on the Financial Stability Oversight Council (FSOC), which is Chaired by the Treasury Secretary. FSOC is a collaboratory body with a clear statutory mandate to identify risks and respond to emerging threats to the U.S. financial system, and to constrain excessive risks in the financial system. Recognizing the policy void on climate-related disclosures, the SEC recently solicited comments from the public on the issue of climate-related financial disclosures. The following Subpart assesses a number of responses to this call, focusing on investor and issuer responses.

^{215.} Hillary J. Allen, *The SEC as Financial Stability Regulator*, 43 J. Corp. L. 715, 719 (2018).

^{216.} Int'l Org. of Sec. Comm'ns, IOSCO Objectives and Principles of Securities Regulation and the IOSCO Assessment Methodology, https://www.iosco.org/about/?subsection=display_committee&cmtid=19 &subSection1=principles [https://perma.cc/C63M-7Q6A] (last visited Jul. 13, 2021).

^{217.} Media Release, Int'l Org. of Sec. Comm'ns, IOSCO Sees an Urgent Need for Globally Consistent, Comparable, and Reliable Sustainability Disclosure Standards and Announces its Priorities and Vision for a Sustainability Standards Boards Under the IFRS Foundation (Feb. 24, 2021), https://www.iosco.org/news/pdf/IOSCONEWS594.pdf [https://perma.cc/WX7Z-AR6Q].

^{218.} Media Release, Int'l Org. of Sec. Comm'ns, IOSCO Elaborates on Its Vision and Expectations for the IFRS Foundation's Work Towards a Global Baseline of Investor-Focused Sustainability Standards to Improve the Global Consistency, Comparability and Reliability of Sustainability Reporting (Jun. 28, 2021), https://www.iosco.org/news/pdf/IOSCONEWS608.pdf [https://perma.cc/W4AV-W8P8].

D. The 2021 SEC Call for Comments on Climate-Related Financial Disclosures

In February 2021, Acting Chair Lee directed the Division of Corporation Finance to enhance its focus on climate-related disclosure in public company filings. In particular, Lee directed the Division of Corporation Finance to focus on the extent to which public companies address the topics identified in the 2010 SEC guidance and to absorb critical lessons on how the market is currently managing climate-related risks.²¹⁹ The announcement was the precursor to an agency effort to update the 2010 guidance. The following month, the agency announced the establishment of an enforcement task force on climate and ESG related disclosures.²²⁰ The initial focus of the task force will be to identify any material gaps or misstatements in issuers' disclosure of climate risks under existing rules. The task force will also analyze disclosure and compliance issues relating to investment advisers' and funds' ESG strategies.

In March 2021, the SEC solicited comments on its current approach to climate-related disclosures.²²¹ The SEC requested public input on the SEC's current disclosure rules and guidance as they apply to climate change disclosures, along with whether and how they should be modified. The agency welcomed a broad range of comments, including on potential new SEC disclosure requirements, potential new disclosure frameworks that the Commission might adopt or incorporate in its disclosure rules, and how the Commission could best regulate climate change disclosures going forward. The record in response to this call for comments lists a number of meetings in response to the SEC's March request for comments, including with the U.S. Chamber of Commerce, State Street Global Advisors, the Business Roundtable, the Edison Electric Institute, and Walmart. The new Chair of the SEC, Gary Gensler, during his March Senate Banking Committee confirmation hearing, reinforced expectations that his agenda as the next SEC chairman will focus heavily on environmental, social, and governance (ESG) issues. During the hearing, Gensler also voiced support for new climate risk disclosure rules in response to questions from Sen. Sherrod Brown of Ohio, the panel's chairman, stating, "I think issuers would benefit from such guidance, so I think through good economic analysis, working with the staff, putting out to the public to get public feedback on this, this is something that the commission, if I'm confirmed, I'd work on."222 The agency is focusing its attention on climate-related disclosures and considering its regulatory options.

^{219.} Public Statement, Allison Herren Lee, Acting Chair, U.S. Sec. & Exch. Comm'n, Statement on the Review of Climate-Related Disclosure (Feb. 24, 2021), https://www.sec.gov/news/public -statement/lee-statement-review-climate-related-disclosure [https://perma.cc/QG8D-RLPX].

^{220.} SEC, supra note 51.

^{221.} Lee, supra note 50.

^{222.} Bill Flook, At Senate Hearing, SEC Nominee Gensler Signals Support for Climate Risk, Political Spending Disclosure Rules, Thomson Reuters (Mar. 3, 2021), https://tax.

The SEC has received over 6,000 public comments in response to this latest call, including almost 600 unique comments.²²³ Most of the comments submitted by large corporations, associations, and non-government organizations generally support efforts by the SEC to establish climate change and ESG reporting standards, with widespread support for incorporating existing international frameworks into the new reporting standards, in particular those developed by the Task Force on Climate-related Financial Disclosures (TCFD) and the Sustainability Accounting Standards Board (SASB). Those in support of new climate and ESG standards and frameworks include large petroleum companies Chevron and ConocoPhillips, the American Gas Association, large financial institutions, investor groups, associations such as the National Manufacturers Association, and technology giants Apple, Amazon, and Google.

The key difference between the comments in support is whether the SEC should mandate disclosure of specific climate metrics and targets under Regulation S-K, or if it should instead continue to apply a principles-based approach to disclosure, allowing companies the flexibility to decide what climate-related information to disclose, through furnished reports rather than filed disclosure statements. Of the comments supporting mandatory rules, most called for a requirement for disclosure of Scope 1, 2, and 3 greenhouse gas emissions from across each company's entire value chain.²²⁴ Comments from large financial players, such as the U.S. Chamber of Commerce, the American Bankers Association, and Deutsche Bank, opposed prescriptive disclosure requirements, highlighting the longstanding materiality standard for corporate disclosure as well as the "variability of investor interest and issuer practices across industries and companies."²²⁵

A similar approach was taken by Amazon, which was joined by a group of technology companies, including Google's parent company Alphabet, as well as Facebook, and Salesforce. Their joint comment argues for the SEC to

thomsonreuters.com/news/at-senate-hearing-sec-nominee-gensler-signals-support-for-climate-risk-political-spending-disclosure-rules [https://perma.cc/3TQ6-MSPD].

^{223.} As of Jul. 13, 2021. For a copy of comments received and list of SEC meetings with key stakeholders see: *Comments on Climate Change Disclosures*, U.S. SEC. & EXCH. COMM'N., https://www.sec.gov/comments/climate-disclosure/cll12.htm [https://perma.cc/FCJ7–8EEK].

^{224.} E.g., Mindy S. Lubber, CEO and President, Ceres, Inc., Comment Letter in Response to Request for Information on Climate Change Disclosures (Jun. 10, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–245664.pdf [https://perma.cc/YF3G-AYUP]; Arvin Ganesan, Glob. Energy & Env't Pol'y, Apple, Comment Letter in Response to Request for Information on Climate Change Disclosures (Jun. 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–8915594–244828.pdf [https://perma.cc/9CNE-TR9P].

^{225.} E.g., Tom Quaadman, Exec. Vice President, Ctr. for Cap. Mkts. Competitiveness, U.S. Chamber of Com., Comment Letter in Response to Request for Information on Climate Change Disclosures (Jun. 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–8907271–244249.pdf [https://perma.cc/ZX8H-VF26]; Erik Soderberg, Head of Regul. Affs. - Ams., Deutsche Bank AG, Comment Letter in Response to Request for Information on Climate Change Disclosures (Jun. 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–8906897–244213.pdf [https://perma.cc/86AA-NRRS].

adopt a flexible principles-based disclosure framework and indicates support for disclosures to include greenhouse gas emissions information, but it does not suggest that such disclosures be mandatory.²²⁶

Departing from Amazon and Google, Apple submitted its own comment, stating that the principles-based approach does not go far enough in the fight against climate change, advocating instead for mandatory reporting rules requiring issuers to measure and disclose third-party-reviewed emissions data from the company's entire value chain, as recommended by the TCFD.²²⁷ Global asset management firm BlackRock also called for mandatory rulemaking in line with the TCFD framework, including "qualitative and quantitative disclosure items modeled on those of the TCFD framework, as well as sector-specific metrics, such as those identified by SASB". Ceres, a nonprofit organization working in climate change and investing, together with over 500 investor groups, companies, non-profit organizations, and individuals, prepared a joint comment generally in line with the comment from BlackRock, calling for mandatory disclosure rules that align with the TFCD framework and with industry-specific metrics and quantitative disclosure of Scope 1, 2, and 3 greenhouse gas emissions.²²⁹ Ceres also submitted an individual comment setting out detailed responses to each of the SEC's fifteen questions, noting in particular that climate change risks permeate all aspects of capital markets, notwithstanding issuer size or sector, and that consistent, comparable climate change disclosure is critical to the SEC's mission to protect investors, to maintain fair, orderly, and efficient markets, and to facilitate capital formation.²³⁰

Two comments actively opposed any new rulemaking on climate or ESG issues. The National Mining Association submitted a comment that argues against any change to the current disclosure regime, stating that it is premature for the SEC to move forward with rulemaking to incorporate mandatory climate-related risk disclosures without first completing an assessment of the effectiveness of its 2010 guidance. The National Mining Association also warned that the SEC must "avoid disclosure obligations designed to further

^{226.} Alphabet Inc. et al., Comment Letter in Response to Request for Information on Climate Change Disclosures (Jun. 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–8907252–244227.pdf [https://perma.cc/SS2Z-VXPX].

^{227.} Arvin Ganesan, Glob. Energy & Env't Pol'y, Apple, Comment Letter in Response to Request for Information on Climate Change Disclosures (Jun. 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–8915594–244828.pdf [https://perma.cc/9CNE-TR9P].

^{228.} Letter from Sandra Boss, Senior Managing Director, Global Head of Investment Stewardship, BlackRock, et al, to Vanessa Countryman, Sec'y, SEC, *Request for Input on Climate Change Disclosure* (Jun. 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–8906794–244146.pdf [https://perma.cc/B2K9-DS6B].

^{229.} Ceres et al., Comment Letter in Response to Request for Information on Climate Change Disclosures (Jun. 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–8911752–244393.pdf [https://perma.cc/VNK7-JUSM].

^{230.} Lubber, supra note 224.

specific policy goals outside of the SEC's tripartite mission."²³¹ The NMA comment concludes that "[t]he SEC does not have the expertise or authority to make policy decisions about climate change, nor the authority to expand the public company disclosure obligations beyond the Commission's mission to ensure that public companies convey material information to investors."

The other comment actively opposed to new rulemaking came from the American Petroleum Institute (API), the largest U.S. trade association for the oil and gas industry in the U.S., which foreshadowed a number of constitutional challenges to any new rules that would require mandatory climate disclosures, including through the incorporation of an international standard created by a private party such as the TFCD. 232 The API argues that "debate persists about whether this type of nonfinancial reporting is material," and that "the materiality of any particular climate-related statement remains very much a case-by-case inquiry, focused on the statements a particular issuer provided in the context of the 'total-mix' of information available to reasonable investors about that issuer." The API warns that if the SEC seeks to impose a "major new climate disclosure regime" that deviates from the materiality requirement without "clear congressional command," it may raise "significant concern about whether the SEC has strayed far beyond its authority to regulate the securities markets," and additionally "could raise serious First Amendment issues under recent precedent applying strict scrutiny to content-based laws compelling speech."

The API also argues that courts would not defer to the SEC's interpretation of its authority on the basis that rulemaking on disclosures of this kind would be considered issues of "vast 'economic and political significance" under the "major questions" doctrine, and refers specifically to recent Supreme Court decisions creating exceptions to the *Chevron* doctrine as discussed above. Finally, the API comment includes a warning against requiring companies to comply with a privately-developed disclosure framework, such as the TCFD, arguing that "neither Congress nor an agency may delegate to private entities unfettered power to establish the content of regulatory requirements that are binding upon third parties."

While political infeasibility and agency inertia on the issue of climate-related disclosures may have dissolved, these latter comments in particular illustrate that business resistance by some market actors will remain an important factor for the agency to consider as it moves forward with its regulatory

^{231.} Tawny Bridgeford, Deputy Gen. Couns. & Vice President, Regul. Affs., Nat'l Mining Ass'n, Comment Letter in Response to Request for Information on Climate Change Disclosures (Jun. 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–8911809–244413.pdf [https://perma.cc/W4KR-GH8M].

^{232.} Frank J. Macchiarola, Senior Vice President, Am. Petrol. Inst., Comment Letter in Response to Request for Information on Climate Change Disclosures (Jun. 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12–8907327–244228.pdf [https://perma.cc/Y8P6–8XL7].

agenda. Some resistance by highly exposed industries can be expected. Despite this resistance, disclosure is considered to be the linchpin of fair, transparent, and well-functioning markets, and it is central to the mandate of the SEC. The following Part weighs the risks and benefits of rulemaking in this area by the SEC.

IV. THE RISKS AND BENEFITS OF RULEMAKING ON CLIMATE DISCLOSURES

As illustrated above, issuers may be resistant to any rule issued by the SEC mandating climate-related disclosures, and this resistance is likely to transform into a litigation challenge to any SEC rulemaking. While the agency could (and should) update and enforce its 2010 guidance, a regulation mandating uniform disclosures would be most useful for investors despite the litigation risks. Judicial hostility to agency rulemaking is likely to involve questions regarding cost-benefit analysis conducted by the agency. While the SEC is an independent agency and not subject to the full extent of Executive Order 12,866—which requires an OIRA review of a proposed rule²³³—it is subject to the Regulatory Flexibility Act 1980 and Paperwork Reduction Act 1995. Both statutes require an assessment of how new rules affect small businesses. In addition, the National Securities Market Improvement Act (NSMIA) requires the SEC consider a proposed rule's effect on "efficiency, competition and capital formation."234 In the 1990s, a series of controversial D.C. Circuit decisions began interpreting this requirement in NSMIA as requiring quantified cost-benefit analysis by the SEC.²³⁵

In a series of cases brought by trade associations such as the Business Roundtable and the U.S. Chamber of Commerce, issuers challenged the cost-benefit analyses (or lack thereof) conducted by the SEC.²³⁶ The rules at issue varied from shareholder-nominated proxy disclosures to rules barring national security exchanges from listing stock that restricted per share voting rights of individual shareholders. In some of these decisions, the SEC rule was found to have violated the APA for failing to adequately consider costs

^{233.} See Datla & Revesz, supra note 63 at 773 (stating Presidential authority to require independent agencies to submit regulations to OIRA for review remains an open question).

^{234.} National Securities Markets Improvement Act of 1996, Pub. L. No. 104–290, 110 Stat. 3416 (codified as amended in scattered sections of 15 U.S.C. (2006)), § 106.

^{235.} Jeff Schwartz & Alexandrea Nelson, *Cost-Benefit Analysis and the Conflict Minerals Rule*, 68 Admin. L. Rev. 287, 299 (2016).

^{236.} See Bus. Roundtable v. SEC, 905 F.2d 406 (D.C. Cir. 1990); Chamber of Commerce of U.S. v. SEC (Chamber of Commerce I), 412 F.3d 133 (D.C. Cir. 2005); Chamber of Commerce of U.S. v. SEC (Chamber of Commerce II), 443 F.3d 890 (D.C. Cir. 2006); Bus. Roundtable and Chamber of Commerce of U.S. v. SEC, 647 F.3d 1144 (D.C. Cir. 2011).

imposed on issuers of the rules²³⁷ or for reliance on extra-record data that was found to be more than supplementary.²³⁸

In the most recent case in this line of decisions, the SEC was found to have acted arbitrarily and capriciously by not evaluating the costs that could be imposed on issuers by the rule.²³⁹ The Court found the SEC had failed to appraise itself of economic consequences of the proposed regulation.²⁴⁰ In strong language, the court accused the agency of "inconsistently and opportunistically" framing the costs and benefits of the rule but failing to quantify certain costs or explain why those costs could not be quantified.²⁴¹

This series of cases was not relied upon in the NAM Conflict Minerals case (covered above), and the cost-benefit analysis involved in the conflict minerals rule has been severely critiqued; however these cases, and the requirement for conducting robust cost-benefit analysis, may still pose obstacles to the SEC.²⁴² In response to these cases, the SEC has put in place a rigorous cost-benefit analysis procedure via the Division of Economic and Risk Analysis (DERA) within the agency.²⁴³ This Part charts some of the risks and benefits of rulemaking in light of these judicial decisions. It also provides some recommendations as to how the SEC could craft a rule that avoids, or at least mitigates, the barriers previously identified.

A. The Risks and Benefits of Rulemaking

While both the political and investment landscapes have shifted dramatically in favor of SEC action on climate-related disclosures, and the agency itself is seriously considering regulatory action, considerable obstacles remain. Judicial resistance to independent agencies generally, and to rulemaking by the SEC without a cost-benefit analysis specifically, is on the rise. Many of these developments are beyond the control of the agency. Issuer resistance to a climate-disclosure rule is likely to trigger judicial review. So, even as an independent agency, the SEC will have to navigate both political and investor enthusiasm, as well as issuer and judicial hostility when taking any agency action on climate-related financial disclosures. Resistance to rulemaking is likely to focus on three issues. The first is that the existing mandate of the SEC does not provide it with sufficient flexibility to mandate climate-related disclosures from industry. The second is that the costs of disclosure significantly

^{237.} See Chamber of Commerce I, 412 F.3d at 143.

^{238.} See Chamber of Commerce II, 443 F.3d at 908.

^{239.} Bus. Roundtable and Chamber of Commerce of U.S. v. SEC, 647 F.3d 1144 (D.C. Cir. 2011).

^{240.} Id. at 1149.

^{241.} Id.

^{242.} Schwartz & Nelson, *supra* note 235, at 300 (finding the SEC's assessment of benefits pithy and critiquing the court's reliance on cost-benefit analysis conducted by issuers as well, partly due to the impossibility of assessing humanitarian benefits such as avoidance of rape in cost-benefit analysis).

^{243.} Karmel, *supra* note 59, at 213, 215.

outweigh the benefits of rulemaking. And third is that any mandated disclosure is likely violates the First Amendment.

In terms of the first argument, the SEC mandate, it is clear that the agency enjoys a broad mandate to require disclosure. Climate related disclosures would squarely fall within the agency's mandate as they are so closely related to protecting the investing public, promoting market efficiency and preserving U.S. market competitiveness. But even if Congress eventually mandates the SEC to require climate-related disclosures,²⁴⁴ as evidenced in the conflict minerals rule, the agency will still have to convince some business and judicial actors of the relevance of climate disclosures to its investor protection mandate. The systemic nature of climate risks to the financial system at large can help the agency navigate this particular objection. Systemic risks will affect investors, as many investors will not be able to diversify away from these risks. Systemic risk mitigation is not just a prudential issue, but it is also a market-based issue; therefore, disclosure rules are firmly tied to the investor protection mandate of the SEC.

Many industry actors, and at times the SEC itself, have taken a narrow view of the agency's mandate.²⁴⁵ Certain SEC Commissioners are likely to resist mandating specialized disclosures, and Commissioner Roisman has already expressed concern regarding the proposed disclosure rule. SEC Commissioner opinions are often adopted by courts, and this was the case in the D.C. Circuit decisions covered above. In June 2021, Commissioner Roisman raised several questions that the SEC will have to consider if it moves forward with further ESG disclosure, particularly if the agency requires more prescriptive disclosures. He stated that investor requests for more disclosure would require

^{244.} There have been a number of legislative attempts at this over the years, including in 2021. The Climate Risk Disclosure Act was introduced in both chambers during the 116th Congress, and in the Senate during the 115th Congress, but died with both legislative sessions. These efforts were revived in 2021 with the change of administration. On February 25th, 2021, the House Committee on Financial Service's Subcommittee on Investor Protection, Entrepreneurship and Capital Markets held a hearing to discuss the 2021 iteration of the Climate Risk Disclosure Act. The bill is designed to amend the Securities Exchange Act of 1934 (Exchange Act) to require issuers to disclose various climate-related risks in SEC filings, and would require the SEC to adopt rules mandating other climate-related disclosures. Another legislative option is the Paris Climate Agreement Disclosure Act, which would amend the Exchange Act to require disclosures related to the Paris Agreement, including a requirement to issue a statement as to why and whether it supports the Agreement's temperature goals. A month later, in March 2021, the House Committee on Energy and Commerce proposed the Climate Leadership and Environmental Action for our Nation's Future Act (CLEAN Future Act), which would amend the Exchange Act to require that the SEC promulgate rules requiring public companies to disclose information including direct and indirect greenhouse gas emissions of the issuer and its affiliates, fossil fuel-related assets owned or managed by the issuer, and climate-related risk disclosures by industry or sector. It is unclear where these legislative attempts will lead, but legislating for climate-related disclosures is not a likely outcome, see Myers, supra note 107.

^{245.} Williams & Nagy, supra note 4, at 1456.

issuers to provide information that "is inherently imprecise, relies on underlying assumptions that continually evolve, and can be reasonably calculated in different ways."²⁴⁶ While some climate data is imprecise, most of it is not. However, this argument illustrates that whether the SEC mandate can require this type of disclosure will be a live issue in any review. Rules that cater to this evolution of climate-related financial risks would address these concerns.

Any judicial scrutiny may be particularly focused on whether the SEC has the statutory mandate to require climate related disclosures. Broad social protection mandates, even if required by Congress, proved detrimental in the conflict minerals rule as the judiciary expressed some skepticism whether these protective mandates fell within the mandate of the SEC. In addition, the inability (or rather impossibility) of the agency to develop quantified benefits for the rule also aided its demise. While regulating climate disclosures is much closer to the statutory mandate of the SEC of investor protection than the conflict minerals rule was, the agency should make every effort to demonstrate, in a quantified manner, both the costs but also the benefits of such a rule to issuers and investors alike.

There are benefits to rulemaking on climate disclosures. The existing materiality principle is confusing, and there is no bright line or strict percentage approach an issuer can adopt to determine whether a risk is material.²⁴⁷ A determination of materiality is up to the issuer to determine, and this contributes to vague and sparsely worded disclosures. Uniform, mandatory, and precise disclosure rules would alleviate this confusion and provide clearer and uniform criteria for issuers to adopt when disclosing climate-related financial risks.

Existing sustainability disclosures are also fragmented.²⁴⁸ Voluntary disclosures tend to be vague, general, or full of boilerplate statements that are not useful for investors.²⁴⁹ Firms use a variety of different metrics in their disclosures, particularly in their disclosures of CO2 emissions.²⁵⁰ This means that disclosures are not comparable either between firms or between subsequent disclosures by the same firm. Mandatory and prescriptive elements of a rule issued by the SEC would overcome this fragmentation—and require a minimum standard of disclosures—with specified metrics that issuers could adopt and investors could easily compare. This would provide a level of uniformity

^{246.} Elad L. Roisman, Comm'r, Putting the Electric Cart before the Horse: Addressing Inevitable Costs of a New ESG Disclosure Regime, Speech at the ESG Board Forum, Washington D.C., (June 3, 2021), https://www.sec.gov/news/speech/roisman-esg-2021-06-03 [https://perma.cc/6Y98-4EDV].

^{247.} Sale, supra note 208, at 1057.

^{248.} Harper Ho, *supra* note 4, at 13 (evidencing the growing international and domestic consensus that ESG reports produced outside of public filings are not reliable, accessible or suitable to investment analysis).

^{249.} Fisch, *supra* note 5, at 948.

^{250.} U.S. Gov't Accountability Off., supra note 2, at 32.

and consistency to disclosures that would make them decision-useful for investors. Mandatory disclosure rules can promote investor protection and improve market efficiency by improving the accuracy of share prices, which can boost investor confidence.²⁵¹ These benefits reduce exposures to systemic risks to investors and issuers and promote efficiency and capital formation.

The SEC is already experienced in managing a transparency framework for securities. Transparency is inherent in federal securities law, and so the SEC can quickly and effectively regulate systemic risk.²⁵² Cary Martin Shelby, a prominent academic in corporate and securities law, argues in the context of hedge funds, that the SEC may be a better regulator of systemic risk than prudential regulators.²⁵³ Shelby recommends that the SEC establish a new division dedicated to mitigating systemic risks and add a stress-test regime in the hedge fund context, 254 but this could also apply to a climate disclosure regime. The existing expertise of the SEC in mandating and monitoring disclosures make it a prime agency to regulate and monitor climate-related financial risks. Ann Lipton, an experienced corporate and securities litigator, argues that disclosure advances the mandate of the SEC in a number of ways, namely by preventing fraud and allowing investors to compare opportunities, and leads to more efficient allocation of capital.²⁵⁵ Disclosure can also shape the behavior of corporate managers and discipline managerial misconduct.²⁵⁶ Disclosure can benefit investors, capital markets, and firms. It can provide benefits to actors in financial markets, and forms a core part of the agency's mandate. Both the costs and benefits of disclosure rules should be explicitly assessed by the SEC when taking agency action.

B. Cost-Benefit Analysis

While the SEC could rely on easier regulatory routes such as updating and enforcing its 2010 guidance and/or revising its no-action review process to avoid regulatory obstacles to shareholder proposals on climate disclosures, it is likely to issue a rule and not just standards in order to ensure consistency of disclosure and to avoid greenwashing.²⁵⁷ A rule that fits easily within the existing mandate of an agency, such as the SEC, would be more feasible,

^{251.} Cary Martin Shelby, Closing the Hedge Fund Loophole: the SEC as the Primary Regulator of Systemic Risk 58 B. C. L. Rev. 639, 683 (2017).

^{252.} *Id.* at 641; Quinn Emanuel and Martin, *SEC Financial Disclosures: Will New Rules Come With a New President?* (17 Dec, 2020).

^{253.} *Id.* at 641–42. (arguing that the blurred distinction between investors and banks due to more flexible and exotic financial instruments has heightened the systemic risks to investors who can no longer absorb losses).

^{254.} Id. at 649.

^{255.} Ann M. Lipton, Not Everything is About Investors: The Case for Mandatory Stakeholder Disclosure, 37 Yale J. on Regul. 499, 509 (2020).

^{256.} Id.

^{257.} Brett McDonnell et al., *Green Boardrooms?*, 53 Conn. L. Rev. (forthcoming 2021) (manuscript at 72), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3569303.

but it would still face obstacles. An explicit cost-benefit analysis conducted by the agency will help to mitigate some of these obstacles. There are, of course, drawbacks to this approach. Conducting rigorous cost-benefit analyses takes time, energy, and expertise. Conducting these analyses also drains the resources of the agency and diverts attention away from other regulatory exercises. Donna Nagy, an author of several books on securities regulation, litigation and enforcement, notes how in the past, mandated cost-benefit analyses have stymied the SEC's regulatory agenda. They are also necessarily incomplete and will be challenging to put together in the context of climate-related risks, which are constantly evolving. Despite these drawbacks, the SEC should undertake such an exercise if a rule on climate-related financial disclosures is promulgated.

While a rigorous cost-benefit analysis conducted by the agency will prolong any rulemaking process and will be difficult to conduct due to inherent uncertainties in the nature and extent of climate risks, this exercise will be critical to avoiding judicial hostility to the SEC rulemaking more broadly, and specifically to its statutory mandate to require climate-related disclosures. The process, already implemented by DERA at the SEC, is critical and any analysis should be robust and explicit. The DERA process includes cost-benefit analysis as one of its four requirements of economic analysis of proposed rules. Including explicit and detailed explanations of where and why costs and/or benefits cannot be quantified will be critically important, considering the series of cases brought by NAM, the Business Roundtable and the U.S. Chamber of Commerce in the past. In fact, attempts during the Trump Administration to undo Obama era regulations were largely unsuccessful in the courts precisely because those Obama regulations were supported by high quality cost-benefit analysis. 260

The costs of high-quality disclosures could be significant, particularly for larger firms. Maintaining the status quo and relying on voluntary standard-setting agencies may avoid some direct costs to firms, and to the SEC of auditing those disclosures, but the current voluntary reporting system is also costly. Producing voluntary reports is expensive, and many firms already produce and publish them on their websites and have done so for decades. Lack of uniform standards when producing these reports also increases their costs—and their inaccuracies—so the utility of publishing voluntary reports without uniform criteria or metrics is questionable. There are also indirect competitive

^{258.} Donna M. Nagy, The Costs of Mandatory Cost-Benefit Analysis in SEC Rulemaking, 57 Ariz. L. Rev. 129 (2015).

^{259.} Although the imposition of cost-benefit analysis on the SEC by the D.C. Circuit is contested, *see id.* at 130 (illustrating that the SEC has already incorporated a robust internal process of cost-benefit analysis as a result of these rulings).

^{260.} Jonathan S. Masur & Eric A. Posner, *Chevronizing Around Cost-Benefit Analysis*, 70 Duke L.J. 1109, 1113 (2021).

^{261.} Harper Ho, supra note 5, at 433.

costs of disclosing information, which may be harmful to firms, but confidentiality provisions or restricting disclosures to existing investors could account for these costs.

The costs of preparing disclosures should be balanced against existing costs imposed on investors as well as on issuers. Investors currently have to rely on private ordering mechanisms in order to obtain climate-related risks. These include combing through vague and potentially inaccurate voluntary sustainability reports as well as reports sent by issuers to private standard-setting agencies. Investors have to spend time and resources distilling information that is material from these reports, instead of being provided with accurate, high quality, consistent, and comparable information in financial reports. The proliferation of voluntary ESG, including climate-related disclosures, is already drowning investors with information that lacks clarity and comparability, thus necessitating greater standardization.

In addition, investors have to engage in disaggregated individualized efforts by engaging in shareholder proxy contents, such as the Engine No. 1 exercise, submitting non-binding shareholder proposals, or engaging directly with firms to request climate-specific risk information. The 2020 GAO report illustrates that institutional investors regularly have to purchase data from third party aggregators and/or engage with issuers in order to supplement gaps and inconsistencies in existing disclosures. These investors report that engagement with issuers can be complicated by conflicting investor demands as well as the sheer proliferation of standards and surveys. A large number of demands from investors can also prove challenging to issuers as well as they struggle to prioritize how to respond to them. These exercises are costly to investors and to issuers. The lack of detail in the SEC 2010 guidance is also costly to issuers, as they have to make their own decisions about what might be covered by the guidance, particularly issuers that choose to disclose climate-related risks. Here we have to engage in disaggregator as the Engine No. 1

This lack of uniformity is costly to the SEC as well. As Harper Ho notes, this system requires SEC staff to conduct no-action reviews of shareholder proposals and can cause reputational damage to the agency itself.²⁶⁸ This information asymmetry is costly, inefficient, and detrimental to the smooth, transparent, and fair functioning of capital markets. Therefore, the costs to investors, issuers, and capital markets should also be included in any cost-benefit analysis undertaken by the SEC.

^{262.} Id. at 452.

^{263.} Id. at 453.

^{264.} GAO, supra note 2, at 13.

^{265.} Id.

^{266.} Id.

^{267.} Harper Ho, supra note 5 at 454.

^{268.} Id. at 456.

The direct and ancillary benefits of rulemaking on climate-related disclosures should also be included. Direct benefits include the reduction of costs to issuers and investors as illustrated above by the adoption of uniform and methodologically consistent disclosure requirements and a more informed and therefore efficient allocation of capital. As Jack Lienke and Alexander Song note, the SEC may rely on purely qualitative assessments of some effects in order to support a conclusion that a climate risk disclosure rule is cost-benefit justified.²⁶⁹ Ancillary benefits can be included in a cost-benefit analysis. While these ancillary benefits cannot be excessively attenuated, there should be parity in treatment of both countervailing costs and ancillary benefits.²⁷⁰ As Revesz and Livermore note, there has been a historical bias in agencies accepting industry estimates of costs of complying with new regulation, because industry has an incentive to overestimate the costs of complying with regulations they do not like, and a disincentive to invest in forecasting the scale and pace of technological developments which might lead to more accurate cost-benefit analysis.²⁷¹ Efficient regulations deliver social welfare and market-based benefits, and counteract failures of an unregulated market.²⁷² Therefore the SEC should carefully balance both the cost and benefits, including distributional benefits, of regulating in this area even where those benefits might be difficult to estimate.

C. Constitutional Issues

While the previous Conflict Minerals decision focused on First Amendment and compelled speech issues, it may also have implications for judicial approaches to any climate disclosures rule. While any rule on climate-related disclosures is unlikely to require a moral "climate compliant" notice on an issuer's website—and so is unlikely to invoke the same level of ire as the requirement for the conflict-free minerals statement did—it is likely that at least some issuers will allege constitutional violations, particularly if the benefits to investors are not ascertainable and identifiable by the agency. For example, the API's responses to the SEC calls for input in 2021 warns that if the SEC issues a rule without a statutory mandate to do so, it may not only exceed its mandate but may also raise First Amendment issues, and the API cites compelled speech laws in particular. These allegations take on new weight as a result of the recent Supreme Court decision in *AFPF v Bonta*, which evidenced increasing judicial hostility to disclosure regimes.

^{269. .} Jack Lienke and Alexander Song, Assessing the Costs and Benefits of Mandatory Climate Risk Disclosure (Jan. 2022), ii, 24–25 (identifying six direct benefits a climate disclosure rule could offer to market participants).

^{270.} Richard L. Revesz & Michael A. Livermore, *Retaking Rationality* (OUP, 2011), at 64.

^{271.} Id., at 134.

^{272.} Id., at 155.

The Conflict Minerals decision will be instructive in this type of challenge, but must be considered in light of the new *AFPF v Bonta* case. In the Conflict Minerals decision, the Court considered the two-step test in *Zauderer* case²⁷³ as an alternative ground for its decision. Step one of the test in *Zauderer*, as elucidated in *AMI*, requires the identification and assessment of the adequacy of government interest motivating the disclosure requirement by businesses. In the Conflict Minerals case, the Court accepted the SEC's description of the government's interest to be the amelioration of the humanitarian crisis in the DRC, and it deemed this to be a sufficient interest. If the SEC can tie domestic action on climate disclosures to reduction of costs and an increase in benefits for U.S. issuers, as well as illustrate the escalating risks of climate change to the U.S. financial system, then it is likely to demonstrate sufficient government interest in the issue.

Step two of *Zauderer* requires an evaluation of the effectiveness of the measure in achieving the stated aim. In the Conflict Minerals case, the Court found there was a lack of evidence regarding the benefits of the rule, meaning the rule failed step two. The Court was particularly troubled by two issues in step two. First, that the benefits cited were purely speculative compared to the high level of costs involved.²⁷⁴ In particular, evidence to the contrary—that forced disclosure would in fact lead to economic impairment of miners in the DRC—meant the court was unconvinced of the effectiveness of the proposed measure. The SEC had the burden, under step two, to demonstrate the measure it adopted would in fact alleviate the alleged harm to a material degree.²⁷⁵ This could be a risk in any judicial review of climate disclosure rules.

^{273.} Zauderer v. Office of Disc. Counsel, 471 U.S. 626 (1985) cited in NAM III, 800 F.3d 518; but see, e.g., Lucien J. Dhooge, The First Amendment and Disclosure Regulations: Compelled Speech or Corporate Opportunism 51 Am. Bus. L.J. (2014) 599, 641 (stating the application of Zauderer outside of consumer protection issues is questionable), the intermediate scrutiny test under Central Hudson may be harder for the SEC to meet, but a focus on listener-rights tied to its statutory investor protection mandate would be critical in that instance, see infra IV.D. See also Sarah Haan, The Post-Truth First Amendment, 94 Indiana L. R. 1351, 1377 (2019) (noting the emphasis in Zauderer by courts on "factual and uncontroversial" nature of the information which the Government is compelling disclosure of, which leads to preference, in First Amendment cases of a higher test for compelling so-called "controversial" information, making that information harder to wrest from wealthy, powerful speakers like corporations). As applied in the NAM case, the D.C. Circuit's approach to the Zauderer "uncontroversial" test was that it could not draw a bring line between facts and opinions, as these two are often blurred. Haan notes this conflation of fact and opinion by courts and a broad interpretation of "controversial" topics can lead to a post-truth information economy where both facts and opinion have equal weight (id. at 1382). Climate change has already been dubbed a controversial issue, along with sexual orientation, gender identity, and evolution by Justice Alito in a majority opinion, (see Janus v. AFSCME, 138 S. Ct. 2448, 2476 (2018)). Applying such a conflated approach to facts and opinions in the disclosure regime of the SEC could unpick the delicate fabric of securities disclosures established since the 1930s, which underpins the entire securities regime.

^{274.} NAM III, 800 F.3d at 525.

^{275.} Id. at 527.

In the climate disclosure context, it will be critically important for the SEC to demonstrate how disclosure can alleviate the financial risks of climate change to investors in particular. Evidence of the systemic nature of climate risks, combined with benefits to investors of regulated disclosures, must be expressly quantified and articulated.

The second issue of particular concern in the Conflict Minerals case was the part of the rule that required issuers to publicly tell their consumers on their website that their products were ethically tainted²⁷⁶ with no concrete evidence of the benefits of the rule. There is unlikely to be any requirement in a climate disclosure rule of a public notice of compliance on an issuer's website. Compliance will be dealt with internally by the SEC as is compliance with any regulatory requirement on financial fillings, so this element of the case is less of a concern. However, in order to account for constitutional issues such as these, it will also be important for the SEC to build in some flexibility into its rules.

The recent *AFPF v Bonta* case, however, evidences a high level of skepticism by the Supreme Court to disclosure regimes, at least in the non profit sector, and imposes a higher level of judicial scrutiny to First Amendment claims concerning disclosure regimes generally.²⁷⁷ In *AFPF v. Bonta*, the Americans for Prosperity Foundation challenged California's requirement for charitable organizations to identify their top donors. The purpose of the disclosure regime was to help the Attorney General to police against charitable frauds and abuses but AFPF claimed that disclosure of donor names may lead to leaks, which would intimidate donors' giving or even threaten their security. However, AFPF provided no evidence that had actually happened.

Despite this lack of concrete evidence of harm, Chief Justice Robert's majority opinion applied an exacting scrutiny test as a one-size-fits all standard. While this case applied to charitable organizations, his opinion attempted to apply this standard for all laws governing compelled disclosure by organizations. Under that standard, there must be a "substantial relation between the disclosure requirement and a sufficiently important governmental interest." The "exacting scrutiny" standard does not require the disclosure regimes be the least restrictive means of achieving their ends, but does require disclosure regimes be narrowly tailored to the Government's asserted interests. As California was unlikely to rely on these disclosures for enforcement purposes, Roberts held the government interest at stake was purely administrative convenience, and so did not reflect the seriousness of the actual burden on First Amendment rights.

The conservative majority on the court was not all in agreement with the application of the exacting scrutiny standard. Justice Thomas' concurring opinion diverged from the majority opinion by advocating for a strict scrutiny test

^{276.} Id. at 530.

^{277.} Ams. for Prosperity Found. v. Bonta, 141 S. Ct. 2373 (2021).

^{278.} Id. at 2383.

instead, with Justices Alito and Gorsuch eschewing a one-size-fits all standard. However, as Haan and Stevelman note, Alito and Gorsuch like the strict scrutiny test. According to Haan and Stevenlman, the *AFPF* decision undermines the authority of state governments to create a record of people and organizations that shape major political initiatives and influence political actors.²⁷⁹ The Americans For Prosperity Foundation has strong links with influential fossil-fuel billionaire conservative, Charles Koch.²⁸⁰ Therefore, it makes sense why the API raised First Amendment challenges in their comment to the 2021 SEC call for comments on climate-related disclosure rules. The Supreme Court's new and more skeptical approach to disclosure regimes, while applied in the nonprofit context, is likely to be applied beyond this area,²⁸¹ and therefore could form part of a challenge to any SEC rules on climate-related disclosures.

D. Flexible But Firm Rules

Climate-related disclosures are complex. The SEC could respond to this complexity by mandating a mixture of both principles-based and more prescriptive, line-item based disclosure requirements, allowing enough prescription for investors to be able to easily discern and compare climate risks while also providing sufficient flexibility for issuers to learn-by-disclosing and to ramp up their disclosures—and the specificity of their disclosures—over time. This more flexible approach is likely to reduce business resistance and judicial hostility to the rule.²⁸² It may also conform more easily to the 'exacting scrutiny' test applied in AFPF v Bonta, which requires that rules be tailored to only target the problem or government interest at stake.²⁸³ Rules-based disclosures could be line-item based where risks are more clearly delineated, such as the physical risks of climate change to corporate assets. Rules could prescriptively require disclosure of the location of firm assets, and estimates of the physical risks to those assets. These line-item disclosures could specify which scenario analysis firms could and should use to estimate physical risks, thereby providing some uniformity and consistency to the disclosures.

Rules could be principle-based where risks, such as transition risks, are less clear and more difficult to estimate and measure. These principles-based rules could be supplemented by guidance issued by the agency, and this

^{279.} Sarah Haan & Faith Stevelman, *The Stakes of Americans For Prosperity Foundation v Bonta*, Hist Phil (Jul. 13, 2021), https://histphil.org/2021/07/13/the-stakes-of-americans-for-prosperity-foundation-v-bonta.

^{280.} Amy Howe, *Divided Court Invalidates California's Donor Disclosure Rules*, Scotus Blog (Jul. 1, 2021), https://www.scotusblog.com/2021/07/divided-court-invalidates-california-donor-disclosure-rules.

^{281.} Amanda H. Nussbaum & Richard M. Corn, *The Impact of Americans for Prosperity Foundation v Bonta on Donor Disclosure Laws* 11 Nat'l L. Rev. 211 (Jul. 30, 2021), https://www.natlawreview.com/article/impact-americans-prosperity-foundation-v-bonta-donor-disclosure-laws.

^{282.} McDonnell et al., supra note 257, at 74.

^{283.} Howe supra note 280.

guidance could be updated periodically over time to take into account new and evolving climate and climate-risk related projections and regulatory developments. In addition, disclosure requirements could be more robust for highly exposed industries, sectors, and firms, and less so for smaller, less exposed firms, sectors, and industries.

Sector specific guidance is also very useful, and the TCFD has already begun to develop these in other areas of disclosures. The SEC already provides Industry Guides to specific sectors such as the mining and oil and gas industry. SEC rules could adhere to the general tenets of internationally based guidance and recommendations, such as from the TCFD and SASB, to ensure international coherence but allow for some firm flexibility. SEC rules could be more detailed and specified for certain industries, making them context- and industry-specific and also in line with international standards. Many investors and issuers will want and benefit from domestic regulation, which is consistent with existing international approaches to disclosure. This will be particularly beneficial for issuers that operate across jurisdictions. This cohesiveness will not only make it easier for issuers to create standardized and uniform disclosures in various jurisdictions, but it would also significantly reduce the costs of preparing and duplicating these disclosures.

The TCFD has quickly emerged as the international leader in climate disclosures, and its recommendations focus on four core areas, which mirror core areas of organizational management: governance, strategy, risk management and metrics, and targets. SEC rules could be framed around these four areas to provide overall consistency with international guidelines. SEC rules could deviate from detailed TCFD guidance where the agency feels those deviations are essential and jurisdiction-specific. TCFD recommendations are also not speculative, a frequent critique made by those opposed to mandatory regulations. Instead, the TCFD guidance focuses on how companies are approaching climate risks and opportunities today.²⁸⁴ Aligning U.S. regulatory approaches with international governance initiatives is in line with the new Administration's approaches to climate risk. It also protects the institutional legitimacy of the SEC itself.²⁸⁵ Securities regulators in many industrialized countries have either endorsed or implemented ESG and climate reporting,²⁸⁶ and some have even implemented mandatory climate risk disclosures.

Related to the costs of rulemaking is the issue (both financially and also technically) of the costs of complying with mandatory rules for smaller companies. Commissioner Roisman's speech provides suggestions for reducing the costs of any new disclosure requirements by providing more scaled disclosure regimes. He suggests providing more flexibility to small or fledgling public

^{284.} Williams & Nagy, supra note 4, at 1478.

^{285.} Id. at 1485.

^{286.} Harper Ho, supra note 4, at 27.

2022

issuers, as well as extended implementation periods.²⁸⁷ Incorporating such flexibility into a rulemaking process can help alleviate costs concerns, particularly for smaller or less exposed issuers. Providing flexibility to smaller issuers and a phased-in process for these companies with extended implementation periods, particularly in less exposed sectors, will help alleviate the costs of regulation. In this interim period of flexibility for smaller or less exposed firms, the agency could also adopt a comply-or-explain approach, allowing firms to state whether a certain disclosure applies to their business, and if not, to explain why.²⁸⁸ The SEC should conduct audits of disclosures, particularly for large or highly exposed industries. But audits could similarly be phased in for smaller or less exposed industries.

The flexibility of rules cuts both ways. Climate science and the risks of climate change are ever evolving, and so the approach adopted by the SEC to require climate-related disclosures should fold flexibility into its requirements for firms to cater to this evolution; therefore, large or highly exposed industries should be required to continually assess the risks of climate change to their businesses. These disclosures should be upgraded over time as the scientific data regarding physical risks becomes more accurate and transition risks evolve. The periodicity of updates to disclosures could be longer for smaller or less exposed industries or issuers.

There are some drawbacks to rulemaking on climate-related disclosures. Not only is it a time-consuming exercise, but due to the complexity of climate science, the SEC will have to hire more climate experts to be able to appropriately assess the disclosures firms make in response to any rules or guidance. But the SEC is used to assessing complex information and already has a diversity of expertise across economics and finance, and so it is well placed to manage this complexity. The SEC, as a member of the FSB, was also a contributor to the TCFD guidance from the outset, and so has experience with this regime already. Issuers will also have to hire climate experts to their boards or to subcommittees of boards to be able to comply with any SEC rule. Issuers such as Amazon and Shell, which have already announced net-zero emissions goals, will already be doing this. But even issuers such as ExxonMobil and Chevron, which have not announced net-zero ambitions or have only recently done so, are being forced to add climate expertise on to their boards by their existing shareholders. Issuers

^{287.} Id. at 36.

^{288.} Harper Ho points to examples in the UK which take such a flexible approach such as comply-or-explain models to corporate disclosures, Harper Ho, *supra* note 5, at 467.

^{289.} Condon, *supra* note 5, at 50. *See* the recent hire of Satyam Khanna as Senior Policy Advisor for Climate and ESG, https://www.sec.gov/news/press-release/2021–20 [https://perma.cc/W7RJ-XDMF].

^{290.} Benjamin, *supra* note 34, at 379–80.

^{291.} Condon, *supra* note 43, at 52.

Despite the drawbacks, the benefits of regulatory action by the SEC outweigh the risks. A mandatory but flexible SEC rule on climate-related financial disclosures will ensure that issuer disclosures are uniform, of consistent quality, and comparable. The SEC can also help ensure that investor-based climate action is not entirely unilateral and fragmented, and this more consistent and predictable system would be beneficial for investors, firms, and capital markets. A phased and stable transition of firms and capital away from fossil fuels and towards climate-friendly investments is essential, and uniform SEC rules on climate-related disclosures can help make a stable and phased transition a reality and mitigate the escalation of climate-related risks into systemic, unmanageable risks.

Conclusion

The time has never been better for the SEC to regulate climate-related financial disclosures. The agency is willing, and the political climate is ripe for such a change. Institutional investors are demanding such disclosures from public corporations, as the risks of climate change are escalating in severity and frequency. The SEC, as an independent agency, is in a prime position to measure and consider the level and type of climate-related disclosures that should be imposed on issuers in order to protect investors. Despite this shifting landscape, business and judicial resistance remain potential obstacles. This article recommends that the SEC consider its past failures in mandating disclosures, and that these failures inform its approaches going forward. This article recommends the inclusion of robust and quantified cost-benefit analyses, as well as a flexible but firm regulatory approaches, that balance both prescriptive as well as principle-based elements in an SEC rule on climate-related financial disclosures. Evidence tving climate-related disclosures to SEC mandates, such as investor protection and capital formation, will be critical. Using these tools, the agency may be better able to harness rising political and investor enthusiasm for rules on disclosure and mitigate any remaining business reluctance and judicial hostility to its regulatory efforts.

* * *