Mother Nature on the Run: The SEC, Climate Change Disclosure, and the Major Questions Doctrine

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I. INTRODUCTION

Climate change can affect a company's financial condition and raise concerns about the sustainability of its business model. As more and more

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issuers find themselves needing to operate within a lower carbon environment, those failing to make the transition by reducing emissions could find themselves with a business model unable to compete without substantial reconfiguration or significant capital investment.

Carbon neutrality has not been legally mandated on a global basis. Nonetheless, the need to operate within a net zero environment is becoming increasingly inevitable. The U.S. Government has committed to a 50% reduction from 2005 levels by 2030, a goal accelerated by the adoption of the Inflation Reduction Act.[1] Investors have insisted on, and issuers have increasingly provided, targets that set out timelines for the transition to carbon neutrality.[2]

The Securities and Exchange Commission (SEC or Commission) has proposed a rule that addresses the disclosure needs of investors with respect to climate change.[3] The proposal would require that public companies reveal the risks to their business associated with climate change and explain the system and strategy of governance for monitoring those risks.[4] In addition, the proposal would mandate the disclosure of certain greenhouse gas emissions.[5]

The SEC's proposal arrived contemporaneously with the Supreme Court's announcement of the "major questions doctrine."[6] A deliberate attempt to limit the authority of the Executive Branch, the doctrine would restrict agencies

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1. *See* Silvio Maracci, *The Inflation Reduction Act Is the Most Important Climate Action in U.S. History*, FORBES (Aug. 2, 2022, 7:00 AM), https://www.forbes.com/sites/energyinnovation/2022/08/02/the-inflation-reduction-act-is-the-most-important-climate-action-in-us-history/?sh=10b6cb3a434d [https://perma.cc/GHT3-5XHX] ("The IRA's emissions-reducing provisions include clean energy and electric vehicle tax credits, large-scale investments in domestic clean tech manufacturing, and environmental justice measure."); *see also* Shelley Welton, *Neutralizing the Atmosphere*, 132 YALE L.J. 171, 174 (2022) ("As of September 2022, net zero commitments covered an impressive 91% (as measured by gross domestic product (GDP)), up from only 16% as recently as 2019.").

2. *See infra* notes 236–39 for a discussion of the increase in net zero commitments by public companies.

3. The Enhancement and Standardization of Climate-Related Disclosures for Investors, Securities Act Release No. 11042, Exchange Act Release No. 94478, 87 Fed. Reg. 21,334 (proposed Mar. 21, 2022).

4. *Id.*

5. *Id.*

6. The first use of the doctrine has sometimes been attributed to *Food & Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000), *superseded by statute*, Family Smoking Prevention and Tobacco Control Act, Pub. L. No. 111-31, 123 Stat. 1776 (2009). *But see* Nathan Richardson, *Antideference: Covid, Climate, and the Rise of the Major Questions Canon*, 108 VA. L. REV. ONLINE 174 (2022) (characterizing MCI Telecommunications Corp. v. AT&T Co., 512 US 218 (1994*), as the first case where the doctrine emerged but attributing to more recent cases the "formal adoption" of the doctrine).* Whatever the historical basis, the cases adopted in the last few years have been substantially different and represent a substantially expanded interpretation of the doctrine. *Id.*

from adopting rules on politically or economically important topics unless "clearly" authorized by Congress. The doctrine in part arises out of a deep-seated suspicion of agency motivations for regulatory action in politically sensitive areas.[7] While still under construction, the fundamental tenet of the doctrine is that certain policy decisions are reserved for Congress unless specifically given to agencies.

Reliance on the major questions doctrine presupposes a colorable claim of authority under the relevant statute. Climate change disclosure falls neatly into the SEC's longstanding and broad regulatory authority[8] and can be characterized as not particularly novel, with any differences from past practices mostly a matter of degree.[9] Investors want the information.[10]

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7. *See infra* notes 108–18 and accompanying text.

8. The SEC can require disclosure designed to protect investors and ensure "fair dealing" in shares. *See* 15 U.S.C. § 78m.

9. While the proposal involves traditional categories such as risk and governance, the degree of disclosure is more granular than past efforts. *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, Securities Act Release No. 11042, Exchange Act Release No. 94867, 87 Fed. Reg. 21,334 (proposed Mar. 21, 2022).

10. Those making the case that investors really do not want this information have to ignore or explain away the express views of asset managers who invest trillions of dollars in the markets, the widespread support for climate change proposals by shareholders, and the fact that management of almost every large public company feels sufficient heat from investors to provide voluntary disclosure about these matters. *See* U.S. GOV'T ACCOUNTABILITY OFF., GAO-20-530, PUBLIC COMPANIES: DISCLOSURE OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE FACTORS AND OPTIONS TO ENHANCE THEM (2020) ("Most institutional investors GAO interviewed (12 of 14) said they seek information on environmental, social, and governance (ESG) issues to better understand risks that could affect company financial performance over time. These investors added that they use ESG disclosures to monitor companies' management of ESG risks, inform their vote at shareholder meetings, or make stock purchasing decisions. Most of these institutional investors noted that they seek additional ESG disclosures to address gaps and inconsistencies in companies' disclosures that limit their usefulness."). They also have to ignore or explain away how every time the SEC has asked for comments on the need for increased climate change disclosure, the response has been consistently and overwhelmingly in the affirmative. *See* Andrew W. Winden, *Jumpstarting Sustainability Disclosures*, 76 BUS. LAW. 1215, 1217 (2021) ("The SEC received over 10,100 responses to its request for views on mandating sustainability disclosures. Among the responses, 10,070 expressed support for mandatory sustainability disclosures, while forty-three commenters expressed opposition or ambiguous views." (footnote omitted) (citing TYLER GELLASCH, TOWARDS A SUSTAINABLE ECONOMY: A REVIEW OF COMMENTS TO THE SEC'S DISCLOSURE EFFECTIVENESS CONCEPT RELEASE 10, 21 (2016))). Occam's razor posits that, all things being equal, the simplest explanation is often the right one. The simplest explanation for the relevant data points here is that, consistent with the SEC's authority, reasonable investors and shareholders want the information. *See* John C. Coates, Comment Letter on Proposed Rule on The Enhancement and Standardization of Climate-Related Disclosures for Investors Under the Securities Act of 1933 and the

The proposal was designed to fit within traditional categories[11] and focus on materiality, the common disclosure standard.[12] Moreover, environmental matters themselves are not new and have been explicitly integrated into the disclosure process since the 1970s.[13]

This, however, only begins the analysis. After all, the Supreme Court acknowledged that the Occupational Health and Safety Administration (OSHA) had the authority to protect employees[14] and that the Environmental Protection Agency (EPA) could regulate emissions at coal-burning plants,[15] yet in both cases, struck down efforts by these agencies to address those mandates.[16] In each instance, the agencies, according to the Court majority, sought to exercise regulatory authority in a novel fashion but failed to adequately articulate sufficient limiting principles.[17]

Securities Exchange Act of 1934, at 15 (June 2, 2022), https://www.sec.gov/comments/s7-10-22/s71022-20130026-296547.pdf [https://perma.cc/L6XW-CAPG] ("That legal question—whether the proposed disclosures could reasonably be viewed in good faith by the Commission as beneficial for investor protection—is easy to answer in the affirmative, based on the record before the Commission when it voted to propose them."). Perhaps unsurprisingly, some have conceded the point but argued over the extent of investor interest in the information. *See* Richard C. Breeden et al., Comment Letter on Proposed Rule on The Enhancement and Standardization of Climate-Related Disclosures for Investors Under the Securities Act of 1933 and the Securities Exchange Act of 1934, at 5 (June 17, 2022), https://www.sec.gov/comments/s7-10-22/s71022-20132519-303005.pdf [https://perma.cc/QN5A-LCUK] ("Given that some investors demand additional disclosures and other investors demand that there shall be no additional disclosures, the Commission must have a reason to choose a side other than investor demand—yet it has no adequate reason for siding with the investors who want additional disclosures. This unreasoned decision to privilege certain investors over others is arbitrary and capricious under the Administrative Procedure Act.").

11. Risk factor disclosure has long been encouraged, see *Guides for Preparation and Filing of Registration Statements*, Securities Act Release No. 4666, 29 Fed. Reg. 2490 (Feb. 7, 1964), and made an explicit part of Regulation S-K at the time of adoption in 1982. *See* Adoption of Integrated Disclosure System, Securities Act Release No. 6383, Exchange Act Release No. 18524, 47 Fed. Reg. 11,380 (Mar. 3, 1982) (including Item 503 in Regulation S-K). So has governance. *See* 17 C.F.R. 229.407(h).

12. The materiality concept is widespread throughout the release and the proposal. The proposed rule includes the term around ten times. The more unique effort was not to abandon materiality but to put guardrails on the analysis, including increased disclosure of the assessment of materiality and potential materiality thresholds. *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, Securities Act Release No. 11042, Exchange Act Release No. 94478, 87 Fed. Reg. 21,334 (proposed Mar. 21, 2022).

13. *See infra* notes 134–37 and accompanying text.

14. Nat'l Fed'n of Indep. Bus. v. Dep't of Lab., 142 S. Ct. 661, 663 (2022).

15. West Virginia v. EPA, 142 S. Ct. 2587 (2022).

16. *See id.*; *see also Nat'l Fed'n of Indep. Bus.*, 142 S. Ct. at 663.

17. *See, e.g.*, *Nat'l Fed'n of Indep. Bus.*, 142 S. Ct. at 665 ("The question, then, is whether the Act plainly authorizes the Secretary's mandate. It does not. The Act empowers the Secretary to set *workplace* safety standards, not broad public health measures."); *West Virginia v. EPA*, 142 S. Ct. at 2616 ("A decision of such magnitude and consequence rests

The importance of climate change information to investors may not, however, be enough for the current Court.[18] Traditional limits on the SEC's exercise of authority in specifying mandatory disclosure by public companies have not been categorical but practical,[19] reflecting an unwillingness to add content and impose costs on issuers unless supported by a sufficient portion of the investment community.[20]

To the extent that the approach is characterized as novel, particularly with respect to the disclosure of greenhouse gas emissions, the SEC will need to establish sufficient limiting principles. These arise less from the particular topic at issue and more from the need for, and purpose of, the rule. In adopting the Securities Exchange Act of 1934,[21] Congress confronted an existing but inadequate system of continuous corporate disclosure. The system was voluntary, did not sufficiently protect investors, and resulted in the misallocation of capital.[22] The SEC was not expected to devise an entirely new system but to fix one already in place.[23]

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with Congress itself, or an agency acting pursuant to a clear delegation from that representative body.").

18. Lawrence A. Cunningham et al., Comment Letter on Proposed Rule on The Enhancement and Standardization of Climate-Related Disclosures for Investors Under the Securities Act of 1933 and the Securities Exchange Act of 1934, at 10 (Apr. 25, 2022), https://www.sec.gov/comments/s7-10-22/s71022-20126528-287180.pdf [https://perma.cc/Y829-DLTS] ("The Proposal, however, is not anchored to any principles. It is unmoored and does not offer any limiting principle to what the SEC can compel companies and their managers to declare. Its potential costs are therefore unlimited. The SEC must articulate a reasoned—non-arbitrary and non-capricious—basis to distinguish climate change not only from financial reporting but also from the myriad other risks businesses face, such as war, pandemic, monetary policy or social and political concerns such as transacting with companies in China or Russia.").

19. *See* Hester M. Peirce, *We are Not the Securities and Environment Commission—At Least Not Yet*, U.S. SEC. & EXCH. COMM'N (Mar. 21, 2022), https://www.sec.gov/news/statement/peirce-climate-disclosure-20220321 [https://perma.cc/P99Q-G2AN] ("The fact that retail and institutional investors and asset managers have myriad motivations when making investing decisions and by extension therefore might want different categories of information necessarily means that we cannot adopt a disclosure regime that provides all information desired by all investors and asset managers.").

20. *See* discussion *infra* notes 134–37.

21. 15 U.S.C. § 78m(a).

22. *See* S. REP. NO. 73-1455, at 68 (1934) ("Insofar as the judgment of either is warped by false, inaccurate, or incomplete information regarding the corporation, the market price fails to reflect the normal operation of the law of supply and demand. One of the prime concerns of the exchanges should be to make available to the public, honest, complete, and correct information regarding the securities listed.").

23. *See infra* notes 84–92. Some voluntary disclosure concerning climate issues will remain even in the aftermath of a mandatory disclosure regime. *See* Lisa M. Fairfax,

In the case of climate change disclosure, most of the information comes from voluntary disclosure in the form of sustainability and other types of reports that are not filed with the SEC. The system has yielded a voluminous amount of information that, from the investor perspective, is inconsistent, non-comparable, and unreliable. Issuers, for example, routinely disclose emission reduction targets. Under the system of voluntary disclosure, however, the targets often lack sufficient accompanying detail for investors to determine whether they are supported by comprehensive plans or are mostly a public relations ploy.[24]

The system of voluntary disclosure limits the oversight role of the Commission, reduces the importance of the periodic reporting process, and contributes to the misallocation of capital.[25] The SEC's climate change proposal is designed to address these failings. Indeed, inactivity would amount to a policy decision to push investors towards a largely unregulated disclosure environment in a manner inconsistent with what Congress intended in adopting the Exchange Act.

This Article will briefly discuss the major questions doctrine then look at the history of the Exchange Act and the disclosure regime that existed prior to the adoption of the federal securities laws. The problems associated with climate change disclosure strongly resemble those that existed when Congress adopted the federal securities laws during the Great Depression. Whatever limits may or may not exist on the SEC's ability to require disclosure from public companies in the first instance, the SEC was given the clear authority to address the efficacy of a voluntary disclosure regime that failed to meet the needs of investors.

II. THE MAJOR QUESTIONS DOCTRINE

The major questions doctrine represents a newly invented tool employed by the Supreme Court in an effort to reign in Executive Branch agencies.[26]

Dynamic Disclosure: An Exposé on the Mythical Divide Between Voluntary and Mandatory ESG Disclosure, 101 TEX. L. REV. 273, 336 (2022) ("[T]his Article also argues that the appropriate response to those concerns is not to jettison voluntary ESG disclosure but rather to shore up the defects in voluntary ESG disclosure. . . . [W]e must look to other solutions to improve the accuracy of voluntary ESG disclosure such as reliance on third-party intermediaries or enhanced board oversight.").

24. *See* discussion *infra* Part V.

25. *See* discussion *infra* Part VI.

26. The current use of the doctrine seeks to address agencies using existing statutory authority to address new issues not considered by Congress at the time of the adoption of the enabling statute. Since many, if not most, agencies have enabling statutes adopted decades in the past, any effort to use the authority to address a new problem could fall within the current approach to the major questions doctrine. *See* Nat'l Fed'n of Indep. Bus. v. Dep't of Lab., 142 S. Ct. 661, 667 (2022) (Gorsuch, J., concurring) ("The Court rightly

The general goal is to prevent agencies from using broad statutory authority in a novel manner to address issues not expressly contemplated by Congress.[27] With much of the Executive Branch operating under enabling statutes adopted decades, even generations, in the past, the doctrine has broad potential application to agency decisions, particularly when addressing new and unforeseen issues.[28]

The recent development of the doctrine makes the boundaries difficult to set out with much certainty. Moreover, the small number of opinions to date suggest wide conceptual divergence in application on the Court. One view is that the doctrine is inapplicable where a "colorable" claim of statutory authority exists.[29] Broad statutory language in these circumstances is often seen as a deliberate decision by Congress to allow agencies to address future, unanticipated concerns[30] and that efforts by courts to restrict agency actions amounts to an inappropriate task for unelected judges.[31]

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applies the major questions doctrine and concludes that this lone statutory subsection does not clearly authorize OSHA's mandate. Section 655(c)(1) was not adopted in response to the pandemic, but some 50 years ago at the time of OSHA's creation. Since then, OSHA has relied on it to issue only comparatively modest rules addressing dangers uniquely prevalent inside the workplace, like asbestos and rare chemicals.").

27. *See infra* note 33 and accompanying text.

28. *See supra* notes 6–9 and accompanying text.

29. West Virginia v. EPA, 142 S. Ct. 2587, 2609 (2022) ("All of these regulatory assertions had a colorable textual basis.").

30. *Id.* at 2628 (Kagan, J., dissenting) ("The majority's decision rests on one claim alone: that generation shifting is just too new and too big a deal for Congress to have authorized it in Section 111's general terms. But that is wrong. A key reason Congress makes broad delegations like Section 111 is so an agency can respond, appropriately and commensurately, to new and big problems. Congress knows what it doesn't and can't know when it drafts a statute; and Congress therefore gives an expert agency the power to address issues—even significant ones—as and when they arise. That is what Congress did in enacting Section 111. The majority today overrides that legislative choice. In so doing, it deprives EPA of the power needed—and the power granted—to curb the emission of greenhouse gases."); *see also Nat'l Fed'n of Indep. Bus.*, 142 S. Ct. at 670 (Breyer, J., dissenting) ("And in so doing, it stymies the Federal Government's ability to counter the unparalleled threat that COVID–19 poses to our Nation's workers. Acting outside of its competence and without legal basis, the Court displaces the judgments of the Government officials given the responsibility to respond to workplace health emergencies.").

31. *Nat'l Fed'n of Indep. Bus.*, 142 S. Ct. at 676–77 (Breyer, J., dissenting) ("And then, there is this Court. Its Members are elected by, and accountable to, no one. And we 'lack the background, competence, and expertise to assess' workplace health and safety issues. . . . Without legal basis, the Court usurps a decision that rightfully belongs to others. It undercuts the capacity of the responsible federal officials, acting well within the scope of their authority, to protect American workers from grave danger." (quoting S. Bay United Pentecostal Church v. Newsom, 140 S. Ct. 1613, 1614 (2020) (Roberts, C.J., concurring))).

Others on the Court, however, view the novel exercise of broad rulemaking authority by federal agencies with deep suspicion.[32] They have described agencies as seeking to "exploit" statutory language[33] and "supplant[] government by the people."[34] Agencies turn to "a long-extant statute" to find "an unheralded power" in an effort "to regulate a significant portion of the American economy."[35]

Those taking this view mostly focus on the effects of the agency's action.[36] In *National Federation of Independent Business v. OSHA*, the concern was the effort to mandate a vaccine requirement that could affect eighty-four million people[37]; in *Biden v. Missouri*, the agency had taken the "unprecedented step of compelling over 10,000,000 healthcare workers to be vaccinated on pain of being fired."[38]

A third interpretation focuses on the novel nature of the exercise of authority and the existence of limiting principles. This approach is less about cutting

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32. *See, e.g.*, U.S. Telecom Ass'n v. FCC, 855 F.3d 381, 417 (D.C. Cir. 2017) (Kavanaugh, J., dissenting) ("The major [Questions] doctrine . . . operates as a vital check on expansive and aggressive assertions of executive authority.").

33. *Nat'l Fed'n of Indep. Bus.*, 142 S. Ct. at 669 (Gorsuch, J., concurring) ("The major questions doctrine serves a similar function [to the nondelegation doctrine] by guarding against unintentional, oblique, or otherwise unlikely delegations of the legislative power. Sometimes, Congress passes broadly worded statutes seeking to resolve important policy questions in a field while leaving an agency to work out the details of implementation. Later, the agency may seek to exploit some gap, ambiguity, or doubtful expression in Congress's statutes to assume responsibilities far beyond its initial assignment.").

34. *Id.* ("Whichever the doctrine, the point is the same. Both serve to prevent 'government by bureaucracy supplanting government by the people.'") (quoting Antonin Scalia, *A Note on Benzene Case*, 4 REGULATION, July–Aug. 1980, at 25, 27).

35. Transcript of Oral Argument at 98–99, West Virginia v. EPA, 142 S. Ct. 2587 (2022) (No. 20-1530) ("One thing we [the Court] said is that Congress must 'speak clearly if it wishes to assign an agency decisions of vast economic and political significance.' And the second thing we said is that the Court greets with 'a measure of skepticism' when agencies claim to have found in 'a long-extant statute an unheralded power to regulate a significant portion of the American economy.'" (citation omitted)) (Statement of Justice Kavanaugh).

36. *See West Virginia v. EPA*, 142 S. Ct. at 2620–21 (Gorsuch, J., concurring) (asserting that Court decisions have provided significant guidance on the application of the major questions doctrine and specifying that the doctrine applies in a non-exclusive set of circumstances that include political, economic and state matters).

37. *Nat'l Fed'n of Indep. Bus.*, 142 S. Ct. 667–68 (Gorsuch, J., concurring) ("OSHA's mandate fails that doctrine's test. The agency claims the power to force 84 million Americans to receive a vaccine or undergo regular testing. By any measure, that is a claim of power to resolve a question of vast national significance. Yet Congress has nowhere clearly assigned so much power to OSHA.").

38. Biden v. Missouri, 142 S. Ct. 647, 659 (2022) (Alito, J., dissenting). Likewise Justice Thomas in his dissent emphasized that the agency had required "effectively mandated vaccination for 10 million healthcare workers." *Id.* at 655 (Thomas, J., dissenting). The exercise was characterized as "sweeping" and "coerci[ve]" and one that forced healthcare workers "to undergo a medical procedure they do not want and cannot undo." *Id.* at 658.

back on existing authority and more about preventing expansion.[39] In these instances, the reasonableness of the particular matter at issue[40] gives way to concerns over the outer boundaries of the authority.[41]

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39. *See* Ala. Ass'n of Realtors v. Dep't of Health & Hum. Servs., 141 S. Ct. 2485, 2489 (2021) ("Indeed, the Government's read of § 361(a) would give the CDC a breathtaking amount of authority. It is hard to see what measures this interpretation would place outside the CDC's reach, and the Government has identified no limit in § 361(a) beyond the requirement that the CDC deem a measure 'necessary.'" (first citing 42 U.S.C. § 264(a); and then citing 42 C.F.R. § 70.2 (2023))); *see also* Transcript of Oral Argument at 103, *Nat'l Fed'n of Indep. Bus.*, 142 S. Ct. 661 (No. 21A244) ("On the issue of whether you're trying to squeeze an elephant into a mouse hole and the question of whether this is fundamentally different from anything that OSHA has ever done before, I want to see if it might be fundamentally different in at least two respects and get your answer . . . to the question. Most OSHA regulations, all of the ones with which I'm familiar, affect employees when they are on the job but not when they are not on the job. And this affects employees all the time. If you're vaccinated while you're on the job, you're vaccinated when you're not on the job. Isn't this different from anything OSHA has done before in that respect?") (statement of Justice Alito).

40. *See* Transcript of Oral Argument, *supra* note 35, at 124–25 ("But, you know, what happens after they—the 5 percent case, they say, oh, this is not a big deal, it's not major, and then the agency says, well, no, you know, we're going to claim 20 percent. And then they—later they say we're claiming 40. And, eventually, they get up to 80, 90, or something like that. At some point, can it become a major question?") (statement of Justice Alito); *see also West Virginia v. EPA*, 142 S. Ct. at 2639 (Kagan, J., dissenting) ("The majority thus pivots to the massive consequences generation shifting could produce—but that claim fares just as poorly. On EPA's view of its own authority, the majority worries, some future rule might 'force coal plants to "shift" away virtually all of their generation—i.e., to cease making power altogether.' But looking at the text of Section 111(d) might here come in handy. For the statute imposes, as already shown, a set of constraints—particularly involving costs and energy needs—that would preclude so extreme a regulation. . . . Such a rule does just what you might think: It requires a plant to burn a different kind of fuel—say, natural gas instead of coal. So it too can significantly 'restructure the Nation's overall mix of electricity generation.' Or take an even more technological-sounding approach: the use of carbon-capture equipment. Order the installation of that equipment, the Trump administration concluded, and the 'exorbitant' costs 'would almost certainly force the closure' of all affected 'coal-fired power plants.' The point is a simple one: If generation shifting can go big, so too can technological controls (assuming, once again, that the statute's text is ignored). The problem (if any exists) is not with the channel, but with the volume." (citations omitted)).

41. *See* Transcript of Oral Argument, *supra* note 39, at 100 ("And also that it's—yes, 50 years ago Congress passed a general provision, but I think it's certainly hard to argue, and you're doing a good job of it, that that gives free rein to the agencies to take—I guess this is invoking the major cases doctrine, that it gives free rein to the agencies to enact such broad regulation that is—was certainly unfamiliar to Congress in 1970.") (statement of Chief Justice Roberts).

In *West Virginia v. EPA*,[42] the Court turned a relatively industry-friendly reduction in emissions at coal burning plants into an attempt by the EPA to assume power to set industrial policy in the power generation industry.[43] The agency traditionally regulated emissions at the plant level, something described at oral argument as "inside the fence."[44] The EPA, however, proposed allowing coal burning plants to meet emissions caps at least in part through "generation shifting,"[45] particularly investments in alternative energy sources such as wind and solar.[46] Although a unique

42. *West Virginia v. EPA*, 142 S. Ct. 2587.

43. *See* Transcript of Oral Argument, *supra* note 35, at 41–42 ("JUSTICE THOMAS: There's quite a bit of talk about outside the fence and inside the fence. I don't know how you can draw such clean distinctions. It would seem that some of the activity that you might think is based—source-based is also outside the fence. How do you make those distinctions? MR. ROTH: Yeah. Justice Thomas, I think that the—I think it's shorthand that isn't exactly precise. So the way I like to think about it is, is this a measure that would reduce the emissions rate from this source's operations? If it is, then it's within the scope of the statute. JUSTICE THOMAS: But it would seem as though that EPA could regulate the source in a way that actually requires a change, for example, in the mix of energy generation that—for example, that the cost of running a facility is so high that you begin to change your generation sources, say, from coal to natural gas or natural gas to solar. MR. ROTH: So, Your Honor, there absolutely could be incidental effects of a regulation that is a valid regulation, right, that have the effect of causing some generation shifting. That's not what we're objecting to here. I mean, there always could be incidental effects of regulation. Our objection is that the EPA's objective, right, the whole design of the Clean Power Plan and that reading of the statute is that the agency can include in its best system measures that are—that are calling on the plant to operate less or not at all. JUSTICE THOMAS: But what's the difference? If you can do it indirectly or directly, isn't—isn't it the same result? You don't have to—EPA doesn't have to say we are doing this for the purpose of requiring you to change your generation—energy generation mix. But, by regulating the facility, it can cause you to do that yourself. So what's the difference?").

44. *Id.*

45. *West Virginia v. EPA*, 142 S. Ct. at 2614 ("Given these circumstances, our precedent counsels skepticism toward EPA's claim that Section 111 empowers it to devise carbon emissions caps based on a generation shifting approach. To overcome that skepticism, the Government must—under the major questions doctrine—point to 'clear congressional authorization' to regulate in that manner." (quoting Util. Air Regul. Grp. v. EPA, 573 U.S. 302, 324 (2014))); *see also* Transcript of Oral Argument, *supra* note 35, at 14 ("JUSTICE KAGAN: In other words, inside-the-fence reform can be very small or it can be catastrophic. And inside the fence, there are inside-the-fence technological fixes that could drive the entire coal industry out of business tomorrow. And an outside-the-fence rule could be very small or it could be very large. So the rule that you're saying sort of emerges from this statute, which is an inside-the-fence/outside-the-fence rule, bears no necessary relationship to whether a—a rule is major in your sense of expensive, costly, destructive to the coal industry. It just bears no necessary relationship to that at all. MS. SEE: Your Honor, I don't think that's true because there are, of course, limits Congress put in the statute, and they make sense with this source-specific limitation.").

46. *See West Virginia v. EPA*, 142 S. Ct. at 2610 ("By contrast, and by design, there is no control a coal plant operator can deploy to attain the emissions limits established by the Clean Power Plan.").

approach, the effort broadly tracked the authority given to the EPA by Congress.[47]

The Court nonetheless viewed the exercise as novel.[48] No longer restricted to emission reductions at the plant itself, coal burning utilities could effectively be forced to shift energy production to alternative sources. Without meaningful limits,[49] the EPA would have the authority to shut down coal burning plants and "transform the Nation's electrical power supply."[50] Similarly, in *National Federation of Independent Business v. OSHA*,[51] the Government was unable to explain, at least to the satisfaction of a majority on the Court, the limiting principles on vaccine/mask mandates that otherwise would have allowed OSHA to impose flu shots and polio vaccines on the general population.[52]

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47. *See* Transcript of Oral Argument, *supra* note 35, at 14 ("Here, if we're thinking about EPA regulating greenhouse gases, well, there's a match between the regulation and the agency's wheelhouse, right? So you're describing something a little bit different than Justice Kagan was asking you. You're saying, when you look at this scheme, this is a really big deal. How do we decide that? That—that's a little bit different than a mismatch between the subject of the—of the regulation and what the agency does.") (statement of Justice Barrett).

48. *West Virginia v. EPA*, 142 S. Ct. at 2612 ("The Government attempts to downplay the magnitude of this 'unprecedented power over American industry.'" (quoting Industrial Union Department v. Am. Petroleum Inst., 448 U.S. 607, 645 (1980))).

49. *See id.* at 2614 ("All the Government can offer, however, is the Agency's authority to establish emissions caps at a level reflecting 'the application of the best system of emission reduction . . . adequately demonstrated.' . . . But of course almost anything could constitute such a 'system'; shorn of all context, the word is an empty vessel. Such a vague statutory grant is not close to the sort of clear authorization required by our precedents." (citation omitted)); *see also* Transcript of Oral Argument, *supra* note 35, at 90 ("I really don't see what the concrete limitations are in any of what you said. When you take in—if you take the arguments about climate change seriously and this is a matter of survival, so long as the system that you devise doesn't mean that there isn't going to be—there isn't going to be electricity, and so long as the costs are not absolutely crushing for the society, I don't know why EPA can't go even a lot further than it did in the CPP.") (statement of Justice Alito).

50. *West Virginia v. EPA*, 142 S. Ct. at 2624.

51. Nat'l Fed'n of Indep. Bus. v. Dep't of Lab., 142 S. Ct. 661 (2022).

52. Transcript of Oral Argument, *supra* note 39, at 121 ("I mean, people forget polio. That was a pretty bad, you can call it a pandemic, you can call it an endemic, I don't know what you'd call it, but it was a terrible scourge on this country for many years. We have vaccines against that—that, but the federal government through OSHA, so far as I know, and you can correct me, does not mandate every worker in the country to receive such a vaccine. We have flu vaccines. The flu kills, I believe, hundreds, thousands of people every year. OSHA has never purported to regulate on that basis. What do we make of that when we're thinking about what qualifies as a major question and what doesn't?").

In contrast, in *Biden v. Missouri*,[53] the Court upheld a vaccine mandate imposed on facilities eligible to receive Medicare and Medicaid funds, despite broad effect.[54] The per curiam opinion acknowledged that the agency had gone "further" than before.[55] Nonetheless, the authority was limited to a particular industry and certain providers and, unlike the OSHA mandate, could not be extended to the wider public.[56]

The approaches to the doctrine can result in very different outcomes. The focus on the magnitude of the decision has the potential to absorb a wide swathe of regulatory decisions. Federal agencies routinely make determinations that affect entire industries and can be readily characterized as economically and politically significant. In these circumstances, courts will have the authority to restrict agency action whenever the matter involves a matter of political controversy, something increasingly likely given the growing politicization of the regulatory process.[57]

This will be less true, however, where the primary concern is the novel exercise of authority in addressing unexpected issues. Agencies can still deal with concerns not specifically contemplated by Congress even when their decisions have broad effect so long as the Court is satisfied that the authority is consistent with traditional practices and subject to adequate limiting principles.

III. THE DISCLOSURE MISSION OF THE SEC

Congress gave to the SEC the authority to regulate continuous disclosure by public companies in the Securities Exchange Act of 1934.[58] Picking up where the Securities Act of 1933 left off,[59] the Exchange Act mandated that the SEC oversee the system of continuous disclosure by public companies in order to protect investors and ensure robust trading in the secondary markets.[60]

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53. Biden v. Missouri, 142 S. Ct. 647 (2022).
54. *Id.* at 653.
55. *Id.*
56. The requirements applied only to healthcare providers, including "hospitals, nursing homes, ambulatory surgical centers, hospices, rehabilitation facilities, and more." *Id.* at 650–53.
57. For an article that discusses the growing politicization of the SEC and the consequences, see J. Robert Brown, Jr., *The Politicization of Corporate Governance: Bureaucratic Discretion, the SEC, and Shareholder Ratification of Auditors*, 2 HARV. BUS. L. REV. 501 (2012).
58. Securities Exchange Act of 1934, 15 U.S.C. §§ 78a–78rr.
59. Securities Act of 1933, 15 U.S.C. §§ 77a–77aa.
60. This was considered a significant omission in the Securities Act of 1933. *See* William O. Douglas & George E. Bates, *The Federal Securities Act of 1933*, 43 YALE L.J. 171, 171 (1933) ("All the Act pretends to do is to require the 'truth about securities' at the

In providing the authority, Congress did not write on a blank slate. At the time of the adoption of the Exchange Act, a widespread system of corporate disclosure already existed. Built around listing standards imposed by the New York Stock Exchange (NYSE), a significant number of large public companies issued quarterly income statements and annual balance sheets.[61] The system, however, did not adequately meet the needs of investors.

First, participation in the disclosure regime was, for the most part, voluntary. Although the NYSE mandated quarterly disclosure, application extended only to the recently listed.[62] Participation therefore became primarily a matter of persuasion rather than requirement.[63] Even those subject to the standard could avoid application by delisting and moving to another exchange.[64] As a result, at the time of the adoption of the securities

time of issue, and to impose a penalty for failure to tell the truth. Once it is told, the matter is left to the investor.").

61. *See Stock Exchange Regulation: Hearing on H.R. 7852 and H.R. 8720 Before the Comm. on Interstate and Foreign Com.*, 73d Cong. 655 (1934), *reprinted in* 9 LEGISLATIVE HISTORY OF THE SECURITIES ACTS OF 1933 AND SECURITIES EXCHANGE ACT OF 1934 (compiled by J.S. Ellenberger and Ellen P. Mahar) [Hereinafter *Stock Hearing*] ("The present listing requirements of the New York Stock Exchange provide that corporations shall publish an annual balance sheet and income account, and quarterly income accounts.").

62. *Id.* ("It is true that some corporations are not submitting quarterly reports because their agreements with the exchange were made before the exchange instituted the provision making this a requirement for new listings. However, the efforts of the exchange through its committee on stock list have been devoted for a long time to having corporations agree voluntarily to modifications of their listing agreements; so as to provide for quarterly earnings reports."). The Exchange asserted that it lacked the authority to impose the standards on issuers already listed on the exchange. *See id.* at 173 ("Mr. Marland. Well, can the stock exchange under the law and under its own rules require all corporations whose stocks are listed, to make quarterly reports? Mr. Whitney. Specifically, no. Mr. Marland. It has not that authority. Mr. Whitney. It has not that authority. At least, it is an open question with regard to those that are already listed, because those corporations have made an agreement with the stock exchange to do certain things so that their stock would be listed, for which a fee was paid to the exchange.").

63. Douglas C. Michael, *Untenable Status of Corporate Governance Listing Standards Under the Securities Exchange Act*, 47 BUS. LAW. 1461, 1467 n.26 (1992) ("By 1931 the Exchange had persuaded 83% of listed companies to follow this rule [requiring submission of audited financial statements], and in 1932 mandated the rule for all new listings." (citing RICHARD J. TEWELES & EDWARD S. BRADLEY, THE STOCK EXCHANGE 107 (4th ed. 1982))).

64. *Stock Hearing*, *supra* note 61, at 174 ("[T]here would be nothing to prevent [the listed companies] from retiring as listed corporations in case they thought our rules, or any legal authority was too stringent."); *see also* Joel Seligman, *The Historical Need for a Mandatory Corporate Disclosure System*, 9 J. CORP. L. 1, 15 (1983) ("Yet, in the period before the 1934 Act become effective, corporations listed on the New York Stock Exchange could avoid the Exchange's various requirements by delisting and being traded on an exchange

laws, around 40% of issuers listed on the NYSE did not provide quarterly reports.[65]

Second, the information was not reliable. With respect to annual disclosure, audits were a matter of "good practice"[66] but not mandatory for most listed companies.[67] By the time of the adoption of the Exchange Act, 15% of listed companies still did not obtain an annual audit.[68] Moreover, even where an audit was obtained, the absence of standards impaired quality,[69] with representations about assurance sometimes describes as a "marketing

with less stringent requirements or in the over-the-counter market."). Indeed, a large number of issuers were listed on exchanges other than the NYSE. *See Stock Hearing*, *supra* note 61, at 512 ("At the present time there are 1,367 separate issuing corporations whose securities are listed on the New York Stock Exchange. The Analyst's annual supplement for 1934 shows 3,500 issuers with securities listed on other stock exchanges than the New York Stock Exchange.").

65. Sean M. O'Connor, *Be Careful What You Wish for: How Accountants and Congress Created the Problem of Auditor Independence*, 45 B.C. L. REV. 741, 795–96 (2004) ("By 1933, however, all of the 1157 listed firms provided annual reports; sixty percent also provided quarterly reports; and eighty-five percent underwent annual audits by CPAs with the results made publicly available."). Most did so as a result of persuasion. *See* Michael, *supra* note 63.

66. *Stock Hearing*, *supra* note 61, at 652 ("We approve the requirement of at least one report each year certified by independent public accountants. This is in accord with what is commonly regarded as good practice.").

67. *See* GEORGE L. LEFFLER, THE STOCK MARKET 140 (Loring C. Farwell rev., 3d ed. 1963) ("In April, 1932, the Exchange made the 1928 policy of independent audits mandatory for all new companies applying for listing."); *see also* Robert Todd Lang et al., Am. Bar Ass'n, *Special Study on Market Structure, Listing Standards and Corporate Governance*, 57 BUS. LAW. 1487, 1499 (2002) ("A new NYSE policy urged, but did not require, companies to prepare financial reports by independent accountants and to prepare detailed income statements. By 1932, independent audits became a part of all new listing agreements and therefore mandatory for all newly listed companies." (footnote omitted) (citations omitted)); *see also* Robert B. Thompson, *Delaware, the Feds, and the Stock Exchange: Challenges to the First State as First in Corporate Law*, 29 DEL. J. CORP. L. 779, 794 (2004) (noting that NYSE required "certification" of financial statements in 1932 (citing LEFFLER, *supra*)).

68. *See Securities Act: Hearings on S. 875 Before the S. Comm. on Banking & Currency*, 73d Cong. 56 (1933) [hereinafter *Securities Act Hearings*] (statement of Col. A.H. Carter, New York City, Certified Public Accountant, President of the New York State Society of Certified Public Accountants) ("Eighty-five percent of the companies that are listed on the exchanges in New York today are examined.").

69. *See* O'Connor, *supra* note 65, at 796 ("'[T]he rapidity with which periodic audited financial statements became commonplace masked the continued unreliability of financial reporting' because 'no government or private agency effectively defined generally accepted accounting principles.'" (quoting JOEL SELIGMAN, THE TRANSFORMATION OF WALL STREET: A HISTORY OF THE SECURITIES AND EXCHANGE COMMISSION AND MODERN CORPORATE FINANCE 48 (1982))).

ploy."[70] Whatever the concerns with annual disclosure, quarterly reports were viewed as even less accurate.[71]

But perhaps most importantly, the disclosure was incomplete and lacked comparability. With the contents of quarterly and annual reports mostly a matter of managerial discretion, information important to investors was often omitted. Risks were not invariably disclosed.[72] Reports did not include important financial information, whether gross income, depreciation, net profits,[73] or sales revenues.[74] Realized and unrealized earnings were

70. *Id*. ("[T]he rapid rise in the use of audited statements may have been mainly a marketing ploy, or, more generously, a quality signaling best practice, to attract investors in a quickly crowding field of issuances.").

71. These were described by one witness as "reasonably correct." *Stock Hearing*, *supra* note 61, at 655 (statement of Edwin F. Chinlund, Controllers Institute of America) ("It is well recognized in accounting and business circles that quarterly statements of many corporations, although reasonably correct, are based upon estimates to a larger degree than annual statements, and therefore without greatly elaborating the present accounting methods they cannot be as accurate as the annual statements.").

72. The disclosure used to sell foreign bonds, for example, "emphasized selling points rather than risks," *see* Seligman, *supra* note 64, at 25 ("Generally, the foreign bond prospectuses were extremely brief, many occupying less than a page in the printed hearings. Typically they emphasized selling points of the bonds rather than investment risks." (citing *Sale of Foreign Bonds or Securities in the United States: Hearing on S. Res. 19 Before the S. Comm. on Fin.*, 72nd Cong. 226 (1931))).

73. *Id.* at 31 ("On the basis of 1927 financial reports, Laurence Sloan, vice-president of Standard Statistics Company, found it possible to compare the gross incomes and net profits of but 235 out of 545 leading industrial firms, or 43 percent. Gross incomes, Sloan found, were not reported by 57 percent of these firms. For only 219 of the 545 firms was it possible to obtain data revealing the sums that were charged to depreciation and depletion in the years 1926 and 1927. A subsequent study conducted by Sloan based on 1929 reports found that only 323 of 580 leading firms reported gross income; 257 or 44 percent did not." (first citing LAURENCE H. SLOAN, CORPORATION PROFITS: A STUDY OF THEIR SIZE, VARIATION, USE, AND DISTRIBUTION IN A PERIOD OF PROSPERITY 42, 62 (1929); and then citing LAURENCE H. SLOAN, EVERYMAN AND HIS COMMON STOCKS: A STUDY OF LONG TERM INVESTMENT POLICY 66–74 (1931))).

74. *Stock Hearing*, *supra* note 61, at 46 (statement of Fred Y. Presley, President of the National Investors Corporation) ("A great many concerns today are not reporting sales, largely because they do not want to show their margin of profit. They fear that it will invite competition and reduce prices, and that is just about the best reason in the world why they should report their sales and net profits."); *see also* Seligman, *supra* note 64, at 14 ("Benston studied the 1934 financial accounting information disclosed by 508 companies listed on the New York Stock Exchange in June 1935, the month before filing was required under the 1934 Act. He found all firms provided a balance sheet and listed current assets and liabilities. Sixty-two percent of the firms published sales figures; 54 percent published the cost of goods sold; 93 percent published depreciation; and 99.6 percent published net income.").

combined; profits could be set out as an average.[75] Companies could cherry pick data by declining to consolidate results from subsidiaries into their financial statements.[76] Information distributed to shareholders was even more selective.[77]

The result was a system of disclosure described as "spotty"[78] and "seriously"[79] or "hopelessly" inadequate.[80] What was disclosed was not "intelligible to the average, well informed investor."[81] Indeed, disclosure could be counterproductive, concealing rather than elucidating the condition of the company,[82] impairing market efficiency.[83]

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75. *See* Frederick W. Jones, *Corporate Accounting and Reporting*, *in* THE SECURITY MARKETS 563, 567 (Alfred L. Bernheim & Margaret Grant Schneider eds., 1935) ("[A] fairly large issue floated by S. W. Straus and Company in 1929 gave the following information in the advertising prospectus: 'average earnings realized and unrealized during the past three and a half years have amounted to over 37 1/2 per cent.' Here two defects are obvious: first, inclusion of 'unrealized' with 'realized' earnings in one lump sum is wholly unwarranted. Second, the use of 'average earnings' leaves the reader in the dark as to the trend of profit during the period.").

76. Seligman, *supra* note 64, at 32 ("The [Twentieth Century] Fund particularly condemned the practice of some parent corporations that neither included the records of subsidiary firms in consolidated financial statements nor published separate reports for these subsidiaries." (citing Jones, *supra* note 75, at 586–89)).

77. Maurice C. Kaplan & Daniel M. Reaugh, *Accounting, Reports to Stockholders, and the SEC*, 48 YALE L.J. 935, 939–40 (1939) ("Of the 70 corporations studied, three did not include any income statement in their annual reports to stockholders in 1937 and the income statements of at least 17 of the corporations are considered by the writers to be totally inadequate." (footnote omitted)).

78. Robert Prentice, *Whither Securities Regulation? Some Behavioral Observations Regarding Proposals for Its Future*, 51 DUKE L.J. 1397, 1418 n.94 (2002) ("The best history of accounting in the United States that has been written points out how spotty voluntary corporate disclosure was before 1933.").

79. *Id.* at 1417–19 ("There is substantial evidence that voluntary corporate disclosure was seriously inadequate before passage of the 1933 Securities Act and the 1934 Securities Exchange Act, and that these Acts created important improvements over previous practices and thereby improved market efficiency.").

80. *See Stock Hearing*, *supra* note 61, at 143 (statement of Thomas Gardner Corcoran, Counsel with the Reconstruction Finance Corporation) ("What the section comes down to is this: These registration requirements on securities, and provisions for reports are designed to take care of the fact that the stock exchange listing requirements, by which they have attempted to give those buying into a stock some idea of what the stock is worth, have been rather hopelessly inadequate. This section is designed to give the stockholder an idea of what his company is like.").

81. Jones, *supra* note 75, at 601 ("We have found that, despite some improvement during the past few years, a majority even of those companies whose issues are listed on the New York Stock Exchange do not disclose enough information to render their balance sheets and their income accounts intelligible to the average, well informed investor.").

82. *Id.* at 580 ("The information contained in such [periodic] reports [prior to the adoption of the federal securities laws] is often so meager as to be almost useless to the stockholder. In numerous instances, indeed, instead of disclosing, the report succeeds in concealing the real conditions.").

83. Prentice, *supra* note 78, at 1417–19.

In adopting the Exchange Act, Congress expected the SEC to fix the existing system.[84] Although modeled on the standards in place at the NYSE,[85] Section 13 of the Exchange Act made a number of changes.[86] Participation would be mandatory rather than voluntary. No longer a matter of discretion, the SEC received the "blanket power" to set out the necessary disclosure requirements[87] for "[f]ull, frequent, and comparable corporation reports" containing whatever the Commission deemed

84. *Stock Hearing*, *supra* note 61, at 783 (statement of Evans Clark) ("Adequate information about corporate activity is absolutely essential in the efficient performance of the functions of the security markets, to the sound investment activities of individuals and institutions and to adequate public regulation. It is surprising, gentlemen, that there should be any opposition to full corporate reporting, except from those individuals who profit from the secrecy of their own operations or are afraid to conduct their business in the open. It would seem almost self-evident that once the stock of a company is sold to the public, once it enters the trading of the Nation's security markets, an economic, if not a moral obligation, is at once created to inform the public about the essential features of the activities of that company. How else, I ask you, is the investing public to know when to buy and sell the stock; how otherwise can the market price of that stock be related to its intrinsic value? This is so axiomatic, gentlemen, that those who oppose publicity for corporate records assume the burden of proving that they have not something of evil omen to conceal.").

85. A.C. Pritchard, *Markets as Monitors: A Proposal to Replace Class Actions with Exchanges as Securities Fraud Enforcers*, 85 VA. L. REV. 925, 1008 (1999) ("The value of the NYSE's listing requirements is testified to by the fact that Congress closely tracked the NYSE disclosure requirements when it drafted the Exchange Act."); *see also* S. REP. NO. 73-1455, at 74 (1934) ("Henceforth it is intended that corporations shall present a truthful face to the world, and that the evasions, suppressions, distortions, exaggerations, and misrepresentations practiced by some corporations with intent to cloak their operations and to present to the investing public a false or misleading appearance as to their financial condition shall be eliminated.").

86. *See* Securities Exchange Act of 1934, 15 U.S.C. § 78m(a).

87. H.R. REP. NO. 73-1383, at 31 (1934) ("Annual and quarterly statements are required, and finally, the commission is given blanket power to require information, and provided any report required under the bill is found inapplicable to any specified class or classes of issuers, to require such reports of comparable character as the commission may deem applicable."). There is a quote from the House Report commonly used to suggest limitations on the Commission's authority with respect to disclosure. *See id.* at 23 ("This assures adequate elasticity without giving the Commission unconfined authority to elicit any information whatsoever."). The quote, however, discusses the Section that applies to the registration of a class of securities with the Commission and the content of the application, *see* 15 U.S.C. § 78l(c), not the continuous disclosure requirements in Securities Exchange Act of 1934 § 13, *see* 15 U.S.C. § 78m(a).

"essential."[88] The authority would help ensure standardized[89] and complete[90] disclosure, something that encompassed "major questions of policy."[91] In doing so, the SEC would put an end to the ability to distort, suppress or exaggerate and cause corporations to present a "truthful face to the world."[92]

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88. *Stock Hearing*, *supra* note 61, at 781 (statement of Evans Clark) ("These four essentials have, we believe, been made the basis for the Fletcher-Rayburn bill. They are: . . . 2. Full, frequent, and comparable corporation reports."); *see also* H.R. REP. NO. 73-1383, at 24 (1934) ("[T]he Commission [is permitted] to require the reporting of all matters regarded as essential under the act for the protection of investors.").

89. Joel Seligman, *The SEC and Accounting: A Historical Perspective*, J. COMPAR. BUS. & CAP. MKT. L. 241, 242 (1985) ("Without federal statutory law and the SEC, there would have been no mechanism to ensure the standardization of items in corporate financial reports.").

90. SEC. & EXCH. COMM'N, SECOND ANNUAL REPORT OF THE SECURITIES AND EXCHANGE COMMISSION (1936) (describing the purpose of the periodic reporting process as making "available to the average investor honest and reliable information sufficiently complete to acquaint him with the current business conditions of the company, the securities of which he may desire to buy or sell").

91. S. REP. NO. 73-1455, at 74 (1934) ("In order that the stockholder may have adequate knowledge as to the manner in which his interests are being served, it is essential that he be enlightened not only as to the financial condition of the corporation, but also as to the major questions of policy, which are decided at stockholders' meetings. Too often proxies are solicited without explanation to the stockholder of the real nature of the matters for which authority to cast his vote is sought.").

92. *Id.* ("Henceforth it is intended that corporations shall present a truthful face to the world, and that the evasions, suppressions, distortions, exaggerations, and misrepresentations practiced by some corporations with intent to cloak their operations and to present to the investing public a false or misleading appearance as to their financial condition shall be eliminated."). The Commission addressed the concerns with the voluntary disclosure system almost immediately. Annual reports were made mandatory for public companies. *See* Business and Financial Disclosure Required by Regulation S-K, Securities Act Release No. 10064, Exchange Act Release No. 77599, 81 Fed. Reg. 23915, at 122 (Apr. 13, 2016) ("The federal securities laws have required registrants to provide annual reports since 1934."); *see also* Rule Adopting Form 10-K, Exchange Act Release No. 445, at 1 (Dec. 20, 1935) ("[A]dopt[ing] Form 10-K for annual reports of corporations" with securities "registered on a national securities exchange."). Supplementary disclosure on current reports was introduced in 1936. *See* Securities and Exchange Commission Release Notice, Exchange Act Release No. 925 (Nov. 11, 1936). With respect to quarterly disclosure, the Commission did not seek to "duplicate" the exchanges but to act "as a backstop for those policies." *See* U.S. SEC. & EXCH. COMM'N, DISCLOSURE TO INVESTORS—A REAPPRAISAL OF FEDERAL ADMINISTRATIVE POLICIES UNDER THE '33 AND '34 ACTS 332 (1969), https://www.sechistorical.org/collection/papers/1960/1969_Wheat_CH10.pdf [https://perma.cc/8YV4-QMYH] (Wheat Report). Some quarterly disclosure was mandated as early as 1945. *See* Securities and Exchange Commission Release Notice, Exchange Act Release No. 3718 (July 23, 1945). Semi-annual reports were required in 1955, *see* Adoption of Form 9-K and Rules X-13A-13 and X-15D-13, Securities Act Release No. 3553, Exchange Act Release No. 5189 (June 23, 1955), and the existing system of quarterly reports on Form 10-Q was put in place in 1970, *see* Adoption of Form 10-Q, Rescission of Form 9-K and Amendment of Rules 13a-13 and 15d-13, Exchange Act Release No. 9004 (Oct. 28, 1970).

Congress, therefore, expected a system of disclosure that provided investors what they needed under the supervisions and oversight of the SEC. Congress did initially have some concern with the possibility of duplicative disclosure requirements.[93] Witnesses at the hearings raised the possibility.[94] A witness from the railroad industry[95] complained that the SEC's mandate would be unnecessary[96] given existing disclosure requirements imposed by the Interstate Commerce Commission (ICC).[97]

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93. 78 CONG. REC. 8284 (1934) (statement of Senator Frederic C. Walcott) ("In this connection it should be noted that common carriers subject to the Interstate Commerce Act are required under that act to establish the most adequate systems of accounting and to make voluminous reports to the Interstate Commerce Commission. These reports are probably more elaborate than any reports which may reasonably be required by the Federal Securities Exchange Commission. Moreover, the books of these common carriers are subject to the audit of agents of the Interstate Commerce Commission, and there is no possible gain in placing them under the supervision of another governmental agency. On the contrary, it would result in duplication of reports and duplication of supervision by two different Federal agencies, with consequent additional cost to the carriers and to the United States.").

94. *Stock Hearing*, *supra* note 61, at 761 (statement of James H. Rand, Chairman of the Comm. for the Nation and Chairman of the Bd. of Remington-Rand, Inc.) ("We have reports called for on income taxes today, to the Treasury, of balance sheets and operating statements, that appear to be adequate so far as showing the operations of the concerns are concerned.").

95. *Id.* at 426–27 (statement of R.V. Fletcher, General Counsel for the Association of Railway Executives) ("Now, in that connection it will be remembered that under the order of the Interstate Commerce Commission every class I railroad, which means every railroad with a gross income of $1,000,000 a year, must now file with the Commission not only annual reports, giving in great detail all of the information which this bill requires to be filed with the Federal Trade Commission, but they have to file monthly reports showing their operating income, net income, additions and deductions, differences, and a digest of their balance sheets.").

96. *Id.* at 427 ("So that it seems to us just an unnecessary and expensive duplication of effort to require the registering of these securities and the making of these reports to the Federal Trade Commission."); *see also* 78 CONG. REC. 8565–66 (1934) (describing the authority to require reports "in addition to those required by the Interstate Commerce Commission" and prescription of "types and forms of accounting which would be supplemental to and in addition to the types and forms now covered by the elaborate requirements of the Interstate Commerce Act" as "unnecessary").

97. *Stock* Hearing, *supra* note 61, at 425–26 (statement of R.V. Fletcher, General Counsel for the Association of Railway Executives) ("I say, also, with reference to section 12, which is the section which calls for elaborate reports, that likewise all of the requirements of section 12 are covered by reports to the Interstate Commerce Commission."); *see also* *id.* at 529 (letter from Walter S. Gifford, American Telephone & Telegraph Co.) ("[I]f the committee approves the exemption requested by Mr. Fletcher, which to us seems an eminently proper one, it is requested that an exemption of the same type be granted to telephone companies under the jurisdiction of the Interstate Commerce Commission.").

Congress took the concerns into account[98] and limited the SEC's authority over disclosure with respect to certain industries.[99] Entities registered with the ICC and eventually other agencies were not required to follow Commission rules governing periodic reports.[100] The categorical exceptions to the SEC's authority generated the predictable results. A divide opened up in the information made available to investors,[101] including in some cases the failure to provide audited financial statements.[102]

Congress revisited the approach in the 1970s and did away with the industry exclusions. The SEC was made singularly responsible for disclosure by public companies, irrespective of overlapping authority with other agencies.[103] The SEC received the authority to adopt requirements "inconsistent" with those imposed by other agencies to the extent necessary to protect investors.[104] The Commission used the authority to integrate public utilities,

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98. *See* S. DOC. NO. 73-185, at 10183 (1934) (Conf. Rep.) ([I]in the case of carriers subject to the provisions of section 20 of the Interstate Commerce Act, as amended, or carriers required pursuant to any other act of Congress to make reports of the same general character as those required under such section 20, shall permit such carriers to file with the Commission and the exchange duplicate copies of the reports and other documents filed with the Interstate Commerce Commission, or with the governmental authority administering such other act of Congress, in lieu of the reports, information, and documents required under this section and section 12 in respect of the same subject matter.").

99. *See* Issuers Reporting to Certain Other Federal Agencies, Exchange Act Release No. 13477, 12 SEC Docket 228, 228–29 (May 10, 1977) ("[T]he broad authority granted to the Commission in Section 13(b) was restricted by two important qualifications which (1) limited the Commission's authority to prescribe methods of accounting to be used in reports filed with the Commission when the registrants concerned are also under the jurisdiction of other federal laws or regulations which prescribe their accounting methods; and (2) mandated that the Commission allow ICC regulated companies, and other carriers similarly regulated, to file copies of reports submitted to the ICC, or other federal agency, in lieu of the reports otherwise required pursuant to Section 13(b).").

100. *See* Rules Relating to Reporting by Certain Issuers that File Reports with Other Federal Agencies, Exchange Act Release No. 12769, 10 SEC Docket 403, 407 (Sept. 21, 1976) (the exemption applied to reports submitted to the Interstate Commerce Commission, the Federal Communications Commission, the Federal Power Commission, and the Civil Aeronautics Board).

101. *See id.* at 408.

102. *See* Issuers Reporting to Certain Other Federal Agencies, Exchange Act Release No. 13477, 12 SEC Docket 77, 229 (May 10, 1977) ("Several commentators indicated that the requirement that Form 10-K contain certified financial statements would place an undue burden on registrants. It appears to the Commission that a substantial majority of the interested parties already have occasion to obtain certified financial statements from independent auditors in connection with exchange listing requirements, bank financing arrangements or otherwise.").

103. *See* Railroad Revitalization and Regulatory Reform Act of 1976, Pub. L. No. 94-210, 90 Stat. 31, 56–57 (1976).

104. *See* 15 U.S.C. § 78m(b)(1) ("[I]n the case of the reports of any person whose methods of accounting are prescribed under the provisions of any law of the United States, or any rule or regulation thereunder, the rules and regulations of the Commission with

common carriers, and pipeline companies more completely into the periodic reporting process.[105]

The SEC's early efforts to fix the voluntary system already in place quickly produced benefits. Share prices became more accurate,[106] costs of raising capital fell, and participation in the securities markets increased.[107]

IV. CLIMATE CHANGE REPORTING AND THE MAJOR QUESTIONS DOCTRINE

The application of the major questions doctrine to the SEC's proposed rule on climate change has been raised by at least one SEC commissioner who voted against the rule,[108] a small cadre of former commissioners,[109] including two who served as chair,[110] a host of law professors,[111] and a collection of state attorney generals.[112] They have pointed to the burdens

respect to reports shall not be inconsistent with the requirements imposed by such law or rule or regulation in respect of the same subject matter (except that such rules and regulations of the Commission may be inconsistent with such requirements to the extent that the Commission determines that the public interest or the protection of investors so requires).").

105. *See* Public Utility Act of 1935, 15 U.S.C. 79 (1935) (repealed 2005); Railroad Revitalization and Regulatory Reform Act of 1976, Pub. L. No. 94-210, 90 Stat. 31, 56–57 (1976).

106. John C. Coffee, Jr., *Convergence and Its Critics: What Are the Preconditions to the Separation of Ownership and Control?* 48 (Colum. L. & Econ., Working Paper No. 179, 2000) ("[T]he total package of new disclosures produced immediate and observable results that are logically interpreted as an increase in pricing accuracy."). For a discussion of the early changes, see *supra* note 92.

107. Prentice, *supra* note 78, at 1419–20 ("In his comprehensive history of federal securities regulation, Professor Joel Seligman notes that several SEC and academic studies indicate that mandatory disclosure provisions of the 1933 and 1934 Acts reduced underwriter costs and that the disclosure programs increased investor confidence and led directly to a large increase in investor participation in the stock markets." (citing JOEL SELIGMAN, THE TRANSFORMATION OF WALL STREET 561–62 (1995))).

108. *See* Peirce, *supra* note 19; *see also* Breeden et al., *supra* note 10.

109. Breeden et al., *supra* note 10.

110. Harvey Pitt and Richard Breeden served as chair. *See infra* note 116.

111. Cunningham et al., *supra* note 18, at 1, 6.

112. Patrick Morrisey et al., Att'y Gen., W. Va., Supplemental Comment Letter on The Enhancement and Standardization Proposed Rule Concerning Climate-Related Disclosures for Investors Under the Securities Act of 1933 and the Securities Exchange Act of 1934, at 1, 3–5 (June 15, 2022), https://www.sec.gov/comments/s7-10-22/s71022-20134128-303943.pdf [https://perma.cc/L73X-BRK3].

of the requirement,[113] the politically sensitive nature of the topic,[114] and the overlap with requirements imposed by other agencies, particularly the EPA. They have described the effort as setting climate change policy,[115] accused the SEC of "handing a weapon to climate change advocates,"[116] and of having an "ulterior political purpose."[117] Particular objection has been made with respect to mandatory disclosure of emissions data.[118]

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113. Cunningham et al., *supra* note 18, at 8, 13 ("Concerning major questions such as climate change, . . . Congress had not clearly authorized the agency to do so as is expected concerning matters of 'vast economic and political significance.' The SEC should take heed of such Supreme Court guidance.").

114. Morrisey et al., *supra* note 112, at 19–20 ("Yet another factor shows that the Proposed Rule involves a major question: 'Climate change has staked a place at the very center of this Nation's public discourse.' It is a 'controversial subject,' and there is no clear answer how to address it. The 'earnest and profound debate' surrounding the issue demonstrates that the SEC has waded too deep into the realm of major questions." (citation omitted)).

115. U.S. Chamber of Commerce, Comment Letter on Proposed Rule Concerning the Enhancement and Standardization of Climate-Related Disclosures for Investors, at 83 (June 16, 2022), http://www.centerforcapitalmarkets.com/wp-content/uploads/2022/06/US-Chamber-comment-on-SEC-Climate-Related-Disclosure_FINAL.pdf [https://perma.cc/J99A-ZWMY] ("With many other federal agencies clearly and explicitly tasked with detailed delegations of authority for regulating specific aspects of the environment, we do not believe that Congress intended for the SEC to set major environmental policy for American businesses or resolve major questions relating to climate change."); *see also* Andrew N. Vollmer, Comment Letter on Proposed Rule on The Enhancement and Standardization of Climate-Related Disclosures for Investors Under the Securities Act of 1933 and the Securities Exchange Act of 1934, at 12 (Apr. 12, 2022), https://www.sec.gov/comments/s7-10-22/s71022-20123525-279742.pdf [https://perma.cc/QGX6-SPBC] ("The truth is that the objective of climate-change disclosures is predominately the policy goal of combating the causes of climate change and reducing fossil fuel emissions. The disclosures would create incentives and disincentives to guide the behavior of corporations toward the policy goals of those advocating strong action against the causes of climate change. Supporters of climate-change disclosures link the disclosures to reduced global emissions and 'sustainable solutions.'").

116. Breeden et al., *supra* note 10, at 4 ("In effect, though nominally framed as an investor protection initiative, the Proposal represents a roundabout way of regulating greenhouse gas emissions themselves, by handing a weapon to climate advocates. . . . It beggars belief that Congress would have delegated to the Commission the authority to set substantive climate policy through entrusting to it the authority to prevent fraud and ensure orderly markets.").

117. Cunningham et al., *supra* note 18, at 14 ("The Proposal, a radical departure from current law, would require companies to disclose extensive climate-related risks that have little to do with firms' current financial outlook but serve an ulterior political purpose."); *see also* Vollmer, *supra* note 115, at 13 ("The Proposal seeks to use the securities disclosure system to advance a public policy goal extraneous to the federal securities laws. The different purpose of climate-change disclosures indicates they do not fall within existing SEC authority for disclosure rules.").

118. *See* Vollmer, *supra* note 115, at 15 ("The Proposal's plan to require reports of GHG emissions is different from traditional issuing and reporting company disclosures in a third way. The GHG emissions report mainly looks outward rather than inward. Outward-looking disclosures discuss the effect of the reporting company on the environment, markets,

Much of the rule proposal, however, resembles the type of disclosure "routinely impose[d]" by the Commission and, as a result, fit "neatly within the language of the statute."[119] The proposal mostly focuses on governance matters and business risks, which are longstanding disclosure topics. Nor is the subject-matter particularly new. Environmental matters have been a part of the disclosure regime since the 1970s.[120]

Mandatory disclosure of emissions data also resembles existing requirements. The proposal would require disclosure of Scope 1 emissions and Scope 2 emissions irrespective of materiality and Scope 3 if material or relevant to a target. The disclosure is designed as a harbinger.[121] Although not necessarily material in every individual case, emissions disclosure provides comparative data and can alert investors about potential risks relating to a company's transition to a lower carbon environment,[122] a process that can impact consumer behavior, corporate reputation, and capital expenditures.[123]

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communities, and the like. Inward-looking disclosures discuss the effect of external environmental or climate developments, such as reduced demand for fossil fuels or the increased losses from wildfires or floods, on the reporting company's business, financial results, and plans."). Not all disclosure needs to have a "direct, immediate effect on a company." *See id.* at 16 ("The reasoning to justify emissions disclosures is different from the purpose of the typical required disclosure. GHG emissions have no direct, immediate effect on a company. They are not like a decrease in revenue, an increase in salary expense, or the introduction of a new product. The effect on the company and the benefit of disclosure to investors are hypothetical and dependent on a series of contingent events. . . . The chain connecting an undependable disclosure of GHG emissions to a material financial effect on the disclosing company is long and speculative. The outward look and the speculative nature of requiring disclosure of GHG emissions make that disclosure obligation different from nearly all other mandatory SEC disclosures.").

119. Biden v. Missouri, 142 S. Ct. 647, 652–53 (2022).

120. Vollmer, *supra* note 115, at 2–3.

121. Risk factors are harbingers. *See* Modernization of Regulation S-K Items 101, 103, and 105, Securities Act Release No. 10825, Exchange Act Release No. 89670, 85 Fed. Reg. 63,726, 63,736 (to be codified at 17 C.F.R. parts 229, 239, and 240)). Disclosure of government proceedings that involve possible penalties of more than $300,000 can but do not necessarily put investors on alert about more serious regulatory problems. *See infra* note 125 and accompanying text.

122. *See* John Armour, Luca Enriques & Thom Wetzer, *Green Pills* 5 (Eur. Corp. Governance Inst., L. Working Paper No. 657, 2022) ("Not meeting the targets under the Paris Agreement is expected to be costly. There is scientific consensus that the long-run costs of *adapting* to higher temperatures will greatly exceed the near-term costs of reducing emissions to mitigate climate change in line with the Paris targets.").

123. The SEC has stated that environmental policies that can affect a company's business can be material and subject to disclosure. *See* Environmental Disclosure, Securities Act Release No. 6130, Exchange Act Release No. 16224, 44 Fed. Reg. 56,924, 56,926 (Oct. 3, 1979) ("[I]f a corporation has a policy or approach toward compliance with

This sort of disclosure already exists in Regulation S-K, specifically with respect to environmental matters.[124] Issuers must disclose certain government proceedings involving environmental compliance irrespective of their materiality.[125] The information is designed to alert investors about problems that could have a substantial effect on a company's operations, including the "possibility" of illegal activity.[126]

The climate change proposal does differ from past disclosure efforts. The proposal is in many ways more granular. While governance disclosure is longstanding, for example, the proposal would add more detailed requirements, including the number of meetings addressing climate change risks and the sources of information provided to directors on the subject.[127] But as the

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environmental regulations which is reasonably likely to result in substantial fines, penalties, or other significant effects on the corporation, it may be necessary for the registrant to disclose the likelihood and magnitude of such fines, penalties and other material effects in order to prevent from being misleading the required disclosures with respect to such matters as descriptions or disclosures of the corporation's business, financial statements, capital expenditures for environmental compliance or legal proceedings.").

124. *See* 17 C.F.R. §§ 229.10–229.1400 (2020) (referencing the regulations that are already in place for environmental matters in items, most specifically in Items 101–03, 105).

125. The Item requires disclosure of actions that could have a monetary sanction of $300,000 or more. *See* 17 C.F.R. 229.103(c). Whether a penalty of any kind was actually assessed is not relevant to the analysis. Indeed, the SEC rejected a proposal that would have required disclosure only after the amount of the sanction was resolved. *See* Adoption of Integrated Disclosure System, Securities Act Release No. 6383, Exchange Act Release No. 18524, 47 Fed. Reg. 11,380 (Mar. 16, 1982). Moreover, the threshold was a later addition. When originally adopted, all governmental proceedings had to be disclosed irrespective of the amount of the sanction. As the SEC determined, "[a]ll environmental proceedings initiated by a government authority are treated as being material and required to be disclosed." Notice of Public Proceeding Regarding: (1) Such Further Disclosure, If Any, of Environmental Matters in Registration Statements, Reports and Other Documents Required to be Filed or Furnished to Investors Pursuant to the Securities Act of 1933 and the Securities Exchange Act of 1934 as May be Necessary, Consistent with the National Policy Reflected in the Federal Securities Law, Fully to Comply with the National Environmental Policy Act of 1969; (2) Disclosure in Such Documents of Other Socially-Significant Matters, and (3) Investors' Interest in and Use of Such Information, Securities Act Release No. 5569, Exchange Act Release No. 11236 (Feb. 11, 1975) https://www.sechistorical.org/collection/papers/1970/1975_0909_SECDisclosureT.pdf [https://perma.cc/T5GG-VFBF].

126. *See* Proposed Amendment to Item 5 of Regulation S-K Regarding Disclosure of Certain Environmental Proceedings, Securities Act Release No. 6315, Exchange Act Release No. 17762, 22 SEC Docket 946, 951 (Proposed May 4, 1981) ("The Commission believes that disclosure of fines by governmental authorities may be of particular importance in assessing a registrant's environmental compliance problems. Proceedings involving fines (as opposed, for example, to proceedings involving capital expenditures necessary to obtain regulatory permits) may be more indicative of possible illegality and conduct contrary to public policy.").

127. *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, Securities Act Release No. 11042, Exchange Act Release No. 94478, 87 Fed. Reg. 21,334 (proposed Mar. 21, 2022); *see also* Possible Revisions to Audit Committee

Court noted in *Biden v. Missouri*, regulatory action may go "further" than past efforts when it is "what [the agency] does."[128]

To the extent, however, that climate change disclosure, including emissions data, is treated as novel, application of the major questions doctrine will likely require the SEC to set out limiting principles. These principles can be found in the broad purpose of the proposed rule. The rule is not intended to define a topic of interest to investors. That has already occurred and can be seen through the development of a voluminous system of voluntary disclosure by public companies. The proposed rule is instead intended to improve the quality of the existing disclosure mostly by integrating the topic back into the periodic reporting process,[129] the same task largely assigned by Congress to the SEC in adopting the Exchange Act.

A. Investor Interest and Climate Change Disclosure

The system of voluntary disclosure with respect to climate change arose directly from an unwillingness of the SEC to adequately integrate environmental matters into the periodic reporting process.

As early as the 1970s, the SEC confronted calls for disclosure of environmental matters in periodic reports but mostly declined these requests.[130]

Disclosures, Securities Act Release No. 9862, Exchange Act Release No. 75344, 80 Fed. Reg. 38,995, 39,005 ("Should the audit committee report disclose the frequency with which it met privately with the auditor? Would confirmation that private conversations occurred be useful disclosure even if there are no disclosures about the topics discussed? Should there be a requirement to disclose the topics discussed?").

128. Biden v. Missouri, 142 S. Ct. 647, 653 (2022); *see also* Charles Franklin, Comment Letter on Proposed Rule on Enhancements and Standardization of Climate-Related Disclosures for Investors Under the Securities Act of 1933 and the Securities Exchange Act of 1934, at 6 (June 17, 2022), https://www.sec.gov/comments/s7-10-22/s71022-20132320-302878.pdf [https://perma.cc/5RZC-EXVE] ("Neither the statutes nor existing regulations and related caselaw support the Commission's broad interpretation of its authority to impose reporting mandates of the scope, granular detail, and political sensitivity required under the Proposal. This lack of a clear legislative mandate raises fundamental questions about the legality of the rule under the authorizing statutes under both the Administrative Procedure Act (APA) and the controlling statutes, including if the rule violates the Major Question Doctrine.").

129. *See* 17 C.F.R. § 240.13a-15 (2011). Including the information in periodic reports would subject the companies to "[d]isclosure controls and procedures," likely improving quality. *See id.* § 240.13a-15(e). In addition, they would be reviewed more frequently by the SEC staff. The SEC is required to review periodic reports "on a regular and systematic basis." *See* 15 U.S.C. § 7266(a).

130. *See* Risa V. Ferman, Note, *Environmental Disclosures and SEC Reporting Requirements*, 17 DEL. J. CORP. L. 483, 493–94 (1992).

The Commission relied not on any lack of authority but on the perceived disinterest of the investor community in the information.[131] That determination, however, was not based on a comprehensive survey or market wide data—indeed, the Commission acknowledged a lack of insight into the views of the investor community[132]—but came mostly from observations about the modest number who chose to participate in the SEC's consideration of the issue.[133]

The Commission used the conclusion to engage in a back of the envelope cost-benefit calculation and concluded that disclosure would impose excessive and unnecessary costs on management.[134] Although making modest changes to the existing regime to reflect some environmental concerns,[135] the

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131. *See* Conclusions and Final Action on Rulemaking Proposals Relating to Environmental Disclosure, Securities Act Release No. 5704, Exchange Act Release No. 12414, 41 Fed. Reg. 21,632, 21,635 (May 27, 1976).

132. *See* Environmental and Social Disclosure: Notice of Commission Conclusions and Rulemaking Proposals, Securities Act Release No. 5627, Exchange Act Release No. 11733, 41 Fed. Reg. 51,656, 51,663 (Nov. 6, 1975) (noting that degree of interest among investors could only be based upon "inferences," the reliability of which were "uncertain," that the proceedings involved "no broad participation of financial institutions," and acknowledging that the interest in environmental issues "does not appear to be a matter which could be resolved by any feasible statistical survey").

133. *See id.* ("Taking the representations of the participants in the proceeding at face value, the least subjective indications of investor interest in social information are the stated views of the approximately 100 participants identifying themselves as investors who consider social information important. These persons constitute, however, an insignificant percentage of the estimated 30 million U.S. shareholders. Furthermore, although many did not identify their investment portfolios, the holdings of those who did constitute approximately 2/3 of 1% of the estimated aggregate value of the common and preferred stock and corporate bonds held in this country at the end of 1974." (footnote omitted)). The Commission suggested, however, that this was an adequate sampling. *See id.* at 51,644 ("Presumably only those with a strong interest took the trouble to respond, although there are probably many more with some interest. On the other hand, many, presumably, had little or no interest in these particular matters."). For a later discussion of the varying views of investors, see John M. Conley & Cynthia A. Williams, *Engage, Embed, and Embellish: Theory Versus Practice in the Corporate Social Responsibility Movement*, 31 J. CORP. L. 1, 21–23 (2005).

134. Environmental and Social Disclosure: Notice of Commission Conclusions and Rulemaking Proposals, Securities Act Release No. 5627, Exchange Act Release No. 11733, 40 Fed. Reg. 51,657, 21,660 (Oct. 14, 1975) ("[D]isclosure to serve the needs or desires of limited segments of the investing public, even if otherwise desirable, may be inappropriate, since the cost to registrants, which must ultimately be borne by their shareholders would be likely to outweigh the resulting benefits to most investors.").

135. The requirement relating to material capital expenditures was put in place in 1976. *See* Modernization of Regulation S-K Items 101, 103, and 105, Securities Act Release No. 10825, Exchange Act Release No. 89670, 85 Fed. Reg. 63,726, 63,736 (to be codified at 17 C.F.R. parts 229, 239, and 240). In 1982, the SEC added the provision requiring disclosure of government proceedings alleging discharge of material into the environment or primary for the purpose of protecting the environment unless the issuer reasonably believed that the action would not result in money sanctions greater than of $100,000

Commission mostly decided to leave resolution to management, with disclosure required only when material to the company,[136] an approach that would remain in place for the next four plus decades.[137]

Initially, the Commission engaged in some oversight of the determinations. A number of early enforcement cases[138] found inadequate disclosure and

(subsequently raised to $300,000). *See* Adoption of Integrated Disclosure System, Securities Act Release No. 6383, Exchange Act Release No. 18524, 47 Fed. Reg. 11380, 11,406–07 (proposed Mar. 3, 1982).

136. *See* 17 C.F.R. § 229.101 (2011); *see also* Environmental and Social Disclosure: Notice of Commission Conclusions and Rulemaking Proposals, Securities Act Release No. 5627, Exchange Act Release No. 11733, 41 Fed. Reg. 51,656, 51,656–57 (proposed Nov. 6, 1975) ("This is not to say, however, that, in specific cases, some information of this type might not be required in order to make the statements in a filing not misleading or to make the filing otherwise complete with respect to information investors appropriately might need to make informed investment or voting decisions. The Commission's rules already require, in addition to specific disclosures, the disclosure of any other material information.").

137. *See* Commission Guidance Regarding Disclosure Related to Climate Change, Securities Act Release No. 9106, Exchange Act Release No. 61469, 75 Fed. Reg. 6290, 6292 (Feb. 8, 2010) (to be codified at 17 C.F.R. pts. 211, 231, 241); *see also* Vollmer, *supra* note 115, at 13 ("The problem with these claims is that existing SEC disclosure rules already cover nearly all of what the new disclosure rules would address. The current disclosure rules for issuing and reporting companies in regulations S-K and S-X comprehensively cover the areas of company information of interest to investors. When global warming or other environmental issues, including transition risk, affect or threaten the operations or financial performance of a specific company, many of the existing disclosure rules require discussion of the effects.").

138. The Commission brought a few actions alleging understatement of clean-up costs. *See* U.S. Steel Corp., Exchange Act Release No. 16223, Exchange Act Release No. 16223, 1979 WL 209575 (Sept. 27, 1979) (alleging failure to disclose certain material capital expenditures designed to meet certain environmental obligations created by statute); *see also* Occidental Petroleum Corp., Exchange Act Release No. 16590, 1980 WL 121345, at *4 (July 2, 1980) ("Oxy did not describe, or include within reported expenditures estimates of, the costs that it believed it would be required to incur in connection with possible remedial activities necessary to compensate for previous non-compliance with environmental regulations at certain Hooker facilities."); *id.* ("Prior to May 1977, Oxy did not disclose, as required, in any filing with the Commission the existence and nature of these 90 pending or contemplated proceedings relating to discharge of waste into the environment or otherwise relating to the protection of the environment."); U.S. Steel Corp., 1979 WL 209575, at *6, *10 ("Prior to the commencement of the Commission's investigation, USSC disclosed pending judicial proceedings in which it was involved that concerned environmental matters, but did not disclose certain pending environmental administrative proceedings. Some of the administrative proceedings not disclosed were initiated by USSC rather than by governmental agencies. . . . [I]f a corporation voluntarily chooses to make disclosures concerning its environmental policy, disclosures must be accurate. And, the corporation must make any additional disclosures necessary to render the voluntary disclosure not misleading.").

identified areas of concern, including the reliance on generic risk factors where problems had materialized,[139] the inadequacy of procedures for collecting relevant data,[140] and the possibility of future exposure from existing environmental practices.[141] The SEC's willingness to intervene did not go unnoticed. Disclosure of environmental matters in periodic reports increased.[142]

Yet by 1980, the Commission retreated. The use of enforcement as a tool to ensure adequate application of the materiality standard to environmental disclosure almost entirely ceased.[143] Disclosure would be left to the discretion

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139. Occidental Petroleum Corp., Exchange Act Release No. 16590, 1980 WL 121345, at *7 (July 2, 1980) ("Oxy only disclosed in certain documents filed with the Commission including, for example, its Annual Report on form 10-K for the period ending December 31, 1977, that 'in light of the expansion of corporate liability in the environmental area in recent years . . ., there can be no assurance that Occidental will not incur material liabilities in the future as a consequence of the impact of its operations upon the environment.' Oxy did not specifically disclose the amount, or describe the nature or extent, of the potential liabilities of Hooker due to its discharge of substantial amounts of wastes." (citation omitted)).

140. *Id.* at *13 ("During time periods discussed herein, Oxy did not have in place adequate company-wide methods or procedures which, when used to determine the nature and facts of the company's environmental compliance or to facilitate the development of compliance costs, would have assisted it in meeting its disclosure obligations.").

141. Allied Chem. Corp., 11 SEC Docket 1982, 1977 WL 173643, at *1 (Mar. 4, 1977) ("The complaint alleges that Allied was subject to material potential financial exposure resulting, in part, from directly and indirectly discharging toxic chemicals, including Kepone, into the environment from its own facilities and from the facilities of others. During the time that Allied was discharging toxic chemicals, it knew that tests showed that animal and marine life which ingested Kepone suffered adverse effects. As a result, Allied was exposed to material potential financial liabilities from companies; individuals, and state and local governments exposed to significant amounts of Kepone. Allied failed to disclose such potential material financial exposure in its reports to shareholders and the investing public in violation of the anti-fraud and reporting provisions of the securities laws.").

142. *See* Proposed Amendments to Item 5 of Regulation S-K Regarding Disclosure of Certain Environmental Proceedings, Securities Act Release No. 6315, Exchange Act Release No. 17762, 46 Fed. Reg. 25,638, 25,640 n.19 (proposed May 8, 1981) ("The Commission has found, for example, that environmental disclosures made by steel companies and utilities often take up several pages in the Annual Report on Form 10-K." (citation omitted)).

143. There were a few later cases that touched on environmental matters. They did not, however, provide meaningful insight into issuer disclosure responsibilities. *See* Ashland Inc., Exchange Act Release No. 54830, 2006 WL 3435637 (Nov. 29, 2006) (alleging that the company reduced, without adequate guidelines or review, the cost estimates for remediating environmental contamination that were used in establishing environmental reserves disclosed in periodic reports resulting in an understatement of reserves and overstatement of net income); *see also* Lee Pharms., Exchange Act Release No. 39843, 1998 WL 164350, at *3 (Apr. 9, 1998) ("Lee falsely: claimed that it had complied with governmental provisions relative to protection of the environment; did not disclose that it was still not complying with the Water Board's Cleanup Order; continued to deny that it had any information about its cleanup costs; continued to deny that it had been designated a PRP

of management[144] with little regulatory accountability.[145]

The premise that a meaningful segment of the investor community had little interest in expanded disclosure on environmental matters, to the extent accurate, began to erode almost immediately.[146] Described as "marginal" in the 1970s,[147] socially responsible investing accelerated in subsequent decades.[148] By 2005, assets managed under the approach exceeded $2 trillion.[149]

The widespread nature of support could also be seen from the shareholder proposal process. The SEC in the 1970s placed average shareholder support

for San Gabriel Valley Superfund Site investigation and cleanup costs; and stated again, without basis, that the EPA was not requiring any cleanup.").

144. Maria Lucia Passador & Federico Riganti, *Less Is More in the Age of Information Overload: The Paradigm Shift from a Shareholder- to a Stakeholder-Oriented Market*, 15 N.Y.U. J.L. & BUS. 567, 651 (2019) ("Moreover, because ESG voluntary disclosures—along with community concerns over CSR matters—are relatively new concepts, the ESG materiality assessment on the effects of the company's activities over environment and communities has to rely on the Board's subjective expectations rather than on objective historical data collected throughout the history of the company. Therefore, a flexible regulatory approach may be more appropriate to respond to such a new and developing need.").

145. *See* Jill E. Fisch, *Making Sustainability Disclosure Sustainable*, 107 GEO. L.J. 923, 937 (2019) ("Climate change disclosure remains limited due in large part to the vagueness of the disclosure obligation and issuers' ability to determine, in their judgment, that a given issue is not material *enough* to warrant disclosure.").

146. *See* Li-Wen Lin, *Corporate Social and Environmental Disclosure in Emerging Securities Markets*, 35 N.C. J. INT'L L. & COM. REG. 1, 6 (2009) ("SRI has evolved from eccentric practices by a small club of faith-based investors to innovative strategies by a large community of financially-sophisticated investors.").

147. Cynthia A. Williams, *The Securities and Exchange Commission and Corporate Social Transparency*, 112 HARV. L. REV. 1197, 1287 (1999) ("At the time of the NRDC proceedings, social investing was a thoroughly marginal phenomenon.").

148. Michael S. Knoll, *Ethical Screening in Modern Financial Markets: The Conflicting Claims Underlying Socially Responsible Investment*, 57 BUS. LAW. 681, 681 (2002) ("The proponents of socially responsible investment (SRI) claim that as of the end of 1999, $1.5 trillion was invested in the United States using social criteria. That is up from $40 billion in 1984, which implies an annualized compound rate of increase of twenty-seven percent. Moreover, rather than slowing down, SRI has been accelerating." (footnotes omitted)).

149. Michael R. Siebecker, *Corporate Speech, Securities Regulation, and an Institutional Approach to the First Amendment*, 48 WM. & MARY L. REV. 613, 623–24 (2006) ("By 2005, total assets under professional management in portfolios screened for one or more social issues had risen to $2.29 trillion, an increase of 258% from 1995. That increase reflects 9% greater growth than assets under professional management not screened based on social criteria within the same period. Moreover, between 2003 and 2005 assets invested in SRI mutual funds increased by 18.5%, with a 40% increase in funds dedicated to community investing projects." (citation omitted)).

for proposals addressing social and environmental matters at around 3%.[150] The percentage, however, was likely affected by structural limitations that were eventually removed. The SEC loosened regulatory restrictions on proposals,[151] allowing more environmental matters to be included in proxy statements,[152] and amended the proxy rules to facilitate collective action by shareholders.[153]

With a wider array of proposals and less regulatory risk, the percentage of support for proposals on environmental topics grew significantly.[154] Efforts by Ceres in the early 1990s to encourage adoption of the environmental and social principles,[155] for example, demonstrated increased investor willingness

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150. Environmental and Social Disclosure: Notice of Commission Conclusion and Rulemaking Proposals, Securities Act Release No. 5627, Exchange Act Release No. 11733, 40 Fed. Reg. 51,656, 51,664 (Nov. 6, 1975) ("[W]e note that certain social shareholder proposals that appear to have social implications have received an average of from 2 to 3% of the vote in recent years . . . .").

151. Elizabeth Glass Geltman & Andrew E. Skroback, *Environmental Activism and The Ethical Investor*, 22 J. CORP. L. 465, 491 (1997) ("Proponents of environmental shareholder proposals have been increasingly successful in forcing issuers to include their proposals in proxy materials. A review of SEC no-action letters reveals an increased reluctance to take a no-action enforcement position when the proposal relates to an environmental matter."); *see also* A.A. Sommer, Jr., *Corporate Governance in the Nineties: Managers vs. Institutions*, 59 U. CIN. L. REV. 357, 370 (1990) ("The SEC has been progressively less restrictive in barring shareholder proposals from management's proxy statement.").

152. *See* Sommer, *supra* note 151, at 371 ("The Commission staff has also been generous in allowing the inclusion in proxy statements of proposals with respect to environmental matters, notably proposals that corporations pledge themselves to abide by the so-called 'Valdez Principles.'" (citation omitted)).

153. *See* 17 C.F.R. § 240.14a-2(b)(1) (2021); *see also* Regulation of Securityholder Communications, Exchange Act Release No. 29315, 56 Fed. Reg. 28,987, 28,990 (proposed June 25, 1991) (codified at 17 C.F.R. pt. 240) ("[T]he uncertainty generated by expansive judicial and administrative interpretations of the term 'solicitation' and the perceived narrowness of the regulatory exceptions to that definition are believed by many to deter constructive information-sharing, both among securityholders and between registrants and their securityholders. Critics cite by way of example the difficulty of assessing potential proxy liability stemming from inter-investor discussions of opposition to management proposals, particularly in the context of an impending partnership roll-up, or support for Rule 14a–8 proposals presented by other securityholders in the registrant's proxy statement." (footnotes omitted)).

154. J. Robert Brown, Jr., *Corporate Governance, Shareholder Proposals, and Engagement Between Managers and Owners*, COLUM. L. SCH. BLUE SKY BLOG (May 15, 2017), https://clsbluesky.law.columbia.edu/2017/05/15/corporate-governance-shareholder-proposals-and-engagement-between-managers-and-owners/ [https://perma.cc/FVB8-BALR].

155. *See* Nell Minow & Michael Deal, *Corporations, Shareholders, and the Environmental Agenda*, 12 CARDOZO L. REV. 1359, 1365 (1991) ("Concern for the environment after the Valdez oil spill led directly to the articulation of the Valdez Principles, ten oaths that a signing corporation vows to uphold."); *see also* Geltman & Skroback, *supra* note 151, at 477 ("Proxy proposals to adopt the Valdez Principles, later known as the CERES Principles, were placed on the agenda by shareholders of many Fortune 500 companies—including the Southern Companies, American Express, Atlantic Richfields, Kerr-McGee, Union Pacific

to vote for these proposals.[156]

Proposals also increasingly addressed climate change related issues. Shareholders sought emissions data and support for "company-wide policies, targets, plans, and programs to reduce those emissions annually."[157] Climate change concerns were designed to address "large capital costs" arising from a transition to a reduced carbon environment.[158] They could impact property loss and health care,[159] anticipated liabilities,[160] and targets.[161] The proposals were given a boost when the staff of the Commission declined

and Exxon. During the 1989 proxy season alone, the environment was part of shareholder resolutions proposed to fifty-six American corporations in seventeen industries. Review of Fortune 500 companies since 1989 indicates that voluntary disclosure of environmental practices has steadily continued to increase." (footnote omitted) (citation omitted)).

156. Robert H. Feller, *Environmental Disclosure and the Securities Laws*, 22 B.C. ENV'T AFFS. L. REV. 225, 260 (1995) ("In 1990, resolutions that required compliance with the *Valdez* Principles were introduced at shareholder meetings of American Express, Atlantic Richfield, Exxon, Kerr-McGee, and Union Pacific. Although these resolutions were defeated, support ranged from 8.5% to 16.7%. This is much higher than the two to three percent level of support cited by the SEC in its decision to deny the NRDC petition. Clearly, this increase can be a powerful argument in support of the need for disclosure of information on corporate environmental policy irrespective of its economic significance." (footnote omitted) (citation omitted)); *see also* Minow & Deal, *supra* note 155, at 1366 ("Even at the five companies where the proposals went to a vote—American Express, ARCO, Exxon, and Union Pacific—between nine and seventeen percent of the shareholders supported the measure, an uncommon event for a social proposal. At Exxon, for example, the 9.5 percent supporting the Valdez Principles represented 74 million shares." (citation omitted)).

157. Texaco, Inc., SEC Staff No-Action Letter, 1992 WL 55816, at *7 (Mar. 16, 1992).

158. Niagara Mohawk Power Corp., SEC Staff No-Action Letter, 1994 WL 33522, at *7 (Feb. 7, 1994) (declining to provide no action relief for proposal requesting a report on "(1) the potential for large capital costs to the Company if standards on carbon dioxide emissions are imposed, (2) the projected amount of such costs, and (3) the Company's plans to use alternative energy sources.").

159. Allstate Ins. Co., SEC Staff No-Action Letter, 1998 WL 56564, at *1 (Jan. 30, 1998) (declining to provide no action relief for proposal requesting that board "review and report on the Company's anticipated liabilities due to property loss and/or health care costs potentially caused by climate change").

160. Exxon Corp., SEC Staff No-Action Letter, 1999 WL 156338, at *1 (Mar. 18, 1999) (declining to provide no action relief for proposal that requests board "to create a committee of outside directors to review and report on the impact of climate change on Exxon's policies and practices, including any anticipated liabilities and how Exxon can reduce carbon dioxide emissions").

161. *Id.*

to omit a proposal addressing greenhouse gas emissions as "ordinary business."[162]

B. The Advent of Voluntary Disclosure

As investor interest grew for climate change related disclosure, so did demands on issuers for additional information.[163] With the SEC on the sidelines, the added disclosure would not be delivered in periodic reports. Instead, a system of voluntary disclosure began to develop in the form of corporate social responsibility (CSR) and sustainability reports. In 1993, around 10% of the companies in the Fortune Global 500 issued these reports.[164] In 2002, reports were provided by about half of the largest global companies,[165] a number that would climb to 82% by 2016[166] and 92% by

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162. Exxon Corp., SEC Staff No-Action Letter, 1990 WL 285931 (Jan. 30, 1990) ("We are unable to concur in your opinion that the proposal may be omitted under Rule 14a-8(c)(7). In this regard, we note that the proposal requests that the Company develop a Company-wide plan to address a major environmental concern, carbon dioxide emissions.").

163. *See* David W. Case, *Corporate Environmental Reporting as Informational Regulation: A Law and Economics Perspective*, 76 U. COLO. L. REV. 379, 386 (2005) ("In the late 1980s, a few firms responded to negative pressures stemming from public disclosure of TRI [Toxics Release Inventory] data by voluntarily publishing reports for general public consumption disclosing primarily positive information about their environmental operations and performance.").

164. Conley & Williams, *supra* note 133, at 4–5 ("Many of the world's largest companies have started to produce social, environmental, or sustainability reports, which integrate social, environmental, and financial information, in addition to their required financial reports. Between 1999 and 2002, the percentage of *Fortune* Global Top 250 companies that produced a separate social, environmental, or sustainability report increased from 35 to 45, and these figures compare to only 10% of the Global 500 in 1993." (citation omitted)).

165. *See* Gary S. Guzy, *Reconciling Environmentalist and Industry Differences: The New Corporate Citizenship "Race To The Top"?*, 17 J. LAND USE & ENV'T. L. 409, 414 (2002) ("Fifty percent of the world's largest companies, the Fortune 100, now prepare these kinds of reports."); *see also* Sonia Gioseffi, Note, *Corporate Accountability: Achieving Internal Self-Governance Through Sustainability Reports*, 13 CORNELL J.L. & PUB. POL'Y 503, 525 (2004) ("Currently, almost half of the 100 largest companies in the world have adopted some form of a sustainability report." (citation omitted)); Michael R. Siebecker, *Corporate Speech, Securities Regulation, and an Institutional Approach to the First Amendment*, 48 WM. & MARY L. REV. 613, 625 (2006) ("Moreover, 40% of those same companies [within the S&P 100 Index] issue special 'corporate social responsibility (CSR) reports' upon which investors and consumers in the SRI community rely." (citation omitted)).

166. Fisch, *supra* note 145, at 944 ("The Governance & Accountability Institute reported that, in 2016, eighty-two percent of S&P 500 companies published sustainability or corporate responsibility reports. These reports vary in their length and the range of topics covered. It is increasingly common for sustainability reports to exceed one hundred pages in length, and some issuers produce multiple sustainability reports, each on different topics." (citing *Flash Report: 82% of the S&P 500 Companies Published Corporate Sustainability Reports in 2016*, 3BL MEDIA (May 31, 2017, 3:30 PM), https://www.3blmedia.com/news/flash-report-82-sp-500-companies-published-corporate-sustainability-reports-2016 [https://perma.cc/RD7X-NYAG])).

2020.[167] Growth was also strong among smaller public companies.[168] Without any required content, disclosure frameworks proliferated,[169] although in practice, they were not consistently used.[170]

Designed at least in part for investors,[171] the reports were nevertheless not inevitably intended to convey a balanced picture of the risks associated with climate change.[172] Self-interest coupled with a lack of regulatory

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167. *92% of the S&P 500 and 70% of the Russell 1000 Published Sustainability Reports in 2020, G&A Research Shows*, GOVERNANCE & ACCOUNTABILITY INST. INC., https://www.ga-institute.com/nc/storage/press-releases/article/92-of-sp-500r-companies-and-70-of-russell-1000r-companies-published-sustainability-reports-in-202.html [https://perma.cc/YHV4-UWEJ] ("G&A's research found that 92% of the S&P 500 companies published a sustainability report in 2020, up from 90% in 2019 . . . [and] 70% of the Russell 1000 companies published a sustainability report in 2020, up from 65% in 2019.").

168. *Id.* ("The number of reporters in the smallest half by market cap of the Russell 1000 index rose to 49% in 2020 from 39% in 2019, showing that corporate sustainability reporting is increasingly being adopted as a best practice by mid-cap companies.").

169. Case, *supra* note 163, 396 ("By the mid-1990s, several stakeholder groups—each generally acting independently of the other—issued guidelines or suggested frameworks regarding what should be reported and how." (citation omitted)).

170. *Id.* at 397 ("A 2000 Council on Economic Priorities ("CEP") survey found that only six-percent of voluntary corporate environmental reports followed any form of standardized guideline. Further, for companies that did utilize a specific framework, the choices were widely spread among the available 'host of different voluntary guidelines.'" (citing Richard MacLean & Romi Gottfrid, *Corporate Environmental Report: Stuck Management Processes Holds Back Real Progress*, 7 CORP. ENV'T STRATEGY J. 244, 250, 255 (2000))).

171. Alan R. Palmiter, *Corporate Triplespeak: Responses by Investor-Owned Utilities to the EPA's Proposed Clean Power Plan*, 83 BROOK. L. REV. 983, 1018 (2018) ("CSR reports have become material also to public investors . . . ."); *see also* Susan N. Gary, *Values and Value: University Endowments, Fiduciary Duties, and ESG Investing*, 42 J. COLL. & U.L., 247, 271 (2016) ("An ESG investor might use information a company reports about its CSR practices as indications of strong management, reduced risk, and enhanced ability to attract capital. Companies increasingly issue reports concerning their CSR practices, both to respond to investor interest and so that the company will focus on issues such as exposure to social and environmental risk." (citing Ioannis Ioannou & George Serafeim, *The Impact of Corporate Social Responsibilities on Investment Recommendations: Analysts' Perceptions and Shifting Institutional Logics*, 36 STRATEGIC MGMT. J. 1053 (2015))).

172. Allison M. Snyder, Note, *Holding Multinational Corporations Accountable: Is Non-Financial Disclosure the Answer?*, 2007 COLUM. BUS. L. REV. 565, 602 (2007) ("The language choice is further amplified by strong incentives not to report negative information. While demands for increasing trust put pressure on companies to disclose 'key information,' firms remain reluctant to disclose bad information for fear of losing customer good will.").

oversight[173] often resulted in one-sided discussions.[174] Reports could, for example, include a company's environmental strengths but omit weaknesses.[175] The contents of reports were therefore sometimes described as "rosy"[176] and filled with "graceful rhetoric."[177]

The voluntary disclosure also raised doubts about the materiality analysis conducted by management with respect to periodic reports. Significant differences emerged between sustainability reports and SEC filings.[178] The differences were sometimes explained as immaterial.[179]

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173. *Id.* at 603 ("As one commentator notes, CSR reporting is a 'method of self-presentation and impression management conducted by companies to insure [sic] various stakeholders are satisfied with their public behaviors.'" (quoting Jamie Snider, Ronald Paul Hill & Diane Martin, *Corporate Social Responsibility in the 21st Century: A View from the World's Most Successful Firms*, 48 J. BUS. ETHICS 175, 176 (2003))).

174. Fisch, *supra* note 145, at 947 ("[I]ssuers are incentivized to focus on the positive aspects of their business practices and to omit unfavorable information.").

175. Lynn M. LoPucki, *Repurposing the Corporation through Stakeholder Markets*, 55 U.C. DAVIS L. REV. 1445, 1460–61 (2022) ("Because CSR reports are voluntary and unregulated, corporations can include or omit whatever they choose. Most corporations choose to report on their strengths but not their weaknesses and to define the data most advantageously to themselves. Commentators agree that 'the existing CSR disclosure system is fragmented, unreliable, and incomplete,' and that the data are not comparable across corporations." (first quoting Fisch, *supra* note 145, at 966; and then citing U.S. GOV'T ACCOUNTABILITY OFF., GAO-20-530, PUBLIC COMPANIES: DISCLOSURE OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE FACTORS AND OPTIONS TO ENHANCE THEM 32 (2020))).

176. Paul Rissman & Diana Kearney, *Rise of The Shadow ESG Regulators: Investment Advisers, Sustainability Accounting, and Their Effects on Corporate Social Responsibility*, 49 ENVTL. L. REP. 10155, 10163 n.81 (2019) (describing sustainability reports as containing "rosy depictions" that "specifically should be viewed as public relations documents (which cannot be materially misleading either) rather than rigorous disclosure").

177. Snyder, *supra* note 172, at 600 ("Currently, corporations are able to control the dialogue about social issues and often do so through graceful rhetoric."). Ironically, the Commission was aware of this possibility and used it as a justification for not including the disclosure in periodic reports. *See* Environmental and Social Disclosure: Notice of Commission Conclusions and Rulemaking Proposals, Securities Act Release No. 5627, Exchange Act Release No. 11733, 41 Fed. Reg. 51,656, 51,663 (Nov. 6, 1975) ("A requirement that registrants disclose their environmental policy would result in subjective disclosures largely incapable of verification and highly susceptible to public-relations presentations. Similarly, we do not believe that capital expenditures and expenses for environmental purposes generally serve as a meaningful index of corporate environmental practices. To the extent they are material, they are already required to be disclosed . . . .").

178. *See* Issachar Rosen-Zvi, *You Are Too Soft!: What Can Corporate Social Responsibility Do for Climate Change?*, 12 MINN. J.L. SCI. & TECH. 527 (2011) (comparing voluntary reports with SEC disclosure).

179. The SEC staff did ask about climate change disclosure in 2010. The staff apparently used as a basis for comments in at least some cases disclosures made in sustainability and other reports. *See Sample Letter to Companies Regarding Climate Change Disclosures*, U.S. SEC. & EXCH. COMM'N (Sept. 22, 2021), https://www.sec.gov/corpfin/sample-letter-climate-change-disclosures [https://perma.cc/7634-WGWX]. Issuers apparently described what appeared in the reports as immaterial and therefore not required in an SEC filing. *See* Peirce, *supra* note 19 ("The staff pressed companies to include in their SEC filings

Yet the inclusion of the information in sustainability reports at least suggested that, in some instances, management viewed the information as important to reasonable investors, the relevant standard for materiality.

C. The Problems with Voluntary Disclosure

As a result of these developments, most of the information relating to climate change[180] appeared—and continues to appear—in a wide assortment of reports, press releases, and other documents that are not filed with the SEC.[181] The materials are often voluminous,[182] with sustainability or environmental reports sometimes longer than a company's annual report on Form 10-K.[183] Yet substantial agreement exists[184] that the reports do not provide investors and shareholders with the information they need to make informed decisions.[185] This is the case for a number of reasons.

First, disclosure is almost entirely voluntary.[186] As a result, companies can choose not to provide the information to investors. While the number

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disclosures that they make in their sustainability reports, but many companies responded that the information was immaterial and therefore need not be included.").

180. *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, Securities Act Release No. 11042, Exchange Act Release No. 94478, 87 Fed. Reg. 21,334, 21,342 (proposed Mar. 21, 2022) ("[M]uch of this climate-related information, particularly GHG emissions and targets, appears outside of Commission filings, in sustainability reports, and on corporate websites.").

181. U.S. GOV'T ACCOUNTABILITY OFF., *supra* note 175, at 18 ("[M]ost companies (11 of 18) told us they have developed ESG-focused presentations for investors, and some companies (four of 18) said they have begun including ESG information in their traditional investor communications, such as quarterly earnings calls and stockholder bulletins.").

182. Apple's "Environmental Progress Report" consisted of 128 pages. *See generally* APPLE INC., ENVIRONMENTAL PROGRESS REPORT (2022). The Apple's Form 10-K filed in October 2021 consisted of 60 pages. *See* Apple Inc., Annual Report (Form 10-K) (Oct. 28, 2021).

183. One place where disclosure does occur is with respect to risk factors. For a discussion of climate change related issues discussed as risk factors in SEC filings, *see* Dean Kingsley, Matt Solomon & Kristen Jaconi, *SEC Risk Factor Disclosure Rules*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Dec. 22, 2021), https://corpgov.law.harvard.edu/2021/12/22/sec-risk-factor-disclosure-rules/ [https://perma.cc/ZTA4-RZ8F].

184. Coates, *supra* note 10, at 13 ("Of course, as Commissioner Peirce does not do much to dispute, and as the proposing release makes clear, existing disclosures are spotty, inconsistent, incomplete and unverified under existing Commission rules.").

185. *Stock Hearing*, *supra* note 61, at 782 (statement of Evans Clark) ("Second, full, frequent, and comparable reports, based upon sound accounting methods, by all corporations whose stock is publicly held are absolutely essential.").

186. Working Grp. on Sec. Disclosure Auth., Comment Letter on Proposed Rule on The Enhancement and Standardization of Climate-Related Disclosures for Investors Under the

of companies issuing the climate change related reports has continued to increase, some of the largest public companies still do not participate in a meaningful fashion in the system of voluntary disclosure.[187]

Second, there is a lack of comparability.[188] Despite a plethora of standard setting organizations,[189] there are no explicit reporting requirements or commonly accepted standards governing content. Data can be cherry picked to create favorable impressions. Companies use different base years in measuring current contributions to climate change[190] and varying time periods for promised reductions in emissions.[191] Others rely on estimates rather than actual measurements.[192] As a result, the information provided in sustainability and environmental reports varies significantly.[193]

The concern with comparability is particularly apparent in connection with emissions. Only one-third of the companies in the Russel 3000 disclose

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Securities Act of 1933 and the Securities Exchange Act of 1934, at 6 (June 16, 2022), https://www.sec.gov/comments/s7-10-22/s71022-20131670-302060.pdf [https://perma.cc/85PH-V8H8] ("Third, even if the information companies currently provided was uniform and of high quality, not all public companies provide that information to investors.").

187. *See* Winden, *supra* note 10, at 1231 ("The number of public companies in the United States issuing annual sustainability reports has also increased dramatically in the last decade. From 2011 to 2019, the percentage of S&P 500 companies publishing voluntary reports on sustainability matters increased from 20 percent to 90 percent.").

188. Working Grp. on Sec. Disclosure Auth., *supra* note 186 ("First, there is a great deal of variation in the type of climate-related information that issuers now provide. This lack of uniformity makes comparison among companies costly for investors, and issuers frequently face overwhelming requests for different information." (footnotes omitted) (citations omitted)).

189. *See* Fisch, *supra* note 145, at 926–27 ("One reason for concern with current disclosure practices is that most existing sustainability reporting is voluntary, which means that individual issuers choose which information to disclose. The resulting lack of standardization means that issuer disclosures vary substantially, which impedes comparability.").

190. U.S. GOV'T ACCOUNTABILITY OFF., *supra* note 175, at 33 ("[C]ompanies used different base years when calculating their reduction in greenhouse gas emissions, limiting their comparability.").

191. *Id.* ("Some companies reported reductions year-over-year, while many reported reductions over multiple years with no consistency within or across industries.").

192. HON XING WONG ET AL., ESG INVESTING AND THE US OIL AND GAS INDUSTRY: AN ANALYSIS OF CLIMATE DISCLOSURES 13 (2022) ("Most of the oil and gas companies surveyed use benchmarks and estimation factors to estimate their emissions rather than measuring their emissions directly.").

193. *See* Fisch, *supra* note 145, at 947 ("In many cases, issuers simply omit the issues on which their practices fall short and reporting metrics that would flag shortcomings.").

Scopes 1 and 2 emissions.[194] Scope 3 emissions[195] represent the largest category.[196] Despite their importance, few provide information on Scope 3 emissions.[197] Most that do, even in the oil and gas field, do not include the data from all of the categories included in the GHG Protocol.[198]

Third, the information is not provided in an easily accessible fashion.[199] The information can appear almost anywhere, whether in videos, press releases, or sustainability reports.[200] Climate change disclosures are not

194. *See* U.S. Securities and Exchange Commission, *2022 06 09 Investor Advisory Committee Meeting Part 02*, YOUTUBE, at 1:24:42 (June 9, 2022), https://www.youtube.com/watch?v=lVHNai8zmZU [https://perma.cc/FAN9-4QBR] (statement of Jonathan Bailey, Head of ESG Investing, Neuberger Berman) (noting that only 22% of Russel 3000 companies disclose Scope 1 & 2 emissions).

195. SARRAH RAZA, Matt Bravante & Claire Curry, UNDERSTANDING AND MONITORING OUR CHANGING PLANET: A CLIMATE TECHNOLOGY WHITE PAPER 23 (2021) ("Scope 3 emissions come from a company's suppliers and customers. Collecting this data involves third-party compliance, data standardization and potential double counting. It is a complex problem that *only a few percent* of corporates tackle. Where they do calculate it, it's often a one-off carbon footprint calculation done infrequently.").

196. Gireesh Shrimali, *Scope 3 Emissions: Measurement and Management* 4 (Stan. Sustainable Fin. Initiative, Working Paper, 2021) ("[O]n average the Scope 3 emissions are 5.5 times the amount of combined Scope 1 and Scope 2 emissions. For example, for Lego and Walmart, Scope 3 emissions constitute 75% and 90%, respectively, of total emissions. In fact, it has now been established that more than 50% of the world's carbon emissions are in eight supply chains." (citations omitted)).

197. WONG ET AL., *supra* note 192, at 13 ("[C]ompanies report their GHG emissions differently across numerous metrics, including scope, methodology, baseline years, and emissions-reduction targets. For example, Chevron and Hess report Scope 1, 2, and 3 emissions, whereas ExxonMobil and Marathon report only Scope 1 and 2 emissions.").

198. ADEC INNOVATIONS, CARBON ACCOUNTING METHODS FOR ESTIMATING SCOPE 3 EMISSIONS 8 (2015) ("According to the ET Global 800 Carbon Ranking Report developed by the Environmental Investment Organisation (EIO), out of the 800 companies examined in the report, 267 of them, or 33%, report one or more Scope 3 emissions source categories. As for those that report more Scope 3 categories, only 15 companies, or a mere 2%, do so.").

199. Winden, *supra* note 10, at 1215 ("But according to investors and other observers, the disclosures included in such voluntary sustainability reports are not sufficiently accessible, comparable, and reliable to provide the information investors need to make informed decisions."). Some have argued otherwise. *See* Fairfax, *supra* note 23, at 323 ("Voluntary disclosure is likely to be a more accessible and digestible form of disclosure. Voluntary disclosure appears on corporate websites and other social media platforms and is thus more readily accessible than mandated disclosure."). At least in the climate change space, the view does not sufficiently account for the difficulty in finding specific types of information (targets for example) on individual websites and the value of a single, centralized location for the information. *See infra* note 201.

200. *Id.* ("[M]ore than 90 percent of the companies in the S&P 500 now voluntarily publish annual sustainability reports." (citing *90% of S&P 500 Index Companies Publish Sustainability Reports in 2019, G&A Announces in its Latest Annual 2020 Flash Report*,

contained in a single, easily searchable data base; there is no system comparable to the Electronic Data Gathering, Analysis, and Retrieval system (EDGAR)[201] for sustainability reports and other voluntary climate change related information. The information is therefore "costly to identify, obtain, and incorporate in investment analysis."[202]

Fourth, the data is not consistently reliable[203] or otherwise of sufficient quality.[204] The disclosure can employ "outdated" methodologies[205] and be based upon data collected without adequate rigor. The relevant disclosure in many instances is compiled by corporate officials who are not responsible for, or involved in, the system of financial reporting.[206] They often lack

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GOVERNANCE & ACCOUNTABILITY INST., INC. (July 16, 2020), https://www.ga-institute.com/storage/press-releases/article/90-of-sp-500-index-companies-publish-sustainability-reports-in-2019-ga-announces-in-its-latest-a.html [https://perma.cc/4DM9-K345])); *see also* The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21,334, 21,342 (proposed Apr. 11, 2022) (to be codified at 17 C.F.R. pts. 210, 229, 232, 239, 249) ("[M]uch of this climate-related information, particularly GHG emissions and targets, appears outside of Commission filings, in sustainability reports, and on corporate websites.").

201. *About EDGAR*, U.S. SEC. & EXCH. COMM'N (Apr. 6, 2023), https://www.sec.gov/edgar/about [https://perma.cc/VH3J-GQ7] ("EDGAR . . . is the primary system for companies and others submitting documents under the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, and the Investment Company Act of 1940.").

202. Virginia Harper Ho, *Modernizing ESG Disclosure*, 2022 U. ILL. L. REV. 277, 290 (2022) (first citing INV. RESP. RSCH. CTR. INST., STATE OF SUSTAINABILITY AND INTEGRATED REPORTING 26–33 (2018); then citing INT'L ORG. OF SEC. COMM'NS, SUSTAINABLE FINANCE AND THE ROLE OF SECURITIES REGULATORS AND IOSCO 22–25 (2020); and then citing Hans B. Christensen, Luzi Hail & Christian Leuz, *Mandatory CSR and Sustainability Reporting: Economic Analysis and Literature Review* 20–21 (Eur. Corp. Governance Inst., Finance Working Paper No. 623/2019, 2021) ("All of these factors make ESG information contained in such reports costly to identify, obtain, and incorporate in investment analysis.").

203. The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21,334, 21,342 (proposed Apr. 11, 2022) (to be codified at 17 C.F.R. pts. 210, 229, 232, 239, 249) ("[I]nvestors' demand for climate-related information is often met by inconsistent and incomplete disclosures due to the considerable variation in the coverage, specificity, location, and reliability of information related to climate risk."); *see also* Fisch, *supra* note 145, at 947 ("Under the current regime, sustainability disclosures are fragmented, of inconsistent quality, and often unreliable.").

204. Working Grp. on Sec. Disclosure Auth., *supra* note 186 ("Second, as a result of excessive variability, the quality of information that companies now provide appears to some to be low.").

205. Madison Condon, *Market Myopia's Climate Bubble*, 2022 UTAH L. REV. 63, 67 (2022) ("[M]arket actors continue to rely on risk-assessment methodologies that are outdated in a climate-changed world.").

206. *See* LoPucki, *supra* note 175, at 1460 ("Because they are not legal documents, CSR reports are often prepared by public relations or marketing personnel." (citing Fisch, *supra* note 145, at 950)).

expertise in controls used to ensure the integrity of the information collected.[207] Nor do the reports necessarily receive the level of review by counsel comparable to SEC filings.[208]

The information is not, for the most part, subject to third-party assurance.[209] To the extent obtained, companies often obtain "limited" rather than "reasonable" assurance.[210] Moreover, there is no guarantee that those providing the service have the necessary expertise or independence.

Fifth, the data is incomplete[211] and lacking in necessary detail.[212] This is particularly apparent with respect to the disclosure of "net zero" targets.[213]

The result is a system of climate change disclosure that is often "inconsistent and incomplete" with "considerable variation in the coverage, specificity, location, and reliability of information related to climate risk."[214] Sustainability reports may, therefore, include "questionable claims"[215] and

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207. The reports were not required to be included in the mandatory "disclosure controls and procedures" applicable to SEC filings or the system of internal control over financial reporting applicable to the financial statements. *See* 17 C.F.R. § 240.13a-15(a), (b), (e) (2022).

208. Fisch, *supra* note 145, at 950 ("These reports are often prepared by public relations or marketing personnel and, as a result, contain disclosures that do not meet the standards applied to securities filings. Furthermore, they are not routinely prepared or reviewed by disclosure lawyers, reviewed or certified by the CEO or board of directors, or subject to the oversight of third-party auditors. Finally, unlike securities filings, sustainability reports are not filed with and reviewed by the SEC.").

209. *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. 21,334, 21,392–93 (proposed Apr. 11, 2022) (to be codified at 17 C.F.R. pts. 210, 229, 232, 239, 249).

210. *Id.* at 21,451.

211. *See* Rosen-Zvi, *supra* note 178, at 551 ("A problem discovered in petroleum industry reporting, that recurs in CSR reports in the automobile sector, is the absence of uniform reporting methods. This leads to unreliable data and makes it impossible to compare between corporations. Corporations are thus free to choose their format and method of presentation in a way that makes them look more environmentally responsible than they actually are, and that hinders the comparative assessment of the achievements and targets of the various corporations in the sector.").

212. Condon, *supra* note 205, at 66 ("[S]hareholders and analysts currently lack the fine-grained asset-level data they need in order to make climate-risk assessments.").

213. *See* discussion *infra* Part IV.

214. The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21,425 ("In practice, however, investors' demand for climate-related information is often met by inconsistent and incomplete disclosures due to the considerable variation in the coverage, specificity, location, and reliability of information related to climate risk.").

215. WONG ET AL., *supra* note 192, at 14 ("Some reports contained questionable claims.").

"convey an incomplete, and potentially misleading, picture."[216] The system has, therefore, been described as "manifestly inadequate"[217] and "misleading or incomplete."[218]

At the same time, the antifraud provisions have proved inadequate to ensure accuracy and completeness.[219] Indeed, voluntary disclosure likely made private fraud actions more difficult. Under the total mix concept,[220] disclosure to the public is considered in determining whether statements were materially false or misleading.[221] Disclosure in sustainability reports, however broad and vague, provides an argument that investors have already been made aware of climate change related issues.[222]

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216. The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21,381 ("It also has been widely recognized that, for some companies, disclosure of just Scopes 1 and 2 emissions could convey an incomplete, and potentially misleading, picture.").

217. David A. Super, Comment Letter on Proposed Rule on The Enhancement and Standardization of Climate-Related Disclosures for Investors Under the Securities Act of 1933 and the Securities Exchange Act of 1934, at 1–2 (June 17, 2022), https://www.sec.gov/comments/s7-10-22/s71022-20132348-302913.pdf [https://perma.cc/XE2N-J3Y3] ("The current voluntary reporting systems are manifestly inadequate. Not only is the scope and clarity of disclosure that they require manifestly inadequate, but they suffer from a serious adverse selection problem: companies with strong profiles will happily provide all required disclosures while those whose actual practices might scare off investors will be inclined either to avoid disclosures completely or exploit fully all ambiguities in the current regimes. . . . A standardized and mandatory reporting system such as the one the Commission is proposing is the only way to allow investors to make reasonably informed decisions.").

218. Jill E. Fisch & George S. Georgiev, Comment Letter on Proposed Rule on The Enhancement and Standardization of Climate-Related Disclosures for Investors Under the Securities Act of 1933 and the Securities Exchange Act of 1934, at 5 (June 6, 2022), https://www.sec.gov/comments/s7-10-22/s71022-20130354-297375.pdf [https://perma.cc/2GPG-JJEX].

219. They may be accompanied by disclaimers and, as forward-looking information, be subject to safe harbors. *See* Armour, Enriques & Wetzer, *supra* note 122, at 31–32 (discussing application of antifraud provisions to emission targets). Other doctrines have made the antifraud provisions insufficient to police the accuracy of disclosure in sustainability reports, including the need for scienter and the availability of a "puffery" argument for aspirational claims. *See* Caitlin M. Ajax & Diane Strauss, *Corporate Sustainability Disclosures in American Case Law: Purposeful or Mere "Puffery"?*, 45 ECOLOGY L.Q. 703, 711–12, 733 (2018) ("Court decisions to date suggest that reliance on many informal sustainability statements would be misplaced and unreasonable, despite the fact that these disclosures are often the sole public indicators of a company's sustainability goals and performance. It follows that there is no clear way to hold companies legally accountable for sustainability statements because many such statements are aspirational in nature. This is an undesirable scenario in today's world where numerous facets of sustainability—from labor to environmental impact—are of 'material' importance to many investors and consumers.").

220. *See* J. ROBERT BROWN, JR., THE REGULATION OF CORPORATE DISCLOSURE, 5-25 to 5-26 (3d ed. 2015).

221. *See* T.S.C. Indus. v. Northway, 426 U.S. 438, 452–53 (1976).

222. While the SEC could still bring actions for the omissions since Section 13(a) is not subject to the total mix analysis, as a practical matter they are unlikely to do so.

Problems with the system of voluntary disclosure have significant consequences. The inadequacy of the disclosure process does not eliminate the need for the information. Instead, risks are simply more difficult to accurately assess.[223] With respect to Scope 3 emissions,[224] for example, investors are often forced to rely on third-party providers for the information.[225] These sources employ different methods of calculation[226] and can result in substantially different outcomes for the same company.[227] With investors only able to accurately price what is known,[228] assets are likely misvalued,[229]

Occasionally this does happen but not often. *See* Jenni Puroila & Hannele Makela, *Matter of Opinion: Exploring the Socio-Political Nature of Materiality Disclosures in Sustainability Reporting*, 32 ACCT. AUDITING & ACCOUNTABILITY J. 1043, 1045 (2019).

223. Condon, *supra* note 205, at 65 ("A growing number of financial experts at institutions ranging from BlackRock, to McKinsey, to the U.S. Commodities Futures Trading Commission, have reached the conclusion that markets are not accurately assessing and pricing climate change-related risks.").

224. *See* U.S. Securities and Exchange Commission, *supra* note 194, at 1:27:25 (noting that investors rely on estimations for Scope 3 and that "different estimations models lead to different outcomes").

225. Joseph V. Amato & Jonathan Bailey, Comment Letter on Proposed Rule on The Enhancement and Standardization of Climate-Related Disclosures for Investors Under the Securities Act of 1933 and the Securities Exchange Act of 1934 (June 11, 2021), https://www.sec.gov/comments/climate-disclosure/cll12-8907251-244243.pdf [https://perma.cc/J57G-HQTB] ("In the absence of standardized and comparable climate disclosures, investors must resort to reliance on estimates that are often provided by third party companies. Unfortunately, that unambiguously makes for less efficient capital markets.").

226. *See* Williams, *supra* note 147, 1291–92 (describing largely unsuccessful efforts to obtain EEO data through FOIA requests and questionnaires).

227. Shrimali, *supra* note 196, at 5 ("Furthermore, the Scope 3 emissions data from commercial data providers tends to be high inconsistent, with correlations as low as 1% . . . ."). As the report explained: "The low consistency of Scope 3 emissions can be attributed to (a) different data sources as well as (b) estimation methods. This is no different from other methods to track climate alignment—for example, analyzing 12 methods that assign temperature scores to portfolios, Raynaud (2020) finds scores ranging from 1.5C to 4C." *Id.* at 5 n.10 (citing JULIE RAYNAUD ET AL., INSTITUT LOUIS BACHELIER, THE ALIGNMENT COOKBOOK: A TECHNICAL REVIEW OF METHODOLOGIES ASSESSING A PORTFOLIO'S ALIGNMENT WITH LOW-CARBON TRAJECTORIES OR TEMPERATURE GOALS (2020)).

228. Condon, *supra* note 205, at 76 ("Investors can only price the risks they are aware of, and increasing attention has been paid to the lack of climate-related risk disclosure, leaving investors in the dark.").

229. *Id.* at 65 ("In April 2019, a coalition of thirty-nine central banks recognized that 'there is a strong risk that climate-related financial risks are not fully reflected in asset valuations.'" (quoting NETWORK FOR GREENING THE FIN. SYS., A CALL FOR ACTION: CLIMATE CHANGE AS A SOURCE OF FINANCIAL RISK 4 (2019))).

equity mispriced,[230] and capital misallocated.[231] The regime can have "distortive effects on competition, market efficiency, capital formation, and the overall integrity of the U.S. capital markets."[232]

V. Fixing the System of Disclosure: The Case of Targets

To the extent that the SEC's climate change proposal is viewed entirely or in part as novel, the necessary limiting principle arises from the overall purpose of the rule. The proposal is not primarily intended to identify categories of information important to investors. The voluntary system of climate change disclosure has already done that.

Instead, the proposal seeks to ensure that an existing system of climate change disclosure is made more useful to investors and shareholders. By integrating the information into the mandatory disclosure process, the rule will also increase the quality of what issuers provide and promote the relevancy of the periodic reporting process. The goal of fixing the existing system of disclosure can be seen with particular clarity in connection with the treatment of emission reduction targets.

A. The Specific Problem of Targets

Investors increasingly want to know about a company's plans for transitioning to a lower carbon environment and, as a result, have sought specific targets,[233]

230. *Id.* at 69 ("The widespread underassessment of climate risk may lead to two undesirable economy-wide harms: (1) systemic risk to the financial system and (2) the physical damages stemming from climate change itself, as mispriced equity leads to misallocation of investment resources.").

231. Amato & Bailey, *supra* note 225 ("We believe the lack of high-quality, comparable, decision-useful information on material climate information and ESG factors is making it harder for the market to efficiently allocate capital to companies that can generate strong long-term financial returns.").

232. Fisch & Georgiev, *supra* note 218, at 6 ("When investors and asset managers rely on incomplete and low-quality data, often coming from third-party providers, this has distortive effects on competition, market efficiency, capital formation, and the overall integrity of U.S. capital markets. These problems fall squarely within the Commission's rulemaking authority, which justifies the Commission's present effort to address them through the Proposal on climate-related disclosure." (footnote omitted)).

233. Mike Scott, *Investors Demand Oil and Gas Firms Adopt Climate Targets, but They Must Also Apply Them to Their Funds*, FORBES (Apr. 29, 2019), https://www.forbes.com/sites/mikescott/2019/04/29/investors-demand-oil-gas-firms-adopt-climate-targets-but-they-must-also-apply-them-to-their-funds/?sh=601fbda56e4e [https://perma.cc/FQ5G-5RXU]; *see also* TASK FORCE ON CLIMATE-RELATED FIN. DISCLOSURES, GUIDANCE ON METRICS, TARGETS, AND TRANSITION PLANS 30 (2021) ("A climate-related target refers to a specific level, threshold, quantity, or qualitative goal that the organization wishes to meet over a defined time horizon in order to address its climate-related risks and opportunities.").

particularly on becoming "Paris-compliant."[234] Net zero targets have been characterized as the "dominant lens" for assessing progress on climate change.[235]

In response, issuers have voluntarily issued these targets. More than 700 companies in the Forbes Global 2000 have done so,[236] a cohort that continues to grow.[237] They are particularly common in key industries such as finance[238] and banking.[239] Shareholder proposals seeking net-zero targets or other

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234. ROBERT J. JOHNSTON, REED BLAKEMORE & RANDOLPH BELL, THE ROLE OF OIL AND GAS COMPANIES IN THE ENERGY TRANSITION 12 (2020) ("[T]hese investors are both prioritizing investments in 'Paris-compliant' companies and divesting from those that are not." (citing Bill McKibben, *Money is the Oxygen on Which the Fire of Global Warming Burns*, NEW YORKER (Sept. 23, 2019), https://www.newyorker.com/news/daily-comment/money-is-the-oxygen-on-which-the-fire-of-global-warming-burns [https://perma.cc/JJ2W-7KB6])); *see also* Memorandum from Gibson Dunn to Clients and Friends, Shareholder Proposal Developments During the 2022 Proxy Season 20 (July 11, 2022), https://www.gibsondunn.com/wp-content/uploads/2022/07/shareholder-proposal-developments-during-the-2022-proxy-season.pdf [https://perma.cc/B2P7-TAZF] ("There were 55 proposals submitted that related to GHG emissions, generally focusing on the adoption of GHG reduction targets, typically in alignment with the Paris Agreement and often time-bound and covering all three scopes of emissions.").

235. FREDERIC HANS ET AL., NEWCLIMATE INST., NET ZERO STOCKTAKE 2022: ASSESSING THE STATUS AND TRENDS OF NET ZERO TARGET SETTING 6 (2022) ("Net zero targets are the dominant lens through which countries, states and regions, cities and companies approach decarbonisation.").

236. *Id.* at 5.

237. Cynthia Cummis, *3 Ways to Ensure Corporate Net-zero Targets Are Credible*, WORLD RES. INST. (Nov. 2, 2021), https://www.wri.org/insights/ways-companies-credible-net-zero-targets [https://perma.cc/32M9-27TG] ("Net-zero commitments now cover one-fifth of the world's largest corporations and 68% of global GDP, compared to 16% in 2019."); *see also* Press Release, United Nations Framework Convention on Climate Change (UNFCCC) Commitments to Net Zero Double in Less Than a Year (Sept. 21, 2020), https://unfccc.int/news/commitments-to-net-zero-double-in-less-than-a-year [https://perma.cc/BWC6-XMUZ].

238. *See* Memorandum from Gibson Dunn to Clients and Friends, *supra* note 234, at 19 ("There were 22 shareholder proposal submitted that related to net zero emissions targets . . . . [M]ost of these proposals were submitted to financial services and energy companies, including nine banks (generally requesting that banks align their financing policies with IEA's Net Zero scenario), two insurance companies and seven energy companies.").

239. UNITED NATIONS NET-ZERO BANKING ALL., UN-CONVENED, NET-ZERO BANKING ALLIANCE: GOVERNANCE ARRANGEMENTS (2021); *see* Sanne Wass & Harry Terris, *Path to Net-Zero: Banks' Pledges Come with Reluctance to Ditch Polluters*, S&P GLOB. MKT. INTELL. (Dec. 21, 2021), https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/path-to-net-zero-banks-pledges-come-with-reluctance-to-ditch-polluters-67951697 [https://perma.cc/CG4J-6WNM] ("In the last year, the largest 30 lenders by assets in the U.S., Canada and Europe have all signed up to the Net-Zero Banking Alliance, committing to bring greenhouse gas emissions linked to their lending and investment portfolios to net-zero by 2050

transition metrics have also increased[240] and done well at the ballot box,[241] with a number receiving majority support.[242]

Yet the state of target disclosure is seriously flawed and potentially misleading.[243] The level of detail varies significantly, with some consisting of only "vague intentions"[244] or accompanied by "scant detail."[245] The targets

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and to publish interim targets for 2030 or sooner. Only one institution, France's La Banque Postale SA, has set an earlier goal of net-zero by 2040, according to S&P Global Market Intelligence's net-zero tracker.").

240. In 2022, 22 proposals related to net zero targets. *See* Memorandum from Gibson Dunn to clients and friends, *supra* note 234, at 19.

241. *See* Marc Treviño, June M. Hu, & Joshua L. Levin, *2021 Proxy Season Review: Shareholder Proposals on Environmental Matters*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Aug. 11, 2021), https://corpgov.law.harvard.edu/2021/08/11/2021-proxy-season-review-shareholder-proposals-on-environmental-matters/ [https://perma.cc/8NSX-276W] ("The eight As You Sow proposals that went to a vote generally received between 36% and 57% support, with two exceptions of high shareholder support and one low shareholder support."); *see also* Memorandum from Gibson Dunn to clients and friends, *supra* note 234, at 19 ("Five companies unsuccessfully challenged the net zero proposal via no-action request, eight proposals were withdrawn, and 12 proposals went to a vote, receiving average support of 25.3%. Two proposals received majority support, including one (91.4% support) where the board recommended votes in favor of the proposal.").

242. Of the twelve environmental proposals that received majority support in 2021, four of them requested that the company adopt ESG emission reduction targets. *See* Treviño, Hu & Levin, *supra* note 241, at n.12 ("These included proposals at ConocoPhillips (59% support), Phillips 66 (80% support), Chevron (61% support) and General Electric (98% support). The General Electric board supported the proposal, rather than settling with As You Sow Foundation, using the proxy statement and shareholder vote as an opportunity to highlight General Electric's commitment to, and efforts regarding, climate."). In 2022, two received majority approval. *See* Memorandum from Gibson Dunn to clients and friends, *supra* note 234, at 19.

243. Coates, *supra* note 10, at 17 ("But beyond academic research, hardest for any neutral observer to challenge as evidence of the financial risks related to climate—and the reasonableness of climate-related financial disclosures to protect investors—comes from public companies themselves. Sixty percent of the Fortune 500 have announced climate targets, typically stated with reference to emissions data, including 17% with net-zero targets, yet 72% of investors lack confidence companies are serious about these targets. If those emissions targets are serious, they will matter to investors by leading to major changes in corporate strategy and investment policy, and in the financial risks and returns companies will generate for investors. If those targets are simply greenwashing, the proposed rules will reduce their potential to harm investors caused by fraud or misleading disclosure short of fraud.").

244. HANS ET AL., *supra* note 235, at 26 ("About half of the 700+ company net zero targets are embedded in corporate strategy documents or annual reports, while most other companies have only announced—in some cases have just declared a vague intention to set—net zero targets.").

245. WONG ET AL., *supra* note 192, at 11 ("The companies provided scant detail on the strategy or targets beyond 2030, including those such as Hess and Chevron that support the 2015 Paris Accord and the global goal of achieving net-zero emissions by 2050. Occidental was an exception . . . .").

apply to varying categories of emissions,[246] are determined using different baseline years[247] and timelines,[248] and may involve reductions in intensity[249] rather than absolute amounts.[250] They may be prone to double-counting[251] and overestimations.[252]

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246. TASK FORCE ON CLIMATE-RELATED FIN. DISCLOSURES, *supra* note 233 ("These targets should specify which emissions scopes are included. For instance, some organizations, such as those in high-emitting sectors, may choose to focus their reductions on Scope 1 and Scope 2 GHG emissions; others, such as financial organizations or auto manufacturers, may focus on reducing Scope 3 GHG emissions."); *see also* Jack Arnold & Perrine Toledano, *Corporate Net-Zero Pledges: The Bad and the Ugly*, COLUM. CTR. ON SUSTAINABLE INV. (Dec. 1, 2021), https://ccsi.columbia.edu/news/corporate-net-zero-pledges-bad-and-ugly [https://perma.cc/D4QC-RYRK] ("Only 37% of the companies analyzed set scope 3 emissions reduction targets. The mining and oil and gas sectors have minimal target-setting on scope 3, despite the fact that their scope 3 emissions represent the vast majority of their life-cycle emissions."); *see also* HANS ET AL., *supra* note 235, at 30 ("For scope 3 emissions, by contrast, we identify just over a third (38%) of the companies that include all scope 3 emissions. The other 60% of the companies' targets either only partially cover or do not cover any of their scope 3 emissions.").

247. Rosen-Zvi, *supra* note 178, at 552 ("Since actual emissions reduction is a function of both the percentage of reduction and the baseline year, the power to choose a baseline year enables corporations (potentially) to manipulate the data by choosing a favorable year. Thus, if a manufacturer chooses the 'right' year, the reduction percentage may look very impressive, but in fact may turn out to be an increase rather than a decrease from the previous year's actual emissions. It also makes it difficult, and in some cases impossible, to compare the levels of reduction presented by different corporations.").

248. WONG ET AL., *supra* note 192, at 14 ("[E]ach company has set GHG emissions-reductions targets with different baseline years and timelines, making it difficult to gauge their progress in meeting their climate goals and compare them with their peers.").

249. *Id.* ("The companies provided scant detail on the strategy or targets beyond 2030, including those such as Hess and Chevron that support the 2015 Paris Accord and the global goal of achieving net-zero emissions by 2050. Occidental was an exception . . . .").

250. Arnold & Toledano, *supra* note 246 ("Of the analyzed companies, 37% use absolute emissions reduction targets, 37% using [sic] both absolute- and intensity-based targets, and 26% solely using [sic] an intensity target. Oil and gas companies are most-heavily reliant on intensity targets, with all assessed oil and gas companies using either only an intensity target or a blend of absolute- and intensity-based targets. The recipe for effective decarbonization is simple: use reduction methods that guarantee absolute emissions reductions.").

251. The practice of selling or attributing the same carbon offset to multiple entities. *See Double Counting*, EPA (Feb. 25, 2022), https://www.epa.gov/green-power-markets/double-counting [https://perma.cc/8254-SJSF].

252. Proposal for a Directive of the European Parliament and of the Council, amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting, COM (2021) 189 final (Apr. 21, 2021) [https://perma.cc/CG96-2T2S] (noting that "[u]sers need reliable information regarding offsets that addresses concerns regarding possible double-counting and overestimations,

Targets, therefore, can be issued without a company having an accurate awareness of its emissions[253] or a specific plan for achieving the proposed reductions.[254] Nor can progress in meeting the targets be easily assessed. With the commitments often extending decades into the future,[255] plenty can go wrong.[256] The hoped-for improvement in technology may never emerge.[257] Reliance on offsets may prove unrealistic.[258] They may also

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given the risks to the achievement of climate-related targets that double-counting and overestimations can create.").

253. *Id.* (noting that "[u]sers need reliable information regarding offsets that addresses concerns regarding possible double-counting and overestimations, given the risks to the achievement of climate-related targets that double-counting and overestimations can create.").

254. Concern has been raised about the credibility of targets. *See* Frank Jordans, *UN Chief Names Panel to Probe Companies' Climate Efforts*, ASSOCIATED PRESS (Mar. 31, 2022), https://apnews.com/article/climate-business-environment-environment-united-nations-93d3b9d8a5d9b868d0dffa3c7bbe70e6 [https://perma.cc/YY7P-UMGT] ("The head of the United Nations announced the appointment Thursday of an expert panel led by Canada's former environment minister to scrutinize whether companies' efforts to curb climate change are credible or mere 'greenwashing.' . . . The 16-member panel will make recommendations before the end of the year on the standards and definitions for setting net-zero targets, how to measure and verify progress, and ways to translate that into international and national regulations.").

255. Arnold & Toledano, *supra* note 246 ("While 94% of the companies analyzed have set long-term targets extending over the next few decades, only 43% set short-term targets, which are vital to prompt immediate action necessary to reach the ambitious long-term targets.").

256. *See* HANS ET AL., *supra* note 235, at 27–28 (noting that of more than 700 companies issuing net zero targets, only one-third committed to these reductions by 2040).

257. Arnold & Toledano, *supra* note 246 ("Thus, CCS [carbon capture and storage] would have to grow exponentially over the coming years if it is to seriously contribute to achieving net-zero targets by 2050. Much like carbon offsets, CCS allows companies to continue to burn fossil fuels and emit GHGs without credible plans to decarbonize."); *see also* Courtney Lindwall, *The Promise and Pitfalls of Net-Zero Pledges: The Ubiquitous Climate Target Comes with Big Loopholes, but That Doesn't Mean We Shouldn't Hit It*, NRDC (Feb. 3, 2022), https://www.nrdc.org/stories/promise-and-pitfalls-net-zero-pledges [https://perma.cc/L82Y-GC7L] ("One of these, direct air capture technology, is a man-made means of soaking up atmospheric carbon. While it may eventually be an important supplemental strategy for addressing the legacy of carbon pollution, it's still largely in development. And the versions of direct air capture that are now in use come with major financial and logistical hurdles, so many advocates view them skeptically.").

258. Cummis, *supra* note 237 ("Critics have been especially concerned about corporate net-zero targets depending heavily on carbon offsets, rather than a business taking rapid action to decarbonize its own value chain where accountability and influence are highest."); *see also* Arnold & Toledano, *supra* note 246 ("Projects that include planting trees and protecting forests can play an important role in preserving land, capturing carbon, and protecting biodiversity; however, there are many concerns with an over-reliance on offsets: 1) Carbon storage in natural systems, like trees and other plants, is inherently temporary and highly reversible. 2) Most carbon offset schemes do not actively remove carbon dioxide from the atmosphere. Rather, they prevent hypothetical polluting activity in the future. 3) Offset markets are voluntary and unregulated. 4) Companies are not required to disclose offset purchases. 5) The market is fragmented and distrusted. 6) The cheap availability of offsets

fail because of managerial exuberance, bias,[259] or, with a median tenure for CEOs at large public companies of five years,[260] a lack of incentives to plan for the long-term.[261]

B. The Regulatory Fix

The SEC's proposed rule seeks to address the concerns over targets in two broad ways. First, while not requiring their disclosure,[262] companies

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hinders efforts to persuade companies to pursue serious decarbonization."); *see also* Lindwall, *supra* note 257 ("We also run into a math problem: There simply isn't enough available land for every country and corporation to reforest without displacing either residents or the farms we rely on for food. Yet, virtually all do, to varying degrees.").

259. Condon, *supra* note 205, 84–85 ("Corporate managers have access to their firms' operational data and are likely better positioned, as compared to their shareholders, to assess their firms' resilience to climate change. However, they may lack personal incentives for seeking out and assessing climate risk, let alone disclosing potential risk exposures to the market. The revelation that a firm is exposed to previously unaccounted-for climate risks may lead to a fall in share price that managers are trained, and incentivized, to avoid. In some cases, adapting to climate change requires up-front capital expenditures in order to stave off longer-term losses—like the raising or relocation of facilities. But managers whose performance is measured by stock price set by a myopic market are discouraged from making these investments in the short term."). *Id.* ("Corporate managers have access to their firms' operational data and are likely better positioned, as compared to their shareholders, to assess their firms' resilience to climate change. However, they may lack personal incentives for seeking out and assessing climate risk, let alone disclosing potential risk exposures to the market. The revelation that a firm is exposed to previously unaccounted-for climate risks may lead to a fall in share price that managers are trained, and incentivized, to avoid. In some cases, adapting to climate change requires up-front capital expenditures in order to stave off longer-term losses—like the raising or relocation of facilities. But managers whose performance is measured by stock price set by a myopic market are discouraged from making these investments in the short term.").

260. *See* Dan Marcec, *CEO Tenure Rates*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Feb. 12, 2018), https://corpgov.law.harvard.edu/2018/02/12/ceo-tenure-rates/ [https://perma.cc/Y6JW-C9JL].

261. Polly Bindman, *Exclusive: The Companies with the Most Ambitious Net-Zero Targets*, CAP. MONITOR (June 23, 2022, 6:49 AM), https://capitalmonitor.ai/factor/environmental/which-sectors-are-the-most-ambitious-on-net-zero/ [https://perma.cc/J6NM-469H] ("But scepticism has been growing around net-zero commitments amid concerns over potential gaming of carbon reporting and a lack of accountability over what has been promised. There are worries that companies are merely paying lip service to carbon cutting to keep investors and regulators happy and are well short of where they should be in reaching their goals.").

262. *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, Securities Act Release No. 11042, Exchange Act Release No. 94478, 87 Fed. Reg. 21,334, 21,405 (proposed Mar. 21, 2022) ("Those goals or targets might, for example,

that voluntarily choose to issue targets must provide the necessary detail[263] needed to evaluate the estimates.[264] This would include a description of:

- The scope of activities and emissions included in the target;
- The unit of measurement, including whether the target is absolute or intensity based;
- The defined time horizon by which the target is intended to be achieved, and whether the time horizon is consistent with one or more goals established by a climate-related treaty, law, regulation, policy, or organization;
- The defined baseline time period and baseline emissions against which progress will be tracked with a consistent base year set for multiple targets;
- Any interim targets set by the registrant; and
- How the registrant intends to meet its climate-related targets or goals.

In addition to the accompanying detail, the proposed rule would move the discussion into periodic reports, with the attendant improvements in accessibility and reliability.[265]

Furthermore, the proposal ties Scope 3 emissions disclosure directly to targets. They must be disclosed if material or included in a target. With that information, investors would be able to assess reduction over a period of time in absolute amount, intensity and particular categories of emissions.[266] To the extent, for example, that little progress towards a target was occurring, this could alert investors to the possibility of unrealistic assumptions or the need for a change to the business model, including significant capital

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relate to the reduction of GHG emissions, or address energy usage, water usage, conservation or ecosystem restoration.").

263. *See id.* at 21,380 ("[T]he objective of this disclosure is not to drive targets, goals, plans, or conduct, but to provide investors with the tools to assess the implications of any targets, goals, or plans on the registrant in making investment or voting decisions.").

264. *See id.* at 21,406 ("The proposed disclosure requirements are intended to elicit enhanced information about climate-related targets and goals so that investors can better evaluate these points.").

265. *See* Condon, *supra* note 205, at 121.

266. *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21,379 ("Scope 3 emissions disclosures would allow an investor to better understand how feasible it would be for the registrant to achieve its targets through its current strategy, to track the registrant's progress over time, and to understand changes the registrant may make to its strategy, targets, or goals. Scope 3 emissions disclosures would thus be important to evaluating the financial effects of the registrant's target or goal. In addition, this disclosure could help prevent instances of greenwashing or other misleading claims concerning the potential impact of Scope 3 emissions on a registrant's business because investors, and the market would have access to a quantifiable, trackable metric.").

expenditures.[267] Mandatory disclosure would also facilitate comparisons in the progress being made towards a low emissions environment.[268]

VI. MAJOR QUESTIONS, CLIMATE CHANGE DISCLOSURE, AND THE PERIODIC REPORTING PROCESS

The potential implications of the major questions doctrine to the SEC goes well beyond climate change disclosure. Capital markets have evolved significantly. The corporate information relevant to decision making by both management and investors has changed. Traditional financial information can be supplanted by "monetizable daily active users"[269] and other key performance indicators.[270] The future expectation of profits increasingly depends less upon plant construction and more on human capital strategies.[271] In an era of social media, the threats to a company's business model through rapid shifts in technology, consumer behavior, and regulation has increased.[272]

267. *Id.* at 21,379–80 ("The proposed disclosure requirement should also give investors the ability to evaluate whether a registrant's target or goal and its plan for achieving that target or goal could have an adverse impact on the registrant. For example, an investor might conclude that the financial costs of a registrant's plan would outweigh any benefits to the business, and factor that into how the registrant's securities fit into the investor's own investment portfolio given the investor's risk tolerance and other investment goals. Thus, the objective of this disclosure is not to drive targets, goals, plans, or conduct, but to provide investors with the tools to assess the implications of any targets, goals, or plans on the registrant in making investment or voting decisions.").

268. The Enhancement and Standardization of Climate-Related Disclosures for Investors, 87 Fed. Reg. at 21,380 ("Without disclosures of the amount and type of Scope 3 emissions, investors would face difficulty assessing the likely impacts of a target or goal that includes Scope 3 emissions on registrants and comparing the relative impacts across registrants.").

269. *See* Order Addressing the Motion to Compel Discovery, Twitter v. Musk, CA No. 2022-0613-KSJM (Del. Ch. Sept. 22, 2022).

270. J. Robert Brown, Jr., Bd. Member, Preventing Audit Extinction (Oct. 24, 2019) (available at https://pcaobus.org/news-events/speeches/speech-detail/preventing-audit-extinction_709 [https://perma.cc/H233-P6UC]).

271. *See* Working Grp. on Hum. Cap. Acct. Disclosure, SEC Rulemaking Petition No. 4-787, at 2–3 (June 7, 2022), https://www.sec.gov/rules/petitions/2022/petn4-787.pdf [https://perma.cc/UB3D-H59F].

272. *The Cost of Being a Public Company in Light of Sarbanes-Oxley and the Federalization of Corporate Governance: Hearing Before the Subcomm. on Fin. Servs.*, 115th Cong. 73 (2017) (statement of J. Robert Brown, Jr., Lawrence W. Treece Professor of Corporate Governance, Director, Corporate & Commercial Law Program, University of Denver Sturm College of Law) ("Whether a result of consumer taste, technology or climate change, disruption to business models can occur today at an accelerated pace. Shareholders should have greater awareness of these risks and efforts at reduction of the risk.").

Yet the existing system of required disclosure largely reflects the concerns of an earlier era. Adopted in 1982,[273] the existing system of integrated disclosure predates the creation of the Internet, the advent of social media, the implementation of EDGAR, and the widespread use of index funds.[274] Existing disclosure requirements no longer entirely suit the current needs of investors.

The SEC is gradually modernizing this system. Climate change is only part of that process. The agency's regulatory agenda includes consideration of other relevant topics such as human capital,[275] board diversity,[276] and cybersecurity.[277] As part of the modernization process, financial statements are likely to become far more granular[278] and disaggregated[279] and include matters currently unreported on the balance sheet.[280] Governance disclosure will extend beyond whether the board considered a topic to encompass the nature and degree of the board's consideration.[281] Information will increasingly be filed in a machine-readable format.[282]

To the extent the major questions doctrine is used to impose categorical limitations on the SEC's authority, it could upend these efforts at modernization. Under the approach, the SEC could require disclosure of operational and financial risks but not those related to climate change. The SEC could

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273. *See* Adoption of Integrated Disclosure System, 47 Fed. Reg. 11,380 (1982) (codified at 17 C.F.R. pts. 200, 201, 229, 230, 239, 240, 249, 250, 260, 274).

274. *See* 17 C.F.R. §§ 200, 201, 229, 230, 239, 240, 249, 250, 260, 274 (2021).

275. OFF. OF MGMT. & BUDGET, EXEC. OFF. OF THE PRESIDENT, UNIFIED AGENDA RIN NO. 3235-AM88, HUMAN CAPITAL MANAGEMENT DISCLOSURE (2022).

276. *Id.*

277. *See* Cybersecurity Risk Management, Strategy, Governance, and Incident Disclosure, Securities Act Release No. 11038, Exchange Act Release No. 94382, 87 Fed. Reg. 16,590 (proposed Mar. 23, 2022).

278. Some of the climate change proposal involves more granular disclosure in the financial statements. *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, Securities Act Release No. 11042, Exchange Act Release No. 94478, 87 Fed. Reg. 21,334 (proposed Apr. 11, 2022); *see also* Working Grp. on Hum. Cap. Acct. Disclosure, SEC Rulemaking Petition No. 4-787, at 2–3 (June 7, 2022), https://www.sec.gov/rules/petitions/2022/petn4-787.pdf [https://perma.cc/UB3D-H59F].

279. *See Disaggregation—Income Statement Expenses*, FIN. ACCOUNTING STANDARDS BD. (Mar. 31, 2023), https://www.fasb.org/Page/ProjectPage?metadata=fasb-Disaggregation—IncomeStatementExpenses-022820221200 [https://perma.cc/GJ2P-VPR7].

280. Balance sheet treatment of R&D expenses is an example. *See* Larry Walther & Sue Strickland, *R&D Accounting: A New Millennium Approach*, MGMT. ACCOUNTING Q., Summer 2002, at 1.

281. *See supra* note 127 and accompanying text.

282. SEC rules increasingly would require the use of XBRL. *See* Pay Versus Performance, 87 Fed. Reg. 55,134, 55,141 (2022) (to be codified at 17 C.F.R. pts. 229, 232, 240) ("The final rules require registrants to separately tag each value disclosed in the table, block-text tag the footnote and relationship disclosure, and tag specific data points (such as quantitative amounts) within the footnote disclosures, all in Inline XBRL.").

require disclosure of governance related matters but not those related to the oversight of greenhouse gas emissions.

The consequences of this approach are entirely predictable. The SEC's role in the disclosure process will diminish. Periodic reports will become less relevant. Investors will be forced to rely on voluntary disclosure, with all of the attendant limitations. They will be less informed and capital markets less efficient.

This has occurred before. Congress initially included categorical limits on the SEC's disclosure authority in the Exchange Act, although they applied to industries rather than subject areas.[283] Gaps opened in the system of disclosure and investors did not receive the information they needed to be adequately informed.[284] The decision to repeal these limitations effectively recognized that investors benefited from a single regulator with plenary authority to determine what public companies must provide to investors.

In the end, application of the major questions doctrine depends upon how the courts decide to frame the SEC's actions. The Supreme Court viewed limitations on coal plants as efforts to set industrial policy rather than to reduce emissions. COVID related mandates were not seen as efforts to protect employees but to set national vaccination requirements.[285] To the extent that courts choose to characterize the SEC's actions as an effort to set climate change policy rather than to provide investors information needed to price risk and allocate capital, the outcome of that choice will inevitably be to strike down some or all of the rule, detrimentally affecting investors and capital markets.

283. *See supra* notes 98–99 and accompanying text.
284. *See supra* notes 101–02 and accompanying text.
285. *See supra* notes 115–21 and accompanying text.