ARTICLES

Time for Plan(et) B? Why Securities Litigation Is a Misguided Attempt at Regulating Climate Change

ROBERT K. COWAN*

Abstract

In response to inconsistent and ineffective direct regulation, climate change litigation has taken off. Litigation is no longer a last resort tactic for action on climate change—instead, it is emerging as a key tool for deterring corporate behavior that is harmful to the environment. Climate change litigation has been advanced under a broad spectrum of theories including federal and state environmental statutes, common law nuisance claims, constitutional claims, the Administrative Procedure Act, and the public trust doctrine. These theories have often been met with skepticism by the courts. More recently, plaintiffs have turned to the securities laws as a means of promoting their climate change agendas. However, these claims—brought under the guise of investor protection—are pretextual. This Article argues that the securities laws were not intended to be used in this manner, but may nonetheless be desirable tools for affecting corporate behavior.

This Article then explains why securities antifraud litigation—under the current laws—is an ineffective tool to combat climate change. It provides reasons why regulation pursuant to state blue sky laws is unlikely to effect widespread policy change. It then explains why regulation under the federal securities laws has been ineffective thus far.

While securities antifraud litigation is unlikely to promote policy change, securities regulation may still provide an avenue to effect change in U.S. climate policy. Enhanced disclosures associated with climate change may facilitate a market-driven transition away from fossil fuels. The Climate Risk Disclosure Act, the latest in a series of proposals mandating increased financial disclosures of the risks associated with climate change, seeks to "guide capital allocation to mitigate, and adapt to, the effects of climate change" by "encourag[ing] a smoother transition to a clean and

^{*} University of Texas School of Law, J.D. 2020; Texas A&M University, B.B.A. 2014. © 2021, Robert Cowan. Rob Cowan is a Corporate Associate in the Houston office of Baker Botts L.L.P. He studied at the Georgetown University Law Center in the fall of 2019 while interning at the U.S. Securities and Exchange Commission. In Washington, D.C., he spoke with Matt Levine, Bloomberg columnist and author of Money Stuff, about the subject of this Article.

renewable energy, low-emissions economy." In this way, the securities laws can still be a useful tool in effecting change in U.S. climate policy.

TABLE OF CONTENTS

I.	Introduction.			3
II.				9
	A.		erything Has Become Securities Fraud	9
	B.		ple v. Exxon Mobil Corporation	12
	C. Ramirez v. Exxon mobil Corporation			15
III.		Investor Protection is a Pretext		
	A.			
	B.			
			sirable Characteristics of the Securities Laws	23
		1.	Securities Fraud Can Be Easier to Prove Than the Underlying	
			Substantive Problem.	24
		2.	Securities Laws Expand Access to More Litigants	26
		3.	Communications with Investors Are Among the Least Protected	-
			of All Speech.	27
	D.	The	Purpose of Securities Laws	30
	E.		vsuits Motivated By Political Agendas	32
IV.			Litigation is Ineffective Under Blue Sky Laws	35
V.	Climate Litigation is Ineffective Under the Federal Securities Laws			40
	А.	Climate Change Disclosure is Limited		
		1.	The Disclosure Rules: Regulation S-K.	41
		2.	The SEC's 2010 Guidance: What Climate Risks Must Be	
			Disclosed?	44
		3.	Limitations of Disclosure Rules: Materiality	47
		4.	Limitations of Disclosure Rules: Forward-Looking Information	49
	В.	Fos	sil Fuel Companies May Not Be Susceptible to Climate Change	
		Risł	Risks	
		1.	Disclosure of Future Regulatory Risks Requires Actual	
			Government Regulation	53
		2.	Climate Risks Associated With Changing Business Trends	
			Requires a Change in Consumer Preferences	54
		3.	Fossil Fuel Companies Are Not Disproportionately Affected By	
			Physical Impacts of Climate Change	55
	C.	Sec	urities Litigation Fails to Regulate the Underlying Bad Act	56
		1.	Only Public Companies Are Subject to Disclosure	
			Requirements Under the Securities Laws	58
		2.	Litigating Pursuant to the Securities Laws Can Be More	
			Expensive Than Direct Regulation	59
		3.	Securities Class Action Lawsuits Are Inefficient Because They	
			Do Not Benefit Diversified Investors	61
	D.	The	Future of Climate Change Securities Litigation	61

VI. Plan B: Market Forces to Indirectly Effect Change in Climate Policy ... 62

I. INTRODUCTION

The world is losing the war against climate change.¹ The burning of fossil fuels is widely considered to be the cause of the severe floods, droughts, heat waves, and rising sea levels assaulting our planet.² Climate change is now seen by most of the world as the greatest threat to international security.³ The crisis was best described by the Ninth Circuit in its *Juliana* decision earlier this year:

Copious expert evidence establishes that this unprecedented rise [in temperature] stems from fossil fuel combustion and will wreak havoc on the Earth's climate if unchecked.... The problem is approaching "the point of no return." Absent some action, the destabilizing climate will bury cities, spawn life-threatening natural disasters, and jeopardize critical food and water supplies.⁴

To avoid such catastrophic effects, the United States needs a fundamental change in energy policy⁵—specifically, reducing greenhouse gas emissions from

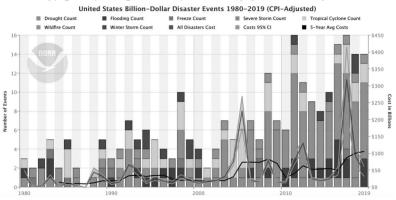


FIGURE 1: U.S. Billion-Dollar Disaster Events (1980-2019) (CPI-Adjusted)⁷ the burning of fossil fuels.⁶

^{1.} The World Is Losing the War Against Climate Change, THE ECONOMIST (Aug. 2, 2018), https://perma.cc/8KE4-3HR4.

^{2.} Alexa Lardieri, *Evidence Humans Are Causing Global Warming Reaches 'Gold Standard,' Study Finds*, U.S. NEWS & WORLD REP. (Feb. 25, 2019), https://perma.cc/44LS-VK6Z.

^{3.} Sintia Radu, *Climate Change is the Greatest Global Threat Right Now, Survey Says*, U.S. NEWS & WORLD REP. (Feb. 10, 2019, 6:00 PM), https://perma.cc/ZBG3-HE5Y.

^{4.} Juliana v. United States, 947 F.3d 1159, 1166 (9th Cir. 2020).

^{5.} *Id.* at 1171 ("Rather, these experts opine that such a result calls for no less than a fundamental transformation of this country's energy system, if not that of the industrialized world.").

^{6.} Hari M. Osofsky Jacqueline Peel, Brett H. McDonnell & Anita Foerster, *Energy Re-Investment*, 94 IND. L.J. 595, 597 (2019), https://perma.cc/UN3M-U6BR (acknowledging the reality that "fossil fuels continue to dominate energy markets" because for the past century they have "provided more than 80% of the energy consumed in the United States, and energy investments reflect that.").

Though climate change remains a global concern, it is widely recognized that the United States bears the most responsibility for its cumulative⁸ contributions to global greenhouse gas emissions.⁹ Therefore, the United States has a significant role to play in any climate change efforts. Successful climate change mitigation in America requires timely decarbonization of our transportation and electricity sectors, the two largest sources of U.S. greenhouse gas emissions.¹⁰ This transition away from fossil fuels will require a dramatic shift in climate policy if the United States is to remake its energy infrastructure.¹¹



FIGURE 2: U.S. net GHG emissions relative to international commitments¹²

9. Umair Irfan, *Why the US Bears the Most Responsibility for Climate Change, in One Chart*, VOX (Dec. 4, 2019), https://perma.cc/HKQ3-B7VC ("What's abundantly clear is that the United States of America is the all-time biggest, baddest greenhouse gas emitter on the planet.").

^{7.} Billion-Dollar Weather and Climate Disasters: Time Series, NAT'L CTR. FOR ENV'T INFO., NAT'L OCEANIC & ATMOSPHERIC ADMIN., https://perma.cc/Z3EV-MMJR (Jan. 8, 2021).

^{8.} Juliana, 947 F.3d at 1170 (acknowledging that "many of the emissions causing climate change happened decades ago or come from foreign and non-governmental sources").

^{10.} U.S. ENVTL. PROT. AGENCY, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2017, at ES-24 (2019), https://perma.cc/6JVL-K5GZ.

^{11.} Elisabeth Rosenthal, *Portugal Gives Itself a Clean-Energy Makeover*, N.Y. TIMES (Aug. 9, 2010), https://perma.cc/ZH2H-KUDR (insisting that, to catch up, the United States "must overcome obstacles like a fragmented, outdated energy grid poorly suited to renewable energy").

^{12.} Trevor Houser & Hannah Pitt, *Preliminary US Emissions Estimates for 2019*, RHODIUM CLIMATE SERV. (Jan. 7, 2020), https://perma.cc/DW9P-YNNB ("The fact that the US has achieved no net reductions over the past three years makes meeting these targets extremely challenging."). 2020 emissions were lower than previous years because of reduced economic activity as a result of the COVID-19 health crisis. The author considers pre-pandemic data to be a better indicator of future emissions.



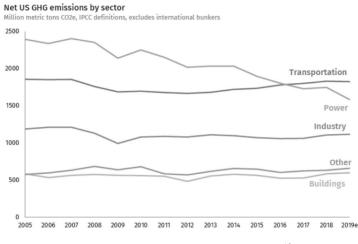


FIGURE 3: Net U.S. emissions by sector¹³

Private ordering alone has not been able to drive the transition.¹⁴ Because environmental externalities are not accounted for and internalized by polluters, private actors have little incentive to mitigate the negative consequences of burning fossil fuels.¹⁵ The ability to externalize most of their societal and environmental costs allows coal, gas, and other fossil fuel power providers to continue producing and selling energy at competitive rates with renewable energy sources, even in spite of rapidly declining costs of renewable energy.¹⁶ Because pollution¹⁷ "is the quintessential negative externality,"¹⁸ some government intervention is necessary

^{13.} *Id.* ("Unfortunately, there was little good news outside the power sector, continuing a trend we have observed for the past several years.").

^{14.} E. Donald Elliott, *Why the United States Does Not Have a Renewable Energy Policy*, 43 ENV'T L. REP. 10095, 10099 (2013), https://perma.cc/L4NC-TPAY (explaining that the United States' strong free-market ideology generally opposes heavy government regulation).

^{15.} Tracey M. Roberts, *The World Trade Organization and Renewable Energy, in* TAX LAW AND THE ENVIRONMENT: A MULTIDISCIPLINARY AND WORLDWIDE PERSPECTIVE 253, 254 (Roberta F. Mann & Tracey M. Roberts eds., 2018) ("Market failures may result from negative or positive externalities ").

^{16.} LAZARD, *Lazard's Levelized Cost of Energy Analysis*—Version 12.0, at 1–2, 19 (2018), https://perma.cc/FV3S-C5HU (comparing the levelized cost of energy between alternative and conventional sources and concluding that utility-scale solar and wind are cheaper than most fossil fuel sources).

^{17.} Carbon dioxide and other air greenhouse gases fall within the Clean Air Act's sweeping definition of "air pollutant." Massachusetts v. EPA, 549 U.S. 497, 528–29 (2007).

^{18.} Omri Ben-Shahar, *Data Pollution*, 11 J. LEGAL ANALYSIS 104, 112 (2019) ("It impacts an ecosystem as a whole, as well as the health of many third parties."); ANDREW P. MORRISS, BRUCE YANDLE & ANDREW DORCHAK, REGULATION BY LITIGATION 16 (2009) (justifying government regulation when "private activity can have an impact on people other than the person who made the decision to act.").

to curb private emissions of greenhouse gases.¹⁹

But federal climate change policies have not proven successful thus far; America's response from the executive and legislative branches has been sluggish²⁰ at a time when action is quickly needed.²¹ After President Donald Trump took office in 2016, the United States withdrew from the 2015 Paris Agreement, ended the Obama administration's Clean Power Plan rules to curb coal-fired power plant emissions, and limited an Obama-era regulation aimed at reducing methane emissions.²² Over the same period, Congress failed to pass any meaningful legislation addressing global warming,²³ while simultaneously threatening to slash the Environmental Protection Agency's budget.²⁴

The American people took notice; two-thirds of the country disapproved of how President Trump handled climate change.²⁵ As a result, climate change emerged as a key political issue in the 2020 presidential election.²⁶ Almost every contender called for holding fossil fuel companies accountable for their contributions to climate change.²⁷ Newly elected President Joe Biden has insisted that

22. Peter Stone, 'Swampy Symbiosis': Fossil Fuel Industry Has More Clout than Ever Under Trump, THE GUARDIAN (Sept. 27, 2019), https://perma.cc/38J2-MS8U.

23. See Timothy Gardner, Republicans Defeat Green New Deal in U.S. Senate Vote Democrats Call a Stunt, REUTERS (Mar. 26, 2019), https://perma.cc/L7VK-GGJ7 ("The non-binding Green New Deal resolution sought to speed a transition of the U.S. economy away from burning oil, gas and coal and emitting greenhouse gases from . . . industry blamed for climate change.").

24. Aristos Georgiou, *Trump Is Trying to Eliminate EPA Programs, 'Putting the Country and the Planet in Jeopardy,' Expert Says*, NEWSWEEK (Feb. 12, 2020), https://perma.cc/35CJ-SDKB (explaining that the proposed budget for 2021 "guts the majority of any program inside of the EPA that even touches climate change.").

25. POLLING THE NATIONS, *Do You Approve or Disapprove of the Way President Trump Is Handling Each of the Following? Climate Change*, HENRY J. KAISER FAM. FOUND. (Sept. 16, 2019).

26. See Judy Greenwald, *Climate Change Ruling May Boost Energy Companies*, BUS. INS. (2019), https://perma.cc/2MGD-ZPBX ("It's a very hot political issue and I think we should ultimately expect to see more suits against other oil and energy companies whose activities impact the climate, such as large manufacturers."); Elizabeth Warren (@ewarren), TWITTER (Apr. 16, 2019, 10:46 AM), ("Climate change is an existential threat. There is no Planet B for us.").

^{19.} Elena Cima, *Caught Between WTO Rules and Climate Change: The Economic Rationale of 'Green' Subsidies, in* ENVIRONMENTAL LAW AND ECONOMICS 379, 388 (Klaus Mathis & Bruce R. Huber eds., 2017) ("In the area of renewable energy development, there is a need to create favorable economic conditions for these new technologies. Because the market alone fails to address the externalities . . . , government intervention is therefore necessary to encourage their deployment.").

^{20.} Juliana v. United States, 947 F.3d 1159, 1175 (9th Cir. 2020) (acknowledging that "the political branches of government have to date been largely deaf to the pleas of the plaintiffs and other similarly situated individuals.").

^{21.} For a description of the necessary pace for decarbonization of the global-energy economy, see INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, GLOBAL WARMING OF 1.5° CELSIUS 95 (2019), https://perma.cc/DK2Y-XE45.

^{27.} See, e.g., Umair Irfan, *Climate Change Lawsuits Are Not Going Away*, Vox (Nov. 13, 2019), https://perma.cc/T3UJ-LQZM ("California Sen. Kamala Harris . . . would bolster the Environmental Protection Agency and the Justice Department's legal efforts to hold greenhouse gas emitters liable.") ("Vermont Sen. Bernie Sanders's plan to fight climate change goes as far as calling for criminal prosecution of companies that contribute to climate change") ("Sen. Elizabeth Warren has also

addressing climate change is one of his top priorities, though significant challenges remain.²⁸

In response to inconsistent and ineffective direct regulation,²⁹ litigation about climate change has taken off.³⁰ These cases are part of a rising tide of litigation instigated by young people, cities, and states seeking to hold private companies and governments accountable for emitting greenhouse gases, misleading the public, and profiting from it.³¹ More than one hundred of these "climate change" lawsuits were filed in the United States in 2017,³² bringing the total count to over one thousand since 1986.³³ And this trend is not confined to the United States; there has been an upswing in climate litigation globally.³⁴ Michael Gerrard, director of the Sabin Center for Climate Change Law at Columbia Law School, believes that "lawsuits will continue to pile up" unless "governments take adequate action against climate change."³⁵

Climate change litigation has been advanced under a broad spectrum of theories, including federal and state environmental statutes, common law nuisance claims, constitutional claims, the Administrative Procedure Act, and the public

30. Dino Grandoni & Steven Mufson, *ExxonMobil Prevails Over New York in High-Profile Climate Fraud Case*, WASH. POST (Dec. 10, 2019), https://perma.cc/977J-5YJE ("With Congress too gridlocked to pass major climate legislation, many left-leaning states and cities have turned to the courts to hold oil companies accountable for their contributions to the changing climate."); Hillel Aron, *Frustrated advocates increasingly turn to the courts to fight climate change*, SALON (Nov. 30, 2019), https://perma.cc/9LTS-JU7U ("The frustration on the part of the environmental community about legislative inaction is sparking litigation.").

31. See ADLER, supra note 29, at 60.

32. Michael B. Gerrard & Edward McTiernan, *Patterns of Climate Change Litigation During Trump Era*, 258 N.Y. L.J. 45 (Mar. 8, 2018), https://perma.cc/498H-QL9F; Geetanjali Ganguly, Joana Setzer, & Veerle Heyvaert, *If at First You Don't Succeed: Suing Corporations for Climate Change*, 38 OXFORD J. LEGAL STUD., 841, 868 No.4 (2018) ("Climate litigation is a broad and still maturing term that refers to the rapidly growing body of lawsuits in which climate change and its impacts are either a contributing or key consideration in legal argumentation and adjudication.").

33. JOANA SETZER & REBECCA BYRNES, GRANTHAM RSCH. INST. ON CLIMATE CHANGE AND THE ENV'T, GLOBAL TRENDS IN CLIMATE CHANGE LITIGATION: 2020 SNAPSHOT 4 (2020), https://perma.cc/AN8U-X37T (as of May 2020, 1,213 climate change lawsuits filed in the United States).

34. Ryan Devereaux, *Everything so far Has Failed: Why Exxon Mobil Is Being Taken to Court Over Climate Change*, INTERCEPT (Nov. 12, 2019), https://perma.cc/P2VC-R85J.

35. Erik Larson, *Exxon's Climate Trial Is Over in New York. But the Legal War Is Just Beginning*, BLOOMBERG (Nov. 15, 2019), https://perma.cc/Q2XG-TVUZ.

proposed legislation to hold corporate executive[s] . . . criminally liable for causing harm to the environment.").

^{28.} See Lauren Sommer, *How Fast Will Biden Need to Move On Climate? Really, Really Fast*, NPR (Feb. 2, 2021), https://perma.cc/CUC7-4JLB ("Still, reversing the Trump administration's environmental rollbacks could potentially take years. The administration will also need the cooperation of Congress to dramatically increase investment in climate policies.").

^{29.} See DENA P. ADLER, U.S. CLIMATE CHANGE LITIGATION IN THE AGE OF TRUMP: YEAR TWO, SABIN CTR. FOR CLIMATE CHANGE L., COLUM. L. SCH. 60 (June 2019), https://perma.cc/VS8D-3ZH6 ("While at least some of these suits may have occurred in the absence of the Trump Administration's deregulation, they are arguably strongly motivated by and take on added significance in regard to the void of federal climate leadership.").

trust doctrine.³⁶ Although many of these cases are still pending, early decisions suggest that some of these strategies may be more effective for enforcing climate protections than others.³⁷ Some theories have been met with skepticism by the courts, resulting in swift dismissal.³⁸ Others have received greater consideration, but ultimately failed because many courts consider climate change to be a policy decision entrusted, "for better or worse, to the wisdom and discretion of the executive and legislative branches."³⁹

As these lawsuits have evolved,⁴⁰ plaintiffs have begun turning to the securities laws to target major carbon producers to influence their corporate strategy and behavior with regard to climate change.⁴¹ But can securities litigation effect meaningful change in U.S. climate policy?⁴² And are the securities laws the appropriate tools for accomplishing such a goal?

Part I of this Article recognizes the growing number of securities lawsuits brought against energy companies. It introduces some of these early securities lawsuits in detail, including claims brought under state blue sky laws and the federal securities laws. Part II seeks to explain why these claims are brought under the securities laws. I suggest that these claims—brought under the guise of investor protection—are pretextual. I argue that the securities laws were not intended to be used in this manner but may nonetheless be desirable tools for affecting corporate behavior. Parts III and IV explain why securities antifraud litigation under the current laws—is an ineffective tool to combat climate change. Part III provides reasons why regulation pursuant to state blue sky laws is unlikely to effect widespread policy change. Part IV then describes why regulation under the

37. ADLER, *supra* note 29, at 65.

^{36.} For a compilation of these lawsuits, see U.S. Climate Change Litigation, SABIN CTR. FOR CLIMATE CHANGE L., COLUM. L. SCH., (March. 16, 2020), https://perma.cc/9KXY-YNLM.

^{38.} *See, e.g.*, New York v. BP P.L.C., 325 F. Supp. 3d 466, 472 (S.D.N.Y. 2018) (dismissing nuisance claim as displaced by the Clean Air Act); City of Oakland v. BP P.L.C., 960 F.3d 570, 580 (9th Cir. 2020); Lindsay v. Republican Nat'l Comm., No. 17-cv-123-wmc, 2017 U.S. Dist. LEXIS 162300 (W.D. Wis. Oct. 2, 2017) (dismissing constitutional claim for failure to address climate change); Holmquist v. United States, No. 2:17-cv-00046 (E.D. Wash. dismissed Jul. 14, 2017); Clean Air Council v. United States, 362 F. Supp. 3d 237, 242 (E.D. Pa. 2019) (dismissing claim against U.S. of public trust violations).

^{39.} Juliana v. United States, 947 F.3d 1159, 1171 (9th Cir. 2020) ("But it is beyond the power of an Article III court to order, design, supervise, or implement the plaintiffs' requested remedial plan."). *But see* Oakland v. BP P.L.C., 960 F.3d 570, 580 (9th Cir. 2020). (permitting state-court litigation against corporate defendants on the theory that producing, distributing, using, or profiting from fossil fuels constitutes a "public nuisance").

^{40.} Ganguly, Setzer, & Heyvaert, *supra* note 32, at 844 (discussing the development of private climate litigation).

^{41.} *Id.* at 843 ("Strategic climate litigation, in contrast, concerns cases initiated to exert bottom-up pressure on . . . corporations ('strategic private climate litigation') to mitigate, adapt or compensate for losses resulting from climate change.").

^{42.} In this Article, the term "policy change" refers to incremental shifts in decision-making by various actors, including governmental bodies, companies, and consumers. It is not limited to acts of lawmaking or political stances taken by the government. Specifically, it focuses on how companies adjust their behavior according to economic incentives.

federal securities laws has been ineffective thus far. It attributes this failure to the Securities and Exchange Commission's prolonged passivity with respect to climate change disclosures.

Although securities antifraud *litigation* is unlikely to promote change in U.S. climate policy, securities *regulation* may still provide an effective avenue. Enhanced disclosures associated with climate change may facilitate a marketdriven transition away from fossil fuels. Part V introduces the Climate Risk Disclosure Act, the latest in a series of proposals mandating increased financial disclosures of the risks associated with climate change. The bill's stated purpose is to "guide capital allocation to mitigate, and adapt to, the effects of climate change" by "encourag[ing] a smoother transition to a clean and renewable energy, low-emissions economy." In this way, the securities laws can still be a useful tool in effecting change in U.S. climate policy.

II. CLIMATE CHANGE SECURITIES LITIGATION IS BECOMING MORE PREVALENT

In the early 2000s, a small number of lawsuits against oil and gas companies were tested in U.S. courts.⁴³ Plaintiffs claimed that pollution by these companies exacerbated damages they suffered as a result of extreme weather events.⁴⁴ The cases were novel and high-profile, but none were successful.⁴⁵

A new theory is now emerging for holding fossil fuel companies liable for their contributions to global climate change. Corporate emitters now face claims over corporate disclosure requirements by shareholders and investors.⁴⁶ These lawsuits allege inadequate transparency and disclosure of information relating to climate risk exposure.⁴⁷ This Part identifies the growing trend of climate change securities litigation and examines two of the landmark cases in detail.

A. EVERYTHING HAS BECOME SECURITIES FRAUD

As a general trend, the rate of securities class action filings is accelerating.⁴⁸ In 2018, 8.77% of all publicly traded companies were sued in securities class actions, the highest since 2006.⁴⁹ And this increase is surprising, considering that fewer and fewer U.S. companies are going public.⁵⁰ Even more alarming, the

^{43.} Ganguly, Setzer, & Heyvaert, supra note 32, at 858.

^{44.} Id.

^{45.} Id.

^{46.} *Id.* ("In particular, the argument that energy-intensive companies have a legal responsibility to disclose the impact of climate change is gradually maturing into a self-standing ground for litigation."). 47. *Id.*

^{48.} John C. Coffee, Jr., *The Changing Character of Securities Litigation in 2019: Why It's Time to Draw Some Distinctions*, CLS BLUE SKY BLOG (Jan. 22, 2019), https://perma.cc/4LYZ-UEXL.

^{49.} *Id.* (identifying 385 securities lawsuits against a possible 4,411 publicly traded companies).

^{50.} Elisabeth de Fontenay, *The Deregulation of Private Capital*, 68 HASTINGS L.J. 445, 454 (2017) ("The U.S. market for IPOs of corporate stock is in the throes of what appears to be a long-term decline.").

amount of alleged losses in securities litigation has also grown dramatically.⁵¹

Leading academics partly attribute the increase in securities class action lawsuits to a shift in plaintiff strategy.⁵² Securities class action lawsuits used to be about inaccurate financial disclosures, such as revenues, liabilities, or income.⁵³ The biggest risk to a company was an accounting restatement. However, as the frequency of financial misstatements has declined,⁵⁴ the biggest risk may now be a freak disaster, such as an airplane crash, a major fire, or a medical calamity attributable to a company's product.⁵⁵

This new type of securities litigation has been characterized as "event-driven" litigation because it results from operational business disasters in which shareholders are not the primary injured party.⁵⁶ For example, Boeing was sued in a securities lawsuit because of the 2018 Lion Air crash in Asia, killing passengers.⁵⁷ Johnson & Johnson was sued by investors because its talcum baby powder may cause cancer among users.⁵⁸ CBS was sued by shareholders because its CEO had a history of sexually harassing employees.⁵⁹ Facebook was sued by shareholders because of its carelessness with customer data.⁶⁰ A drug manufacturer was sued by several shareholders because its data integrity standards did not meet the requirements of the FDA.⁶¹ Most recently, a cruise line was sued by investors because passengers were exposed to COVID-19 on its ships.⁶² In several cases, securities regulators have also brought antifraud claims. In 2018, the Securities and Exchange Commission ("SEC") sued Sea World for mistreating its captive killer whales.⁶³ In 2019, the SEC sued Volkswagen for rigging its cars to cheat on emissions tests.⁶⁴ In the words of one Bloomberg columnist, "Everything is

^{51.} Coffee, *supra* note 48 ("Cornerstone Research finds that the alleged losses in just the first half of 2018 were substantially greater than the alleged losses in all of 2017.").

^{52.} Id.

^{53.} Id.

^{54.} Mark Olsen, *Companies Less Likely to Do "Big R" Financial Restatements*, INTELLIGIZE (Dec. 10, 2019), https://perma.cc/C4DZ-PRXF.

^{55.} Coffee, *supra* note 48.

^{56.} Id. In contrast, accounting mistakes are considered to primarily harm shareholders.

^{57.} Id.

^{58.} Id.

^{59.} Matt Levine, Santander Didn't Pay Its Non-Debt, BLOOMBERG (Feb. 13, 2019), https://perma.cc/5LG8-H3K9.

^{60.} Matt Levine, *Facebook's Shareholders Are Disappointed*, BLOOMBERG (Mar. 21, 2018), https://perma.cc/VR5P-FJ4R.

^{61.} See Twin Master Fund, Ltd. v. Akorn, Inc., No. 19 C 3648, 2020 WL 564222, at *1 (N.D. Ill. Feb. 5, 2020).

^{62.} See Matt Levine, *Stocks Are Trying to Forget 2020*, BLOOMBERG (June 1, 2020), https://perma. cc/7L4Y-W688.

^{63.} Matt Levine, *Securities Fraud Was Lurking in the Orca Pool*, BLOOMBERG (Sept. 21, 2018), https://perma.cc/SH84-RQJF ("There is no claim that SeaWorld ever lied about its revenue or attendance figures.").

^{64.} Matt Levine, It's Hard to Make Everything Securities Fraud, BLOOMBERG (July 9, 2019), https://perma.cc/C6LK-59HJ.

securities fraud."65

The theory underlying event-driven securities claims is fairly straightforward. If a company does something bad—or something bad happens to it—its stock price will go down in response.⁶⁶ Frequently, companies will try to hide bad news from shareholders⁶⁷ or mislead them about the consequences. But the securities laws require companies to tell their shareholders about material news so that the shareholders can make informed trading decisions. The failure to fully and immediately disclose bad news to shareholders is securities fraud.

Companies can be liable for securities fraud even *without* trying to hide bad news from shareholders. Event-driven securities litigation is also triggered when an issuer fails to disclose its potential *vulnerability* to such a disaster.⁶⁸ Companies have an additional obligation to disclose risks that could materially affect their share price. Failing to disclose these risks also causes shareholder to sue, immediately after the stock price drops.⁶⁹

Finally, event-driven securities litigation can transform almost any allegation of corporate negligence or misconduct into securities fraud. Nearly every company's public filings include generic or aspirational statements about how they behave; one common example is an assertion that a company complies with an internal code of conduct or other corporate policy.⁷⁰ But, any allegation of misconduct by the company would conflict with some written corporate policy, thereby creating inaccurate (albeit generalized) disclosures.⁷¹ Using this formula, regulators and investors can re-characterize operational misconduct as securities fraud.⁷²

Preliminary results from a recent study indicate that about 16.5% of securities class actions arise from misconduct where the most direct victims are not shareholders.⁷³ Given the widespread use of event-driven litigation pursuant to the securities laws, it is unsurprising that shareholders have turned to antifraud

^{65.} Matt Levine, *Everything Everywhere Is Securities Fraud*, BLOOMBERG (June 26, 2019), https://perma.cc/NXY2-5YJM. *But see* Matt Levine, *Is Everything Securities Fraud?*, BLOOMBERG (Feb. 3, 2021), https://perma.cc/25MS-ZC5U (discussing Arkansas Teacher Retirement System v. Goldman Sachs Group, Inc., 955 F.3d 254 (2d Cir. 2020), *cert. granted*, Goldman Sachs Group, Inc. v. Arkansas Teacher Retirement System, Case No. 20-222, 2020 WL 7296815 (U.S. Dec. 11, 2020)) ("If statements of generic goodness are enough to certify a class—as U.S. courts mostly seem to think these days—then any bad thing a company does really can be securities fraud. If not, then perhaps only lying about securities is securities fraud.").

^{66.} Id.

^{67.} *Id.* (observing that it is "not particularly common" for companies to immediately communicate bad news to shareholders).

^{68.} Coffee, *supra* note 48.

^{69.} Id.

^{70.} Levine, Is Everything Securities Fraud?, supra note 65.

^{71.} Id.

^{72.} Id.

^{73.} Emily Strauss, Note, *Is Everything Securities Fraud?*, DUKE L. SCH. PUB. L. & LEGAL THEORY SERIES No. 2021-04, 1, 3 (Feb. 8, 2021), https://perma.cc/BAR8-HTZP.

statutes in the context of climate change. Both state regulators⁷⁴ and shareholders⁷⁵ have framed greenhouse gas emissions as a bad event for which risks must be adequately disclosed to investors. The remainder of this Part introduces two high-profile antifraud lawsuits that have received significant media attention after surviving preliminary motions to dismiss.

B. PEOPLE V. EXXON MOBIL CORPORATION

In October 2018, the New York State Attorney General filed a lawsuit against Exxon Mobil Corporation alleging "a longstanding fraudulent scheme by Exxon . . . to deceive investors and the investment community . . . concerning the company's management of the risks posed to its business by climate change regulation."⁷⁶ In essence, the complaint alleged that Exxon misled investors regarding the risk that future climate change regulations posed to its business.⁷⁷

The lawsuit was brought to recoup up to \$1.6 billion in investor losses attributable to the purchase of securities at artificially inflated prices.⁷⁸ These purchases were followed by significant drops in stock price associated with several impairments of long-lived assets and reserves in 2017.⁷⁹

Specifically, the company used two separate financial calculations of the proxy cost of future regulatory action related to climate change. Externally, Exxon told investors⁸⁰ that the company evaluates the profitability of potential investments based on its "best assessment of costs associated with potential [future] GHG regulations."⁸¹ This approach is more conservative because most industry participants agree that climate change regulations will become stricter over time and these costs will increase.⁸² For the past decade, Exxon itself has acknowledged that climate policies and regulations could affect its business by reducing demand for its products and increasing the costs of bringing those products to

80. Exxon's external representations concerning its proxy cost of carbon were communicated to investors in a set of public reports separate from its SEC filings, including 2014 "Outlook for Energy," "Energy & Climate," and "Energy and Carbon - Managing the Risks." *See* Matt Levine, *Exxon Is in Trouble Over Climate Change*, BLOOMBERG (Oct. 25, 2018), https://perma.cc/N2FV-P4BP.

^{74.} See infra section I.B.

^{75.} See infra section I.C.

^{76.} Summons & Compl. at 1, People v. Exxon Mobil Corp., No. 452044/2018, 2018 WL 5306631 (N.Y. Sup. Ct. Oct. 24, 2018).

^{77.} Id.

^{78.} Priscilla DeGregory, *Exxon Mobil Should Pay Up to \$1.6B for 'Hiding' Climate Change Risks:* AG's Office, N.Y. POST (Oct. 22, 2019), https://perma.cc/7GM4-EQ2T.

^{79.} See Ashley Poon, Note, An Examination of New York's Martin Act as a Tool to Combat Climate Change, 44 B.C. ENV'T AFF. L. REV. 115, 118 (2017); see also Tom DiChristopher, Exxon Mobil Says It May Write Down Assets After SEC Probe into Its Reserves, CNBC (Oct. 28, 2016), https://perma.cc/3J3A-GNSD ("Writing down assets essentially moves them off a company's balance sheet, reducing the potential value they could reap in the future, thereby potentially making the company itself less attractive to investors.").

^{81.} Summons & Complaint at 26, People v. Exxon Mobil Corp., No. 452044/2018, 2018 WL 5306631 (N.Y. Sup. Ct. 2018).

^{82.} Levine, supra note 80.

market.⁸³ Based on this analysis, Exxon assured investors that it was "confident that none of [its] hydrocarbon reserves are now or will become stranded."⁸⁴

However, contrary to its external representations, Exxon had prepared its internal budgets using a much lower⁸⁵ proxy cost of carbon that did not consider the effect of future carbon regulations.⁸⁶ Exxon instead assumed "existing climate regulation would remain in place, unchanged, indefinitely into the future."⁸⁷ According to the complaint, Exxon "create[d] the illusion that it had fully considered the risks of climate change regulation and had factored those risks into its business operations."⁸⁸ The lower proxy costs "had the effect of moving the company's investments towards more GHG-intensive assets, and away from emissions-reducing investments."⁸⁹ The result: greater exposure to risk from climate change.⁹⁰ Had investors known the truth about how Exxon was accounting for carbon and investing in new projects, they would not have bought the stock.⁹¹

The lawsuit was brought under the Martin Act,⁹² New York's blue sky law.⁹³ The Act prohibits the use of "any device, scheme or artifice . . . deception, misrepresentation, concealment, suppression, fraud, false pretense or false promise" in connection with the "issuance, exchange, purchase, sale, promotion, negotiation, advertisement, investment advice or distribution" of securities.⁹⁴ To establish liability under the Martin Act, the Attorney General must prove a misrepresentation of material facts.⁹⁵ or an omission of material facts.⁹⁶

The Act grants the New York Attorney General substantial authority to investigate companies suspected of wrongdoing.⁹⁷ First, the Act is far-reaching,

^{83.} People v. Exxon Mobil Corp. at 5, No. 452044/2018, 2018 WL 5306631 (N.Y. Sup. Ct. 2018).

^{84.} *Id.* at 17. "Stranded" assets are those assets that are included in the market value of fossil fuel companies but are no longer expected to be developed and sold, including proven reserves and unusable production capacity. *See* Marvin Gandall, *Climate Change and the Crisis of Stranded Fossil Fuel Assets*, CANADIAN DIMENSION (Feb. 12, 2020), https://perma.cc/AWP7-75S9.

^{85.} The complaint alleges that Exxon used an internal cost of \$40 per ton at 2030 instead of the publicly represented cost of \$60 per ton. Summons & Complaint at 15, People v. Exxon Mobil Corp., No. 452044/2018, 2018 WL 5306631 (N.Y. Sup. Ct. 2018).

^{86.} Id. at 35.

^{87.} *Id.* at 43. Exxon also did not apply proxy costs to its GHG emissions for long-term assets before 2016. *Id.* at 8.

^{88.} Id. at 6.

^{89.} Id. at 86.

^{90.} Id.

^{91.} See id. at 62-63.

^{92.} Id. at 86 (listing the first cause of action as "Martin Act Securities Fraud").

^{93.} Blue sky statutes are enacted by states to protect investors from securities fraud. *See* COFFEE, JR., HILLARY A. SALE & M. TODD HENDERSON, SECURITIES REGULATION CASES AND MATERIALS 57 (13th ed. 2015).

^{94.} The Martin Act, N.Y. GEN. BUS L. § 352-353.

^{95.} People v. Federated Radio Corp., 244 N.Y. 33, 41 (1926).

^{96.} People v. Sala, 258 A.D.2d 182, 194 (3d Dep't 1999), aff'd 95 N.Y.2d 254 (2000).

^{97.} Aaron A. Tidman, Securities Law Enforcement in the Twenty-First Century: Why States Are Better Equipped than the Securities and Exchange Commission to Enforce Securities Law, 57 SYRACUSE L. REV. 379, 392 (2007) ("The Martin Act's de facto national jurisdiction, combined with its civil and

covering the securities of any publicly traded company.⁹⁸ Second, the Act empowers the Attorney General to conduct a nearly unlimited investigation of companies based on evidence "satisfactory to him" that a person is engaging in fraud.⁹⁹ Exxon was forced to turn over millions of pages of internal documents.¹⁰⁰ Most importantly, the Act does not require scienter as an element of the claim; the Attorney General does not have to prove that the company intended to defraud anyone.¹⁰¹

Despite its initial cooperation with the State's inquiry,¹⁰² Exxon pushed back after the Attorney General began scrutinizing its accounting practices.¹⁰³ The four-year investigation spanning three different New York Attorneys General was resolved at trial in December 2019.¹⁰⁴ The Attorney General had to prove not only that Exxon made false statements in its public disclosures to shareholders, but also that those statements would have been considered important by investors when making decisions about buying and selling stock.¹⁰⁵ The New York court held that Exxon was not liable under the Martin Act.¹⁰⁶

The Office of the Attorney General produced no testimony ... from any investor who claimed to have been misled by any disclosure. ... The publication of Managing the Risks had no market impact and was, as far as the evidence adduced at trial reflected, essentially ignored by the investment community.¹⁰⁷

Ultimately, the State could not prove that investors considered the proxy cost disclosures material.

106. Id. at 1.

criminal investigatory power, broadly interpreted definition of 'fraud,' and lack of scienter, give the New York State Attorney General more authority to enforce securities laws than any other state regulator.").

^{98.} *Id.* at 391 (observing that "the statute has been construed . . . to cover securities fraud that takes place *in* New York, that is directed *to* New York from outside the state, and that emanates *from* New York.").

^{99.} N.Y. GEN. BUS. L. § 353. Refusal to respond to a subpoena or testify "shall be prima facie proof that such defendant is or has been engaged in fraudulent practices as set forth in such application and a permanent injunction may issue from the supreme court without any further showing by the attorney general." *Id.*

^{100.} Zoe Carpenter, *Exxon Won a Major Climate Change Lawsuit—But More Are Coming*, NATION (Dec. 13, 2019), https://perma.cc/RRQ5-QYDC.

^{101.} See N.Y. GEN. BUS. L. §§ 352-353.

^{102.} The initial inquiry related to news reports in 2015 that "Exxon had understood for decades the environmental impact of burning fossil fuels, despite having funded climate change denial research, think tanks, and publications." Fentress v. Exxon Mobil Corp., 304 F. Supp. 3d 569, 573 (S.D. Tex. 2018).

^{103.} See Poon, supra note 79, at 117.

^{104.} Dino Grandoni & Steven Mufson, *ExxonMobil Prevails Over New York in High-Profile Climate Fraud Case*, WASH. POST (Dec. 10, 2019), https://perma.cc/977J-5YJE.

^{105.} People v. Exxon Mobil Corp. at 2, No. 452044/2018, 2018 WL 5306631 (N.Y. Sup. Ct. 2018).

^{107.} Id. at 30.

Attorneys,¹⁰⁸ law professors,¹⁰⁹ and the media¹¹⁰ believe that this decision was a narrow one and not dispositive of future climate change securities fraud cases. The opinion indicates that the case died on technical questions over securities law rather than the more substantive issue of climate change. The facts that were alleged to be misleading were not substantially different from those that were used internally, and Exxon's detailed record-keeping practices supported this defense.¹¹¹ Other companies with less refined internal and external metrics may still be at risk.

Although oil and gas companies were encouraged by the outcome of the *Exxon* litigation, similar claims may be successful in the future.¹¹² The judge clarified that "[n]othing in this opinion is intended to absolve Exxon Mobil from responsibility for contributing to climate change in the production of its fossil fuel products. . . . Exxon Mobil is in the business of producing energy, and *this is a securities fraud case, not a climate change case*."¹¹³ For example, the State of Massachusetts has initiated a similar lawsuit against Exxon under its own blue sky law.¹¹⁴ Massachusetts law authorizes its Attorney General to protect investors against deceptive corporate practices by launching investigations aided by civil investigative demands, instituting litigation, and promulgating rules.¹¹⁵ Though the Massachusetts case is still pending, the New York lawsuit may serve as a helpful case study.

C. RAMIREZ V. EXXON MOBIL CORPORATION

Climate change securities litigation has also been advanced under federal law. In *Ramirez v. Exxon Mobil Corporation*,¹¹⁶ Exxon was once again the target of a securities antifraud claim. The class action lawsuit was brought under federal law by a pension fund that had invested in Exxon securities.¹¹⁷ The investors alleged

^{108.} John Anooshian, Sean Mahoney, & R. Victoria Fuller, *Exxon Prevails in a Major Climate Change-Related Legal Battle, But Many Questions Remain Unanswered*, WHITE & WILLIAMS LLP (Dec. 12, 2019), https://perma.cc/2RNR-C4U7 (observing that "Exxon Mobil prevailed with a narrow victory, and the majority of issues concerning potential climate change liabilities have yet to be decided").

^{109.} See, e.g., Carpenter, *supra* note 100. (quoting Michael Burger, executive director of the Sabin Center for Climate Change at Columbia University) (describing the ruling as "a narrow decision on a specific claim about a particular set of non-required statements Exxon made a few years ago").

^{110.} See, e.g., id.

^{111.} Greenwald, *supra* note 26 (noting that the court used the word "meticulous" to describe Exxon's record-keeping).

^{112.} Id. (noting that "these issues continue to have a lot of heat associated with them").

^{113.} People v. Exxon Mobil Corp. at 1, No. 452044/2018, 2018 WL 5306631 (N.Y. Sup. Ct. 2018) (emphasis added).

^{114.} See Compl. at 1, Massachusetts v. Exxon Mobil Corp., No. 1984CV03333 (Mass. Super. Ct. 2019) In addition to its claim of fraud against shareholders, the Massachusetts lawsuit accuses Exxon of deceiving consumers as well. *Id*.

^{115.} MASS. GEN. L. ch. 93A §§ 4, 6.

^{116.} Ramirez v. Exxon Mobil Corp., 334 F. Supp. 3d 832 (N.D. Tex. 2018).

^{117.} See id. at 847.

a theory similar to that posed in the New York lawsuit—Exxon failed to disclose the actual proxy cost of carbon it used (and at times failed to use) when evaluating capital expenditures and making investment decisions.¹¹⁸

Much like the Martin Act of New York, the Securities Exchange Act of 1934 prohibits false and misleading statements or omissions in connection with the purchase or sale of securities.¹¹⁹ SEC Rule 10b-5 is the basic antifraud provision of the federal securities laws, and broadly prohibits misleading statements to shareholders in a wide variety of contexts including periodic reporting and statements to the press or over the Internet.¹²⁰ A securities fraud claim under Rule 10b-5 includes the following elements: (1) a misstatement or omission; (2) of a material fact; (3) made with scienter; (4) on which the plaintiff relied; and (5) that proximately caused the plaintiff's injuries.¹²¹

The *Ramirez* complaint also alleges that investors "paid artificially inflated prices for Exxon common stock."¹²² But it goes beyond the New York lawsuit by emphasizing that Exxon failed to include its proxy cost of carbon in the impairment analysis, resulting in material misstatements in the financial statements.¹²³ If Exxon failed to include a proxy cost of carbon in its impairment determination, ExxonMobil's purported opinion that certain assets were not impaired in 2015 could be materially misleading.¹²⁴

The outcome of the *Ramirez* litigation is still pending. The case survived a motion to dismiss in 2018^{125} and—based on the outcome of the Martin Act claim—is likely headed to trial. The pension fund's success will likely depend on whether (1) misleading statements about the proxy cost of carbon was material to

120. 15 U.S.C. § 78j; 17 C.F.R. § 240.10b-5 (2020).

121. Southland Sec. Corp. v. INSpire Ins. Solutions Inc., 365 F.3d 353, 362 (5th Cir. 2004). In contrast to the Martin Act, Rule 10b-5 requires a showing that the defendant intentionally or recklessly created the false statement or omission. *See* Ernst & Ernst v. Hochfelder, 425 U.S. 185, 193 (1976). *Cf.* Discussion of the Martin Act in *supra* section I.B.

122. Consolidated Complaint for Violations of the Fed. Sec. Laws at 173, No. 3:16-cv-03111-K (filed July 26, 2017), Ramirez v. Exxon Mobil Corp., 334 F. Supp. 3d 832 (N.D. Tex. 2018).

123. Ramirez, 334 F. Supp. 3d at 847.

124. See *id.* at 848. Another federal court, however, has already suggested that this is a tenuous argument. See Fentress v. Exxon Mobil Corp., 304 F. Supp. 3d 569, 579 (S.D. Tex. 2018) ("There is a disconnect between future regulatory developments and likelihood that oil will be extracted. But Plaintiffs have not plausibly linked the realities of climate change to future health of an oil and gas company...").

125. *See Ramirez*, 334 F. Supp. 3d at 859 ("Pension Fund sufficiently pleaded securities fraud claims under Section 10(b), Rule 10b-5....").

^{118.} Id. at 846.

^{119.} See 15 U.S.C. § 78j. Similarly, Section 11 of the Securities Act of 1933 establishes a civil cause of action if a registration statement contains "an untrue statement of material fact or omit [s] to state a material fact required to be stated therein or necessary in order to make the statements therein not misleading." 15 U.S.C. § 77k. Section 12 of the Act creates a civil cause of action and strict liability for materially misleading facts or omissions of facts needed to make the statements not misleading that appear in a prospectus or oral communication in connection with an offer or sale of a security. 15 U.S.C. § 77l.

investors¹²⁶ and (2) whether subsequent drops in stock price can be attributed to the misleading statements.¹²⁷

III. INVESTOR PROTECTION IS A PRETEXT

Part I of this Article identified a growing trend of securities antifraud lawsuits in the context of climate change. This Part considers why these claims are being brought under the securities laws. I suggest that the claims may not be brought solely for the protection of investors; rather, they may be advanced to indirectly effect change in U.S. climate policy.

A. DIRECT REGULATION OF CLIMATE CHANGE HAS BEEN INEFFECTIVE

Scientists are in near-universal agreement that effective climate change mitigation requires a transition in energy infrastructure from fossil fuels to renewable energy.¹²⁸ This transition away from fossil fuels will require a dramatic shift in climate policy if the U.S. is to remake its energy infrastructure.¹²⁹

But direct regulation of climate change has been ineffective thus far because the United States is ill-suited to form a national renewable energy policy.¹³⁰ Structural¹³¹ and cultural¹³² impediments suggest that the U.S. system of government is not best suited to lead transformations of the economy, such as mobilizing significant amounts of capital to remake our energy infrastructure. The failure of the legislative and executive branches to enact meaningful climate change policies or regulations has led advocates to rely on the courts to effect change.¹³³

Congressional gridlock has stalled major reductions in greenhouse gas emissions.¹³⁴ Various approaches have been proposed for cost-effective promotion of

129. *Id.* (acknowledging that it is still possible to meet the Paris Agreement targets, but doing so "will require a significant change in federal policy").

133. Aron, *supra* note 30 ("The frustration on the part of the environmental community about legislative inaction is sparking litigation.").

134. Romany Webb, Congressional Gridlock: Democrats and Republicans Take Opposing Views on Methane Regulation, KAY BAILEY HUTCHISON CTR. FOR ENERGY, L. AND BUS., UNIV. OF TEXAS (Oct.

^{126.} This element was not satisfied in New York v. Exxon Mobil Corp. See supra section I.B.

^{127.} The Supreme Court has held that if a defendant can prove alleged misrepresentations did not affect its stock price, class certification can be denied. *See* Halliburton Co. v. Erica P. John Fund Inc., 573 U.S. 258 (2014).

^{128.} Houser & Pitt, *supra* note 12 ("Large-scale fuel substitution (to decarbonized electricity and other zero-carbon fuels) will be required.").

^{130.} Elliott, supra note 14.

^{131.} Regulatory authority of energy is fragmented, where fifty different states regulate electric utilities while the federal government regulates wholesale transportation of electricity. *Id.* at 10096. The United States has difficulty maintaining consistent energy policies because of frequent changes in government control by our political parties. *Id.* at 10097. And future generations who would largely derive the benefits of clean energy are largely unrepresented in current politics. *Id.* at 10098.

^{132.} American citizens have come to expect energy to remain cheap because it has historically been cheap. *Id.* The United States' strong free-market ideology opposes heavy government intervention. *Id.* at 10099. And our electricity system is controlled by private ownership of electric utilities, oil, and coal companies, which are powerful lobbying forces against change. *Id.*

renewable energy deployment, including a federal cap-and-trade regime, federal renewable portfolio standards, and a federal feed-in tariff.¹³⁵ Though each has its merits, none have gained significant political support.¹³⁶ In fact, these policies account for over thirty failed legislative proposals.¹³⁷ The most recent high-profile bill—the "Green New Deal"—was overwhelmingly rejected by the Senate in 2019.¹³⁸

Further, there is evidence that Congress is influenced by fossil fuel companies that spend significant amounts of corporate money on political campaigns¹³⁹ and lobbying.¹⁴⁰ The Supreme Court's decision in *Citizens United*¹⁴¹ allows corporate wealth to influence who gets elected. The result is that corporations are likely to engage in political spending solely to elect or defeat candidates who favor industry-friendly regulatory policies, even though the general public may have far broader concerns, such as environmental protection.¹⁴² Corporations have tremendous access to capital, which they use to influence political decisions,¹⁴³ contributing to fossil-fuel entrenchment by inhibiting implementation of direct climate change legislation.

136. Mormann, *supra* note 135, at 310. Congress has expressed a systemic preference for tax policy over nontax policy options to promote renewables because of their political advantages. Robert K. Cowan, Note, *Different Name, Same Result: Why Master Limited Partnerships are Unlikely to Finance our Green Energy Future*, 98 TEXAS L. REV. 357, 360 (2019).

137. See id. at 337-38 n.249 (listing various failed campaigns).

138. Susan Davis, *Senate Blocks Green New Deal, But Climate Change Emerges as Key 2020 Issue*, NATIONAL PUBLIC RADIO (Mar. 26, 2019), https://perma.cc/U7DN-RHGW. The bill may find new life with the recently elected democratic majority in Congress.

139. *Oil & Gas: Money to Congress*, OPENSECRETS.ORG, CTR. FOR RESPONSIVE POLITICS (last visited Mar. 21, 2020), https://perma.cc/5YYN-EM7G (\$28.8 million contributed by oil and gas companies to support congressional campaigns in the 2018 election cycle).

140. Niall McCarthy, *Oil and Gas Giants Spend Millions Lobbying to Block Climate Change Policies*, FORBES (Mar. 25, 2019), https://perma.cc/A364-ZJQP ("Every year, the world's five largest publicly owned oil and gas companies spend approximately \$200 million on lobbying designed to control, delay or block binding climate-motivated policy.").

141. Citizens United v. Fed. Election Comm'n, 558 U.S. 310 (2010) (holding that corporate funding in political elections cannot be limited because it is free speech protected under the First Amendment).

142. Leo E. Strine & Nicholas Walter, *Conservative Collision Course?: The Tension Between Conservative Corporate Law Theory and* Citizens United, 100 CORNELL L. REV. 335, 335–36 (2015). The Shareholders United Act of 2019 would amend the Securities Exchange Act of 1934 to "prohibit a corporation from making disbursements for a political purpose unless the corporation has assessed the preferences of its shareholders with respect to such disbursements." H.R. 936, 116th Cong. (2019).

143. Strine & Walter, *supra* note 143, at 390 ("Otherwise, one form of nonhuman citizen that as a matter of reality controls much of the wealth of actual humans will have the ability to imbalance public policy, in a manner that is inconsistent with social welfare.").

^{12, 2015),} https://perma.cc/TZ78-G55N ("Shortly before President Obama took office, in January 2009, the public was highly optimistic that Republicans and Democrats would work together to solve problems. This hope did not, however, turn into reality.").

^{135.} Felix Mormann, *Beyond Tax Credits: Smarter Tax Policy for a Cleaner More Democratic Energy Future*, 31 YALE J. ON REG. 303, 309–10 (2014). For a discussion of how each policy instrument operates, *see* Roberts, *supra* note 15, at 254–61, 264–68.

Nor has the executive branch taken significant action to curb emissions in recent years. Former President Trump withdrew from the 2015 Paris Agreement,¹⁴⁴ ended the Obama administration's Clean Power Plan rules to curb coal-fired power plant emissions, and limited Obama's Climate Action Plan aimed at reducing methane emissions.¹⁴⁵ While direct regulation of climate change has been entrusted primarily to the Environmental Protection Agency under the Clean Air Act,¹⁴⁶ the agency is subject to political influence and control,¹⁴⁷ as evidenced by a recent congressional proposal to slash the EPA's budget.¹⁴⁸ Additionally, the procedural hurdles associated with rulemaking mean that agencies are slower to respond to problems than they otherwise would be if left unconstrained.¹⁴⁹

B. LITIGATION AS A TOOL TO FACILITATE CHANGE IN U.S. CLIMATE POLICY

Over the past twenty years, lawyers have used litigation in an attempt to influence public policy.¹⁵⁰ Climate change litigation can deter behaviors deemed harmful to the environment because of the significant costs lawsuits impose on companies. These costs include both the immediate cost of mounting a legal defense and the long-term reputational effect on a company.¹⁵¹ Such litigation aims to change the fossil fuel industry's response to climate change.¹⁵²

147. See EPA's Administrators, U.S. ENVTL. PROT. AGENCY (last visited Feb 12, 2021), https://perma.cc/G73G-4MXV ("President Donald J. Trump had announced [Andrew Wheeler's] appointment as the Acting EPA Administrator on July 5, 2018.").

148. Aristos Georgiou, *Trump Is Trying to Eliminate EPA Programs*, '*Putting the Country and the Planet in Jeopardy*,' *Expert Says*, NEWSWEEK (Feb. 12, 2020), https://perma.cc/R2MH-SDW7 (explaining that the proposed budget for 2021 "guts the majority of any program inside of the EPA that even touches climate change.").

^{144.} In November 2019, the United States formally announced its withdrawal of the Paris Agreement, which takes effect one year from the date notice was given. *See* Michael R. Pompeo, U.S. Sec'y of State, *On the U.S. Withdrawal from the Paris Agreement*, U.S. DEP'T OF STATE (Nov. 4, 2019), https://perma.cc/K8QP-QRTA.

^{145.} Stone, supra note 23.

^{146.} *Air Pollution: Current and Future Challenges*, U.S. ENV'T PROT. AGENCY (last visited Mar. 20, 2020), https://perma.cc/A6UA-VBQ7 ("Under the Clean Air Act, EPA is taking initial common sense steps to limit greenhouse gas pollution from large sources.").

^{149.} MORRISS, YANDLE & DORCHAK, supra note 18, at 170–71.

^{150.} Michael J. Mazzone & Kelli Stephenson, *Asserting Contrary Policy Arguments in "Public Policy" Litigation*, TRIALS & TRIBULATIONS (Spring 2009), at 1 (listing tobacco, guns, fast food, and carbon dioxide emissions as examples of such tort lawsuits).

^{151.} Leslie Hook, *Oil Majors Gear up for Wave of Climate Change Liability Lawsuits*, FIN. TIMES (June 8, 2019), https://perma.cc/8QAB-HZQC ("Taken together, these lawsuits amount to a legal onslaught that climate activists hope will have a profound financial impact on oil and gas producers, by imposing huge penalties.").

^{152.} Hana V. Vizcarra, *Climate-Related Disclosure and Litigation Risk in the Oil & Gas Industry: Will State Attorneys General Investigations Impede the Drive for More Expansive Disclosures?*, 43 VT. L. REV. 733, 772 (2019) (observing the trend of "increasingly aggressive approaches and a shift towards policy-creation.").

Financial costs to companies include legal defense costs, settlement costs, and costs from adverse judgments.¹⁵³ For example, Exxon's legal defense in the Martin Act case required significant hours from both internal and external counsel.¹⁵⁴ It spanned four years and required approximately one million documents be turned over to the Attorney General,¹⁵⁵ posing a financial threat to Exxon that could exceed hundreds of millions of dollars.¹⁵⁶ The potential business damage that could result from a public Martin Act investigation is often sufficient to compel a settlement.¹⁵⁷ And according to the preliminary results of one recent study, the average shareholder settlement in event-driven securities litigation is over double the average for cases where the primary victims are shareholders.¹⁵⁸

Fossil fuel companies are committing significant resources to their defense.¹⁵⁹ The industry recognizes that only a few adverse judgments are necessary to establish a precedent for widespread liability.¹⁶⁰ Litigation can be an effective substitute for government regulation because a finding of liability could send a strong signal to greenhouse gas emitters and have a ripple effect across the energy industry.¹⁶¹ Indeed, if one company is sued with a successful outcome, peer companies may change their practices to avoid similar lawsuits in the future.

^{153.} Ganguly, Setzer, & Heyvaert, *supra* note 32, at 865 ("Climate change lawsuits are expensive to litigate, even for well-resourced corporations. Since climate change is a transboundary phenomenon, corporations can potentially be sued for damages in any jurisdiction in which climate harm occurs and could therefore face a litany of lawsuits. The exponential increase in climate harms globally means that Carbon Major corporations may be liable to pay billions of dollars worth of damages for existing as well as future climate harms.").

^{154. &}quot;In-house lawyers at Exxon handle nearly all the company's transactional work and compliance matters, and more than 60 attorneys are devoted solely to intellectual property work like patent prosecution, while litigation is chiefly handled by outside counsel." *See* Jess Krochtengel, *Leading Exxon's Attys a Career Capstone for GC Jack Balagia*, LAW 360 (Aug. 5, 2016), https://perma.cc/9K6G-9DUL.

^{155.} Benjamin Hulac, *Original Subpoena Finally Surfaces in Exxon Case*, E&E NEWS (Oct. 24, 2016), https://perma.cc/396C-62M7 ("Exxon has sent at least 700,000 and as many as 1.2 million documents to the New York attorney general, according to court papers.").

^{156.} John Schwartz, New York Sues Exxon Mobil, Saying It Deceived Shareholders on Climate Change, N.Y. TIMES (Oct. 24, 2018), https://perma.cc/4D36-D2JG.

^{157.} Ganguly, Setzer, & Heyvaert, *supra* note 32, at 866 ("In addition, not all climate change damage is covered by insurers. Corporate defendants typically rely on liability insurers for indemnification and defense, but climate change-related allegations against corporations do not automatically trigger the corporate insurer's indemnification and defense duties to their clients.").

^{158.} Strauss, supra note 73.

^{159.} Id. (citing AES Corp v. Steadfast Ins. Co. 725 S.E.2d 532 (Va. 2012)).

^{160.} William Savitt, Anitha Reddy & Bita Assad, *Climate Change Litigation Takes an Ominous Turn*, HARV. L. SCH. F. ON CORP. GOVERNANCE (June 9, 2020), https://perma.cc/Y459-6WDC ("And the tort system, when confronted with civil litigation claiming broad social injury, is often indiscriminate in extracting enormous damages from corporate defendants-even those seemingly far afield from the alleged liability-creating conduct.").

^{161.} See Shi-Ling Hsu, A Realistic Evaluation of Climate Change Litigation Through the Lens of a Hypothetical Lawsuit, 79 U. COLO. L. REV. 701, 717 (2008) (observing that "[a civil] litigation strategy is potentially a means of regulation itself, as a finding of liability could have an enormous ripple effect and send [GHG] emitters scrambling to avoid the unwelcome spotlight."); Vizcarra, *supra* note 152, at

Defendant corporations in climate litigation also incur costs in terms of reputational damage.¹⁶² Even if a corporate defendant successfully deflects a climate change lawsuit and recovers costs, its practices are likely to remain subject to ongoing public and financial scrutiny.¹⁶³ For example, Exxon had its "triple A" credit rating downgraded in 2017 and subsequently faced pressure from investors to disclose climate risks.¹⁶⁴ Moreover, labeling a company as a perpetrator of "securities fraud" carries tremendous weight because of our societal conception of fraud.¹⁶⁵ Much of the public perceives dishonesty from a corporation to be worse than the act of polluting itself. Litigation also reinforces the public's perception of the dangers arising from the climate crisis and inspires political efforts to address global warming.¹⁶⁶

The mere *announcement* of an antifraud investigation may incite investors. Shareholders often give an investigation greater weight than it is due because they cannot distinguish between investigations resulting from actual fraud and those that are simply fishing expeditions.¹⁶⁷ And as discussed above, corporations must disclose an investigation at the outset or risk a securities fraud claim.¹⁶⁸ Simply disclosing an investigation may be misunderstood by some shareholders as indicating that the company engaged in wrongdoing, which may lead to baseless lawsuits by shareholders.

For these reasons, climate change litigation has caught the attention of fossil fuel companies.¹⁶⁹ There is evidence that these lawsuits are influencing corporate behavior.¹⁷⁰ Fossil fuel companies have responded with enhanced lobbying efforts for a carbon tax bill that would waive liability for fossil fuel products sold

166. ADLER, *supra* note 29, at 60.

167. Deborah J. Birnbach, Michael T. Jones, Nicole L. Chessari & Morgan Mordecai, *Do You Have to Disclose a Government Investigation? Practical Considerations, Legal Standards, and Recent Case Law*, GOODWIN PROCTOR (Mar. 16, 2016), https://perma.cc/K9JG-NKE8.

168. See supra Part I.A.

169. Hook, *supra* note 151 (quoting Phil Goldberg, special counsel for the National Association of Manufacturers) ("Anytime you are sued, you take it seriously.").

170. See ADLER, supra note 29, at 60 ("In particular, a wave of common lawsuits against fossil fuel companies for money damages can shape the public discourse and lead companies to pursue climate regulation in exchange for limiting their liability from such suits.").

^{772 (&}quot;As past experience shows, one AG's successful settlement or decision in court can cause a cascade of multi-state litigation.").

^{162.} Aron, *supra* note 30 (suggesting that even if Exxon prevails in the litigation, the lawsuit will have cost the company "many millions of dollars and caused it a great deal of reputational damage.").

^{163.} Ganguly, Setzer, & Heyvaert, supra note 32, at 865.

^{164.} *Id.* at 865. Similarly, Exxon suffered reputational damage when it emerged that it actively misled investors and the public about climate science. *Id.*

^{165.} Samuel W. Buell, *What Is Securities Fraud?*, 61 DUKE L.J. 511, 573 (2011) ("The law of securities fraud is the 800-pound gorilla of antifraud law. When lawyers call something securities fraud, especially when referencing a high-profile case, they are shaping the social conception of fraud. Fraud not only constitutes legal doctrine, it also has an expressive power that can determine norms and behavior."). For this reason, some academics have suggested that securities antifraud lawsuits need to be carefully limited. *Id.* ("Such a potent instrument should be maintained carefully.").

in the past.¹⁷¹ Most companies would prefer a tax over the uncertain future regulatory environment; a tax would essentially establish a predictable proxy cost of carbon, providing certainty to energy companies evaluating the economics of potential investments.¹⁷²

This concept of "regulation-by-litigation"¹⁷³ is most effective in industries with certain characteristics.¹⁷⁴ First, defendants must be a concentrated group to enable regulation to be effective without the transaction costs of the multiple lawsuits that would make the effort too expensive.¹⁷⁵ Lawsuits generally target just one company at a time and require considerable resources. Therefore, a small number of firms should constitute the entire domestic market, as is the case for supermajor oil companies like Exxon, commonly known as "Big Oil." Litigation is a more effective deterrent when it only needs to be brought against a small group of corporations who collectively are responsible for a large percentage of emissions.¹⁷⁶

Second, the targets of litigation must be the appropriate parties to bear responsibility.¹⁷⁷ For regulating climate change, fossil fuel companies could be held responsible because they have contributed to it through their carbon-emitting activities.¹⁷⁸ Collectively, the "Carbon Majors are responsible for two thirds of human-made carbon emissions in the atmosphere today."¹⁷⁹ And since the consumption of fossil fuels for transportation and electricity generation makes up 70% of global greenhouse gases, corporations will play an important role in

^{171.} Hook, *supra* note 151 (noting that some energy companies "have poured millions of dollars into lobbying for a new carbon tax bill.").

^{172.} See Janet L. Yellen & Ted Halstead, *The Most Ambitious Climate Plan in History*, FORTUNE (Sept. 10, 2018), https://perma.cc/8D6E-QLF9. The Climate Leadership Council has articulated the most popular of these carbon tax plans. *See generally* JAMES A. BAKER, III ET AL., CLIMATE LEADERSHIP COUNCIL, THE CONSERVATIVE CASE FOR CARBON DIVIDENDS (Feb. 2017), *available at* https://perma.cc/ P9DK-TR6E.

^{173.} Technically, regulation-by-litigation is distinct from enforcement litigation. In both approaches, "[a]n agency (or a private actor) sues one or more regulated entities, charging them with a violation of an existing statute, regulation, or common-law rule." MORRISS, YANDLE & DORCHAK, *supra* note 18, at 47. But "more is required than an enforcement suit for the litigation to become regulation. . . . One distinctive characteristic of regulation-by-litigation, compared with litigation, is that it results in forward-looking substantive requirements imposed on the regulated entities through the litigation." *Id.* This Article does not dwell on this distinction and assumes that both types of litigation provide a deterrent effect.

^{174.} Id. at 176–77. These conditions are best exemplified by Big Tobacco.

^{175.} Id.

^{176.} Ganguly, Setzer, & Heyvaert, *supra* note 32, at 845. For example, Exxon is the fifth highest emitting entity globally, behind China, Saudi Aramco, Gazprom, and National Iranian Oil Company. *See* PAUL GRIFFIN, CDP CARBON MAJORS REPORT 2017 at 7 (2017), https://perma.cc/ZSW3-NU2X.

^{177.} Ganguly, Setzer, & Heyvaert, supra note 32, at 844-45.

^{178.} Id.

^{179.} KEELY BOOM, JULIE-ANNE RICHARDS & STEPHEN LEONARD, CLIMATE JUSTICE: THE INTERNATIONAL MOMENTUM TOWARDS CLIMATE LITIGATION 2 (2016),

https://perma.cc/3AEM-ZLKE.

achieving climate change mitigation.¹⁸⁰ Corporations are involved in the key activities needed to facilitate a green energy transition, such as infrastructure provision, development, and land use.¹⁸¹ There would be little deterrent effect if law-suits were brought against non-emitters or companies whose emissions fell below a *de minimus* level.¹⁸²

Third, the would-be regulator-by-litigation must be able to coerce change by threatening a catastrophic outcome. Big Oil has significant financial resources, so the magnitude of lawsuits must also be large. The catastrophic effects of climate change, and its massive costs, suggest that litigation may be a real threat to the fossil fuel industry; one estimate placed the financial cost to the U.S. economy at \$520 billion *per year*.¹⁸³ To put that figure in perspective, the total market capitalization of the three largest publicly traded oil and gas companies in the world was only \$376 billion as of Q3 2020.¹⁸⁴ While these companies are not entirely responsible for the effects of global warming,¹⁸⁵ the financial costs of climate change would undoubtedly be material, and would need to be paid in perpetuity.

Therefore, using litigation as a way to effect change in U.S. climate policy is a compelling option¹⁸⁶ for regulators and private attorneys seeking to sidestep the political constraints of government.¹⁸⁷ Climate change litigation against Big Oil has been compared to Big Tobacco litigation because of the significant political influence that each industry asserted at the height of their power.¹⁸⁸

C. DESIRABLE CHARACTERISTICS OF THE SECURITIES LAWS

Part II.B explained how litigation can be used as a tool to affect corporate behavior and facilitate change in U.S. climate policy. This Part describes the

^{180.} See JACQUELINE PEEL & HARI M. OSOFSKY, CLIMATE CHANGE LITIGATION: REGULATORY PATHWAYS TO CLEANER ENERGY 173–220 (Cambridge Univ. Press 2015).

^{181.} Ganguly, Setzer, & Heyvaert, supra note 32, at 845.

^{182.} Hsu, *supra* note 162, 716–17 (2008) (explaining that "seeking direct civil liability against those responsible for [GHG] emissions" is the only litigation strategy "that holds out any promise of being a magic bullet.").

^{183.} Renee Cho, *How Climate Change Impacts the Economy*, EARTH INSTITUTE COLUM. U. (June 20, 2019), https://perma.cc/2TQY-WE7C.

^{184.} Everett Wheeler, *Top Oil and Gas Companies See Market Cap Spiral Lower in Q3*, S&P GLOBAL (Oct. 7, 2020), https://perma.cc/9NZS-6HNN (including Exxon, Shell, and Chevron).

^{185.} GRIFFIN, *supra* note 177, at 14 (providing cumulative greenhouse gas emission estimates for Exxon (2.0%), Shell (1.7%), BP (1.5%), and Chevron (1.2%)).

^{186.} MORRISS, YANDLE & DORCHAK, *supra* note 18, at 176 ("It is hard to see why, once agencies and . . . private attorneys discovered the rewards of using litigation to regulate, they would abandon the tool.").

^{187.} See supra section II.A. In the past, plaintiffs have used regulation-by-litigation in the context of (1) reducing NOx emissions to sidestep the Clean Air Act's lead-time rules, (2) asbestos manufacturers to sidestep the workers' compensation system, and (3) the tobacco industry to sidestep its political influence in Congress and the White House. See MORRISS, YANDLE & DORCHAK, supra note 18, at 171.

^{188.} Lincoln Caplan, *Will the "Tobacco Strategy" Work Against Big Oil?*, THE NEW YORKER, Nov. 17, 2015, at 2–3 (Nov. 17, 2015), https://perma.cc/K4ST-G7C5.

reasons that plaintiffs might specifically turn to the securities laws as the legal grounds for their claims.

1. Securities Fraud Can Be Easier to Prove Than the Underlying Substantive Problem

Though securities fraud has traditionally been used to penalize financial crimes, there has been a recent trend in punishing other conduct that is not inherently of a financial nature.¹⁸⁹ Plaintiffs like to treat everything as securities fraud because it tends to be easier to prove—and to punish—than whatever the underlying substantive problem is.¹⁹⁰ This is particularly true in the case of climate change, which is difficult to regulate directly.¹⁹¹ The requirements for securities fraud are easier to satisfy for a number of reasons.

First, in securities antifraud claims, the plaintiff does not have to prove that the underlying conduct was illegal. The underlying offense may involve intricate and disputed fact patterns that may complicate the application of more conventional legal tools to punish bad behavior.¹⁹² The underlying offense may have statutory elements that are difficult to prove because of certain evidentiary standards. In contrast, a violation of the securities laws occurs anytime corporate nondisclosure of material information proximately causes a decline in share value.¹⁹³ The ease with which securities laws can be applied to varied conduct makes it a tempting alternative on which plaintiffs can rely.

In fact, the securities laws permit plaintiffs to initiate lawsuits that could deter harmful corporate behavior that is not per se illegal. For example, few substantive regulations seek to prevent climate change.¹⁹⁴ Yet securities fraud can still be a viable claim if shareholders are misled about the risks or effects of climate change.¹⁹⁵ Even though historic contributions to global warming (through greenhouse gas emissions) are not technically illegal, we can conclude that it is socially bad because the value of the company drops when the public finds out about the behavior. A company's stock price reflects what the capital market judges to be good and bad behavior. Shareholders or government agencies can use the

^{189.} See supra section I.A.

^{190.} Matt Levine, Aramco's Failed IPO Went Pretty Well, BLOOMBERG (Dec. 11, 2019), https://perma.cc/R2A5-J2HZ.

^{191.} See supra section II.A; Levine, supra note 80.

^{192.} Joseph T. McClure, A New Trend in Securities Fraud: Punishing People Who Do Bad Things, SSRN, Feb. 1, 2019, at 21, https://perma.cc/5QBX-PTQX ("Enforcement agencies rarely have an appetite for prolonged legal battles where the law is unclear, often preferring a negotiated settlement imposing a fine. In light of such difficulties, the ease of prosecuting violations of securities law is attractive and comes with some certainty that enforcement will be successful.").

^{193.} *Id.* ("This framework can be utilized for all kinds of corporate conduct that does not fit neatly into the government's toolkit of criminal and civil laws and penalties.").

^{194.} See supra section II.A.

^{195.} See supra section I.B-C.

securities laws to discipline companies who are culpable, yet difficult to reprimand, under traditional environmental law.

A high-profile example of deterring corporate behavior that is not necessarily illegal is Facebook's recent release of user data. A researcher gained access to data about millions of Facebook users without those users' explicit permission.¹⁹⁶ That researcher then turned the data over to Cambridge Analytica for political targeting in violation of Facebook's terms, but it was not considered an illegal data breach because Facebook was not hacked.¹⁹⁷ While Facebook did not violate any substantive law, its stock price did drop once the scandal was publicized.¹⁹⁸ Shareholders initiated a securities lawsuit to recoup their losses associated with Facebook's cover-up.¹⁹⁹

The deterrent effect of securities litigation is the same as if the company were actually punished for the underlying conduct. Companies do not distinguish between paying a fine for allowing massive data misuse or for simply failing to disclose the massive data misuse in a timely manner.²⁰⁰

Second, it can be easier to measure damages for a violation of the securities laws than for an underlying violation. This is an important practical benefit; the drop in stock price is an objective measure of the harm. The capital market does the work of quantifying the damage done, which may even exceed penalties available under environmental statutes, depending on shareholder reactions. For this reason, securities law is an efficient measure of corporate misconduct.²⁰¹

Third, the securities laws can facilitate easier discovery to uncover corporate wrongdoing.²⁰² Certain state securities laws—like the Martin Act—give enormous discretion to regulators to investigate possible securities fraud. Some securities regulators may also have more financial resources than their environmental counterparts, providing another incentive to recast environmental issues as securities claims.²⁰³

Finally, the unique threat of securities fraud could incentivize more corporate settlements. There is enhanced reputational risk associated with being labeled as a securities fraudster than as a mere contributor to global warming. For example,

^{196.} Levine, supra note 60.

^{197.} *Id.* ("What happened was somewhere between a contractual violation and . . . you know . . . just how Facebook works?").

^{198.} Id.

^{199.} Id.

^{200.} McClure, supra note 192, at 22.

^{201.} Levine, *supra* note 60 ("Securities law is an all-purpose tool for punishing corporate badness, a one-size-fits-all approach that makes all badness commensurable using the metric of stock price. It has a certain efficiency."). The fraud-on-the-market-doctrine creates a rebuttable presumption that the misleading statements caused the negative stock movement. *See* Part III, *supra*.

^{202.} See supra section I.B (discussing the extent of the Attorney General's powers under the Martin Act).

^{203.} Levine, *supra* note 191 ("So, here, state attorneys general have more tools to fight securities fraud than climate change, so they have incentives to recast climate change disputes as securities-fraud disputes.").

at the New York Martin Act trial, then-Exxon CEO Rex Tillerson had no problem acknowledging that Exxon "is in the depletion business."²⁰⁴ After all, every investor in America knows Exxon as an oil company.²⁰⁵ There is evidence that plaintiffs' counsel are often less concerned about surviving a motion to dismiss in securities lawsuits because they expect an early settlement.²⁰⁶

2. Securities Laws Expand Access to More Litigants

Litigation under the securities laws is more widely available to plaintiffs than litigation under traditional environmental regulations. By recharacterizing climate change risks as corporate risks, new categories of litigants can ensure that companies behave responsibly.²⁰⁷ Both state and federal securities regulators, as well as private parties, can use securities fraud claims to compel companies to change their behavior.

Litigation under the securities laws is available to both state and federal regulators, who have concurrent power to enforce securities antifraud claims. Section 18(c)(1)(A)(i) of the Securities Act of 1933 recognizes that the states retain jurisdiction to regulate fraud or deceit with respect to securities.²⁰⁸

The securities laws also offer a private right of action.²⁰⁹ And while many major federal environmental statutes allow for some degree of private party enforcement,²¹⁰ the Supreme Court has held that under the Article III "case or controversy" requirement of the Constitution,²¹¹ litigants must demonstrate that they have suffered "injury in fact" in order to establish standing to bring an action

211. U.S. CONST. art. III, § 2.

^{204.} Devereaux, supra note 34.

^{205.} People v. Exxon Mobil Corp. No. 452044/2018, at 3 (N.Y. S. Ct. 2019) ("ExxonMobil does not dispute either that its operations produce greenhouse gases or that greenhouse gases contribute to climate change."). The complaint focused on the issue of adequate disclosure without delving too far into underling discussions of pollution or climate change. *See* Levine, *supra* note 81.

^{206.} Coffee, *supra* note 48 ("The combination of broad investigative powers and lower thresholds for liability encourages those under investigation to settle rather than litigate."). "One reason the Martin Act has faced little judicial scrutiny is that virtually all companies settle rather than risk total destruction of the enterprise at trial." Manny Alicandro, *Depoliticize the Martin Act*, CRAIN'S N.Y. BUS. 4 (Sept. 12, 2018), https://perma.cc/UD3J-SAFN.

^{207.} Ganguly, Setzer, & Heyvaert, supra note 32, at 861.

^{208.} See 15 U.S.C. § 77r.

^{209.} See Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 267 (2014) ("Although section 10 (b) does not create an express private cause of action, we have long recognized an implied private cause of action to enforce the provision and its implementing regulation.").

^{210.} See, e.g., Clean Water Act, 33 U.S.C. § 1365(a) (authorizing "any citizen" to commence a civil action "on his own behalf" against any person who is alleged to be in violation of an effluent standard or limitation promulgated under the statute); Clean Air Act, 42 U.S.C. § 7604(a) (authorizing "any person" to commence a civil action "on his own behalf" against any person who is alleged to be in violation of an emission standard or limitation promulgated under that statute). *Cf.* National Environmental Policy Act, 42 U.S.C. § 4321–4347 (not explicitly providing for citizen suit enforcement). Private actions challenging the sufficiency of environmental review conducted for federal agency actions are allowed under the Administrative Procedure Act. *See* 5 U.S.C. § 702 (any "person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action ... is entitled to judicial review").

in federal court.²¹² This requirement is easily satisfied in securities antifraud cases because of the large volume of dispersed public shareholders.

Private access for litigants is important because changing priorities among federal agencies may affect the manner in which those agencies choose to enforce environmental laws.²¹³ Considering the powerful lobbying efforts of Big Oil, governmental bodies cannot always be trusted to be independent of fossil fuel influence.²¹⁴ And judges may be more sympathetic to private citizens bringing lawsuits as opposed to governmental actors.²¹⁵

Because there is a private right of action in addition to government regulation, more claims can be brought than would otherwise be permitted by limited agency resources.²¹⁶ Moreover, shareholder plaintiffs benefit from government investigations into defendant companies' event-driven misconduct because they can effectively piggyback their own lawsuit off of work performed by regulators, reducing the cost of their lawsuit.²¹⁷ Shareholders also tend to be more experienced in litigation as compared with the victims of the physical impacts of climate change, and they have access to more resources.²¹⁸ Put simply, these are "new players, and they are also a different kind of player."²¹⁹

3. Communications with Investors Are Among the Least Protected of All Speech

The New York Attorney General's examination of Exxon was prompted, in part, by investigative journalism from *InsideClimate News* and the *Los Angeles Times*. According to the journalists, Exxon "conducted cutting-edge climate research decades ago and then, without revealing all that it had learned, worked at the forefront of climate denial, manufacturing doubt about the scientific consensus that its own scientists had confirmed."²²⁰ Journalists revealed that Exxon

216. COFFEE, SALE & HENDERSON, *supra* note 93, at 922 (explaining that "securities class actions provide an important vehicle for bringing claims against corporate actors and deterring securities wrongdoing.").

217. See Strauss, supra note 73.

219. Id.

220. See Neela Banerjee, Lisa Song & David Hasemyer, Exxon: The Road Not Taken, INSIDECLIMATE NEWS (Sept. 16, 2015), https://perma.cc/8S8S-VLGP. Exxon had poured millions into a

^{212.} See, e.g., Whitmore v. Arkansas, 495 U.S. 149, 155 (1990).

^{213.} Kevin T. Haroff, Can Constitutional Standing Arguments Restrain Citizen-Suit Enforcement of Federal Environmental Laws?, WASH. LEGAL FOUND. (Sept. 8, 2017), https://perma.cc/MH9Z-CG7W.

^{214.} Kimberly Barnes, *Litigation for the Era of Extreme Weather*, 50 U. PAC. L. REV. 652, 668 (2019).

^{215.} See Andrew J. Wistrich, Jeffrey J. Rachlinski & Chris Guthrie, *Heart Versus Head: Do Judges Follow the Law or Follow Their Feelings*?, 93 TEXAS L. REV. 855, 911 (2015) (acknowledging that "when the law is unclear, the facts are disputed, or judges possess wide discretion their decisions can be influenced by their feelings about litigants.").

^{218.} Ganguly, Setzer, & Heyvaert, *supra* note 32, at 861; *see* Strauss, *supra* note 73 (examining the parties involved in event-driven securities class actions and noting that "the majority of these lawsuits are brought by institutional investors (particularly pension funds), and the top-tier plaintiffs' lawyers that serve them").

spread misinformation to prevent the negative impact potential legislation and regulation would have on business.²²¹

This sustained fraud on the public²²² began in the 1970s and continued until 2007, when Exxon publicly admitted that climate change was occurring and was largely a result of burning fossil fuels.²²³ Unsurprisingly, these misleading statements triggered litigation under consumer protection statutes, in addition to the securities claims discussed above.²²⁴ All states have consumer protection statutes that authorize investigations of unfair or deceptive practices in the conduct of business.²²⁵ But even plainly misleading communications about climate change can be subject to free speech protections under the First Amendment.

It is now well-settled that corporations are subject to many of the same constitutional protections as individuals.²²⁶ These include First Amendment rights protecting non-commercial speech. Climate change is a matter of public concern and is not likely to be considered commercial speech under modern First Amendment doctrine.²²⁷ And after *Citizens United*, courts are even more likely to limit the category of commercial speech in favor of noncommercial corporate speech.²²⁸ This means that courts are less likely to characterize a newspaper ad that expresses Exxon's views regarding climate change as commercial speech.²²⁹ The same is

223. Id.

campaign that questioned climate change, taking out prominent ads in the Washington Post, the Wall Street Journal and the New York Times, contending climate change science was murky and uncertain. Exxon also argued regulations aimed at curbing global warming were ill-considered and premature. Katie Jennings, Dino Grandoni & Susanne Rust, *How Exxon Went from Leader to Skeptic on Climate Change*, L.A. TIMES (Oct. 23, 2015), https://perma.cc/43F5-BWBF.

^{221.} Shannon M. Roesler, *Evaluating Corporate Speech About Science*, 106 GEO. L.J. 447, 462 (2018) ("These documents show that corporate actors were interested in spinning the science in their public communications to serve the company's bottom line.").

^{222.} Jennings, Grandoni & Rust, *supra* note 220 (finding that ExxonMobil publicly advanced its stance on climate change through newspaper advertising campaigns, public executive statements, and at company shareholder meetings).

^{224.} Roesler, *supra* note 221, at 459 ("Like New York's Martin Act, state consumer protection laws—such as the one under which the Massachusetts attorney general is proceeding—give state attorneys general wide latitude to police corporate speech.").

^{225.} Victor E. Schwartz & Cary Silverman, *Common-Sense Construction of Consumer Protection Acts*, 54 U. KAN. L. REV. 1, 16 (2005); Joanne Spalding & Alejandra Núñez, *Statutory Framework Underlying Exxon Investigations by the Attorneys General of New York and Massachussetts*, 14 ENV'T DISCLOSURE COMM. NEWSL., no. 3, Aug. 2017, at 12, https://perma.cc/WZ3Q-KUZB (listing state consumer protection statutes).

^{226.} *See* Citizens United v. Federal Election Commission, 558 U.S. 310 (2010). More and more free-speech claims are being filed by corporations rather than individuals. Roesler, *supra* note 221, at 501.

^{227.} Roesler, *supra* note 221, at 509 (noting that "when commercial speech is 'inextricably intertwined' with fully protected speech, the Court treats all the speech as fully protected.").

^{228.} Id.

^{229.} Matt Levine, *Exxon Might Be in Trouble Over Climate Change*, BLOOMBERG (Nov. 6, 2015), https://perma.cc/2J9E-M7VZ ("Climate change is a scientific issue, and responses to climate change are policy issues, and lying about science and policy are just totally accepted, much-loved, everyday parts of our great democracy.").

true of speech by corporate executives to the media.²³⁰ Exxon has asserted this exact defense in response to attorney general investigations, ²³¹ relying on First Amendment claims about the chilling of political speech.²³²

The securities laws are a more effective tool than consumer protection laws because communications with investors are among the least protected of all speech.²³³ Securities regulation has been characterized by the Supreme Court as existing completely outside First Amendment protection,²³⁴ because the purpose of securities disclosure laws is to promote an efficient market through the provision of accurate information to investors.²³⁵

Securities antifraud statutes are broadly written to establish liability for making "any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made . . . not misleading."²³⁶ In securities antifraud suits, the plaintiff has the burden of proving that a reasonable investor would be misled by a company's representations "in light of the total mix of information available."²³⁷ While financial statements are the most important of the "total mix of information" publicly available to investors,²³⁸ a company's other communications—such as corporate sustainability reports²³⁹—can also affect

230. Roesler, supra note 221, at 508.

234. See, e.g., Ohralik v. Ohio State Bar Ass'n, 436 U.S. 447, 456 (1978) (listing "exchange of information about securities" as an example of commercial regulation not subject to First Amendment challenge).

235. Roesler, *supra* note 221, at 513.

236. 17 C.F.R. § 240.10b-5(b) (2020).

237. Basic Inc. v. Levinson, 485 U.S. 224, 231, 234 (1988) (quoting TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976)).

238. See, e.g., In re Burlington Coat Factory Sec. Litig., 114 F.3d 1410, 1421 n.9 (3d Cir. 1997) (finding that "earnings reports are among the pieces of data that investors find most relevant to their investment decisions" and "likely to be material" to investors); In re Kidder Peabody Sec. Litig., 10 F. Supp. 2d 398, 410 (S.D.N.Y. 1998) (noting that financial reports are of particular interest to investors). There was no claim against Exxon that any disclosure in its Form 10-K was misleading. People v. Exxon Mobil Corp. No. 452044/2018, at 34 (N.Y. S. Ct. 2019).

239. See, e.g., In re BP P.L.C. Sec. Litig., 922 F. Supp. 2d 600, 602 (S.D. Tex. 2013) (sustainability report was a potential basis for securities fraud claim); see also Joseph A. Hall, Betty M. Huber, Katherine J. Brennan & Connor Kuratek, Legal Liability for ESG Disclosures – Investor Pressure, State of Play and Practical Recommendations, in INTERNATIONAL COMPARATIVE LEGAL GUIDES: CORPORATE GOVERNANCE 11, 13 (13th ed. 2020), https://perma.cc/R3QF-BRMK ("Although the federal securities laws generally do not require the disclosure of ESG data except in limited instances, potential liability may arise from making ESG-related disclosures that are materially misleading or false.").

^{231.} Id. at 501 ("Of course, enforcement of antifraud laws will still prompt First Amendment challenges.").

^{232.} See Pl.'s Original Pet. for Declaratory Relief at 23, Exxon Mobil Corp. v. Walker, No. 017-284890-16 (Tex. Dist. Ct. Tarrant Cnty. Apr. 13, 2016).

^{233.} Levine, *supra* note 229 ("[Securities fraud] fits . . . uncomfortably with the First Amendment; the [SEC] forbids even truthful speech by companies in many situations. And lying anywhere near a security will get you in trouble"); Roesler, *supra* note 221, at 501 ("In an era when direct command-and-control regulation has given way to information disclosure as a regulatory tool, increased First Amendment protection for corporate entities may mean less economic and consumer-protection regulation.").

investor decision-making. For example, Exxon's external representations concerning its proxy cost of carbon were communicated to investors in a set of public reports separate from its SEC filings, including 2014 "Outlook for Energy," "Energy & Climate," and "Energy and Carbon - Managing the Risks."²⁴⁰

Therefore, it is easier to prove the misleading and material nature of recent financial statements directed toward investors than statements about climate science directed toward the general public.²⁴¹ In this "era of stronger First Amendment protections for corporations, antifraud laws are essential tools in the policing of corporate speech about public health and environmental risks."²⁴² Furthermore, "even if [a company's] public statements are technically misleading, it may be difficult to show if and how the statements affected consumers."²⁴³ The limited First Amendment protections afforded to corporations when communicating with investors is another reason that plaintiffs are turning to the securities laws.²⁴⁴

D. THE PURPOSE OF SECURITIES LAWS

The purpose of securities laws also suggests that these climate change lawsuits are pretextual. Treating climate change as a matter of defrauding shareholders is somewhat strange.²⁴⁵ Securities laws are not designed to protect the planet. They are designed to protect shareholders.

For example, the Securities Exchange Act of 1934 was designed to protect investors against the manipulation of stock prices.²⁴⁶ The legislative history of the Act notes that the federal securities laws were created to prevent "[m]anipulation and dishonest practices of the market place," which "thrive upon mystery and secrecy."²⁴⁷ The Supreme Court has "described the fundamental purpose of the Act as implementing a philosophy of full disclosure" in order to protect investors.²⁴⁸

^{240.} See Levine, supra note 80.

^{241.} See Roesler, supra note 221, at 501.

^{242.} Id. at 514.

^{243.} *Id.* at 505 ("Given these trends, the problem of misleading commercial speech may be harder to solve with ex ante regulations, a reality that elevates the role of ex post litigation under the antifraud provisions of various federal and state statutes.").

^{244.} Levine, *supra* note 229 ("If you lie to the public about the risks that fossil fuel use poses to life on earth, you are just exercising your right as a citizen. But if you lie to your investors about the risks that fossil fuel regulation poses to your stock price, you are committing fraud and will get in bad trouble.").

^{245.} Levine, supra note 190.

^{246.} See S. Rep. No. 73-792, at 1-5 (1934).

^{247.} H.R. Rep. No. 73-1383, at 11 (1934).

^{248.} Basic Inc. v. Levinson, 485 U.S. 224, 230 (1988) (quoting Santa Fe Indus., Inc. v. Green, 430 U.S. 462, 477–78 (1977)).

TIME FOR PLAN(ET) B?

The federal securities laws are a scheme of disclosure regulation²⁴⁹ as opposed to merit regulation.²⁵⁰ The general philosophy is to force information into the open to create investment markets that are informationally efficient, with the expectation that investors protect their own interests once full disclosure is made.²⁵¹ Historically, state securities regulation took a more paternalistic merit-based approach.²⁵² Under a merit-based approach, "securities proposed to be sold in a state [must] be submitted to an administrative agency for review as to their 'merit' or intrinsic worth."²⁵³ Under either approach, however, the fundamental objective is to protect investors.

Therefore, it is counterintuitive for New York to bring a securities antifraud suit against Exxon over climate change.²⁵⁴ If the Attorney General is truly worried that Exxon is engaged in a conspiracy to mislead its shareholders over the effects of climate change, the last thing he should do is fine Exxon a lot of money. If the lawsuit is successful—or Exxon's stock price drops as a result of the investigation—shareholders are the ones who ultimately have to pay that money.²⁵⁵ The litigation actually harms them.²⁵⁶ The lawsuit is "not good news for Exxon Mobil or Exxon Mobil shareholders."²⁵⁷ It comes as no surprise that the "Attorney General produced no testimony [] from any investor who claimed to

250. COFFEE, SALE & HENDERSON, supra note 93, at 76.

255. Levine, supra note 230.

^{249.} See, e.g., Mark A. Sargent, State Disclosure Regulation and the Allocation of Regulatory Responsibilities, 46 MD. L. REV. 1027, 1039 (1987) ("The establishment of a disclosure-based federal securities regulatory system in 1933 can be described as a rejection of the first indigenous tradition of American securities regulation, the merit-based system prevalent in the midwestern states, in favor of a disclosure-based system derived from a British model and from the broader tradition of Progressive disclosure legislation.").

^{251.} Id. at 76.

^{252.} Ronald J. Columbo, *Merit Regulation via the Suitability Rules*, 12 J. INT'L BUS. & L. 1, 2 (2014) (noting that "state securities regulation (commonly referred to as the 'blue sky laws') followed primarily a merit-based approach").

^{253.} Jonathan R. Macey & Geoffrey P. Miller, *Origin of the Blue Sky Laws*, 70 TEX. L. REV. 347, 348–49 (1991). Examples of merit regulation include the system for controlling how pharmaceuticals reach the market the system for determining who can practice certain professions. *See* Buell, *supra* note 165, at 569.

^{254.} Some investors suffering losses may still have good reason to use antifraud litigation under the federal securities laws to recover losses. This section assumes that the lawsuits motivated in-part to effect change in climate policy. *See infra* section II.E.

^{256.} See COFFEE, SALE & HENDERSON, supra note 93, at 923 (noting that "recoveries for the plaintiffs are small, while fees to the lawyers are high") (noting that "the economic interests of the lawyer may differ from those of the class"); *infra* section IV.C.3.

^{257.} Justin Gillis & Clifford Krauss, *Exxon Mobil Under Investigation in New York Over Climate Statements*, N.Y. TIMES (Nov. 5, 2015), https://perma.cc/WZZ9-933U. "In reality, the Attorney General's efforts to hook discrepancies between public disclosure and internal deliberations to corporate liability could create a perverse incentive for minimal disclosure, running counter to the investment community who is urging a the more the better approach to climate-related disclosures." Vizcarra, *supra* note 152, at 772.

have been misled by any disclosure."258

In contrast, if the New York Attorney General is worried that Exxon is engaging in a conspiracy to suppress climate science, then it should not be advancing a claim under the securities laws. Exxon's shareholders do not need protection; they are the ones profiting from the greenhouse gas emissions. For example, in 2019 alone, Exxon paid out over \$14.5 billion in cash dividends to its shareholders.²⁵⁹ It seems unlikely, then, that Exxon shareholders would be overly concerned with the adequacy of Exxon's climate change disclosures.

E. LAWSUITS MOTIVATED BY POLITICAL AGENDAS

Exxon has also accused the state attorneys general of abusing their power, portraying their actions as politically motivated attempts to damage the company's reputation and further a campaign against fossil fuel companies.²⁶⁰ The company's position has gained widespread support: academics,²⁶¹ journalists,²⁶² and members of Congress²⁶³ have all raised concerns about the true reasons for the lawsuits. Even a federal judge questioned the legitimacy of the motives of the attorneys general.²⁶⁴

There is substantial evidence that these lawsuits are politically influenced with the objective of advancing change in climate policy. First, the investigations show a pattern of targeting the fossil fuel industry, despite climate risks also affecting companies in other industries. Second, political polarization among securities regulators has increased in the last decade. And third, there are clear rewards for regulators who target the industry.

The New York Attorney General's investigation of Exxon is not an isolated occurrence; the state has a history of threatening energy companies with the Martin Act.²⁶⁵ In 2007, former Attorney General Andrew Cuomo initiated

^{258.} People v. Exxon Mobil Corp., No. 452044/2018, 2019 WL 6795771, at *22 (N.Y. Sup. Ct. Dec. 10, 2019). To succeed in a claim under the securities laws, investors must suffer some harm measured by diminution in stock price. *See infra* note 122 and accompanying text.

^{259.} Exxon Mobil Corporation, Annual Report (Form 10-K), at 52 (Feb. 26, 2020), https://perma.cc/LB5N-2S2J.

^{260.} *See* Pl.'s Original Pet. for Declaratory Relief at 2, Exxon Mobil Corp. v. Walker, No. 017-284890-16 (Dist. Ct. Tarrant Cty., Tex. Apr. 13, 2016). Ironically, it is the states that rely heavily of outside sources for energy that are attempting to use the legal system to limit future production.

^{261.} See generally Vizcarra, supra note 152.

^{262.} Editorial, *The Worst Law in America*, WALL ST. J. (Mar. 25, 2018), https://perma.cc/YV4M-EU28.

^{263.} See John Schwartz, State Officials Investigated Over Their Inquiry into Exxon Mobil's Climate Change Research, N.Y. TIMES (May 19, 2016), https://perma.cc/V828-WZ3Q (reporting that Congressman Lamar Smith, the chair of the House Committee on Science, Space, and Technology, questioned Exxon's motives).

^{264.} See Order at 5-6, Exxon Mobil Corp. v. Schneiderman, No. 4:16-cv-00469-K (N.D. Tex. Mar.

^{29, 2017) (}transferring case to the U.S. District Court for the Southern District of New York).

^{265.} The Exxon Martin Act litigation is the first such climate disclosure case to reach the litigation stage. Vizcarra, *supra* note 152, at 771. Separately, New York Attorneys General have pursued oil and

investigations into the disclosures of four power producers and a coal producer as part of an effort to pressure the SEC into updating its guidance on environmental disclosures in mandatory financial filings.²⁶⁶ In 2008, Cuomo settled with Xcel (power generation) and Dynegy (natural gas and coal power generation) in exchange for additional disclosure of material financial risks of climate change in the companies' 10-K filings.²⁶⁷ The additional disclosure included information about legislation, regulation, and the physical impacts of climate change.²⁶⁸ It also required the companies commit to disclosures of carbon emissions and climate strategies.²⁶⁹ In 2009, Cuomo reached a comparable agreement with AES Corporation (power generation).²⁷⁰

Settlements did not come as quickly with Peabody Coal (coal) and Dominion Resources (natural gas and nuclear power generation)—the last two of the five companies Cuomo targeted in 2007.²⁷¹ The Peabody investigation continued until 2015, and the settlement required the company to correct financial statement disclosures that the Attorney General thought misled investors regarding the impact of climate change on its business.²⁷² Specifically, Peabody had publicly disclosed that it could not predict the effects of climate change on its business; however, the company had privately contracted with consultants to make such internal predictions.²⁷³ The Peabody investigation closely resembles the investigation into Exxon, which the Attorney General announced within days of the settlement.²⁷⁴ Although the Peabody settlement was unrelated to the Exxon investigation, it demonstrates the Attorney General's broader goal of compelling energy companies to provide enhanced disclosure of their contributions to climate change.²⁷⁵

The tendency to target energy companies has persisted. In 2018, climate change litigation was initiated against eleven fossil fuel companies, a utility, and an aerospace company.²⁷⁶ The litigation poses special challenges to industries sued in these cases.²⁷⁷ By increasing the pressure on energy companies, regulators hope to "influence private sector actors' environmental stewardship and contribute to efforts to combat climate change."²⁷⁸

266. *Id.* at 767.
267. *Id.*268. *Id.*269. *Id.*270. *Id.* at 768.
271. *Id.*272. *Id.*273. *Id.*274. *Id.* at 769.
275. *See* Poon, *supra* note 79, at 132.
276. ADLER, *supra* note 29, at 61.
277. Mazzone & Stephenson, *supra* note 150, at 9.

gas producers for their failure to disclose financial risks related to environmental impacts of hydraulic fracturing. *Id.* at 769.

^{277.} Wizzone & Stephenson, supra note 15

^{278.} Vizcarra, supra note 152, at 766.

The emphasis on the fossil fuel industry suggests an underlying political agenda to affect the behavior of fossil fuel companies in particular. Climate change risks affect everyone, not just fossil fuel companies. There are other risks beyond the possibility of future carbon regulations—for example, the physical impacts and business trends resulting from climate change.²⁷⁹ Virtually any company could be targeted for not disclosing financial risks associated with climate change, particularly those operating in sectors such as real estate, tourism, and agriculture—the industry most vulnerable to climate risk.²⁸⁰

Political polarization among regulators has increased in recent years, supporting the inference that climate change lawsuits could be brought for political reasons. State attorneys general in particular have become more partisan, following trends in Congress.²⁸¹ This partisanship is common in inherently political positions, as those officials are subject to elections.²⁸² For example, states sharing partisan interests now often team up to challenge actions to regulate or deregulate environmental issues at the federal level.²⁸³ Partisan organization has intensified since the election of President Trump, paralleling efforts to address climate change through litigation.²⁸⁴ In a 2013 study, two Vanderbilt professors reviewed SEC filings for disclosures of securities enforcement proceedings.²⁸⁵ The "results indicate[d] that states with elected enforcers brought securities-related matters at more than four times the rate of other states, and states with an elected Democrat serving as the securities regulator brought matters at nearly seven times the rate of other states."²⁸⁶

Finally, plaintiffs are incentivized to operate according to their political agendas. Many regulators may receive positive publicity for targeting unsympathetic corporations such as Big Oil. This type of legal grandstanding works. For instance, the Attorney General's office in New York has sent both Eliot Spitzer and Andrew Cuomo to the Governor's mansion.²⁸⁷ Regulators may also receive financial encouragement from special interest lobbyists.²⁸⁸

^{279.} See supra section III.B (discussing climate change risk disclosure required by the SEC). A compelling argument could be made that future climate regulations are among the *least* certain of climate change risks, given the unpredictable political environment in the United States.

^{280.} Renee Cho, *How Climate Change Impacts the Economy*, COLUM. UNIV. EARTH INST. (June 20, 2019), https://perma.cc/WX5S-FN32.

^{281.} Vizcarra, *supra* note 152, at 760 ("AG involvement in environmental law has shifted in a partisan direction–pursuing policy-forcing and policy-creating litigation during the George W. Bush Administration and policy-blocking litigation during the Obama Administration.").

^{282.} Id. at 764.

^{283.} Id. at 763.

^{284.} Id. at 764.

^{285.} See generally Amanda M. Rose & Larry J. LeBlanc, *Policing Public Companies: An Empirical Examination of the Enforcement Landscape and the Role Played by State Securities Regulators*, 65 FLA. L. REV. 395 (2013).

^{286.} Id. at 395.

^{287.} The Worst Law in America, supra note 262.

^{288.} Schwartz, supra note 156.

The incentives are not just limited to government regulators. Private plaintiffs interested in applying pressure to corporations can also bring claims, so long as they owned shares during the relevant period. While it is unclear whether the *Ramirez* class action was initiated for the sole purpose of effecting policy change, it is easy to imagine similar claims brought by environmental advocacy groups or socially conscious investors. For example, shareholders such as Amazon Employees for Climate Justice, As You Sow,²⁸⁹ Sisters for the Preservation of the Blessed Virgin Mary, New York State Common Retirement Fund, and SumOfUs have all submitted environmental shareholder proposals that were included in 2019 corporate proxy statements.²⁹⁰ These proxy proposals are evidence of their commitment to influencing corporate behavior. Additionally, trial lawyers can win big paydays if they succeed in class actions alleging securities fraud.²⁹¹ Irrespective of their underlying motivations, it remains to be seen whether securities antifraud lawsuits can effect wide-scale change in U.S. climate policy.

Part I of this Article examined two of these claims in detail: the Martin Act claim against Exxon and the shareholder class action against Exxon pursuant to Rule 10b-5 of the Securities Exchange Act.²⁹² In Parts III and IV of this Article, I will consider the different securities antifraud laws available to plaintiffs. I first conclude that state blue sky laws are unlikely to facilitate wide-scale policy change. I then explain why climate change regulation pursuant to the federal securities laws has been ineffective thus far. I also discuss the limitations of securities litigation, generally.

IV. CLIMATE LITIGATION IS INEFFECTIVE UNDER BLUE SKY LAWS

Though federal securities law partially preempts several aspects of state securities regulation, it does not preempt state antifraud remedies.²⁹³ The National Securities Markets Improvement Act of 1996 ("NSMIA") broadly preempted ex ante state regulation of public companies' securities offerings and disclosure documents, but expressly preserved state enforcement actions against companies

^{289.} As You Sow has been particularly active in the 2020 proxy season, pressuring Exxon, Chevron, and JP Morgan Chase to disclose how their business operations align with the goals of the Paris Agreement. *See* Dana Drugmand, *Exxon, Chevron, Chase Reject Shareholder Requests to Address Climate Risk*, CLIMATE LIABILITY NEWS (Jan. 29, 2020), https://perma.cc/SZ44-ENKF.

^{290.} Proxy Monitor, MANHATTAN INST., accessible at https://www.proxymonitor.org/Results.aspx (last visited Feb. 12, 2021) (search parameters "2019" and "Environmental"). "In the U.S., shareholder proposal filings have historically played an important role in advancing corporate governance and in highlighting key risks related to environmental and social issues." Subodh Mishra, *An Early Look at 2019 US Shareholder Proposals*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Mar. 4, 2019), https://perma.cc/Z7PC-DEZJ. For additional information on the rules governing shareholder proposals, *see* 17 CFR § 240.14a-8 (2021).

^{291.} See COFFEE, SALE & HENDERSON, *supra* note 93, at 923 (noting that in class action lawsuits, "the recoveries for the plaintiffs are small, while fees to the lawyers are high.").

^{292.} See supra section I.C.

^{293.} COFFEE, SALE & HENDERSON, supra note 93, at 1363.

for "fraud or deceit, or unlawful conduct by a broker or dealer, in connection with securities or securities transactions."²⁹⁴ Therefore, civil litigation remains available under both state and federal law.²⁹⁵ Federal securities regulation, however, is likely to be more effective for a number of reasons.

First, state blue sky laws are subject to territorial restrictions. To come within the purview of the statute, the sale or solicitation of the security must occur within the state.²⁹⁶ Although this works well for some states like New York,²⁹⁷ it might not allow for claims by all states. The federal securities laws, however, need only a transaction that affects interstate commerce—a low hurdle because it includes communications over the internet.²⁹⁸

Second, some states' blue sky laws do not offer a private right of action to plaintiffs.²⁹⁹ Rather, a regulatory body must bring the enforcement action. New York is one example—only the state Attorney General can bring a claim under

296. See, e.g., In re Activision Sec. Litig., 621 F. Supp. 415, 431–32 (N.D. Cal. 1985) (certifying nationwide class of purchasers in an IPO where corporation was headquartered in California, but refusing to certify nationwide class of aftermarket purchasers); In re Victor Tech. Sec. Litig., 102 F.R.D. 53, 60 (N.D. Cal. 1984), *aff d*, 792 F.2d 862 (9th Cir. 1986); Dofflemyer v. W.F. Hall Printing Co., 558 F. Supp. 372, 377 (D. Del. 1983) (finding no liability under Delaware Securities Act when solicitation and sale did not take place in Delaware); Singer v. Magnavox Co., 380 A.2d 969, 981 (Del. 1977) (same).

297. The New York Stock Exchange is located in the state of New York.

298. See Robert B. Thompson & Hillary A. Sale, Securities Fraud as Corporate Governance, 56 VAND. L. REV. 859, 861 (2003) (noting the "minimalist jurisdictional hook of the interstate commerce requirement."); SEC v. Straub, 921 F. Supp. 2d 244, 262 (S.D.N.Y. 2013).

299. But see CPC Int'l Inc. v. McKesson Corp., 514 N.E.2d 116, 118 (1987) ("In all the other states, except one, the Legislature has expressly recognized a private civil action for violations of the corresponding provision.").

^{294.} Rose & LeBlanc, supra note 285, at 397.

^{295.} Some academics have suggested that there is a need to rethink the dual system of regulation. See id. at 424 (noting that the allocation between federal and state securities enforcement authority "has more to do with historical happenstance than thoughtful design choices."). Because each regulator acts independently, there is the possibility of expensive duplicate litigation and inconsistent enforcement policies. Id. ("Our findings support the contention that American public companies operate in a highly litigious business environment generally, and that they confront significant enforcement in the securities law area in particular-often at the hands of multiple different enforcers."). But see, Rutheford B. Campbell, Jr., The Role of Blue Sky Laws After NSMIA and the JOBS Act, 66 DUKE L.J. 605, 627 (2016) ("State antifraud provisions seem likely to promote an efficient allocation of capital by allowing states to impose higher penalty costs on perpetrators of manipulation or deception in connection with the offer and sale of securities. Congress's decision in NSMIA not to preempt state antifraud authority appears, therefore, to have been economically sound."). The Securities Fraud Deterrence and Investor Restitution Act of 2003 would have added to the SEC's powers and precluded states from reaching separate settlements that differed from or added to requirements set by the SEC, but was not passed. See Poon, supra note 79, at 118. More recently, the proposed Securities Fraud Act of 2018 would preempt state enforcement of civil securities fraud. The Worst Law in America, supra note 262. The bill was drafted because the "prevalence of meritless securities lawsuits and settlements in the U.S. has driven up the apparent and actual cost of business" and has "driven away potential investors." Id.

the Martin Act.³⁰⁰ Private rights of action are important because regulators are rarely able to investigate all potential violations on their own.³⁰¹

Third, state regulators cannot match the knowledge, experience, and resources of federal regulators. This fact is especially important when taking on well-equipped opponents like Big Oil; successful enforcement "depends to a significant degree on the state's willingness to invest its own resources in the enforcement of its antifraud rules."³⁰² The SEC received a budget of \$1.8 billion in 2020.³⁰³ This total will likely rise 5.6% to \$1.9 billion in 2021.³⁰⁴ In contrast, the total budget for all fifty state security regulators is likely in the range of \$50 to \$60 million.³⁰⁵

Fourth, many state security regulators may simply choose not to enforce antifraud laws against fossil fuel companies. As discussed in Part III.E, state regulators are subject to political influence.³⁰⁶ For example, when the New York Attorney General began its investigation into Exxon, sixteen other attorneys general formed a coalition vowing to hold fossil fuel companies accountable.³⁰⁷ At the same time, eleven attorneys general filed an amicus brief in support of Exxon, opposing such investigations.³⁰⁸ The SEC is not subject to the same political

302. See Campbell Jr., supra note 295, at 618–19, 627 ("Indeed, efficiency may be further enhanced if states invest more in antifraud enforcement.").

303. Andrew Ramonas & Lydia Beyoud, SEC Gets Budget Boost in Trump's Fiscal 2021 Plan (1), Bloomberg Law (Feb. 10, 2020), https://perma.cc/2S87-32WU.

304. Id. (noting that the Trump administration wants to "pump up the SEC's budget for fiscal 2021.").

306. See supra section III.E.

^{300.} See id. (holding that there is no private right of action under the Martin Act because it would be inconsistent with the enforcement mechanism created by the Act).

^{301.} David Skeel, Unleashing a Wall Street Watchdog, Pac. Standard (June 14, 2017), https://perma. cc/RLE3-QYE8 ("[P]rivate litigation has always been a necessary supplement to regulatory oversight. Regulators have never been able to do it all on their own. This is true of both federal and state regulators.").

^{305.} The North American Securities Administrators Association no longer collects information on state enforcement expenditures. See generally About, NASAA, https://perma.cc/V788-R6FY (last visited Mar. 6, 2020). One academic estimated the total securities enforcement budgets for all states to be between \$28 million and \$40 million in 1983. See Rutheford B. Campbell, Jr., An Open Attack on the Nonsense of Blue Sky Regulation, 10 J. Corp. L. 553, 577 n.143 (1985) (noting that Texas had one of the larger state budgets at \$1.9 million). In 2020, Texas had a budget of \$3.0 million, representing a 58% increase from 1983. See Texas State Sec. Bd., Operating Budget Fiscal Year 2020, at 2 (Dec. 1, 2019). Therefore, a conservative estimate of the 2020 state security regulator budgets is in the range of \$44 million and \$63 million.

^{307.} David Hasemyer & Sabrina Shankman, Climate Fraud Investigation of ExxonMobil Draws Attention of 17 Attorneys General, InsideClimate News (Mar. 30, 2016), https://perma.cc/X4LB-L55T (attorneys general from California, Connecticut, D.C., Illinois, Iowa, Maine, Maryland, Massachusetts, Minnesota, New Mexico, New York, Oregon, Rhode Island, Virginia, Vermont, Virgin Islands, and Washington attended the conference).

^{308.} See Brief of Texas, Louisiana, South Carolina, Alabama, Michigan, Arizona, Wisconsin, Nebraska, Oklahoma, Utah, and Nevada as Amici Curiae in Support of Plaintiff's Motion for Preliminary Injunction at 1–2, 9, Exxon Mobil Corp. v. Healey, 215 F. Supp. 3d 520 (N.D. Tex. 2016) (No. 4:16-CV-00469-K), 2016 WL 7433124.

pressures as elected officials. By law, no more than three of the five SEC Commissioners can be from the same political party.³⁰⁹ And regardless of their political persuasion, all Commissioners and staff are driven by the Agency's mission: to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.³¹⁰

Fifth, securities class actions lawsuits are only permitted in federal court. Class action lawsuits are the preferred means of litigation under the securities laws.³¹¹ Given the limited resources of the SEC, class actions are arguably an important part of the overall enforcement regime.³¹² Class actions convert otherwise uneconomical individual suits into realistic collective actions by reducing the litigation costs of individual participants, which allows plaintiffs to afford better legal services.³¹³

Not long ago, the judiciary considered private securities lawsuits to be "vexatious tool[s]" to force settlements of meritless claims.³¹⁴ The Private Securities Litigation Reform Act of 1995 ("PSLRA") was passed in response to concerns about strike suits, making it more difficult for plaintiffs' attorneys to file strike suits in federal court.³¹⁵ As a result, attorneys began filing more actions in state courts.

To combat this trend, Congress then passed the Securities Litigation Uniform Standards Act of 1998 ("SLUSA").³¹⁶ The law stated that "[n]o covered class action based upon the statutory or common law of any State or subdivision thereof may be maintained in any State or Federal court by any private party alleging . . . [fraud] . . . in connection with the purchase or sale of a covered security."³¹⁷ The SLUSA closed this loophole within the PSLRA to protect companies against strike suits in state court.³¹⁸ The SLUSA effectively eliminated state class

314. Steven A. Ramirez, Arbitration and Reform in Private Securities Litigation: Dealing with the Meritorious as Well as the Frivolous, 40 Wm. & Mary L. Rev. 1055, 1068–72 (1999) (discussing the trend by the Supreme Court and lower federal courts to limit private securities actions).

315. Coffee, Sale & Henderson, supra note 93, at 1363.

316. Pub. L. No. 105-353, 112 Stat. 3227 (1998) (codified as amended in scattered sections of 15) (enacted "to prevent certain State private securities class action lawsuits alleging fraud from being used to frustrate the objectives of the Private Securities Litigation Reform Act.").

317. See 15 U.S.C. § 78bb(f); 15 U.S.C. § 77p(b).

318. See H.R. Rep. No. 105-640, at 9 (1998) (Committee on Commerce noting that "this legislation establishes uniform national rules for securities class action litigation involving our national capital

^{309.} See 15 U.S.C. § 78d(a) (2018).

^{310.} About the SEC, U.S. Sec. & Exch. Comm'n (Nov. 22, 2016), https://perma.cc/UM5R-SQ7S.

^{311.} Coffee, supra note 48 ("8.77% of all publicly traded companies were sued in securities class actions just in 2018—which litigation rate is the highest rate since 2006. This 8.77% rate is more than three times the average annual litigation rate over 1996-2016 (which was 2.9%).").

^{312.} Coffee, Sale & Henderson, supra note 93, at 922.

^{313.} See, e.g., Phillips Petroleum Co. v. Shutts, 472 U.S. 797, 809 (1985) ("Class actions . . . may permit the plaintiffs to pool claims which would be uneconomical to litigate individually. For example, this lawsuit involves claims averaging about \$100 per plaintiff; most of the plaintiffs would have no realistic day in court if a class action were not available.").

actions in securities disputes involving public companies.³¹⁹

Sixth, the fraud-on-the-market doctrine—a staple of federal securities law³²⁰—has not found widespread acceptance under state law.³²¹ Most federal courts have concluded that there is no fraud-on-the-market theory under the applicable state antifraud laws.³²² The theory presumes that the corporate defendant's misleading statements caused the fall in stock price.³²³ It therefore permits the rebuttable inference of causation element in a securities class action.³²⁴ By shifting the burden to the defendant, it becomes much easier to certify a class and prove the element of causation.³²⁵ The theory strengthens private enforcement of the securities laws.

Seventh, certain state antifraud statutes have begun to lose credibility among the legal profession. For example, the Martin Act has been described as the "worst law in America" because it is susceptible to abuse.³²⁶ When used as a political tool, it risks undermining "the rule of law."³²⁷ The Martin Act also is criticized as lacking a deterrent effect because it does not have an intent requirement.³²⁸ In contrast, the federal securities laws require scienter as an element of the claim.³²⁹

For these reasons, academics have recognized that "state-level regulation [is] . . . insufficient to address global, systemic problems like climate change."³³⁰ But it may still pave the way for federal regulations, which provide a more

320. Amanda Rose, *The Shifting Purpose of the Rule 10b-5 Private Right of Action*, COL. L. SCH. BLUE SKY BLOG (June 27, 2017), https://perma.cc/QQ6K-E6PA.

321. Michael A. Perino, Fraud and Federalism: Preempting Private State Securities Fraud Causes of Action, 50 STAN. L. REV. 273, 285 (1998).

322. Id. at 285 n.55.

323. See COFFEE, SALE & HENDERSON, supra note 93, at 1137.

- 324. See id.
- 325. See id.

326. The Worst Law in America, supra note 262.

329. Perry E. Wallace, *Climate Change, Fiduciary Duty, and Corporate Disclosure: Are Things Heating Up in the Boardroom?*, 26 U. VA. ENV. L. J. 293, 314 (2008).

330. Thomas Joo, *Global Warming and the Management-Centered Corporation*, 44 WAKE FOREST L. REV. 671, 672 (2009).

markets . . . [C]lass actions relating to a 'covered security' . . . alleging fraud or manipulation must be maintained pursuant to the provisions of Federal securities law, in Federal court (subject to certain exceptions).").

^{319.} See, e.g., Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Dabit, 547 U.S. 71 (2006) (holding that the SLUSA preempted class action relief for plaintiffs alleging fraudulent inducement to hold securities and thereby destroyed such claims).

^{327.} John C. Coffee, Jr., *On Thin Ice: Climate Change, Exxon, the NYAG and the Martin Act*, COLUM. L. SCH. BLUE SKY BLOG (Nov. 23, 2015), https://perma.cc/29VJ-ZT6L ("Ultimately, if statutes lose their moorings and become vehicles by which regulators can become knights on horseback, dispensing justice as they see fit, the rule of law is imperiled.").

^{328.} *See* Buell, *supra* note 165, at 575 (arguing that liability for securities fraud should be limited to "cases of purposeful deception or its near equivalent."); People v. Federated Radio Corp., 244 N.Y. 33, 38–39 (1926) (defendant asserting a lack of intent held liable because the Act does not require intent or scienter).

comprehensive regulatory scheme.³³¹ Part V considers whether antifraud litigation under federal securities laws can effect change in U.S. climate policy.

V. CLIMATE LITIGATION IS INEFFECTIVE UNDER THE FEDERAL SECURITIES LAWS

Securities climate change litigation is available to litigants only to the extent that companies (1) have an obligation to make disclosures under the federal securities laws, (2) actually trigger those disclosure requirements, and (3) fail to adequately include those disclosures in communications with investors. Therefore, the analysis condenses to three questions: What types of climate change risks must be disclosed under the SEC's rules and regulations? Which of these risks do fossil fuel companies face? And are those risks being adequately disclosed? Parts V.A, V.B, and V.C address each of these questions, in turn.

A. CLIMATE CHANGE DISCLOSURE IS LIMITED

Federal securities laws require certain disclosures from public companies and impose liability for material misrepresentations.³³² To be a "material misrepresentation," a statement must be misleading. But the Supreme Court has held that "[s]ilence, absent a duty to disclose, is not misleading under Rule 10b-5."³³³ Without disclosure regulation, companies have strong incentives to under-disclose—particularly when it comes to corporate risks.³³⁴

Therefore, litigation under the securities laws is only available to the extent that the company has an affirmative obligation to disclose. If no disclosure of climate risks is required, then no lawsuits can be brought to achieve regulation-by-litigation.³³⁵ This limitation makes the SEC's disclosure laws the starting point for determining whether a company's non-disclosure of climate risks can affect policy change. Section IV.A.1 describes the rules requiring disclosure of climate

^{331.} *Id.*; *see* Jennifer Hijazi, *Is the Fight in N.Y. Really About Climate Change?*, E&E NEWS (Oct. 28, 2019), https://perma.cc/TN9Q-8XRU (opining that the New York case against Exxon could have "high implications" for the industry at large and test whether states can scrutinize corporate climate disclosure in ways that the SEC "has been unwilling to").

^{332.} Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 267 (2014). ("Section 10(b) of the Securities Exchange Act of 1934 and the Securities and Exchange Commission's Rule 10b-5 prohibit making any material misstatement or omission in connection with the purchase or sale of any security.").

^{333.} Basic Inc. v. Levinson, 485 U.S. 224, 239 n.17 (1988). Although this Article primarily discusses Rule 10b-5 (the most prominent securities antifraud rule), a securities fraud suit can be brought under other federal laws as well. *See* Wallace, *supra* note 329, at 314 (discussing securities laws in addition to Section 10(b) and Rule 10b-5).

^{334.} See generally Donald C. Langevoort, Organized Illusions: A Behavioral Theory of Why Corporations Mislead Stock Market Investors (and Cause Other Social Harms), 145 U. PA. L. REV. 101 (1997) (describing reasons that lead corporate managers to under-identify and under-disclose risks).

^{335.} See supra section II.E. See also Roesler, supra note 221, at 501 ("Although antifraud laws cannot encourage disclosure of information when corporations lack a duty to disclose, they can deter misleading speech, particularly about health and environmental risks, when corporations choose to speak.").

change issues. Section IV.A.2 discusses the SEC's 2010 climate change disclosure guidance on the ways that climate change may trigger disclosure required by those rules. Sections IV.A.3 and IV.A.4 explain the primary limitations associated with the current disclosure standards.

1. The Disclosure Rules: Regulation S-K

The Securities Act of 1933 and the Securities Exchange Act of 1934 list the disclosure requirements for public reporting companies that must register securities with the SEC.³³⁶ The compilation of these requirements is set forth in Regulation S-K.³³⁷ Although there are many requirements under Regulation S-K, several are particularly relevant to climate change:³³⁸

Item 101: Description of Business

(2) Discuss the information specified in paragraphs (c)(2)(i) and (ii) of this section with respect to, and to the extent material to an understanding of, the registrant's business taken as a whole, except that, if the information is material to a particular segment, you should additionally identify that segment.

(i) The material effects that compliance with government regulations, including environmental regulations, may have upon the capital expenditures, earnings and competitive position of the registrant and its subsidiaries, including the estimated capital expenditures for environmental control facilities for the current fiscal year and any other material subsequent period.³³⁹

Item 103: Legal Proceedings

Describe briefly any material pending legal proceedings, other than ordinary routine litigation incidental to the business, to which the registrant or any of its subsidiaries is a party or of which any of their property is the subject. Include the name of the court or agency in which the proceedings are pending, the date instituted, the principal parties thereto, a description of the factual basis alleged to underlie the proceeding and the relief sought. Include similar information as to any such proceedings known to be contemplated by governmental authorities.³⁴⁰

^{336.} Securities Act of 1933, 15 U.S.C. §§ 77a-77mm; The Securities Exchange Act of 1934, 15 U.S.C. §§ 78a-78kk.

^{337. 17} C.F.R. pt. 229 (2018).

^{338.} *See* Commission Guidance Regarding Disclosure Related to Climate Change, Securities Act Release No. 9106, Exchange Act Release No. 61,469, 97 SEC Docket 2414 (Feb. 8, 2010).

^{339. 17} C.F.R. 229.101(c)(2)(i) (2021).

^{340. 17} C.F.R. 229.103(a) (2020). This requirement generally excludes claims with alleged damages below 10% of current assets. *See generally* 17 C.F.R. 229.103 (2020). But Instruction 5 to Item 103 clarifies that environmental proceedings are not generally considered routine litigation incidental to the business and must be described if they are material; involve costs that would exceed 10% of current assets; or a government authority is a party and it could result in sanctions of \$100,000 or more. *Id.*

Item 105: Risk Factors

(a) Where appropriate, provide under the caption "Risk Factors" a discussion of the material factors that make an investment in the registrant or offering speculative or risky. This discussion must be organized logically with relevant headings and each risk factor should be set forth under a subcaption that adequately describes the risk. The presentation of risks that could apply generically to any registrant or any offering is discouraged, but to the extent generic risk factors are presented, disclose them at the end of the risk factor section under the caption "General Risk Factors."³⁴¹

Item 303: Management's Discussion and Analysis

(1) Liquidity and capital resources.

... (i) Liquidity.

Identify any known trends or any known demands, commitments, events or uncertainties that will result in or that are reasonably likely to result in the registrant's liquidity increasing or decreasing in any material way. If a material deficiency is identified, indicate the course of action that the registrant has taken or proposes to take to remedy the deficiency. Also identify and separately describe internal and external sources of liquidity, and briefly discuss any material unused sources of liquid assets.

(ii) Capital resources.

(A) Describe the registrant's material cash requirements, including commitments for capital expenditures, as of the end of the latest fiscal period, the anticipated source of funds needed to satisfy such cash requirements and the general purpose of such requirements.

(B) Describe any known material trends, favorable or unfavorable, in the registrant's capital resources. Indicate any reasonably likely material changes in the mix and relative cost of such resources. The discussion shall consider changes between equity, debt and any off-balance sheet financing arrangements.

(2) Results of operations.

(i) Describe any unusual or infrequent events or transactions or any significant economic changes that materially affected the amount of reported income from continuing operations and, in each case, indicate the extent to which income was so affected. In addition, describe any other significant components of revenues or expenses that, in the registrant's judgment, should be described in order to understand the registrant's results of operations.

^{341. 17} C.F.R. 229.105(a) (2021). The SEC recently adopted a rule replacing the requirement to disclose the "most significant" factors with the "material" factors. *See*, Modernization of Regulation S-K Items 101, 103, and 105, Securities Act Release No. 10,825, Exchange Act Release No. 89,670, 2020 WL 5076727 (Aug. 26, 2020).

(ii) Describe any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. If the registrant knows of events that will cause a material change in the relationship between costs and revenues (such as known future increases in costs of labor or materials or price increases or inventory adjustments), the change in the relationship shall be disclosed.³⁴²

Depending on individual facts and circumstances of a particular company, each of these rules may require disclosure regarding the impact of climate change. All public companies are subject to Regulation S-K. Fossil fuel companies are no exception.

The SEC reviews these climate-related disclosures as part of their comprehensive review of all disclosures within a company's annual filings.³⁴³ The Sarbanes-Oxley Act of 2002³⁴⁴ requires the SEC review the filings of each reporting company at least every three years, but more frequently subject to the discretion of SEC staff. The review is performed by the Division of Corporation Finance and includes an examination of both financial and nonfinancial disclosures.³⁴⁵ If the SEC reviewers find that disclosures are materially inadequate, they may refer the potential violation to the Division of Enforcement for investigation.³⁴⁶

It is important to understand what must be disclosed under the current laws. Regulation S-K does not require companies to disclose the negative effects of company operations on the environment.³⁴⁷ Nor does it require companies to disclose the risks that their operations pose to the environment.³⁴⁸ What must be disclosed are the *financial* risks and effects of climate change. To help clarify the nature of these climate-related risks, the SEC issued guidance in 2010 that has become companies' primary tool in drafting climate change disclosures.

^{342. 17} C.F.R. 229.303 (2021). The SEC has emphasized the importance of Management's Discussion and Analysis, which is meant to "give the investor an opportunity to look at the company through the eyes of management by providing both a short and long-term analysis of the business of the company." Concept Release on Management's Discussion and Analysis of Financial Conditions and Operations, Securities Act Release No. 6711, Exchange Act Release No. 24,356, 38 SEC Docket 138 (Apr. 17, 1987).

^{343.} U.S. GOV'T. ACCOUNTABILITY OFFICE, REPORT TO CONGRESSIONAL REQUESTERS ON CLIMATE-RELATED RISKS 10 (Feb. 2018).

^{344.} Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, §408, 116 Stat. 745, 790–91 (2002) (codified at 15 U.S.C. § 7266).

^{345.} U.S. GOV'T. ACCOUNTABILITY OFFICE, supra note 343, at 10.

^{346.} Id. at 12.

^{347.} See Matt Levine, Maybe the Companies Will Fix the Climate, BLOOMBERG

⁽July 11, 2019), https://perma.cc/A82C-N84N ("Notice what else is not in the risk factor. There is no effort to quantify the risk...."). For example, companies do not have to quantify the amount of their greenhouse gas emissions.

^{348.} See id.

2. The SEC's 2010 Guidance: What Climate Risks Must Be Disclosed?

In 2010, the Agency issued guidance regarding disclosure obligations related to climate change.³⁴⁹ Although the guidance technically did not create new legal obligations, it clarified how publicly traded corporations should apply the existing SEC disclosure rules in the context of climate change developments.³⁵⁰ The guidance is important because climate change litigation under the securities laws is only effective to the extent that fossil fuel companies actually face these risks. It provided a non-exhaustive list of some of the ways that climate change may trigger disclosure required by the Regulation S-K disclosure rules.³⁵¹

The guidance first explained how the impact of legislation and regulation could trigger disclosure requirements: "Registrants should consider specific risks they face as a result of climate change legislation or regulation and avoid generic risk factor disclosure that could apply to any company."³⁵² The SEC observed that registrants in the energy sector may be particularly sensitive to greenhouse gas legislation. The SEC also observed that registrants in the transportation sector may be affected because of reliance on products that emit greenhouse gases.³⁵³ The guidance also clarifies that changes in the law may provide new opportunities for some registrants, which would also trigger disclosure requirements.³⁵⁴

The guidance next explained how international treaties and accords could trigger climate change disclosure requirements.³⁵⁵ The rationale is the same as for potential legislation and regulation. "Registrants whose businesses are reasonably likely to be affected by such agreement should monitor the progress of any potential agreements and consider the possible impact."³⁵⁶

The guidance then turned to indirect consequences of regulation or business trends.³⁵⁷ Developments in areas of law, science, technology, and politics may create new opportunities or risks for companies.³⁵⁸ The developments could affect demand for a company's products or services or influence competition.³⁵⁹ These developments could also affect a company's reputation, especially if the company operates in an industry that is sensitive to public opinion.³⁶⁰

^{349.} See Commission Guidance Regarding Disclosure Related to Climate Change, supra note 338.

^{350.} GARY SHORTER, CONG. RSCH. SERV., R42544, SEC CLIMATE CHANGE DISCLOSURE GUIDANCE: AN OVERVIEW AND CONGRESSIONAL CONCERNS 1 (2013).

^{351.} See Commission Guidance Regarding Disclosure Related to Climate Change, *supra* note 338 (noting that the examples are "some of the ways" disclosure may be required).

^{352.} Id.

^{353.} Id.

^{354.} Id. Opportunities include potential profits from selling offset credits or allowances under a capand-trade system. Id.

^{355.} Id.

^{356.} Id.

^{357.} Id.

^{358.} Id.

^{359.} Id.

^{360.} Id.

TIME FOR PLAN(ET) B?

Finally, the guidance discussed the physical impacts of climate change.³⁶¹ Examples include severe weather events, rising sea levels, the arability of farmland, and the availability of water.³⁶² Each of these examples could affect a company's operations and results; the SEC specifically anticipated damage along coastal properties, increased insurance claims, decreased agricultural production, and hindered shipping or supply operations.³⁶³

The SEC emphasized that the securities laws require companies to, at a minimum, provide straightforward information about the risks that climate change presents to their business,³⁶⁴ particularly with respect to these four threats. Fossil fuel companies are susceptible to some of these risks.³⁶⁵ In fact, the SEC approvingly cited the New York Attorney General's settlements with three energy companies regarding climate disclosures as examples in its climate guidance.³⁶⁶

Initially, the 2010 SEC guidance received a lot of attention.³⁶⁷ Law firms around the country sent letters to their clients notifying them of the new guidance, anticipating SEC enforcement actions.³⁶⁸ But despite this initial buzz, the guidance had little effect on how much companies disclosed about the risks of climate change.³⁶⁹ SEC staff reported that they did not identify significant year-to-year changes in the disclosures before and after the 2010 guidance.³⁷⁰ "[D]uring the first years after the SEC guidance, fewer than three-fifths of companies in the S&P 500 mentioned climate change in their 10-K annual reports."³⁷¹ Furthermore, the SEC has not brought any enforcement actions to compel compliance with the climate-related disclosure guidance.³⁷² Nor has it issued many comment letters to companies

368. *Id.* The 2010 guidance suffered from three key problems. First, some law firms doubted the existence of climate change altogether. Second, some were unsure how to follow the guidance. Third, some questioned the ability of companies to determine how climate change might affect them. *Id.* at 21–22.

369. U.S. GOV'T ACCOUNTABILITY OFF., GAO-18-188, REPORT TO CONGRESSIONAL REQUESTERS ON CLIMATE-RELATED RISKS 15 (Feb. 2018) ("SEC senior staff said they did not expect changes in companies' climate-related disclosures as a result of the 2010 Guidance since SEC did not adopt any new disclosure requirements.").

^{361.} Id.

^{362.} Id.

^{363.} *Id.* It is easy to "imagine architects and engineers being accused of professional malpractice for designing structures that don't withstand foreseeable climate-related events." *Insurer's Message: Prepare for Climate Change or Get Sued*, NBC NEWS (June 6, 2014), https://perma.cc/P4Y6-28V8.

^{364.} Commission Guidance Regarding Disclosure Related to Climate Change, supra note 338.

^{365.} Section IV.B, infra, considers which of these risks are relevant to fossil fuel companies.

^{366.} Commission Guidance Regarding Disclosure Related to Climate Change, supra note 338.

^{367.} Alan R. Palmiter, *Climate Change Disclosure: A Failed SEC Mandate*, SSRN, Aug. 5. 2015, at 1, https://perma.cc/3M94-UCR6.

^{370.} Id.

^{371.} Id. For the most part, it consisted of "a short one-paragraph risk factor." Id.

^{372.} *Id.* While the SEC had been investigating Exxon's climate disclosures in the wake of revelations in 2015 that the company had been studying climate change for decades despite publicly casting doubt on the science, it recently announced the investigation had ended and Exxon would face no punishment." Karen Savage, *New Bill Would Require the SEC to Police Companies' Climate Risks*, CLIMATE LIABILITY NEWS (Sept. 20, 2018), https://perma.cc/9SZC-9XHE.

as a result of inadequate climate change disclosures.³⁷³

These findings have led to accusations that the SEC has not prioritized "the financial risks and opportunities of climate change as an important disclosure issue,"³⁷⁴ and the allegations—which are increasingly coming from prominent investors and academics, rather than environmental advocates³⁷⁵—are generally valid. Since issuing the 2010 guidance, the SEC has essentially disregarded the disclosure of climate change risks.³⁷⁶ Instead, the SEC has recently given attention to other emerging issues, such as cybersecurity,³⁷⁷ the COVID-19 pandemic,³⁷⁸ and human capital management.³⁷⁹

The Government Accountability Office reviewed the 2010 guidance and found that the SEC's enforcement of climate-related disclosures was limited for several reasons.³⁸⁰ First, SEC reviewers may not have access to the detailed information that companies use to arrive at their determinations of whether climate-related risks are material.³⁸¹ Although the Division of Corporation Finance—which is responsible for review of filings—can request additional information related to disclosures through the comment letter process, it does not have the authority to subpoen a company information.³⁸² Second, climate-related disclosures vary in

381. Id. at 17-18.

^{373.} Jim Coburn & Jackie Cook, *Cool Response: The SEC & Corporate Climate Change Reporting*, CERES (Feb. 2014), https://perma.cc/N689-AYW9. Ceres is a nonprofit organization that mobilizes businesses and investors on environmental issues. *Id*.

^{374.} Id.

^{375.} See Cynthia A. Williams & Jill E. Fisch, *Request for Rulemaking on Environmental, Social, and Governance (ESG) Disclosure to U.S. Securities & Exchange Commission* (Oct. 1, 2018), https://perma. cc/E49P-UYAK (petition signatories include CalPERS, New York State Comptroller, Illinois State Treasurer, and securities law professors, among others).

^{376.} See Roshaan Wasim, Note, Corporate (Non)Disclsoure of Climate Change Information, 119 COLUM. L. REV. 1311, 1312 (2019). The Commission avoided the issue in its 2018 and 2019 amendments to Regulation S-K. See Harper Ho, Disclosure Overload? Lessons for Risk Disclosure & ESG Reporting Reform from the Regulation S-K Concept Release, 65 VILLANOVA L. REV. 67, 69 (2020). The Commission again sidestepped the issue in its 2020 proposed rule. See Proposed Rule: Management's Discussion and Analysis, Selected Financial Data, and Supplementary Financial Information, Exchange Act Release No. 10,750, U.S. Securities & Exchange Commission (Jan. 30, 2020) (failing to discuss climate change and only referencing the 2010 guidance one time); Comm'r Allison Herren Lee, "Modernizing" Regulation S-K: Ignoring the Elephant in the Room, U.S. SEC. & EXCH. COMM'N (Jan. 30, 2020), https://perma.cc/95J9-VHP2 ("My objection is to the policy choice we make as a Commission to ignore the challenge of disclosure around climate change risk rather than to begin the difficult process of confronting it.") ("But we have not engaged in that discussion at all even as we update the very provisions that we've said may implicate climate change disclosure.").

^{377.} E.g., SEC Adopts Statement and Interpretive Guidance on Public Company Cybersecurity Disclosures, U.S. SEC. & EXCH. COMM'N (Feb. 21, 2018), https://perma.cc/9YVS-CY6E.

^{378.} E.g., The Importance of Disclosure – For Investors, Markets and Our Fight Against COVID-19, U.S. SEC. & EXCH. COMM'N (Apr. 8, 2020), https://perma.cc/FWV7-Y524.

^{379.} E.g., Modernization of Regulation S-K Items 101, 103, and 105, supra note 341.

^{380.} U.S. GOV'T ACCOUNTABILITY OFF., supra note 369, at 15.

^{382.} Id. at 17. The Division of Enforcement can subpoen acompanies only after a formal order of investigation. Id.

format and specificity, which makes it hard for SEC reviewers to locate and evaluate the adequacy of company disclosures.³⁸³ Finally, the SEC faces internal restraints in reviewing climate-related disclosures because "increased scrutiny of companies' climate-related information . . . could have . . . resource implications" for the Commission.³⁸⁴ Many of these issues could be addressed if the SEC promulgated more detailed disclosure rules. However, the SEC's commitment to a principles-based framework limits climate change disclosure.

In its 2010 guidance, the SEC intentionally left key judgments to companies, taking a principles-based approach over a more prescriptive alternative.³⁸⁵ Its commitment to a principles-based approach has been reaffirmed several times over the past decade³⁸⁶ and remains the most significant barrier to enhanced climate-risk disclosure requirements. The approach has two important effects. First, a company is only required to disclose information about climate risks to the extent that it is material. Second, a company is not required to disclose certain forward-looking information that is uncertain to occur or come to fruition. These judgments significantly qualify, reduce, or eliminate the climate change disclosures required by companies under the rules and guidance issued by the Commission. I describe each in sections IV.A.3 and IV.A.4.

3. Limitations of Disclosure Rules: Materiality

An important limitation on the SEC's disclosure requirements is the condition that companies need only disclose information to the extent that it is material. To prevail on a Rule 10b-5 claim under the federal securities laws, a shareholder must show that the statements were misleading as to a material fact.³⁸⁷ A false or

^{383.} Id. at 18.

^{384.} Id. at 16.

^{385.} See Commission Guidance Regarding Disclosure Related to Climate Change, supra note 338.

^{386.} See, e.g., Modernization of Regulation S-K Items 101, 103, and 105, 84 FR 44,358 (Aug. 23, 2019); Jay Clayton, Chairman, U.S. Sec. & Exch. Comm'n, *Proposed Amendments to Modernize and Enhance Financial Disclosures; Other Ongoing Disclosure Modernization Initiatives; Impact of the Coronavirus; Environmental and Climate-Related Disclosure*, U.S. SEC. & EXCH. COMM'N (Jan. 30, 2020) ("As discussed above, this commitment has been, and in my view should remain, disclosure-based and rooted in materiality..."); William Hinman, Former Dir., Div. of Corp. Finance, U.S. Sec. & Exch. Comm'n, *Applying a Principles-Based Approach to Disclosing Complex, Uncertain and Evolving Risks*, U.S. SEC. & EXCH. COMM'N (Mar. 15, 2019), https://perma.cc/9TKA-RGSN ("Today I would like to discuss how the U.S. securities disclosure requirements, which are largely principles-based..."). *Cf.* Ho, *supra* note 376 (suggesting that the "absence of more ambitious modifications to risk disclosure thus far is due less to the SEC's prudence and incrementalism and more to the fact that disclosure reform has become increasingly contentious.").

^{387.} Basic Inc. v. Levinson, 485 U.S. 224, 238 (1988). Some information, however, must be disclosed regardless of its quantitative impact. Business and Financial Disclosure Required by Regulation S-K, 81 Fed. Reg. 23,916, 23,925 (Apr. 22, 2016) (explaining that prescriptive disclosure requirements demand disclosure based on quantitative thresholds regardless of materiality). Rule 408 also requires disclosure of any other non-prescribed information if it is "necessary to make the required statements, in the light of the circumstances . . . not misleading." 17 C.F.R. §230.408(a) (2018). But climate change risks are subject to materiality thresholds.

incomplete statement is insufficient if the misrepresented fact is otherwise insignificant.³⁸⁸

A statement is material if there is a substantial likelihood that it will alter the "total mix" of information available to an investor and take on "actual significance in the deliberations of [a] reasonable shareholder."³⁸⁹ This definition creates an objective standard that is highly dependent on what a reasonable investor would find useful.³⁹⁰ So, materiality is judgmental in nature and made on a case-by-case basis based on the specific facts and circumstances of a particular company; a fact that is material for one company may not be material for another.³⁹¹ The SEC has repeatedly rejected the possibility of converting the materiality concept into a numerical formula or requiring climate change disclosures without regard to materiality.³⁹²

The SEC has rejected a more prescriptive approach to materiality because any "approach that designates a single fact or occurrence as always determinative of an inherently fact-specific finding such as materiality, must necessarily be overinclusive or underinclusive."³⁹³ A more flexible approach is better suited to elicit disclosure about rapidly evolving topics without needing to continuously update a rule's text.³⁹⁴ Another objection to eliminating the materiality qualifier for company disclosures is the fear that expanding reporting requirements could overload investors with trivial information and obscure what is truly material.³⁹⁵

"Not every potential concern or impact on a business that could result from climate change warrants disclosure as a financially material risk."³⁹⁶ This flexibility

^{388.} Basic Inc., 485 U.S. at 238.

^{389.} TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 449 (1976).

^{390.} Vizcarra, supra note 152, at 746.

^{391.} *Basic Inc.*, 485 U.S. at 236 n.14. ("The Committee's advice to the [SEC] is to avoid this quest for certainty and to continue consideration of materiality on a case-by-case basis as problems are identified.").

^{392.} See *id*. ("Although the Committee believes that ideally it would be desirable to have absolute certainty in the application of the materiality concept, it is its view that such a goal is illusory and unrealistic. The materiality concept is judgmental in nature and it is not possible to translate this into a numerical formula.").

^{393.} *Basic Inc.*, 485 U.S. at 236. Some journalists have argued that the resistance to change is a result of the Trump administration's efforts to downplay the narrative of climate change in public company financial statements. *See* Hijazi, *supra* note 331.

^{394.} Proposed Rule: Management's Discussion & Analysis, Selected Financial Data, and Supplementary Financial Information, Securities Act Release No. 10,750, Exchange Act Release No. 88,093, 2020 WL 527923 (Jan. 30, 2020) (citing to Commission Guidance Regarding Disclosure Related to Climate Change, *supra* note 338).

^{395.} See TSC Indus., Inc. v. Northway, Inc., 426 U.S. 448–49 (observing that "if the standard of materiality is unnecessarily low, not only may the corporation and its management be subjected to liability for insignificant omissions or misstatements, but also management's fear of exposing itself to substantial liability may cause it simply to bury the shareholders in an avalanche of trivial information a result that is hardly conducive to informed decision making.").

^{396.} Vizcarra, *supra* note 152, at 774 ("Those disclosed publicly should be both reasonably plausible and potentially material now or within a relevant timeframe. Otherwise, disclosure could be misleading.").

afforded to companies in determining what information is material to investors allows some amount of selective disclosure of climate change risks.³⁹⁷ There are compelling arguments that investors truly do not care about risks associated with climate change; some investors continue to deny its existence while others believe its effects will not arrive until a future date.³⁹⁸ Others may simply care more about short-term returns than long-term risks. The difficulty in assessing climate change risks from the perspective of a "reasonable investor" likely contributes to more limited disclosure.

The legal community has yet to accept broad climate change risks to the planet as material to a reasonable investor. For example, in *Natural Resources Defense Council v. SEC*,³⁹⁹ the D.C. Circuit refused to expand the definition of materiality to include the special interests of the "ethical investor."⁴⁰⁰ The SEC's guidance clarifies that only specific risks with respect to a company's business or operations must be disclosed. But even these risks must overcome the materiality threshold. In the *Exxon Mobil* case introduced in Part I, the State's claim failed because the Attorney General failed to prove that investors considered the misleading proxy cost disclosures material.⁴⁰¹

4. Limitations of Disclosure Rules: Forward-Looking Information

Another important limitation on the SEC's disclosure rules relates to the disclosure of forward-looking information. Statements about the future are inherently uncertain because future events may not materialize or come to fruition. Accurate disclosure of contingent or speculative events is particularly difficult for companies because the impact of such an event on a company's financial position is unknown at the time disclosure is made.⁴⁰² For this reason, Regulation S-K only requires disclosure of certain future information, which is included in the Management's Discussion and Analysis ("MD&A") section of company reports.⁴⁰³

^{397.} See Hijazi, supra note 331 ("When the Securities and Exchange Commission changed its disclosure rules to require disclosure of only 'material' risks, energy companies gained more leeway under the less-stringent obligations.").

^{398.} See Jennifer Marlon, Peter Howe, Matto Mildenberger, Anthony Leiserowitz & Xinran Wang, *Yale Climate Opinion Maps 2020*, YALE PROGRAM ON CLIMATE CHANGE COMMC'N (Sep. 2, 2020), https://perma.cc/9KXY-8TPE (illustrating that 28% of Americans do not believe that global warming is happening) (illustrating that 44% of Americans believe that global warming is not already harming people in the U.S.).

^{399.} NRDC v. Sec. & Exch. Comm'n, 606 F.2d 1031 (D.C. Cir. 1979).

^{400.} *Id.* at 1051 (rejecting the claim that a special priority should be given to environmental concerns under the National Environmental Policy Act); *see also* Environmental and Social Disclosure, Securities Act Release No. 5627, Exchange Act Release No. 11,733, 40 Fed. Reg. 51,656, 51,657 (Nov. 6, 1975).

^{401.} See supra note 108 and accompanying text.

^{402.} See Basic Inc. v. Levinson, 485 U.S. 224, 238 (1988).

^{403.} See 17 C.F.R. 229.303 (2021). Several specific provisions in Item 303 require disclosure of forward-looking information, including events affecting liquidity, capital resources, or income. See

The initial determination of whether the information must be disclosed under MD&A depends on whether it is characterized as a "known event[] or uncertaint[y]" or as "general forward-looking information."⁴⁰⁴ Companies are only required to disclose information that results from *known* events or uncertainties. In contrast, other forward-looking information is optional for the company to disclose. The distinction between these sets of information is slight but depends on the "nature of the prediction required."⁴⁰⁵ Information about known events or uncertainties results from "*current known trends, events, and uncertainties that are reasonably expected to have material effects*," whereas forward-looking information is more speculative and requires "*anticipating a future trend or event or anticipating a less predict-able impact of a known event, trend, or uncertainty*."⁴⁰⁶

Therefore, a disclosure duty exists where a trend, demand, commitment, event, or uncertainty is *both* (1) presently known to management and (2) reasonably likely to have material effects on the registrant's financial condition or results of operation.⁴⁰⁷ The SEC articulated a two-step test for assessing when forward-looking disclosure is required in MD&A:

Where a trend, demand, commitment, event or uncertainty is known, management must make two assessments:

- (1) Is the known trend, demand, commitment, event or uncertainty likely to come to fruition? If management determines that it is not reasonably likely to occur, no disclosure is required.
- (2) If management cannot make that determination, it must evaluate objectively the consequences of the known trend, demand, commitment, event or uncertainty, on the assumption that it will come to fruition. Disclosure is then required unless management determines that a material effect on

Concept Release on Management's Discussion and Analysis of Financial Conditions and Operations, *supra* note 342.

^{404.} *See* Management's Discussion and Analysis Interpretive Release, Securities Act Release No. 6835, Exchange Act Release No. 26,831, 43 SEC Docket 1330 (May 18, 1989).

^{405.} Concept Release on Management's Discussion and Analysis of Financial Conditions and Operations, *supra* note 342. Companies are expected to consider all relevant information in identifying, discussing, and analyzing known material trends and uncertainties, even if that information is not required to be disclosed. *See* Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations, Securities Act Release No. 8350, Exchange Act Release No. 48,960, 81 SEC Docket 2905 (Dec. 19, 2003).

^{406.} Concept Release on Management's Discussion and Analysis of Financial Conditions and Operations, *supra* note 342 (emphasis added).

^{407.} *Id.* Circuit courts are split over whether a company's failure to disclose material information in the MD&A, alone, can support a securities fraud suit brought under Rule 10b-5. *Compare* Twin Master Fund, Ltd. v. Akorn, Inc. 2020 WL 564222 (N.D. III. Feb. 5, 2020) (concluding that Item 303 of Reg. SK imposes a duty to disclose) *and* Stratte-McClure v. Morgan Stanley, 776 F.3d 94, 102 (2d Cir. 2015) (same) *with In re* NVIDIA Corp. Secs. Litig., 768 F.3d 1046, 1056 (9th Cir. 2014) (concluding that Item 303 of Reg. S-K does not create a duty to disclose).

the registrant's financial condition or results of operations is not reasonably likely to occur.⁴⁰⁸

These determinations must be objectively reasonable when viewed as of the time the determination is made. 409

Disclosures associated with climate change risks must undergo this assessment because there is uncertainty regarding the probability, timing, and magnitude of such risks and occurrences. Even though the effects of climate change may not yet be material, they could represent a future trend, uncertainty, or commitment that may become material in the future.⁴¹⁰

The distinction between "presently known trends and uncertainties" and "optional forward-looking information" is murky at best,⁴¹¹ and the SEC has not specified a time period that a company must consider when assessing the impact of a known event or uncertainty.⁴¹² As a result, companies have tremendous flexibility in determining which projections or anticipated future events can be characterized as forward-looking—thus avoiding disclosure of that information altogether. Moreover, to the extent that companies choose to disclose optional forward-looking information, this flexibility allows them to frame climate-related issues as statements of opinion by including qualifiers such as "believe," "expect," or "anticipate." These statements of opinion are not actionable under the securities laws.⁴¹³

For known trends or uncertainties, this test creates a presumption in favor of disclosure unless the company believes that the event is unlikely to occur or its occurrence would be immaterial. But how are companies to determine whether *future* events are material when it is uncertain whether they will occur? The Supreme Court has adopted the *Texas Gulf Sulphur* test for materiality of contingent information.⁴¹⁴ For uncertain future events, materiality "will depend at any given time upon a balancing of both the indicated probability that the event will occur and the anticipated magnitude of the

^{408.} See Management's Discussion and Analysis Interpretive Release, supra note 404.

^{409.} Id.

^{410.} See 17 C.F.R. 229.303 (2021).

^{411.} COFFEE, SALE & HENDERSON, *supra* note 93, at 1084 (questioning whether "this distinction is clear"); Wasim, *supra* note 376, at 1347 ("Despite the significance of this distinction, however, the SEC has failed to articulate a clear rule to demarcate what type of information about the future is considered a known event or uncertainty versus forward-looking information.").

^{412.} See Management's Discussion and Analysis Interpretive Release, supra note 404.

^{413.} In 2015, the Supreme Court held that "a sincere statement of pure opinion is not an 'untrue statement of material fact,' regardless whether an investor can ultimately prove the belief wrong." Omnicare, Inc. v. Laborers Dist. Council Constr. Indus. Pension Fund, 135 S. Ct. 1318, 1327 (2015). While the Court was interpreting the standard for a "misstatement "in the context of section 11 of the Securities Act, other courts have applied the *Omnicare* analysis to claims under section 10(b) of the Exchange Act. *See, e.g.*, Dearborn Heights Act 345 Police & Fire Ret. Sys. v. Align Tech., Inc., 856 F.3d 605, 616 (9th Cir. 2017).

^{414.} See Basic Inc. v. Levinson, 485 U.S. 224, 238 (1988).

event in light of the totality of the company activity."⁴¹⁵ As noted in the previous section, the subjective determination of materiality is another opportunity for companies to avoid disclosure related to climate change.

The SEC is ill-equipped to investigate many of these company determinations and projections; it is a *financial* regulator without the tools or expertise to adequately assess the probability or magnitude of climate change risks.⁴¹⁶ This knowledge gap exacerbates the disclosure problems.

B. FOSSIL FUEL COMPANIES MAY NOT BE SUSCEPTIBLE TO CLIMATE CHANGE RISKS

It is not enough that SEC rules requires disclosure of climate change risks. Effective climate change litigation against fossil fuel companies is contingent on those companies actually *facing* climate change risks. This section considers the types of risks fossil fuel companies may face, which can provide litigants an avenue for securities antifraud claims.

Many of the types of risks contemplated by the SEC when drafting the 2010 interpretive release did not occur.⁴¹⁷ For example, at the time the guidance was issued, there was an international movement to launch an international cap-andtrade system,⁴¹⁸ and President Obama had pledged to reduce America's greenhouse gas emissions if other industrialized countries complied as well.⁴¹⁹ None of these international policies came to fruition, and the United States briefly withdrew from the Paris Climate Agreement in November 2020 under President Trump.⁴²⁰

It is debatable whether the SEC's other risks have materialized in a meaningful way. The following sections consider whether fossil fuel companies are subject to the other risks identified in the 2010 guidance. Section IV.B.1 considers the impact of future legislation and regulation. Section IV.B.2 considers indirect consequences of business trends. Finally, section IV.B.3 considers the physical impacts of climate change.

^{415.} SEC v. Texas Gulf Sulphur Co., 401 F.2d 833, 849 (1968).

^{416.} See Levine, supra note 229 ("There are more obvious centers of expertise. The U.S. federal government, for instance, employs a lot of scientists who think about climate change. It has meteorological agencies, even an Environmental Protection Agency.").

^{417.} U.S. GOV'T ACCOUNTABILITY OFF., GAO-18-188, CLIMATE-RELATED RISKS 15 (2018) ("The 2010 Guidance in part provided clarification on how such changes—if they took place—could be incorporated into companies' filings. However, some of these changes did not occur.").

^{418.} Id.

^{419.} EXEC. OFF. OF THE PRESIDENT, THE PRESIDENT'S CLIMATE ACTION PLAN 4 (2013), https://perma.cc/MYQ6-DERV.

^{420.} Lisa Friedman, *Trump Serves Notice to Quit Paris Agreement*, N.Y. TIMES (Nov. 4, 2019), https://perma.cc/PQU4-ULYH. President Biden recommitted the United States to the Paris Climate Agreement as one of his first steps in office. *See* Coral Davenport & Lisa Friedman, *Biden Cancels Keystone XL Pipeline and Rejoins Paris Climate Agreement*, N.Y. TIMES (Feb. 19, 2021), https://perma. cc/955G-CNU4.

1. Disclosure of Future Regulatory Risks Requires Actual Government Regulation

Certainly, fossil fuel companies like Exxon could be subject to heightened regulatory requirements in the future. Climate change legislation has been a recurring topic in Congress over the past three decades, with a wide variety of creative proposals. The Environmental Protection Agency, an administrative agency responsible for "protect[ing] human health and the environment," could enact more stringent emissions regulations.⁴²¹ Regulations that impose carbon taxes or restrictions could raise the cost of oil and gas production, materially affecting the financial condition of fossil fuel companies.⁴²²

To date, this is the only risk that has been the subject of litigation in securities antifraud lawsuits against fossil fuel companies. The complaints against Exxon alleged that the company failed to apply the appropriate proxy cost of carbon⁴²³ to its internal models; instead, Exxon assumed that existing climate regulation would remain in place indefinitely, and failed to price any changes into its fore-casts.⁴²⁴ The argument was premised on the widely held belief that climate change regulation will get stricter over time and those proxy costs will go up.⁴²⁵ Many companies already perform such an analysis internally as part of their long-range budgeting process.

But the New York claim failed—in part—because these costs remain *hypothetical*.⁴²⁶ Widely adopted carbon regulations do not yet exist. Exxon allegedly fabricated higher numbers in its public reports and lower numbers in its internal planning, but the New York Attorney General could not prove or allege that the high numbers were right and the low ones were wrong.⁴²⁷

At the time the SEC's 2010 guidance was issued, the Environmental Protection Agency was taking steps to regulate greenhouse gas emissions, federal "cap and trade" legislation was being proposed in Congress.⁴²⁸ But this Congressional proposal and others, such as federal renewable-portfolio standards and a federal

^{421.} Our Mission and What We Do, U.S. ENVTL. PROT. AGENCY (last updated Feb. 7, 2018), https://perma.cc/C4R4-D3TP.

^{422.} Levine, *supra* note 190 ("If regulators want oil companies to internalize the cost of carbon emissions, the regulators can impose carbon taxes or restrictions, which will raise the cost of oil production.").

^{423.} Proxy costs of carbon are meant to represent Exxon's estimate of the cost (per ton of carbon) that would be imposed by *potential future regulation* of greenhouse gas. *See* Levine, *supra* note 80.

^{424.} See id.

^{425.} *Id.* (acknowledging that "Exxon ought to know—and indeed often says publicly—that climate change regulation will get stricter over time and those [proxy] costs will go up") ("If governments took stronger actions to address climate change, that would impose more costs on Exxon, and these costs would flow through Exxon's financial statements.").

^{426.} Id. ("Proxy costs are just made-up estimates of the hypothetical future costs of climate regulation.").

^{427.} Id.

^{428.} Id.

feed-in tariff, have all failed.⁴²⁹ A carbon tax seems to be gaining the most support, but it remains a divisive political issue.⁴³⁰ To the extent that future regulations are not enacted, disclosure of these costs actually has the potential to mislead investors.

For proxy costs to change, regulators need to get stricter about climate change.⁴³¹ Budgeting with zero proxy costs accurately reflects the current state of regulation because widely adopted carbon regulations do not yet exist.⁴³² For the proxy costs to be accurate or economically meaningful, governments need to change how they regulate carbon emissions.⁴³³ The New York court agreed with this premise. It found that, because "there were no actual GHG costs associated with [its disputed asset valuation]," "ExxonMobil surely had the discretion to determine that it was *not appropriate* to add a GHG cost assumption to [its asset impairment test]."⁴³⁴

2. Climate Risks Associated With Changing Business Trends Requires a Change in Consumer Preferences

Another risk that fossil fuel companies could face is the effect of business trends as the world economy shifts to cleaner energy sources. Legal, technological, and scientific developments could result in reduced demand for coal, oil, and natural gas. These developments could encourage competition from alternative energy sources. And as the media continues to publicize the realities of climate change, the reputations of fossil fuel companies may deteriorate,⁴³⁵ spurring investment in lower emission alternatives.

However, for these risks to materialize, global consumers must change their consumption habits. Fossil fuels are part of a global market, and worldwide demand for oil and gas is not expected to peak until 2030 and 2035, respectively.⁴³⁶ Coal still accounts for 40% of electricity generation worldwide.⁴³⁷ Exxon itself has "consistently expressed [the] view that the world's need for

^{429.} Mormann, supra note 135, at 309-10, 337-38 n.249 (listing various failed campaigns).

^{430.} Robinson Meyer, *How to Cut U.S. Carbon Pollution by Nearly 40 Percent in 10 Years*, THE ATLANTIC (Nov. 13, 2019), https://perma.cc/EZ23-ZLSM (acknowledging that "the politics" remain a barrier to "[s]even carbon-price proposals [] currently in the people's chamber.").

^{431.} Hijazi, supra note 331.

^{432.} Id.

^{433.} See Levine, supra note 80 ("If you can't get governments to do something, you can't really expect the markets to act like they will.").

^{434.} People v. Exxon Mobil Corp. No. 452044/2018, at 52 (N.Y. S. Ct. 2019) (emphasis in original). Rather, inclusion of these optional costs merely "reflects conservatism on the part of management." *Id.* at 53.

^{435.} See Kelly Mitchell, Exxon's 10-K Fails to Acknowledge Climate Litigation Risk, Adds New Section on Reputational Risk, DOCUMENTED (Mar. 2, 2018), https://perma.cc/YF26-A9CT.

^{436.} MCKINSEY, GLOBAL ENERGY PERSPECTIVE 2019, at 18, 23 (Jan. 2019), https://perma.cc/92Q5-TG49.

^{437.} International Energy Agency, Coal 2019 (Dec. 2019), https://perma.cc/G63B-M549.

energy will continue to rise."438

The United States Energy Information Administration expects for world energy consumption to rise nearly 50% between 2018 and 2050.⁴³⁹ Fossil fuels are projected to be the predominant transportation fuel and an important industrial feedstock because of their energy density, cost, and chemical properties.⁴⁴⁰ Although renewable energy is expected to become the leading source of energy by 2050, absolute "consumption increases for all primary energy sources" over this period.⁴⁴¹ These data suggest that consumer preferences—particularly in developing countries—will not change significantly in the near term.

Although no lawsuits have yet been advanced based on inadequate disclosure of the business risks associated with climate change, it remains a possibility for future litigation. Any success of securities fraud claims under this theory would depend on whether plaintiffs could prove that fossil fuel companies actually face these indirect business risks, and yet failed to disclose them.

3. Fossil Fuel Companies Are Not Disproportionately Affected By Physical Impacts of Climate Change

Physical effects of climate change are a third risk that fossil fuel companies may encounter. Severe weather events such as floods, droughts, hurricanes, and rising sea levels will eventually have material effects on the operations of various companies. Much of these effects will depend on where a company is geographically located, as some parts of the world are more susceptible to extreme weather events than others. Some fossil fuel companies could be vulnerable.

But these physical effects may still be too far in the future to be considered material. Most investors have a short-term horizon for their investments, rarely looking more than three to five years into the future. It is uncertain whether severe weather conditions will manifest in the next several years to such a degree that they materially affect fossil fuel companies. Furthermore, physical weather events are often covered by insurance, meaning that any financial losses could be offset by insurance recovery. Insurance coverage mitigates losses and reduces the likelihood that severe weather events materially affect a company's financial condition.

Perhaps the most important reason that nondisclosure of the physical effects of climate change would not be a compelling theory in antifraud litigation is that fossil fuel companies are not disproportionately affected by severe weather events, as compared to other industries. Industries such as real estate, tourism,

^{438.} People v. Exxon Mobil Corp. No. 452044/2018, at 29 (N.Y. S. Ct. 2019).

^{439.} U.S. ENERGY INFO. ADMIN., INTERNATIONAL ENERGY OUTLOOK 2019, at 24 (2019), *available at* https://perma.cc/2PYH-DKRF.

^{440.} Id. at 30.

^{441.} *Id.* at 32 ("As a share of primary energy consumption, petroleum and other liquids declines from 32% in 2018 to 27% in 2050.").

agriculture, and insurance are far more likely to be adversely affected because of their dependence on favorable weather conditions. Judges are likely to remain skeptical of lawsuits alleging nondisclosure of risks associated with the physical impacts of climate change to fossil fuel companies, at least until similar lawsuits are successful against companies with heightened risk.

Sections IV.A and IV.B explained the modest requirements that fossil fuel companies must overcome in drafting climate change disclosures. This section concludes that fossil fuel companies are meeting this low standard. It then explains a significant flaw in regulating climate change under the securities laws: if climate risks are adequately disclosed and investors are not misled, then antifraud litigation is unavailable.

So, are fossil fuel companies adequately disclosing these risks? Thus far, the answer appears to be yes. Fewer than five climate change lawsuits have been brought under state and federal securities laws,⁴⁴² and fossil fuel companies appear to be taking notice of potential liability for climate change disclosures. Over 85% of companies in the S&P 500 voluntarily produce sustainability reports.⁴⁴³ Many companies also voluntarily include sustainability disclosures in their annual reports or proxy statements. Take, for example, the Risk Factors section of Exxon's 2019 10-K report. The company disclosed the following risks that may be relevant to climate-change:

- **Regulatory and litigation risks**. Even in countries with well-developed legal systems where ExxonMobil does business, we remain exposed to changes in law or interpretation of settled law (including changes that result from international treaties and accords) that could adversely affect our results....⁴⁴⁴
- Climate change and greenhouse gas restrictions. Due to concern over the risks of climate change, a number of countries have adopted, or are considering the adoption of, regulatory frameworks to reduce greenhouse gas emissions. These include adoption of cap and trade regimes, carbon

^{442.} See Sabin Ctr. for Climate Change L. at Colum. L. Sch., Securities and Financial Regulation, U.S. CLIMATE CHANGE LITIG. (Apr. 2020), https://perma.cc/M2PL-KUNS (excluding derivative suits brought against directors and officers).

^{443.} Flash Report: 86% of S&P 500 Index Companies Produced Corporate Sustainability/ Responsibility Reports in 2018 GOVERNANCE & ACCOUNTABILITY INST. (2019), https://perma.cc/HS2V-U7TL. Sustainability does not necessarily equate to climate change mitigation, but climate change is a subset of sustainability. Smaller companies, however, are far less likely to produce sustainability reports. *Id.*

^{444.} EXXON MOBIL CORP., ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934 (FORM 10-K) 3 (Feb. 26, 2020), *available at* https://perma.cc/9VRK-S5GM.

taxes, minimum renewable usage requirements, restrictive permitting, increased efficiency standards, and incentives or mandates for renewable energy. Such policies could make our products more expensive, less competitive, lengthen project implementation times, and reduce demand for hydrocarbons, as well as shift hydrocarbon demand toward relatively lower-carbon sources such as natural gas. Current and pending greenhouse gas regulations or policies may also increase our compliance costs, such as for monitoring or sequestering emissions.⁴⁴⁵

- Alternative energy. Many governments are providing tax advantages and other subsidies to support transitioning to alternative energy sources or are mandating the use of specific fuels or technologies. Governments and others are also promoting research into new technologies to reduce the cost and increase the scalability of alternative energy sources. . . . Our future results may depend in part on the success of our research efforts and on our ability to adapt and apply the strengths of our current business model to providing the energy products of the future in a cost-competitive manner. . . . ⁴⁴⁶
- Other demand-related factors. Other factors that may affect the demand for oil, gas, and petrochemicals, and therefore impact our results, include technological improvements in energy efficiency; seasonal weather patterns; increased competitiveness of alternative energy sources; changes in technology or consumer preferences that alter fuel choices, such as technological advances in energy storage that make wind and solar more competitive for power generation or increased consumer demand for alternative fueled or electric vehicles; and broad-based changes in personal income levels.⁴⁴⁷
- Research and development and technological change. To maintain our competitive position, especially in light of the technological nature of our businesses and the need for continuous efficiency improvement, ExxonMobil's research and development organizations must be successful and able to adapt to a changing market and policy environment, including developing technologies to help reduce greenhouse gas emissions. To remain competitive we must also continuously adapt and capture the benefits of new and emerging technologies, including successfully applying advances in the ability to process very large amounts of data to our businesses.⁴⁴⁸
- **Reputation**. Our reputation is an important corporate asset. An operating incident, significant cybersecurity disruption, or other adverse event such as those described in this Item 1A may have a negative impact on our reputation, which in turn could make it more difficult for us to compete successfully for new opportunities, obtain necessary regulatory approvals, or could reduce consumer demand for our branded products. ExxonMobil's

^{445.} Id.

^{446.} Id.

^{447.} Id. at 2.

^{448.} Id. at 4.

reputation may also be harmed by events which negatively affect the image of our industry as a whole. . . . 449

Ultimately, if the risks and effects of climate change are fully disclosed, then investors cannot be misled. This precludes securities antifraud litigation as a possible deterrent. Yet the underlying conduct of emitting greenhouse gas emissions continues.

Beyond this flaw, securities litigation also has several limitations attributable to its round-about enforcement scheme. These disadvantages result from regulating pollution as a matter of securities fraud, rather than addressing the underlying problem directly through environmental statutes and regulations.

1. Only Public Companies Are Subject to Disclosure Requirements Under the Securities Laws

The scope of securities regulation is limited because the SEC's disclosure rules apply only to companies listed on stock exchanges. Rule 10b-5 antifraud claims may be brought against both public and private companies,⁴⁵⁰ but the SEC's disclosure rules apply only to publicly traded companies.⁴⁵¹ Although private companies also have securities, they are not owned by the "public" and are therefore much less likely to be the subject of antifraud lawsuits. Therefore, securities litigation against privately held companies is much less common,⁴⁵² and it is much more difficult for regulators to justify resource expenditures on behalf of a small number of investors instead of dispersed public shareholders.⁴⁵³

Not all oil and gas producers are public companies. Privately held companies such as Koch Energy Services, Jones Energy, Hunt Oil Company, Tauber Oil Company, and Hilcorp Energy Company also produce a significant amount of the country's fossil fuels. These are only a few of the companies that would fall outside the scope of such federal securities litigation. Even among public companies

^{449.} Id. at 5.

^{450.} See, e.g., SEC v. Stiefel Labs. Inc., No. 11-cv-24438-WJZ (S.D. Fl. filed Dec. 12, 2011) (applying the anti-fraud provisions of the federal securities laws to a private company's statements). Rule 10b-5 of the Securities Exchange Act prohibits misleading investors "in connection with the purchase and sale of any security." 17 C.F.R. § 240.10b-5 (2020). The term "security" is defined broadly without reference to a "public" or "private" nature. See 15 U.S.C. § 78c(a)(10).

^{451.} See 15 U.S.C. § 78m(a) ("Every issuer of a security registered pursuant to section 78l of this title shall file with the Commission, in accordance with such rules and regulations as the Commission may prescribe as necessary or appropriate for the proper protection of investors and to insure fair dealing in the security."); 15 U.S.C. § 78l ("It shall be unlawful... to effect any transaction in any security... on a national securities exchange unless a registration is effective as to such security...").

^{452.} See Levine, supra note 229 ("Exxon Mobil, by virtue of its publicly traded stock and SEC reports, is an easy target for securities-fraud lawsuits.").

^{453.} See id.

2021]

that are subject to the SEC's disclosure rules, there is evidence that smaller companies may get away with less disclosure than larger companies.⁴⁵⁴

One journalist has specifically acknowledged this limitation, suggesting that it might be "a reason [for companies] to stay private."⁴⁵⁵ Fossil fuel companies may be encouraged to avoid public sources of capital in order to avoid the onerous disclosure requirements and the threat of increased litigation. This exacerbates existing problems with the public capital markets, which are already being shunned in favor of robust private markets.⁴⁵⁶

2. Litigating Pursuant to the Securities Laws Can Be More Expensive Than Direct Regulation

Litigation under the securities laws has additional costs associated with it. Because there are additional elements in claims of securities fraud—chiefly the intent requirement—as compared to violations of traditional environmental statutes, additional time and expense is expended by plaintiffs to meet their evidentiary burden. Volkswagen's cheating on emissions standards from 2009 to 2016 is a recent example.⁴⁵⁷

Volkswagen—a German company that had issued U.S. securities—rigged its cars to cheat on U.S. emissions tests.⁴⁵⁸ Though the company publicly acknowledged "its use of a defeat device" that automatically subjected it to environmental penalties under the Clean Air Act, Volkswagen denied that it ever intended to mislead investors when it failed to disclose the emissions issues in a public bond offering.⁴⁵⁹ The SEC, however, initiated a securities fraud suit against the automaker in March 2019.⁴⁶⁰

The lawsuit is one example of the event-driven securities litigation that has become common in recent years.⁴⁶¹ Both the Environmental Protection Agency and the Department of Justice have already levied penalties on Volkswagen for

^{454.} ERNST & YOUNG, IS YOUR NONFINANCIAL PERFORMANCE REVEALING THE TRUE VALUE OF YOUR BUSINESS TO INVESTORS? 9 (2017), https://perma.cc/2S3A-XPWT (finding that the level and quality of sustainability reporting among smaller public companies is significantly lower than for larger public companies).

^{455.} Levine, supra note 229.

^{456.} COFFEE, SALE & HENDERSON, supra note 93, at 4.

^{457.} Volkswagen Clean Air Act Civil Settlement, U.S. ENVTL. PROT. AGENCY, https://perma.cc/KU93-PSJ8 (last updated Oct. 31, 2019).

^{458.} See Levine, supra note 64.

^{459.} See *id*. (reporting that "VW has denied that it acted knowingly, recklessly, or even negligently, in failing to disclose the emissions issues to investors").

^{460.} Linda Chiem, VW Says SEC Can't 'Pile On' With Late Emissions Fraud Suit, LAW360 (Apr. 13, 2020), https://perma.cc/6SWV-L6EC. The SEC's lawsuit alleges that Volkswagen "offloaded more than \$13 billion in so-called 144A bonds and asset-backed securities at inflated prices from April 2014 to May 2015." *Id.*

^{461.} See supra section I.A.

its wrongdoing, totaling \$14.7 billion.⁴⁶² Volkswagen believes that the SEC's securities claim "is inequitable piling on."⁴⁶³

What is noteworthy about the lawsuit is that the SEC waited over three years to sue Volkswagen over the emissions scandal.⁴⁶⁴ This delay is especially puzzling after considering Volkswagen's admission of liability for the Clean Air Act violations; the most likely reason is that securities fraud introduces new requirements for regulators to prove, such as intent and materiality.⁴⁶⁵ These elements required SEC attorneys to devote years reviewing approximately two-million additional pages of evidence, simply to determine whether the people responsible for cheating the emissions test talked to the people writing the disclosures.⁴⁶⁶ The district judge presiding over the case has acknowledged the potential for wasted resources, urging both parties to work out a settlement to avoid a costly court battle.⁴⁶⁷

State and federal securities regulators are particularly ill-equipped to deal with issues of climate change. It is both outside their areas of expertise and "regulatory resources are not infinite, which means that regulators must choose when to act."⁴⁶⁸ The SEC's limited resources are already stretched thin by existing securities-related matters,⁴⁶⁹ whereas environmental regulators possess relevant training and have more time available to address the threat of climate change. Investors may benefit from securities regulators staying in their lanes and focusing on traditional securities fraud.⁴⁷⁰

^{462.} Chiem, supra note 460.

^{463.} *Id.* There is a compelling argument that securities litigation is overly litigious, which increases transaction costs associated with needless litigation. This is in-part because of America's use of multiple securities laws enforcers with overlapping authority. Rose & LeBlanc, *supra* note 285, at 396.

^{464.} Linda Chiem, *SEC*, *VW Must Cut Deal in Emissions Fraud Suit, Judge Says*, LAW360 (Aug. 16, 2019) ("At an initial hearing in May, Judge Breyer said he was 'totally mystified' by how many years the SEC took to sue Volkswagen over the emissions scandal, describing the SEC as a 'carrion hawk' that 'simply descends when everything is all over and sees what it can get.'").

^{465.} Levine, *supra* note 190 ("But calling everything securities fraud doesn't only make things easier for regulators. It also introduces some new requirements.").

^{466.} Levine, *supra* note 64 ("As a *factual* question-whether or not the people designating the emissions-testing cheat device talked to the people writing the disclosure for the bond offerings—it feels bizarrely myopic.").

^{467.} Chiem, *supra* note 464 ("At an initial hearing in May, Judge Breyer said he was 'totally mystified' by how many years the SEC took to sue Volkswagen over the emissions scandal, describing the SEC as a 'carrion hawk' that 'simply descends when everything is all over and sees what it can get.""). For example, litigating the issue of Volkswagen's liability would involve parsing evidence and witnesses from both the U.S. and Germany. *Id.*

^{468.} MORRISS, YANDLE & DORCHAK, supra note 18, at 16.

^{469.} COFFEE, SALE & HENDERSON, *supra* note 93, at 922 (acknowledging "the limited resources of the SEC").

^{470.} See, e.g., Mary Jo White, Chair, SEC, The Importance of Independence, 14th Annual A.A. Sommer, Jr. Corporate Securities and Financial Law Lecture, Fordham Law School (Oct. 3, 2013) ("Seeking to improve safety in mines . . . or to end . . . atrocities in the Democratic Republic of the Congo are compelling objectives. . . . But . . . I must question, as a policy matter, using the federal securities laws and the SEC's powers of mandatory disclosure to accomplish these goals.").

3. Securities Class Action Lawsuits Are Inefficient Because They Do Not Benefit Diversified Investors

Securities fraud class action lawsuits under SEC rule 10b-5 are the predominant antifraud enforcement tool, yet these lawsuits have been criticized as substantially flawed. Though the securities laws were created for the protection of shareholders, investors disproportionately bear the losses for antifraud class actions. There are two fundamental problems with securities fraud class action lawsuits: circular wealth transfer among shareholders and feedback loops.⁴⁷¹

First, diversified investors⁴⁷² are mostly protected against simple securities fraud.⁴⁷³ Securities class action lawsuits are a zero-sum game. For every sellerwinner there is a buyer-loser. Across all publicly held corporations, diversified shareholders will divide equally between these two groups: one paying the settlement and one receiving the settlement.⁴⁷⁴ On average, diversified shareholders simply break even, "except for the fact that attorneys deduct substantial transaction costs, which in this view amount to a dead weight social loss."⁴⁷⁵

Second, there is an additional cost resulting from the feedback loop associated with these lawsuits. Because "the defendant company pays the damages . . . the value of the company is reduced by the amount of the payout in addition to any decline in the stock price of the company that results from disclosure of new information."⁴⁷⁶ The decline in stock price "may be several times the decline that would have resulted simply from the disclosure of negative information," a cost on top of the expenses of litigation.⁴⁷⁷ Each of these costs results in an increased cost of capital for the corporation, harming existing shareholders.⁴⁷⁸

D. THE FUTURE OF CLIMATE CHANGE SECURITIES LITIGATION

The SEC's 2010 interpretive guidance remains the best guide for drafting company climate change disclosures.⁴⁷⁹ Bill Hinman, former Director of the SEC's

^{471.} Richard A. Booth, *Sense and Nonsense About Securities Litigation*, 21 U. PENN. J. BUS. L. 1, 4–6 (2018).

^{472.} Because it is a widely known and basic fundamental of investing, securities law should presume that all stockholders are diversified. *See* Richard A. Booth, *The End of the Securities Fraud Class Action as We Know It*, 4 BERKELEY BUS. L.J. 1, 1 (2007).

^{473.} See id.

^{474.} COFFEE, SALE & HENDERSON, *supra* note 93, at 925. "Most settlements in securities class actions appear to be funded out of insurance policies and payments by the defendant corporation." *Id*.

^{475.} *Id.* at 925. As discussed in section II.C, "the economic interests of the lawyer may differ from those of the class." *Id.* at 923. And often "the recoveries for the plaintiffs are small, while fees to the lawyers are high." *Id.*

^{476.} See Booth, supra note 472, at 3.

^{477.} See id.

^{478.} See Amanda M. Rose, The Multienforcer Approach to Securities Fraud Deterrence: A Critical Analysis, 158 U. PA. L. REV. 2173, 2179–80 (2010).

^{479.} Hinman, *supra* note 386 ("That [2010] guidance remains a relevant and useful tool for companies when evaluating their disclosure obligations concerning climate change matters."). Hinman's only update to the 2010 climate change disclosure guidance was his statement that companies

Division of Corporation Finance, explained in 2019 that the agency is still evaluating whether "additional disclosure on [sustainability] topics would provide consistently material and useful information."⁴⁸⁰ He also emphasized the importance of market-driven solutions in this area, noting that the SEC is actively monitoring the information that companies voluntarily provide outside of their filings, and comparing those to the disclosures filed with them.⁴⁸¹

Acting SEC Chair Allison Herren Lee recently released a statement directing the Division of Corporation Finance to enhance its focus of climate-related disclosure in public company filings.⁴⁸² The statement is the first meaningful step the SEC has made regarding climate-related disclosure since issuing its 2010 interpretive guidance. As part of this enhanced focus, SEC staff will review the extent to which public companies address the topics identified in the 2010 guidance and begin to update the guidance "to take into account developments in the last decade."⁴⁸³ This statement closely follows the announcement that the SEC has created a new senior policy advisor position on climate change and ESG issues.⁴⁸⁴ These moves indicate that new leadership under the Biden administration may result in more prescriptive climate-related disclosures.⁴⁸⁵

Many companies are concerned that new disclosure rules would expand the possibility for disclosure-related litigation.⁴⁸⁶ Securities antifraud lawsuits targeting the fossil fuel industry will only be successful to the extent that companies are failing to disclose material risks associated with climate change. As long as fossil fuel companies continue to satisfy their disclosure obligations, climate change securities litigation is likely to remain limited.⁴⁸⁷

VI. PLAN B: MARKET FORCES TO INDIRECTLY EFFECT CHANGE IN CLIMATE POLICY

For the reasons described in Parts III and IV, direct litigation under the securities laws is unlikely to spur wide-scale change in climate policy. Enforcement

should be disclosing the board's role in the risk oversight of the company with respect to material risks facing the company, which may include climate change. *Id.*

^{480.} Id.

^{481.} Id.

^{482.} Press Release, Allison Herren Lee, Active Chair, U.S. Sec. & Exch. Comm'n, Statement on the Review of Climate-Related Disclosure (Feb. 24, 2021), https://perma.cc/CYW8-6ATP.

^{483.} Id.

^{484.} Press Release, U.S. Sec. & Exch. Comm'n, Satyam Khanna Named Senior Policy Advisor for Climate and ESG (Feb. 1, 2021), https://perma.cc/4MFF-BRG3.

^{485.} Aaron Nicodemus, *SEC Takes First Step Toward New Framework for Climate Change*, COMPLIANCE WEEK (Feb. 24, 2021), https://perma.cc/8U7G-EG9A ("The moves lay the groundwork for more substantive change to be pursued by Gary Gensler, President Joe Biden's nominee to lead the SEC.").

^{486.} Business and Financial Disclosure Required by Regulation S-K, *supra* note 387 (noting all of these as factors weighing against expansive disclosure rules).

^{487.} Some scholars have suggested that climate change securities litigation may become more prevalent in the future due to increased pressure for disclosure by investors. *See* Wasim, *supra* note 376, at 1332–33.

under state blue sky laws is limited by inadequate resources and federal preemption of class actions. And enforcement under the federal securities laws is ineffective because the existing disclosure regime fails to regulate the underlying bad act.

But while securities litigation may not be the answer, enhanced disclosure may still provide a path toward decarbonization. Even when formal enforcement of disclosure is weak,⁴⁸⁸ reputational interests can facilitate changes in corporate behavior.⁴⁸⁹ Regulators often use disclosure as a "soft" regulatory tool to publicly shame companies, thereby effecting market-driven policy change.⁴⁹⁰ Public shaming only works if the information that is disclosed grabs attention and facilitates investor action.⁴⁹¹ But as destructive weather events continue to occur in the United States,⁴⁹² these headlines are likely to carry more weight.

Many economists believe that the basic goal of securities regulation, particularly in the United States, is to promote allocative efficiency in the capital markets.⁴⁹³ Full disclosure of company risks, performance, and financial condition allows investors to choose how best to allocate their capital; investors will choose to promote companies with the best chance of future success.⁴⁹⁴ These choices of capital allocation affect a company's stock price and therefore its cost of capital.

Companies with a lower cost of capital receive more favorable financing terms, providing superior future prospects.⁴⁹⁵ Companies with a higher cost of capital receive less favorable terms, effectively being penalized by the market.⁴⁹⁶ Over time, this directs capital—a scarce resource—to the companies that are best able to put it to productive use for the benefit of society.⁴⁹⁷ In this way, a transparent stock market promotes efficiency, benefitting both investors and non-investors

492. See, e.g., Irina Ivanova, Texas' Frozen Power Grid Is a Preview of Climate Change Disasters to Come, CBS NEWS (Feb. 19, 2021), https://perma.cc/VM4A-BR6Y.

496. Id.

^{488.} See, e.g., Donald C. Langevoort, *Disasters and Disclosures: Securities Fraud Liability in the Shadow of a Corporate Catastrophe*, 107 GEO. L.J. 971 (2019). (explaining the weakness of disclosure rules and fraud-on-the-market litigation in compelling and enforcing risk disclosure).

^{489.} Louis Lowenstein, *Financial Transparency and Corporate Governance: You Manage What You Measure*, 96 COLUM. L. REV. 1335, 1342–45 (1996).

^{490.} See Paula J. Dalley, *The Use and Misuse of Disclosure as a Regulatory System*, 34 FLA. ST. L. REV. 1089, 1093 (2007).

^{491.} Teresa Johnson, *Disclosure Will Not Solve the Lack of Diversity on Boards*, FIN. TIMES (Sept. 23, 2020), https://perma.cc/G25P-PEMG (explaining that public shaming has been unable to accelerate boardroom diversity measures).

^{493.} COFFEE, SALE & HENDERSON, *supra* note 93, at 242 ("[I]f we view the securities market as the principal allocative mechanism for investment capital, the behavior of securities prices is important not so much because of their distributive consequences on investors but more because of their effect on allocative efficiency.").

^{494.} *Id.* (mechanically, disclosure "encourage[s] the price-correcting work of informed traders who will use SEC-mandated disclosures to buy underpriced stocks and sell overpriced ones, until prices conform to 'fundamental' values.").

^{495.} Id. at 8.

^{497.} Henry T. C. Hu, Faith and Magic: Investor Beliefs and Government Neutrality, 78 TEX. L. REV. 777, 794 (2000) ("Any time the trading prices of shares deviate from their intrinsic value, 'wrong'

alike.⁴⁹⁸ Because increased allocative efficiency benefits virtually all members of society, the goal is considered even more important than the narrower goal of investor protection.⁴⁹⁹

The idea of allocative efficiency makes sense, particularly in the U.S. capital markets. As of 2018, the United States capital market remains the world's largest, accounting for 40% of global equity market capitalization and more than half of the world's corporate debt securities.⁵⁰⁰ The United States relies more heavily on the efficient operation of its capital markets to allocate investor capital, as compared to foreign countries such as Germany or Japan that rely primarily on bank-based allocation schemes.⁵⁰¹ The United States' reliance on the effective operation of its public equity markets is a compelling reason to impose height-ened disclosure obligations on public companies.

Relying on these principles,⁵⁰² efforts are underway to enhance the disclosure requirements for climate change-related risks. Section V.E of this Article noted that new leadership in the SEC may look to expand climate-related disclosure.⁵⁰³ To the extent that the SEC does not expand its disclosure requirements, federal legislation may accomplish the same goal. The Climate Risk Disclosure Act is a proposal from Senator Elizabeth Warren that frames climate change as a threat to the public markets.⁵⁰⁴ The bill's stated purpose is to "guide capital allocation to mitigate, and adapt to, the effects of climate change" by "encourag[ing] a smoother transition to a clean and renewable energy, lowemissions economy."⁵⁰⁵ According to Warren, the Act "empowers investors to make smart decisions about where to invest their money by requiring that public companies be straight about how climate change and related policies will affect their bottom lines."⁵⁰⁶

market signals are provided to corporate managers, investors, and other decisionmakers. Real economic resources are thereby directed to the wrong investment projects, corporations, and sectors.").

^{498.} COFFEE, SALE & HENDERSON, *supra* note 93, at 8.

^{499.} *Id.* at 243, 936 ("Indeed, any strategy that successfully reduces the cost of capital would produce real macroeconomic benefits for the entire society, not just investors.").

^{500.} See U.S. As % Of World Stock Market Cap Tops 40% Again, SEEKING ALPHA (Aug. 29, 2018), https://perma.cc/397X-LYWU.

^{501.} See United States System of Allocating Investment Capital: Hearing Before the Committee on Banking, Housing, and Urban Affairs, United States Senate, 102d Cong., 2d ed. 98 (June 26, 1992).

^{502.} Rebecca Heilweil, *Elizabeth Warren's Climate Risk Disclosure Act Tries to Do What the SEC Didn't*, ECOWATCH, (Sept. 24, 2019) https://perma.cc/V6TU-D65Q ("Our bill utilizes market mechanisms to incentivize climate action by ensuring that corporations disclose the risks posed by climate action to the benefit of their shareholders and the public.").

^{503.} See supra section V.E.

^{504.} Id.

^{505.} Climate Risk Disclosure Act of 2019, S. 2075, 116th Cong. (2020).

^{506.} Umair Irfan, *Elizabeth Warren Thinks Corruption Is Why the US Hasn't Acted on Climate Change*, Vox, (July 30, 2019), https://perma.cc/6F6P-HEX2.

TIME FOR PLAN(ET) B?

The bill was introduced on July 10, 2019⁵⁰⁷ and was referred to the Senate Committee on Banking, Housing, and Urban Affairs.⁵⁰⁸ It was concurrently introduced in the House by Representative Sean Casten (D-III),⁵⁰⁹ where it was referred to the House Committees on Financial Services and Energy and Commerce.⁵¹⁰ The bill is thought to be particularly effective because it frames climate change as an economic issue rather than an environmental issue.⁵¹¹

Such a solution has garnered tremendous support over the past several years. Proponents include professors, law students, journalists,⁵¹² investors, and environmental advocates.⁵¹³ Though a full analysis of the bill is beyond the scope of this Article, such a market-driven solution may be a more effective tool for influencing corporate behavior and accelerating change in U.S. climate change policy.

This Article has shown why securities litigation is a convenient but imperfect vehicle for affecting corporate behavior. Although litigation has proved a successful deterrent in the past,⁵¹⁴ it is not the optimal approach to combat climate change. However, enhanced disclosure requirements under the securities laws may provide an avenue for a market-driven solution.

^{507.} S. 2075. The bill was previously proposed by Senator Warren in 2018, but died in the Senate. *See* Climate Risk Disclosure Act of 2018, S. 3481, 115th Cong. (2018-2019).

^{508.} S. 2075.

^{509.} Climate Risk Disclosure Act of 2019, H.R. 3623, 116th Cong. (2019).

^{510.} Id.

^{511.} Irfan, *supra* note 506 ("It could also be her opening to more climate change-skeptical general election voters who are not seeing rising sea levels or extreme weather firsthand.").

^{512.} *Id.* ("It would give companies a powerful incentive to make their operations more resilient and would encourage them to withdraw from coal, oil, and natural gas.").

^{513.} Nicole Pinko, *Climate Risk Disclosure Act Is Good for Your Investments*, UNION OF CONCERNED SCI. (July 25, 2019), https://perma.cc/856R-N8A7.

^{514.} Litigation has proved itself a successful deterrent in the past, as was the case in the automobile, asbestos, and tobacco lawsuits. *See generally* MORRISS, YANDLE & DORCHAK, *supra* note 18.