NWC NATIONAL WHISTLEBLOWER CENTER

EXPOSING A TICKING TIME BOMB

How fossil fuel industry fraud is setting us up for a financial implosion – and what whistleblowers can do about it

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About the National Whistleblower Center

The National Whistleblower Center (NWC) is the leading nonprofit in the U.S. dedicated to protecting and rewarding whistleblowers. We provide legal assistance to whistleblowers, advocate for stronger whistleblower protection laws, and educate the public about whistleblowers' critical role in protecting democracy and the rule of law. Our mission is to support whistleblowers in their efforts to expose and help prosecute corruption and other wrongdoing.

Learn more about us at www.whistleblowers.org

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How fossil fuel industry fraud is setting us up for a climate & financial implosion – and what whistleblowers can do about it

EXECUTIVE SUMMARY

In the past several years, U.S. states, cities, counties and individuals concerned about climate change have filed important lawsuits against fossil fuel companies, asserting that the companies are responsible for climate-related damage due to their carbon pollution. These cases confront "what might be the greatest scam in history," in the words of historian Naomi Oreskes: the massive disinformation campaign designed to stall action on climate change by persuading decision makers and the public that it is not a problem to be taken seriously.[1]

In this report, the National Whistleblower Center focuses on a related deception that, with a small handful of notable exceptions, is unaddressed in the climate change lawsuits filed to date: the dramatic understatement of risks posed by climate change to fossil fuel companies' own financial condition and to the economy at large. We describe an important pathway to ensuring proper disclosures of climate risks: collaborative work by whistleblowers, prosecutors and regulators to enforce anti-fraud laws.

This report is a call to action for executives of fossil fuel companies and others with knowledge of improper accounting and disclosure practices, such as external auditors, to take the steps needed to obtain protected whistleblower status and work with the Securities and Exchange Commission (SEC), other regulators and law enforcement officials to help expose and prosecute fraud. For the first time, legal strategies are provided for whistleblowers and others to expose and prosecute climate risk fraud in the fossil fuel industry. This is also the first report to use the methods of professional fraud investigators to identify fossil fuel industry financial disclosure practices that are likely to be fraudulent.

Climate risks—comprised of "transition risks," the financial risks to some companies due to the world's shift away from fossil fuels, and "physical risks," those associated with climate change-related damage to property— uniquely threaten the finances of fossil fuel companies. Fossil fuel companies, fearful of losing access to investment capital and loans, are therefore highly motivated to conceal their exposure to these risks.

Concealment of climate risks is a matter of great public interest because when it is successful, it harms investors, the environment and the economy. Investors who provide capital to these companies suffer because they invest based on a false sense of the companies' readiness for the transition to a low-carbon economy and for the physical shocks of climate change. This deception undercuts efforts to address climate change because it slows the shift of investments to businesses developing and deploying low-carbon technologies. It harms the economy by leaving financial institutions such as banks and insurers less prepared for the stresses of rapid asset deflation.

This last type of harm deserves special attention. The potential for rapid asset deflation at large fossil fuel companies is a ticking time bomb that, if not detected and addressed, could make the global financial system implode. This is because banks, insurers and other globally significant financial institutions are heavily invested in these companies and may not be able to withstand the stresses of simultaneous company failures. Numerous companies and industries are also linked to the financial condition of fossil fuel companies, posing a danger that simultaneous collapses of fossil fuel companies will reverberate widely across the economy, destroying countless jobs and livelihoods.

This systemic risk, which threatens many more people than just the shareholders of fossil fuel companies, has put climate change at the center of the agenda of the world's financial regulators, investors and asset managers. In June 2020, the central banks of 66 nations warned that, without aggressive action to reduce carbon emissions, global Gross Domestic Product will fall 25 percent by the end of the century.[2] In July 2020, financial institutions that together manage almost $1 trillion in assets wrote to the SEC and other U.S. financial regulators warning that the "systemic threat" of climate change means "significant disruptive consequences on asset valuations and our nation's economic stability" as well as "the lives and livelihoods of tens of millions of people across the country."[3] Both documents call for regulators to mandate that companies provide robust and consistent disclosures of the climate risks facing them.

Although a number of companies with large fossil fuel investments such as Shell and BP have agreed on the need to shift to an economic system not dependent on carbon emissions and have even pledged to achieve "net zero" emissions by mid-century, the National Whistleblower Center's analysis of public statements by these and other exploration and production companies reveals that material information on climate risks is being deceptively omitted. Further investigation by whistleblowers and law enforcement officials is needed to determine whether this deception constitutes legally actionable fraud.

In a new approach to climate risks, NWC looks at fossil fuel companies through the skeptical lens of a fraud investigator using "fraud triangle" analysis, which considers incentives, opportunities & rationalizations to commit fraud.

We find that a vast array of deceptions about climate risk are underway in the fossil fuel industry. These deceptions generally fall into three categories:

- **Overstating the value of reserves**
- **Understating environmental liabilities**
- **Understating physical risks to infrastructure**

A small number of pending legal actions allege climate risk deceptions by one fossil fuel company, ExxonMobil (Exxon), the world's largest publicly traded oil and gas company. A climate risk fraud case has been filed by the Commonwealth of Massachusetts against Exxon, shareholders have filed similar cases in federal courts in Texas and New Jersey, and a group of whistleblowers has filed a complaint against Exxon with the SEC. The climate risk fraud case filed by the Commonwealth of Massachusetts against Exxon in 2019 is significant because it alleges misleading statements and omissions by Exxon about climate risk that we find are pervasive in the industry. According to the complaint, "Exxon knew forty years ago that climate change was happening, and that humans were contributing to it by burning fossil fuels."[4] Further, "Exxon's misleading omissions and misrepresentations about the systemic risks of climate change are material to Massachusetts investors."[5] The Massachusetts' action, based on its consumer protection law, seeks injunctive relief and money damages from Exxon for misleading the state's investors and consumers. Similar cases against Exxon have been brought by shareholders in federal courts in Texas and New Jersey and by a group of whistleblowers in a petition to the SEC.[6]

NWC's analysis of these and other cases dealing with climate change, corporate fraud and whistleblowers shows these cases are likely just the tip of the iceberg. We anticipate that the number of cases and defendants will increase dramatically in the near future once potential whistleblowers learn about the benefits of modern whistleblower laws and begin providing information to regulators and prosecutors about the variety of climate risk deceptions outlined in this report.

Whistleblowers have long played a central role in exposing frauds and ensuring successful government investigations and prosecutions. In the tobacco, banking and health care sectors, for example, they are credited with producing major legal precedents and industry reforms. Their contributions to global efforts to combat private sector corruption have dramatically increased since U.S. whistleblower laws were first modernized with the 1986 amendments to the False Claims Act. More than US$2 billion in monetary sanctions have been imposed, and more than US$500 million in whistleblower awards paid, under the Dodd-Frank Act alone.[7] Prosecutors and regulators of all political affiliations strongly support these laws because they know that without whistleblowers, a large percentage of law enforcement actions would be unsuccessful.

Although improvements to climate risk disclosure rules and whistleblower laws are needed in the U.S. and around the world, the existing U.S. whistleblower legal regime offers great promise for producing near-term results in the battle against climate risk fraud by fossil fuel companies.

At the conclusion of this report, we recommend enforcement actions that can be taken today by potential whistleblowers, law enforcement officials and others to address climate risk fraud. We also recommend actions that policy makers and others can take to assist whistleblowers and otherwise improve the disclosure of climate risks by fossil fuel companies.

A PRIMER: WHISTLEBLOWER PROTECTIONS & INCENTIVES IN THE U.S.

The key to the success of modern whistleblower laws in the U.S. has been protections and incentives. Presumably, many executives at fossil fuel companies or auditing firms are witnessing frauds, and some are experiencing moral outrage. But corporate executives have voiced legitimate fears that one may not be able to blow the whistle without experiencing retaliation, sacrificing one's job and losing any ability to find a job within the industry.

Modern whistleblower award laws are designed to remedy this problem. Under these laws, anyone with original information about a potential crime can confidentially disclose such information to law enforcement authorities. If the whistleblower's identity becomes known, retaliation is strictly prohibited. If the information provided by whistleblowers to law enforcement contributes to the recovery of monetary sanctions, they are guaranteed a share of these monetary awards based on the extent to which their information contributed to the successful prosecution.

These laws facilitate prosecutions and civil actions against virtually any company doing business in the U.S., regardless of whether the company is U.S.-based. **Confidentiality and monetary awards are provided to whistleblowers regardless of location, citizenship or employment status.**

KEY FINDINGS

1 Deception about the financial risks of climate change is pervasive across the fossil fuel industry. Two categories of material information are routinely omitted from companies' statements to shareholders:

- The immediate risks that climate change poses to companies' financial condition.
- The risk that the company's asset deflation will contribute to an economy-wide financial implosion.

2 The growing role of whistleblowers in the fight against fraud means the handful of pending securities fraud cases challenging these deceptions represent just the tip of the iceberg."

- There are just five pending cases – all against Exxon – seeking judicial or administrative rulings on whether a company's statements on the financial risks of climate change constitute securities fraud under state or federal law.
- The number of cases and defendants will likely increase dramatically once potential whistleblowers learn about the protections and rewards offered by modern whistleblower law and provide detailed information about climate risk fraud to regulators and prosecutors.

3 Whistleblowers in the fossil fuel industry, like their predecessors in the tobacco, banking and health care industries, can play a central role in industry reform and help prevent a worldwide financial implosion.

INTRODUCTION

Apocalyptic Australian bushfires killing more than a billion animals. Hundred-degree temperatures in the Siberian Arctic. These are today's headlines, all written in the present tense. Climate change is no longer couched in terms of impacts that "could" be experienced if action is not taken. Increased heat, wildfires, flooding and other harmful impacts of climate change are now the reality of virtually everyone on the planet.

The greatest harm is experienced by people of color and those without the financial wherewithal to adapt. Those who suffer the most are generally those who benefited the least from the economic development made possible by fossil fuels and who contributed the least to the fossil fuel combustion causing today's climate damage.

Government and business leaders concerned about this injustice, working with civil society, have identified a wide array of solutions that can be implemented immediately to reduce suffering. Acknowledging the reality of climate change and the need to shift away from a business model dependent on high levels of carbon pollution, a small number of companies once heavily invested in fossil fuels are now shifting to low-carbon technologies.

Others are portraying themselves as part of the solution with minor investments in renewable energy or vague promises to achieve net-zero carbon emissions by mid-century. At the same time, they are engaging in aggressive spending on fossil fuel exploration and development and making price assumptions that anticipate a long-term rise in demand for fossil fuels. When fossil fuel companies' carbon reduction commitments are accompanied by business-as-usual planning and investment decisions, those commitments should be met with skepticism. Company financial statements must be carefully scrutinized for how they handle climate risks.

Climate risks have two components:

> ***TRANSITION RISKS*** are financial risks associated with the global shift away from fossil fuels as environmental policies change (through new regulations, court rulings, tax and subsidy changes, etc.), low-carbon technologies become less expensive and more available, and consumers seek low-carbon choices
>
> ***PHYSICAL RISKS*** are the risks of physical damage to property, economic productivity, and household wealth from climate change, including an increase in frequency & severity of catastrophic weather events as well as long-term environmental changes.

This report focuses on an important pathway to ensuring proper disclosures of climate risks: collaborative work by whistleblowers, law enforcement officials and regulators to enforce anti-fraud laws.

To date, climate risk disclosure has been centered around the industry-led Task Force on Climate-related Financial Disclosure (TCFD) created in 2015 by the G20's Financial Stability Board, and the Network for Greening the Financial System, launched by central banks in 2017 and now comprised of 66 central banks and supervisors.[8] These organizations are providing important leadership by designing and promoting disclosure guidelines for the global business community. However, these guidelines are flexible and voluntary, creating opportunities for greenwashing, prompting

TCFD co-founder and former Bank of England governor Mark Carney to call for a shift to a mandatory framework with comprehensive and comparable disclosures.[9]

Countries outside the U.S. are beginning to respond to this need. For example, in Australia, regulators have provided detailed instructions on how accounting estimates of climate risks must comply with disclosure requirements.[10] They have instructed auditors to consider whether there is material inconsistency between such estimates and other statements on climate risk in annual reports, as well as with other facts learned during the audit. In November 2019, the International Accounting Standards Board (responsible for accounting standards outside the U.S. and China) published an article on climate risk disclosures suggesting that this approach is required under existing IASB accounting standards.[11] In contrast, financial regulators in the U.S. have not yet signaled any intention to shift from their voluntary, flexible approach.

This report examines how fossil fuel companies are taking advantage of the lack of clear disclosure rules and omitting critical information about climate risks that affect their asset valuations and liabilities. The absence of detailed disclosure rules is *not* an excuse for fraud. It does not absolve fossil fuel companies from their obligations under U.S. securities laws to disclose information about climate risks that is material to shareholders. In fact, if such risks are intentionally concealed, companies and company executives invite criminal prosecution.

To provide a path forward, we focus on the critical partnership between whistleblowers and the chief U.S. regulator of disclosures to shareholders: the Securities and Exchange Commission (SEC). Established in 1934, the SEC has a three-part mission: to protect investors, to maintain fair, orderly, and efficient markets, and to facilitate capital formation. With a statutory structure of five commissioners, divided between nominees from both parties, it strives to maintain its reputation as a regulator that acts without political bias.

The SEC's successful implementation of the Dodd-Frank Act's whistleblower program highlights what can be accomplished when whistleblowers are properly treated as central players in law enforcement strategy. Since its inception in 2011, enforcement actions from anonymous and confidential whistleblower tips have resulted in more than $2 billion in financial remedies against corporate wrongdoing around the world, with massive securities frauds exposed and ill-gotten gains returned to shareholders.[12] As with other private sector whistleblower laws, Dodd-Frank authorizes financial awards to any whistleblower with original information, including those working outside the company where the wrongdoing is committed and those outside the U.S.

> Whistleblowers "provide an invaluable public service, and they should be supported. And, we at the SEC increasingly see ourselves as the whistleblower's advocates."
>
> *- Mary Jo White, SEC Chair, 2013-2017*

Whistleblowers have played a critical role in reining in fraud in industries ranging from tobacco to banking to health care. Lessons from those industries must now be harvested so that a new generation of whistleblowing can begin in the fossil fuel industry.

This report is a call to action for executives of fossil fuel companies and others with knowledge of improper accounting and disclosure practices, such as external auditors, to take the steps needed to obtain protected whistleblower status and work with the SEC, other regulators and law enforcement officials to help expose and prosecute fraud.

The Dodd-Frank Act and other whistleblower laws provide powerful tools for exposing and prosecuting fraud, but they have been greatly underutilized in addressing fossil fuel industry fraud. While cases of fraud in fossil fuel company valuations have been successfully pursued under federal securities law, such as in the 2015 case involving Anadarko Petroleum, which resulted in a $5.15 billion penalty, much more work remains.[13]

Failure to disclose climate risks threatens not just individual companies and their shareholders. It threatens the livability of the planet, as capital funds are diverted away from the companies building the low-carbon economy that is so essential for civilization to thrive. It also threatens the banks, investors and insurers that provide support to these companies, and ultimately the entire financial system. If major frauds by these influential companies are not prosecuted, public trust in the fair application of the rule of law will be further shaken.

SECTION I

DECEPTION BY FOSSIL FUEL EXECUTIVES REGARDING CLIMATE CHANGE'S FINANCIAL RISKS IS WIDESPREAD

Federal law prohibits public companies from making misleading statements and omissions on matters material to shareholders

Fossil fuel company disclosures on climate change risks frequently omit information that is highly material to shareholders

- Omission #1: Lack of preparedness for policies encouraging a transition away from carbon-intensive energy technologies
- Omission #2: Vulnerability to disruption from low-carbon technologies
- Omission #3: Justifications for optimistic price assumptions
- Omission #4: Plans for removing carbon from emissions
- Omission #5: Liabilities for toxic wastes, carbon pollution and other environmental impacts
- Omission #6: Climate change-related damage to infrastructure
- Omission #7: Climate risks to the global financial system

Although we reach no conclusions about actionable fraud – such conclusions are not feasible without an in-depth investigation involving whistleblowers, regulators and/or prosecutors – we find that there is abundant evidence that deception about climate risks is pervasive and that further investigation is warranted.

A. Federal law prohibits public companies from making misleading statements and omissions on matters material to shareholders

Under U.S. securities law, fraud is regulated in three ways: the SEC can bring a civil enforcement case, shareholders can file a private civil enforcement case, or the Department of Justice (DOJ) (often working with the SEC) can bring a criminal case. In all three types of cases, the Securities Act and Securities Exchange Act require that three elements be proven:

- A material misstatement or omission by the defendant
- Scienter, *i.e.*, intention to deceive, manipulate, or defraud
- A purchase or sale of a security

Scienter is easier to prove in an SEC civil case than in a criminal action because many courts allow circumstantial evidence of intent such as recklessness and the low-threshold "preponderance of the evidence" standard applies. In criminal cases, by contrast, the DOJ must prove willful misconduct, and its entire case must be proven "beyond a reasonable doubt." In a private case, shareholders must prove the above three elements *plus* reliance upon the material misstatement or omission, economic loss or damages, and a causal connection between the misrepresentation and loss.[14]

B. Fossil fuel companies' disclosures on climate change risks frequently omit information that is highly material to shareholders

In this report, we find that fossil fuel companies' public statements to shareholders frequently omit material information about seven climate risks. The deceptions can be grouped into three broad categories: overstating the value of reserves (Omissions #1-4), understating environmental liabilities (Omission #5) and understating the physical risks to infrastructure (Omission #6). Omission #7 addresses all three categories because it deals with failures to disclose the systemic risks posed by the company's asset deflation.

Omission #1: Lack of preparedness for policies encouraging a transition away from carbon-intensive energy technologies

Transition risk is an enormous financial risk facing fossil fuel companies. Among other things, it includes the risk of new regulations discouraging use of fossil fuels, withdrawals of subsidies, and court rulings ordering the payment of billions ($US) for the massive climate damages that fossil fuel companies are currently shifting to state and local governments and others.

For those who evaluate transition risk, a key turning point was 2015. That year, policy makers from across the global community came together at the UN Climate Change conference in Paris and agreed that to have any chance of preserving a habitable planet, atmospheric temperatures must be kept "well below" 2 degrees Celsius above preindustrial levels. UN member nations agreed to enact national plans consistent with the 2 degrees target and further agreed that they would "pursue efforts to" limit the temperature increase to 1.5 degrees Celsius. To date, 192 countries accounting for almost 97 percent of global emissions have submitted their plans to the UN's climate change secretariat.[15]

OIL AND GAS MAJORS & THE AFTERMATH OF THE PARIS AGREEMENT

According to research by Influence Map, in the three years following the signing of the Paris Agreement, the five oil and gas majors spent over USD$1 billion to persuade investors, policy makers and the public not to take the agreement and the climate change problem seriously.[16] In November 2019 the U.S. formally initiated its withdrawal from the Paris Agreement; the withdrawal will take effect on November 4, 2020.

Despite this, new carbon reduction commitments to advance the Paris Agreement are coming from the U.S., with cities, states, and other non-state actors pledging to carry out climate change actions in furtherance of the Paris targets through the America's Pledge initiative.[17]

New policies to implement the national plans are virtually inevitable, even if they do not fully succeed in meeting Paris targets. Such policies will, by definition, give low-carbon technologies an enormous competitive advantage over fossil fuel companies, making fossil fuels more costly to produce and more expensive for consumers to buy.

Before the Paris Agreement, the financial think tank Carbon Tracker devised the concept of a "carbon bubble" to describe the reserves on the books of fossil fuel companies that could not be burned while staying below a 2°C scenario.[18] Numerous studies have shown that these companies now face the risk that a significant portion of their assets will become stranded. Carbon Tracker estimated that to stay within the 2°C limit, over two-thirds of the reserves of oil and gas and coal companies would need to be kept in the ground.[19] A 2018 study in *Nature* found that to remain below the 2°C limit, 80% of fossil fuel reserves would need to be left in the ground. In 2019, the Center for International Environmental Law found that the carbon emissions from existing proved oil and gas reserves alone would significantly exceed current predictions for a carbon budget.[20]

Put simply, failure by companies holding significant fossil fuel assets to participate in the "energy transition" (*i.e.,* the transition to a low-carbon economy) could leave the energy sector with billions of dollars in stranded assets and, given the risks of sudden and massive deflation of assets, pose a severe threat to the world's financial system.

Despite these risks, the industry continues to spend aggressively on exploration and development, approving projects incompatible with a low-carbon economy. 2019 marked a four-year high for the oil and gas sector, with Exxon leading the way.[21] According to Andrew Grant, Senior Analyst at Carbon Tracker, "[e]very oil major is betting heavily against a 1.5˚C world."[22]

The fossil fuel industry recognizes that maintaining its credibility with investors and lenders is key to its growth strategy. Analysis from the Rainforest Action Network shows that since the Paris Agreement, the industry has persuaded investors to provide more than US$2.7 trillion in financing for exploration and development, with amounts growing steadily each year.[23] A 2019 report from Global Witness identified US$4.9 trillion in forecasted capital expenditures, all incompatible with limiting warming as called for in the Paris Agreement. (Global Witness used the more aggressive 1.5°C Paris target rather than 2°C.)[24]

Longtime investors in fossil fuels are now acknowledging climate reality and signaling that major changes are underway. For example, Larry Fink, CEO of investment banking firm BlackRock, the world's largest money manager with nearly US$7 trillion in assets, stated in a January 2020 letter to CEOs that climate change is now "a defining factor in companies' long-term prospects."[25] Fink further stated that "climate change is almost invariably the top issue that clients around the world raise with BlackRock" and "the evidence on climate risk is compelling investors to reassess core assumptions about modern finance."[26] Fink pledged that BlackRock would begin to exit investments in coal production, introduce funds that ban fossil-fuel stocks and vote against corporate managers who aren't making progress on fighting climate change.

WHAT'S NEXT FOR BLACKROCK?

Left unaddressed in CEO Fink's January 2020 letter was any commitment from BlackRock to exit investments in oil and gas production. Yet, like coal companies, oil and gas companies are far out of alignment with Paris carbon reduction goals. According to Kathy Hipple of the Institute for Energy Economics and Analysis (IEEFA), co-author of a report on the growing rationale for divesting from the fossil fuel industry, "the sector is ill-prepared for a low-carbon future, based both on idiosyncratic factors affecting individual companies, as well as an industry-wide failure to acknowledge, and prepare for, an energy transition that is gaining momentum and changing the very nature of how energy is produced and consumed."[27] Financing for oil and gas projects as well as coal projects is the target of major advocacy campaigns such as Stop the Money Pipeline, campaigns that will almost inevitably increase the costs and difficulty of fossil fuel production.[28]

Only a close examination of the financial statements of individual fossil fuel companies will determine which are truly prepared for new energy policies and which are using deceptive tactics to conceal lack of preparedness. Whistleblowers, particularly those inside these companies and the companies that audit them, will be key to this examination.

Omission #2: Vulnerability to disruption from low-carbon technologies

Extensive research shows that wind and solar energy and other low-carbon technologies have sufficiently cut costs and addressed reliability concerns to significantly reduce fossil fuel demand in most places around the world. The weaknesses of fossil fuel sources of energy compared to low-carbon technologies are structural, not only attributable to the recent declines in demand caused by the Covid-19 pandemic. Moreover, they exist regardless of the enactment of new climate policy. A July 2018 study in *Nature* found that, even without additional climate policy, competition from renewable energy and changing demand alone will lead to significant impairments for major oil and gas assets and that these impairments could accelerate with an anticipated sell-off by lower cost fossil fuel producers.[29]

Coal is particularly vulnerable to competition from low-carbon technologies. It already has experienced steep declines in the U.S. and European markets due to competition from natural gas and renewables. In June 2020, the Rocky Mountain Institute and others conducted an in-depth analysis of world energy markets and concluded that "new renewables are now cheaper than new coal plants virtually everywhere."[30]

Renewable energy is competitive with fossil fuels even where they currently dominate and benefit from a lengthy history of publicly supported infrastructure, such as in surface transportation. In August 2019, BNP Paribas, the world's eighth largest investor by assets, issued a report on the role of oil in electric power and surface transportation and found the following:

> **The death toll for petrol.** With 36% of demand for crude oil today accounted for by LDVs [light-duty vehicles] and other vehicle categories susceptible to electrification, and a further 5% by power generation, the oil industry has never before in its history faced the kind of threat that renewable electricity in tandem with EVs [electric vehicles] poses to its business model: a competing energy source that (i) has a short-run marginal cost (SRMC) of zero, (ii) is much cleaner environmentally, (iii) is much easier to transport, and (iv) could readily replace up to 40% of global oil demand if it had the necessary scale. We conclude that the economics of oil for gasoline and diesel vehicles versus wind- and solar-powered EVs are now in relentless and irreversible decline, with far-reaching implications for both policymakers and the oil majors.[31]

Renewable energy competes extremely well against fossil fuels in the U.S. A June 2020 report by the University of California, Berkeley, and others concludes that by 2035, the U.S. electric grid could get 90 percent of its power without greenhouse gas emissions while lowering electricity rates.[32] To achieve this, the country would need to increase its use of renewables, energy storage and transmission lines while closing all coal plants and slashing natural gas use by 70 percent.[33]

The extent to which fossil fuel companies have addressed their vulnerabilities to these disruptions from low-carbon technologies in internal analyses and failed to disclose the conclusions with shareholders will likely only be known with the help of whistleblowers.

Omission #3: Justifications for optimistic price assumptions

According to the Public Company Accounting Oversight Board (PCAOB), a key fraud risk indicator is "significant declines in consumer demand."[34] The natural inclination of companies unprepared for such declines is to attempt to hide them and thereby avoid embarrassing asset write-downs. ("Writing down" an asset means recording an impairment charge against the company's earnings to reflect a more pessimistic assessment of the asset's fair market value.)

The best indication of whether fossil fuel companies are being forthright about declining consumer demand is their long-term price forecasts, which evaluate demand relative to supply. A 2018 report by asset manager Sarasin & Partners found evidence of a "systemic overstatement of capital and profits linked to overly optimistic long-term oil price assumptions that fail to take account of the international commitment to phase out fossil fuels."[35]

A group of twenty-two institutional investors led by Sarasin & Partners then sent letters to BP, Shell, and Total in November 2018 expressing concern that the companies were overlooking material climate considerations and consequently potentially overstating both performance and capital.[36] The nonprofit law firm Client Earth sent a similar letter to oil and gas and coal companies, noting that bullish forecasts increase companies' exposure to shareholder lawsuits, especially given the risk that confidential internal documents will be released showing that material information was withheld from shareholders.[37]

With a long-term decline in prices, significant investments become unprofitable. Kathy Mulvey at the Union of Concerned Scientists notes that some of the industry's most carbon intensive projects, including the development in Canadian oil sands, were built

-$5.3B

Repsol, December2019

Spanish energy giant Repsol wrote down assets by USD$5.3 billion in December of 2019.

-$17.5B

BP, May 2020

In an unexpected move in May 2020, BP lowered its price assumptions and slashed US$17.5 billion from the value of its assets.

-$22B

Shell, June 2020

The latest oil major to reduce the value of its assets, Shell, announced it would be cutting USD$22B in June 2020.

with the expectation of prices as high as $80.[38] Whether particular companies will be resilient to price drops may depend on their exposure to low-margin assets. A report from Wood Mackenzie finds Exxon at greatest risk, with 60% exposure to the 30 lowest margin assets owned by supermajors, including assets in Canadian oil sands and Alaska's Prudhoe Bay.[39]

Key players in the industry are now acknowledging that price assumptions are unrealistically high. In December 2019, Repsol announced it would write down assets by US$5.3 billion.[40] In May 2020, in an unexpected move, BP announced it was lowering its price assumptions and slashing up to US$17.5 billion from the value of its assets. At the time, the Financial Times considered it "the biggest recognition yet in the oil and gas industry that tens of billions of dollars' worth of investments could be rendered uneconomic as the world pursues the Paris climate goals."[41] Then, in June 2020, Shell announced it would be cutting the value of its oil and gas assets by US$22 billion.[42]

No independent analysis has yet suggested these adjusted valuations mean that the industry's price outlooks now reflect the reality of climate change and the energy transition. In fact, a June 2020 report from Carbon Tracker finds the recent write-downs merely reflect the severity of previous overestimates and that no oil and gas major has yet disclosed price assumptions aligning with Paris goals.[43] Notably, U.S.-based Exxon, ConocoPhillips and Chevron have refused to disclose their outlooks.

Only in-depth scrutiny of financial statements, with the help of whistleblowers, will determine whether price outlooks represent honest assessments of future demand or efforts to conceal a management failure to adequately deal with transition risk.

Omission #4: Plans for removing carbon from fossil fuel emissions

Some European fossil fuel companies have responded to climate change concerns by setting ambitious carbon reduction goals. For example, in December 2019, Repsol stated it would produce "net zero" carbon emissions by 2050. However, as highlighted in a May 2020 briefing paper by the investor-led Transition Pathways Initiative (TPI), the companies have not disclosed their strategies for achieving their carbon reduction goals; TPI infers that they are counting on unproven carbon capture and sequestration (CCS) strategies rather than significant cutbacks in exploration and production.[44]

According to the IPCC, because carbon capture has not been deployed at a meaningful scale, "reliance on such technology is a major risk in the ability to limit warming to 1.5°C."[45] A Global Witness report finds that "[d]espite considerable effort, including the commitment of $28 billion of public funds to CCS projects, there are only two operational in the power sector worldwide. Yet both use the captured CO2 to enable further oil extraction, in turn leading to further CO2 emissions."[46]

Close scrutiny of fossil fuel company financial statements, aided by whistleblowers, will be needed to ensure against fraudulent claims of alignment with Paris or other measures of climate progress.

Omission #5: Liabilities for toxic wastes, carbon pollution and other environmental impacts

The fossil fuel industry has failed to fully disclose its enormous liabilities associated with the toxic wastes and other environmental impacts of its extraction activities that are rarely addressed in detail in public statements. We focus here on three types of liabilities.

THE OPTION OF FOSSIL FUEL DIVESTMENT & REDEPLOYMENT OF CAPITAL

Some energy companies have acknowledged climate change risks by exiting from fossil fuels investments altogether. For example, Orsted, once known as Danish Oil and Natural Gas, is now a global leader in offshore wind development. It has been steadily divesting its fossil fuel assets and aims to reach 99 percent renewable energy production by 2025. So far, Orsted's bet has paid off: On July 7, 2020, the Financial Times reported that in the past three years, Orsted's valuation rose 175%, allowing it to catch up to BP, whose stock has fallen by a third in the same period. Unfortunately, the energy industry as a whole has not redeployed its capital to take advantage of the growing demand for climate solutions. Between 2015 and 2019, less than one percent of capital expenditure in the oil and gas industry was dedicated to low-carbon businesses.[48]

First, oil and gas companies are required by law to close wells no longer in use in accordance with environmental standards. As demand for fossil fuels falls below the projections that justified development of wells, companies must accelerate the date of the wells' retirement. Thus, companies are forced to pay for environmental remediation costs that they may not have planned for despite their foreseeability. Carbon Tracker refers to these costs as "stranded liabilities" because, like stranded assets, they represent financial losses stemming from a company's failure to anticipate and prepare for the energy transition.[49]

Second, regardless of asset retirement dates, both oil and gas and coal companies have spent decades accumulating extensive liabilities for the costs of remediating toxic wastes and other environmental damage from their extraction activities and chemical businesses. Failure to disclose these costs has sometimes led to liability for securities fraud. In 2015, oil & gas company Anadarko Petroleum (now owned by Occidental Petroleum) agreed to a $5.15 billion penalty to settle allegations that Kerr-McGee Corporation (acquired by Anadarko) had fraudulently sold assets in order to avoid substantial environmental liabilities when spinning off a new company.[50]

Third, the industry faces enormous potential liabilities for damages caused by its carbon pollution. In Section IV, we describe the pending lawsuits filed by states, local governments and individuals to recover these damages. A small number of companies including Shell, Occidental Petroleum, ConocoPhillips, and Arch Coal have briefly acknowledged the risks created by climate litigation in their financial disclosures.[57] However, no company has fully grappled with the possibility that it will be forced by court order to halt major projects and compensate plaintiffs for the many billions ($US) they have lost and will lose due to climate change-related damage.

THE CASE OF MURRAY ENERGY

Some fossil fuel companies are notorious for evading the costs of environmental cleanup, as well as liabilities from pension plan obligations. A common practice is to shed such liabilities in bankruptcy or to offload them onto poorly managed companies destined for bankruptcy. A 2004 report by the Rose Foundation found that BP, ConocoPhillips, Chevron USA, Oxy USA and Atlantic Richfield had offloaded millions in asset retirement obligations by selling old wells to Panoco, a smaller company that declared bankruptcy after racking up $60 million in costs for decommissioning wells.[51] A 2019 study of coal companies published in the Stanford Law Review found that between 2012 and 2017, four of the largest coal companies in the U.S. managed to evade US$5.2 billion of environmental and retiree liabilities by filing for bankruptcy.[52]

The recent Murray Energy bankruptcy demonstrates that some companies simply prefer not to use their available funds to cover responsibilities to workers and the environment.[53] In 2019, Murray Energy filed for bankruptcy seeking protection from $2.7 billion in debts and more than $8 billion in obligations, in large part pension and health care plans for coal miner employees.[54] The company is led by Robert E. Murray, a vocal denier of climate change and frequent requestor of federal government subsidies on his company's behalf.[55]

Bankruptcy filings show that Murray earmarked nearly $1 million to fund political action committees and groups working to deny climate change and roll back emission reduction laws. For example, Murray gave $300,000 to Government Accountability & Oversight, a group that describes its efforts as an "antidote" to climate campaigner efforts.[56] Other beneficiaries include the Competitive Enterprise Institute, a free-market think tank that denies human activity is the main cause of global warming, and the Heartland Institute, which has worked for years to instill doubt about climate science.

Omission #6: Climate change-related damage to infrastructure

The physical risks of climate change affect the fossil fuel sector more than many other sectors. Fossil fuel companies' valuations are closely linked to long term capital investments, so if these investments are threatened by climate change-related events, significant asset retirements and write-downs may be necessary. Adding to the risk is the fact that the revenue streams supporting financing for these investments comes from prices set in volatile commodities markets.

The oil and gas sector relies heavily on infrastructure that is highly exposed to climate-related shocks and not easily moved. An Australian National University report finds that the oil and gas industry will face particularly severe risks to key infrastructure from melting permafrost, severe flooding, cyclones, storm surges and sea level rise at coastal oil refineries, and fires that could be initiated or exacerbated by pipeline explosions or gas leaks.[58] Higher temperatures can also impact LNG operations due to the need to chill natural gas in order to liquify it.[59]

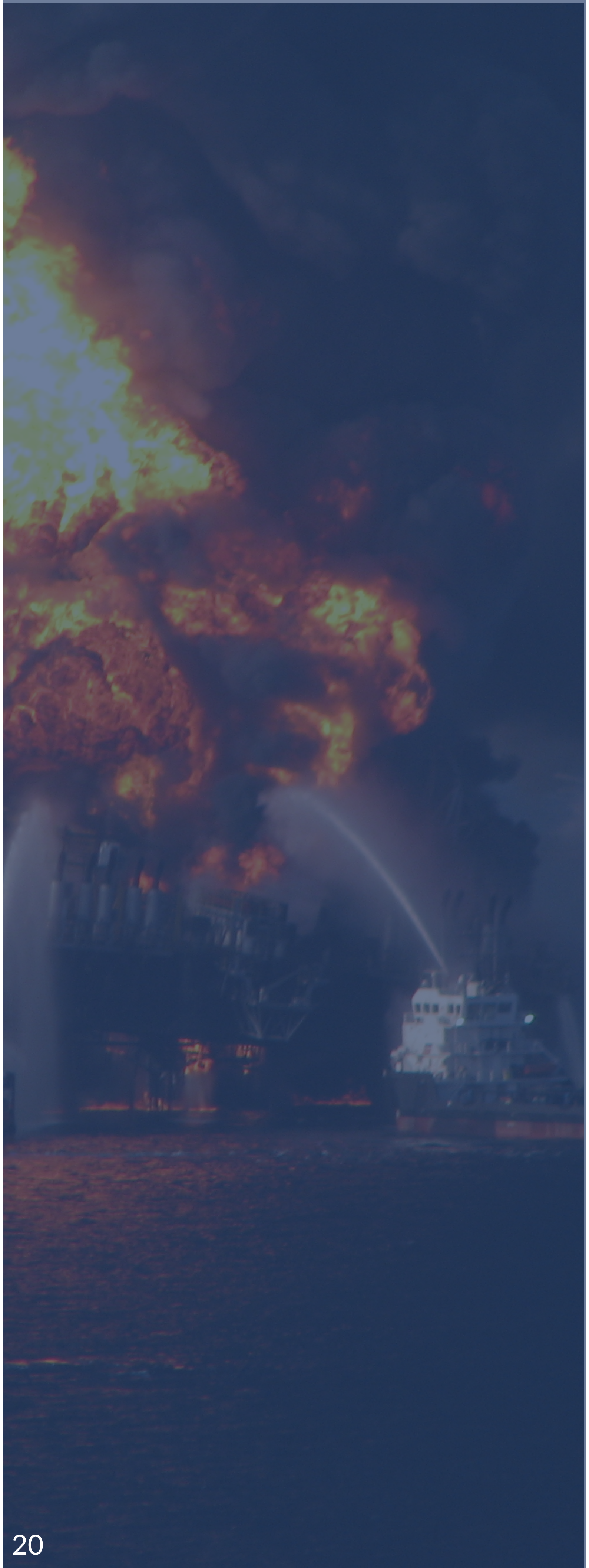
Climate-related damage to infrastructure not only leads to expensive repair costs but also increases the risk of environmental disasters that lead to significant cleanup liabilities. For example, Bloomberg reported that melting permafrost appears to be the cause behind a devastating fuel spill in May 2020 in Russia.[60]

According to an article published in Nature Energy in February 2020, Paul Griffin finds that the failure of the energy industry to account for the impacts of extreme weather has led to significant "unpriced risk."[61] The oil and gas industry is particularly susceptible, according to Griffin, because of the disproportionate vulnerability of oil and gas infrastructure, particularly in the Gulf of Mexico and along the Gulf Coast.[62] The vulnerability of energy infrastructure means that "the short- and long-term effects on shareholder value of corrections to physical climate risk underpricing from extreme weather will be much greater" than in other industries.[63]

2010 DEEPWATER HORIZON EXPLOSION

As climate change increases the frequency and intensity of extreme weather events, companies that fail to prepare will face a greater risk of infrastructure damage and disasters. The BP Deepwater Horizon offshore drilling rig blowout highlights the critical role whistleblowers could play in exposing companies that make fraudulent statements about their emergency preparedness. Three months before the explosion, BP well manager Ronald Sepulvado had reported to his superiors that key safety tests were not conducted at the Deepwater Horizon site, which had been plagued with mechanical problems and lax safety practices: His concerns were ignored.[64]

After the explosion, an investigation by the Associated Press found BP had vastly overstated its preparedness to deal with a major leak while understating and misstating the dangers that a spill would pose to local environmental and public health.[65] Under the Consent Decree reached with the Department of Justice, BP agreed to pay a $5.5 billion Clean Water Act penalty, $8.1 billion in environmental damage, $700 million for adaptive management, and $600 million for other claims such as claims under the False Claims Act and royalty payments.[66] This case shows that companies that fail to heed whistleblower disclosures about risk and emergency preparedness in order to save money in the short run may pay a much greater price later, to the detriment of shareholders.



The fossil fuel industry has known about physical risks of climate change for decades. In fact, investigations by journalists at the Los Angeles Times revealed that the industry was working behind-the-scenes to prepare infrastructure for rising sea levels while simultaneously funding climate denial campaigns.[67] Further investigative work supported by whistleblowers is needed to expose similar deceptions.

Omission #7: Climate risks to the global financial system

In addition to the risks presented to specific assets and investments, fossil fuel companies have engaged in deception surrounding how they exacerbate the systemic risks posed by climate change. Systemic risks are those that go beyond firm-specific or even industry-specific risks to affect the majority of asset classes, industries, and economies, creating the potential to destabilize the entire global economy.[68] According to the Sustainability Accounting Standards Board, 93% of U.S. industrial sectors will be impacted by significant climate risks.[69]

In contrast to firm-specific risks, investors cannot manage systemic risk through traditional risk management strategies such as diversification. According to Ceres, the various risks created by climate change across industries present a systemic danger because they will not just add up, but the interconnected nature of these risks will cause them to multiply.[70]

For those investors concerned with long-term sustainability, systemic risks created by fossil fuel companies are perhaps the most material of all climate risks because they have large-scale reverberating effects across the economy. Adam Tooze of Columbia University has found that, across global financial markets, “one-third of equity and fixed income assets are tied to carbon-intensive industries.” The Center for American Progress has highlighted the fact that sudden impacts on the fossil fuel industry created by transition risks such as major changes to carbon prices or asset write-downs could ripple across the entire financial system.[71]

Leading experts on global finance, including Mark Carney, former Governor of the Bank of England, and Jim Yong Kim, President of the World Bank Group, have long warned about threats posed by climate change to global financial markets. This sense of alarm is shared by asset managers. A July 2020 letter sent to the SEC and other regulators on July 21, 2020, from a group representing $1 trillion in assets states that "the climate crisis poses a systemic threat to financial markets and the real economy."[73]

The complaint filed by the Commonwealth of Massachusetts in October 2019 against Exxon is the first legal action to address a failure to disclose systemic risk. In the complaint, amended in June 2020, Massachusetts alleges that Exxon misled investors not just about the impact of climate change on Exxon's business and the fossil fuel industry, but also about the impact on the global economy and the world's financial markets.[74] By presenting itself as a "thought leader on energy trends and policies," the amended complaint alleges that the company engaged in a "broad strategy of deceptive communications" designed to obscure systemic global risks by claiming, among other things, that fossil fuel demand will inevitably grow.[75]

The amended complaint highlights that these assumptions rely on projections that assume substantial economic growth in developing countries, while omitting how the risks created by climate change will negatively impact the economies in these same countries.[76] According to the complaint, Exxon's public disclosures "have obscured and had the effect of worsening the systemic risks identified by regulators to the world's financial system."[77]

Systemic risks posed by the company's asset deflation are rarely discussed in the public statements of fossil fuel companies. Whistleblowers, working with prosecutors and regulators, will be needed to efforts to conceal material facts concerning systemic risks and, when justified by the evidence, to assist with prosecutions for fraud.

SECTION II

ANALYSIS OF THE “FRAUD TRIANGLE” SUGGESTS THAT FOSSIL FUEL INDUSTRY DECEPTION IS LIKELY TO BE ACTIONABLE FRAUD

Incentives given to fossil fuel industry executives create a high likelihood of financial fraud

A lack of accounting transparency and accountability creates significant opportunities for fraud

- Rubber Stamping of Reserve Valuations by “Independent” Auditors
- Auditors’ Failures to Investigate Environmental Liabilities

Given the fossil fuel industry’s decades of successful climate change deception, continuing rationalizations for fraud on this subject are likely

The omissions discussed in Section I warrant additional investigation to determine the likelihood of fraud. To detect high fraud risk, anti-fraud professionals frequently use an approach, drawn from criminology research, called the "fraud triangle." In essence, they assess companies or an industry sector for the presence of three conditions that lead to a higher risk of fraud: incentives, opportunities, and the predisposition to rationalize fraud.

The PCAOB and SEC have adopted the fraud triangle approach in their guidance to independent auditors identifying risks of fraud in connection with financial statements.[78] Although auditors do not determine whether companies have committed fraud or unintentional error in connection with financial statements, the PCAOB and SEC call for them to address the *risk* that material misstatements may be due to fraud.

The three components of the fraud triangle are also used by courts to decide if there is enough evidence of fraudulent intent, known in the law as "scienter." Under case law interpreting Section 10(b) of the Securities and Exchange Act and SEC Rule 10b–5, the SEC must show that the defendant had both motive and opportunity to commit fraud or that the facts constitute strong circumstantial evidence of conscious misbehavior or recklessness.[79]

We apply the PCAOB's and SEC's fraud triangle guidance to assess the likelihood of fraud in fossil fuel companies' statements of capital and profits, which together make up the companies' valuation. We focus on potential frauds in three broad categories: overstating the value of reserves, understating environmental liabilities and understating the physical risks to infrastructure.

A. Incentives given to fossil fuel industry executives create a high likelihood of financial fraud

We begin with an analysis of the first of the three components of the fraud triangle, the *incentives* in the industry to commit fraud. The fossil fuel sector is a prime example of an industry sector with incentives to commit fraud given that its financial stability and profitability are greatly threatened by industry conditions and larger economic trends.

Incentives to engage in fraudulent concealment of weaknesses are reflected in the industry's executive incentives structure. Fossil fuel companies have historically tied executive pay to increases in share prices, even if those price increases reflect strategies that put the company further out of alignment with Paris targets. A 2014 report from the Institute for Policy Studies found that executives of the 30 largest U.S. publicly-held oil, gas, and coal companies averaged $14.7 million dollars in compensation, 9% higher than the S&P executive average, and that each oil and gas company examined used reserve replacement ratios as an incentive criteria.

The report highlighted states that this incentive structure creates "an enormous personal incentive to spend billions per year developing new fossil fuel reserves that cannot be exploited without destabilizing the climate."[80] There is also no sign that fossil fuel companies plan to change these incentives; the Carbon Tracker report Paying with Fire found that in 2019, 26 out of 30 largest listed oil and gas companies still based incentive structures on production volumes and growth metrics such as reserve replacement ratios.[81]

A key indicator highlighting the incentive to commit fraud is "excessive pressure on management or operating personnel to meet financial targets set up by the board of directors or management."[82] With incentives tied to increased production and the discovery of new reserves, executives have little incentive to adjust to a low-carbon pathway. As companies pursue growth while also making bold public claims about net-zero goals, this strategy will put pressure on executives to meet increasingly contradictory or even impossible targets, creating short-term incentives to conceal these problems through financial fraud.

B. A lack of accounting transparency and accountability creates significant opportunities for fraud

Under the fraud triangle approach, the second condition suggesting a high risk of fraud is opportunities to commit fraud. Opportunities to commit fraud are abundant at companies where strong transparency and accountability measures are not established. To identify opportunities for fraud, researchers commonly point to structural factors including internal controls or auditing procedures, regulatory oversight, and economic conditions that may weaken oversight or internal controls, such as a financial crisis.

The primary check against fraud in a publicly traded company is the review performed by independent auditors. However, for at least two reasons, auditors' effectiveness in detecting and reporting fraud in the fossil fuel sector is lower than in other industry sectors.

Rubber Stamping of Reserve Valuations by "Independent" Auditors

First, company valuations are linked to the value of proven reserves. The technical and complex nature of reserve estimates makes it difficult for auditors inexperienced in reservoir engineering to examine properly the accuracy of company reports. Auditing firms have little incentive to address this shortcoming and thereby jeopardize repeat business.

Auditing firms have a track record of reinforcing this dynamic by assigning junior auditors to examine reserve valuations; these junior auditors typically lack the required knowledge and experience to properly examine reserve valuations. Their lack of qualifications means that they are not in the position to analyze key unstated assumptions that drive valuations.

For example, in 2017, auditing company KPMG paid $6.2 million to settle allegations that it failed to catch a former penny stock company Miller Energy, which transformed itself into an exchange-listed energy company by inventing more than $400 million dollars in value in oil and gas assets. According to the SEC's order, KPMG did not properly staff the audit and failed to properly assess risks by relying on an inaccurate reserve report.[83]

Although the SEC has given guidance to oil and gas companies on carrying out reserve valuations, there is no equivalent guidance on review of those valuations by external auditors, and few auditors have the needed expertise to undertake such reviews.[84] There are no legal requirements that qualified auditors be used; in fact, oil and gas companies are not required by the SEC to use external auditors to oversee reserve valuations at all.

An analysis of the U.S. shale industry by the nonprofit news outlet DeSmog shows how it has long been known in the industry that reserve valuation methods developed for convention oil and gas wells are not suitable for wells in shale country, where modern extraction technologies lead to faster well decline rates and lower total production. Despite this routine use of a flawed methodology, auditors routinely bless inflated reserve estimates, allowing oil and gas companies to use deception to attract hundreds of billions in dollars in loans.

JP Morgan estimated that in 2019, banks were forced to write off approximately $1 billion in loans to shale companies, exceeding their total losses for the past 30 years; it predicted that such massive losses would continue in the coming years. According to DeSmog, with supposedly independent entities rubber-stamping companies' valuations, the oil and gas industry could have its "own version of the sub-prime mortgage rating debacle."

Auditors' Failures to Investigate Environmental Liabilities

Fossil fuel company valuations are dependent on reserves, but also on significant environmental liabilities that are inextricably linked to a company's assets, including both environmental remediation liabilities (ERLs) and asset retirement obligations (AROs). The accuracy of environmental liabilities can be difficult to confirm, and a Government Accountability Office study highlights that "determining what companies should be disclosing is extremely challenging without access to company records."[85]

A study of how U.S. oil and gas majors were accounting for environmental debt from 2003 to 2014 found an "alarmingly high" rate of revisions to expected cash flow for previously recognized liabilities, suggesting that companies were not reliably estimating asset retirement obligations.[86] According to the study, "significant disclosure is required in order for an outside analyst to deconstruct a company's accounting estimates and assess the reasonableness of the embedded assumptions. Sufficient disclosures, however, are often unavailable."[87]

Whistleblower disclosures will be essential to compensate for these insufficient company disclosures and the structural failures of the external audit process.

C. Given the fossil fuel industry's decades of successful climate change deception, continuing rationalizations for fraud on this subject are likely

Under the fraud triangle approach, the third condition suggesting a high risk of fraud is the ability for employees to rationalize fraud. Employees may have an easy time rationalizing fraud, for example, when they perceive that executives condone fraud or believe that fraud is widespread across an industry. Anti-fraud professionals also look to economic factors that can be used to rationalize fraud, such as the belief that fraud is necessary to help a business survive a financial crisis.

The high level of rationalization of fraud in the fossil fuel industry is apparent from two surveys of industry employees on ethics. A 2013 KPMG study found that 74% of employees in the energy and natural resources industry reported that they had personally seen or had first-hand knowledge of misconduct, and 53% identified this misconduct as severe enough to cause a "significant loss of public trust if discovered."[88]

In a 2016 survey of the oil and gas sector and mining sector (which includes coal), the management consulting firm EY found that 35% of respondents would "act unethically to help a business survive an economic downturn."[89] EY concluded that increased pressure on managers provides "a strong incentive to do whatever it takes to make the numbers look good." Rationalization of cheating appears to be prevalent in the fossil fuel sector. In the same EY survey referenced above, 43% of respondents said that "potentially unethical action could be justified to meet financial targets."[90]

Attitudes toward fraud can also be understood by evaluating an industry's track record. The fossil fuel industry has a long history of fraud and deception, from systematic underpayment of oil and gas royalties[91] to schemes by mining companies to defeat benefit claims from miners with black lung disease.[92]

This attitude is perhaps best reflected by the campaign waged by leading players in the fossil fuel industry to deceive policy makers and the public about the causes and consequences of climate change, discussed in Section IV. Although important work has already been done to expose this massive disinformation campaign, whistleblowers will be essential to exposing further deceptive tactics to delay climate action.

SECTION III

THANKS TO AWARD LAWS, WHISTLEBLOWERS AROUND THE WORLD ARE WELL-POSITIONED TO LEAD A NEW MOVEMENT AGAINST FRAUD IN THE FOSSIL FUEL INDUSTRY

U.S. securities laws provide a framework for addressing fraudulent climate risk disclosures by fossil fuel companies

The Dodd-Frank Act has demonstrated the power of offering awards and confidentiality for whistleblowers around the world

Other key award laws can be used to fight fossil fuel industry fraud

Whistleblowers are needed to protect investors, the environment and the economy

Whistleblowers in the banking, tobacco and health care industries provide success models for fighting fraud in the fossil fuel industry

New policies are needed to strengthen and supplement enforcement

To fully address the need for meaningful climate risk disclosures by fossil fuel companies doing business in the U.S., U.S. laws on corporate governance must be used to prompt such disclosures and prevent misleading omissions. We discuss the most critical governance laws, virtually all of which have powerful whistleblower provisions.

A. U.S. securities laws provide the framework for addressing fraudulent climate risk disclosures by fossil fuel companies

The Securities and Exchange Act and Securities Act contain powerful anti-fraud provisions

The Securities Act and Securities Exchange Act, which regulate the buying and selling of securities in the U.S., were passed in the 1930s to prevent a repetition of the fraud that contributed to the massive business failures of the Great Depression. Nearly 100 years later, they remain the U.S.'s most powerful tools for preventing fraud against shareholders and potential shareholders by publicly traded companies.

Investor protection and market integrity are the fundamental objectives of these laws. The Securities Act of 1933 mandates that investors receive financial and other significant information concerning securities being offered for public sale and prohibits deceit, misrepresentations and other fraud in the sale of securities. The Securities Exchange Act of 1934 regulates the trading of registered securities and gives the SEC broad authority over all aspects of the securities industry.

As explained in Section I, these two laws establish that in bringing a securities fraud case, the SEC must prove that a defendant (which can be a company or individual) has engaged in a material misstatement or omission, with scienter, in the buying or selling of securities. Private litigants must also show reliance on the material misstatement or omission, economic damages, and a causal link between reliance and damages.

To date, SEC has used these securities laws to challenge fraudulent valuations by fossil fuel companies, but only to a limited extent. In 2017, the SEC brought a fraud action against Rio Tinto and its CEO and CFO, challenging their concealment of the dramatic decline in value of their coal business in Mozambique.[93] A federal court recently rejected Rio Tinto's motion to dismiss and allowed the case to proceed. It is unclear whether a whistleblower is involved in this case: SEC does not disclose the involvement of whistleblowers so as not to jeopardize whistleblower confidentiality and anonymity.

As discussed in Section IV, to date the SEC has not taken any enforcement actions with respect to the key aspect of valuation that is the focus of this report: disclosures regarding how the company is addressing climate change risk.

The Sarbanes-Oxley Act sets forth important corporate governance requirements and whistleblower protections

The two primary federal laws outlining the disclosure obligations of publicly traded companies and setting forth other corporate governance requirements are the Sarbanes-Oxley Act and the Dodd-Frank Act (discussed in the next section).

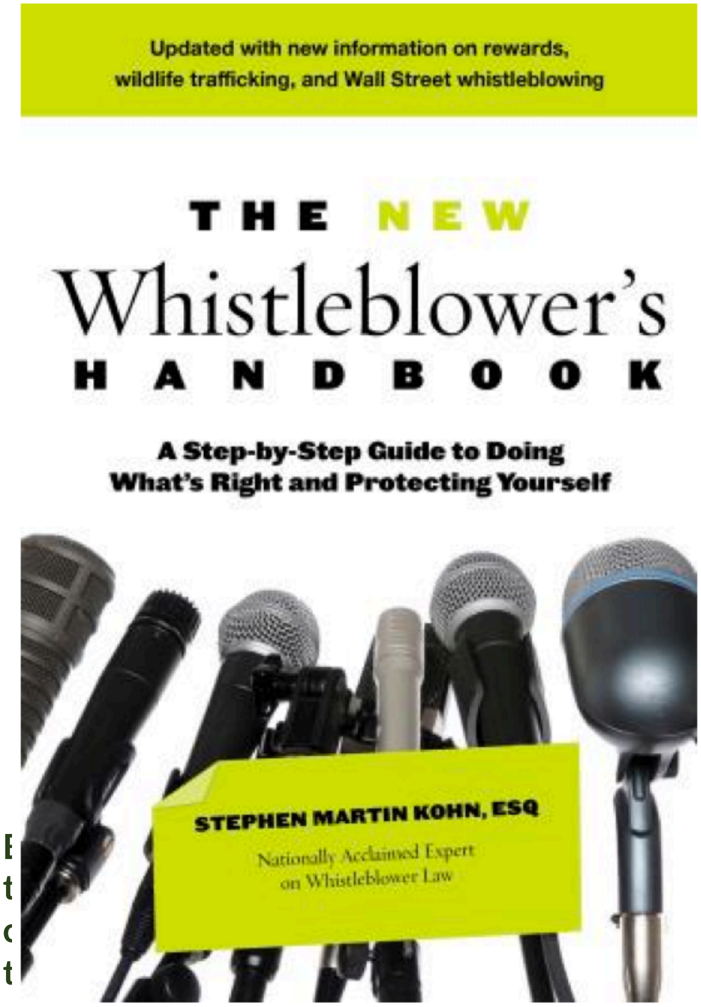
The Sarbanes-Oxley Act was enacted in 2002 following the devastating collapse of two of the U.S.'s largest publicly traded companies, Enron and WorldCom. Massive fraud at these two companies had been reported internally by whistleblowers Sherron Watkins and Cynthia Cooper, respectively, and then brushed aside by top management before the companies imploded.

Sarbanes-Oxley contains a host of provisions designed to address these and other breakdowns in corporate governance.

For example, it requires establishment of confidential and anonymous whistleblower reporting channels and prohibits retaliation against whistleblowers. It also requires that the principal executive and financial officers of a company personally attest to the accuracy of financial statements and to the effectiveness of internal controls in quarterly 10-Q and annual 10-K reports filed with the SEC. The effectiveness of internal controls must be tested annually by external auditors.

Unfortunately, Sarbanes-Oxley did not achieve its intended purpose; it failed to prevent the widespread fraud that led to the financial crisis and Great Recession of 2008 and 2009. In a 2011 critique, compliance experts Tim Leech and Lauren Leech say this failure is because it does not require executives and external auditors to address the most statistically probable root causes of false financial statements, such as financial incentives for executives to falsify results and auditors' conflicts of interest and inexperience.[94]

Whistleblower attorney and National Whistleblower Center board chairman Stephen Kohn provides a similar explanation for the failure of Sarbanes-Oxley in *The New Whistleblower's Handbook*: its lack of adequate measures to protect and incentivize whistleblowers. The law requires whistleblowers to file claims of illegal retaliation with the Occupational Health and Safety Administration, an agency that has been roundly criticized as "weak, underfunded, over bureaucratized and dysfunctional."[96] According to Kohn, "[t]he pressure [faced by top executives] to hide bad news from investors is almost impossible to overcome, and firing a whistleblower may be a much cheaper alternative than risking the fallout from the investor community." *The New Whistleblower's Handbook* sets forth a number of steps that whistleblowers should follow before using a company's internal reporting channel, including utilizing the Dodd-Frank Act and other whistleblower award laws.

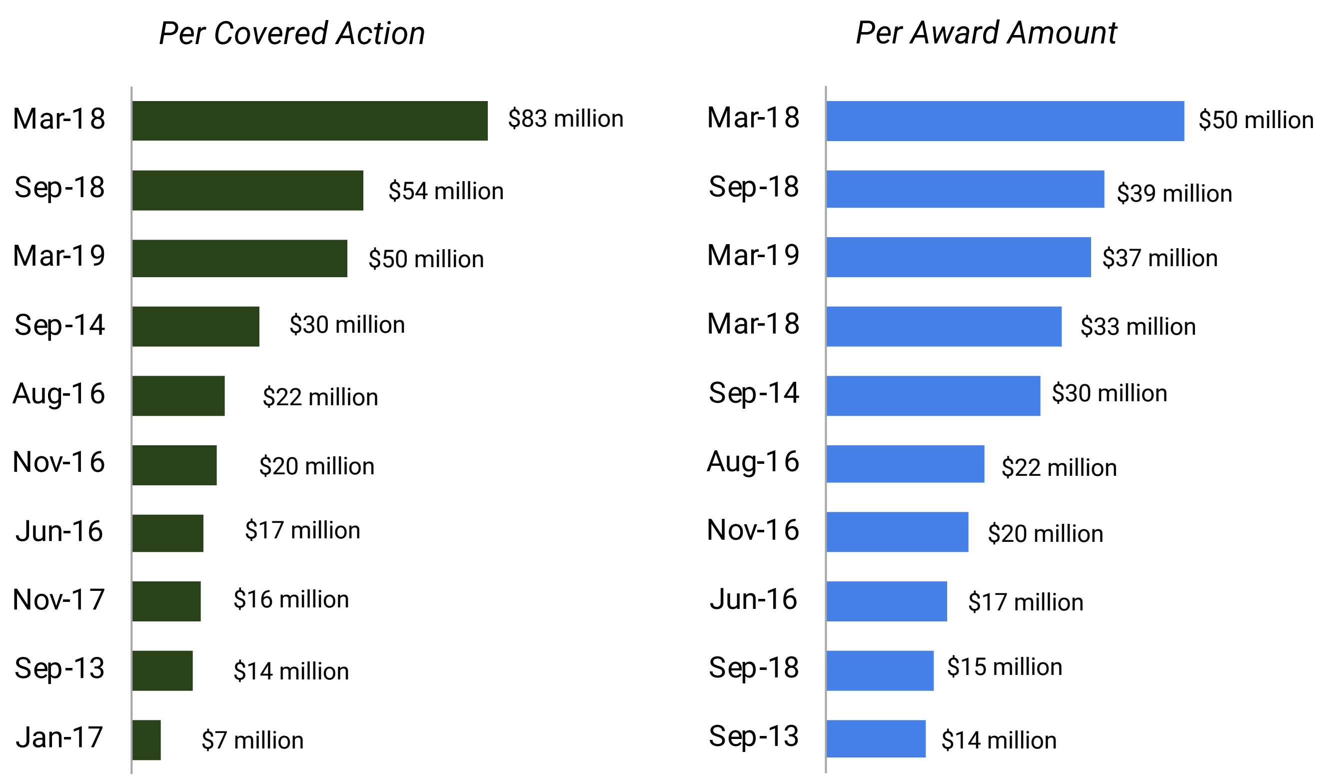


The Dodd-Frank Act, enacted in response to the financial crisis in 2008, imposes a wide array of reforms directed at corporations, hedge funds, private equity fund advisers, credit rating agencies, banks and non-bank financial institutions. Perhaps most importantly for purposes of climate risk disclosures, it addresses the shortcomings of the Sarbanes-Oxley whistleblower provisions. It directs the SEC and the Commodity Futures Trading Commission (CFTC) to create whistleblowing programs that protect individuals who provide original information showing a violation of the federal securities laws. If the information leads to a successful enforcement in a judicial or administrative action taken by SEC or CFTC, or in a related action, and the monetary sanctions exceed $1 million, the whistleblower is entitled to a financial award. Whistleblower awards can range from 10 percent to 30 percent of the money collected.

The Dodd-Frank whistleblower program at the SEC has been a tremendous success. Since its inception in 2011, enforcement actions from anonymous and confidential whistleblower tips have resulted in more than $2 billion in financial remedies against corporate wrongdoers, and the SEC has awarded over $500 million to 83 individuals.[97] The most recent whistleblower award, a $50 million award announced in early June 2020, was the largest ever. Among these awards are ones given to whistleblowers located outside the U.S. and whistleblowers who reported misconduct outside the U.S. To highlight the law's international reach, the SEC recently reported that it has received tips from 123 countries outside the U.S. since program inception.[98] According to the SEC, "whistleblowers have proven to be a critical tool in the enforcement arsenal to combat fraud and protect investors."[99]

Note that this report discusses the SEC role rather than the CFTC's because our focus is fossil fuel companies' climate risk disclosures required under the Sarbanes-Oxley and Dodd-Frank Acts, which are under the SEC's purview. Nonetheless, although the CFTC is not involved with such disclosures, it can provide significant oversight of climate risks in the commodities and derivatives market. Along these lines, the CFTC announced in April that it was opening an investigation of the unprecedented drop in the price of West Texas Intermediate crude in Spring 2020.[100] In addition, the CFTC has launched a multi-stakeholder Climate-Related Market Risk Subcommittee that will soon be issuing a report identifying, among other things, "policy initiatives and best practices for risk management and disclosure of financial and market risks related to climate change that support financial stability."[101]

Top 10 SEC Whistleblower Awards Since Program Inception[102]



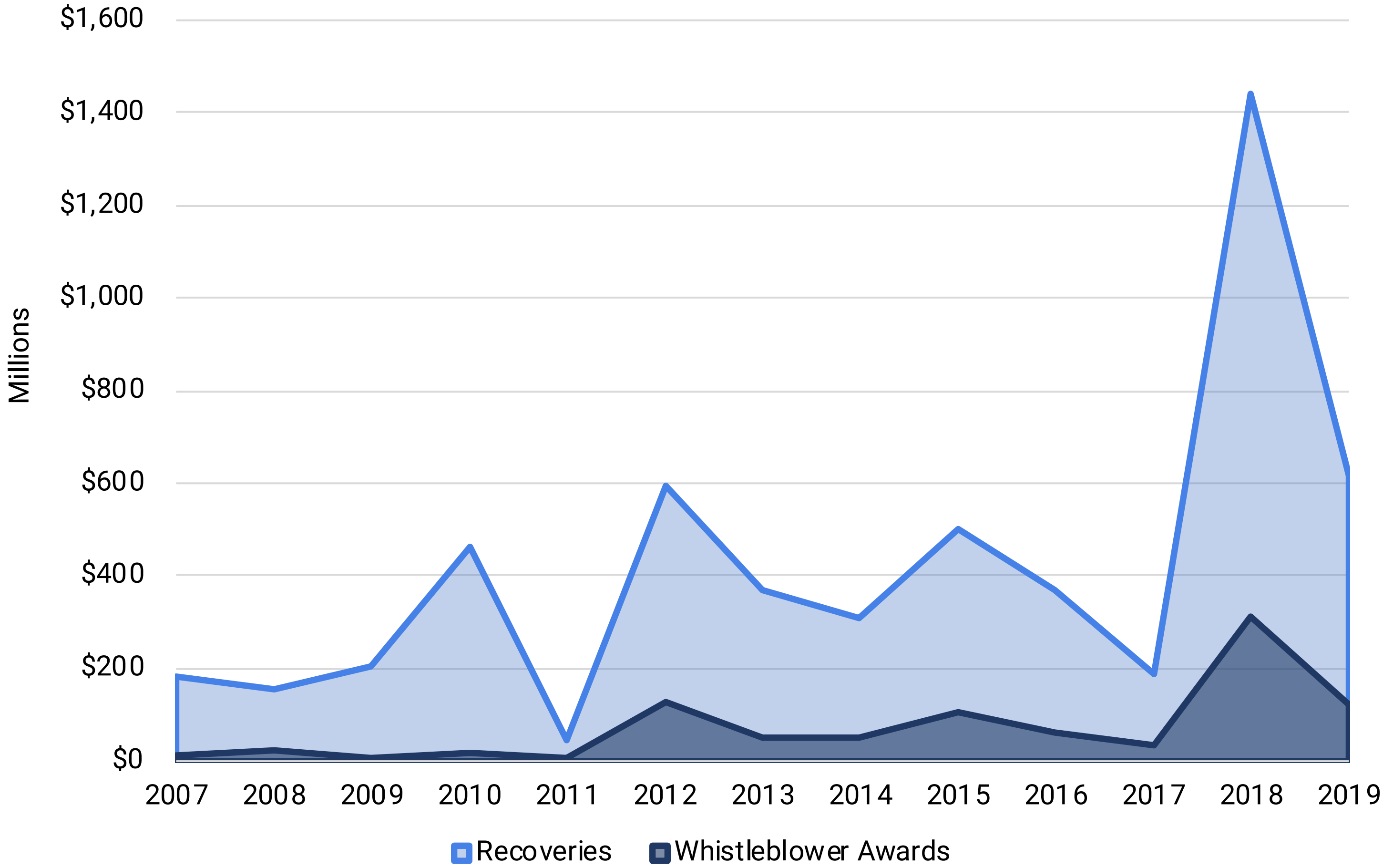
C. Other key award laws can be used to fight fossil fuel industry fraud

Although the focus of this report is the use of securities law to ensure accurate climate risk disclosures, several other federal corporate governance statutes also can help to ensure that the financial risks of climate change are properly disclosed. Each of these laws is well-suited to address climate risk fraud by the fossil fuel industry. Each has a track record of success in producing convictions or settlements that involve large-scale monetary sanctions and/or reforms to corporate governance practices. Each explicitly recognizes that enforcement depends on whistleblowers and contains mechanisms for confidential reporting of violations. As with the Dodd-Frank Act, whistleblowers receive a share of any monetary sanctions recovered when their reporting of violations contributes to a successful prosecution.

Internal Revenue Code

The Internal Revenue Code requires accurate reporting of income and other financial information on tax returns. According to IRS 2019 Annual Report, since the inception of the whistleblower program in 2007, whistleblower disclosures have resulted in recoveries of more than $5.7 billion, and the total amount of awards paid is over $931.7 million.

Sanctions Recovered from Whistleblower Disclosures and Awards Paid to Whistleblowers by the Internal Revenue Service[103]
FY 2007 - FY 2019



False Claims Acts

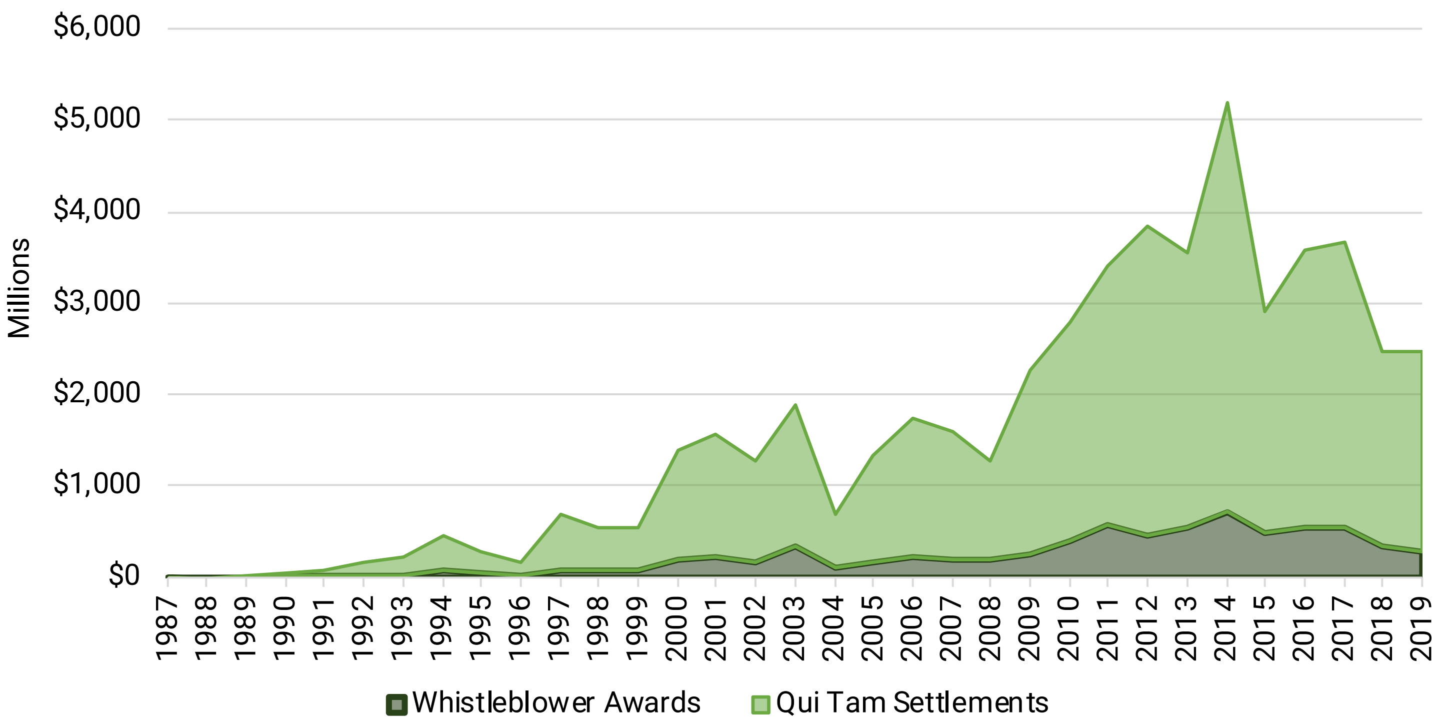
The federal and state False Claims Acts require accurate representations by private companies transacting business with the U.S. government. Under these award laws, whistleblowers can file fraud lawsuits on the government's behalf and collect a share of the government's recovery. The whistleblower incentive in the federal law has worked extremely well: Since the incentive's inception in 1986, whistleblowers have helped the government recover $42.5 billion from contractors committing fraud against the federal government.[104] Two types of fraud cases are available: challenging inappropriate collection of funds from the government and challenging inappropriate withholding of funds from the government (known as "reverse" false claims).

A common fraud by oil, gas and coal companies is depriving the government of the full amount of royalties it is owed through manipulation of the formulas used to calculate royalty payments. For example, in 1999, Peabody Coal paid $11 million to settle a massive royalty underpayment case relating to federal land leases in Montana. Other major oil and gas companies have also committed royalty fraud and as a result have paid approximately $500 million in total to settle whistleblower-initiated False Claims Act lawsuits.[105]

Another fraud involves deception of the government in obtaining a permit or license. The large-scale penalties paid by BP for the Deepwater Horizon disaster included False Claims Act penalties for falsely describing its environmental risk management in securing federal offshore oil leases as well as deception surrounding royalty payments. This case is further discussed in Section I.

Sanctions Recovered from Whistleblower Disclosures and Awards Paid to Whistleblowers Under the Federal False Claims Act[106]

FY 1987 - FY 2019



Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act prohibits bribery of foreign officials, and the Dodd-Frank Act requires the SEC to reward whistleblowers who assist with FCPA prosecutions leading to monetary sanctions. The FCPA has been used extensively to rein in bribery by energy companies. A 2012 study from Clinton Long finds that as of that date, the energy industry had paid at least $2.12 billion in fines under the statute, the highest of any industry.[107] Since 2012 seven energy companies have paid at least $2.6 billion in penalties.[108]

An example of how the FCPA is being used to address corruption in the fossil fuel industry is the RAE Systems case. In 2010, the SEC charged this San Jose-based company with violations of the FCPA for making improper payments through two of its Chinese joint venture entities to Chinese officials in order to obtain significant government contracts for their gas and chemical detection products. RAE consented to the entry of a permanent injunction against further FCPA violations and agreed to pay US$1,1 million in disgorgement of ill-gotten gains.

D. Whistleblowers are needed to protect investors, the environment and the economy

Each of the anti-fraud and anti-corruption laws discussed above has depended on whistleblowers for its success. Given the complexity and secrecy of corporate crime, regulators and prosecutors struggle to collect evidence of crimes, and to understand the nuances of the evidence they collect, without the help of whistleblowers. To avoid the many harms flowing from climate risk fraud by fossil fuel companies, whistleblowers will need to step forward to provide prosecutors and regulators with the assistance they need.

A successful partnership of whistleblowers, prosecutors and regulators to address climate risk deception is critical for a number of reasons. First, deception by fossil fuel companies about climate risks harms shareholders, including the employee pension funds and 401k retirement plans that serve as financial security for so many individuals. Many of these institutional investors are committed to long-term sustainability and for this reason are considering divestment from fossil fuel companies. Deceptive statements by fossil fuel companies about their commitments to reducing their carbon footprint, for example, deny these shareholders the information they need to make well-informed decisions.

Second, private sector efforts to combat climate change also depend on well-informed investors. When climate risks are concealed from investors through accounting tricks such as overstatement of reserves and understatement of liabilities, capital is misallocated to fossil fuel companies rather than to companies developing the low-carbon technologies that are key to curtailing climate change.

Third, as noted above, deceptions by fossil fuel companies about their climate risks threatens the functioning of our entire financial system, given the significant presence of fossil fuel companies in the portfolios of major banks and insurance companies and the heavy dependence on these companies by so many other companies. If these companies are unable to withstand the stress of a massive, unexpected collapse in the value of their fossil fuel assets, they could collapse and thereby contribute to a cascading series of catastrophic business failures.

E. Whistleblowers in the banking, tobacco, and health care industries provide success models for fighting fraud in the fossil fuel industry

Whistleblowers can have industry-changing impact. Few cases exemplify this better than the story of Bradley Birkenfeld, the banker

BRAD BIRKENFELD
Banking Whistleblower

MERRELL WILLIAMS
Tobacco Whistleblower

JEFFREY WIGAND
Tobacco Whistleblower

whose successful whistleblowing ended secret Swiss banking for U.S. taxpayers. Thanks to Birkenfeld's whistleblowing, the U.S. government was able to secure unprecedented recoveries for taxpayers, including US$780 million dollars in civil fines and penalties paid by UBS bank.[109]

Birkenfeld's assistance led Switzerland to turn over the names of 4,450 Americans with illegal offshore accounts and enabled the IRS to recover US$5 billion in collections from U.S. taxpayers with such accounts.

His disclosures also led to an IRS compliance program designed to convince tax avoiders to return money in exchange for avoiding prosecution, which recovered an additional US$7 billion.[110]

For his assistance, Birkenfeld received a record-breaking US$104 million reward. His reward has helped to drive massive growth in prosecutions of securities, commodities and tax fraud by demonstrating to both whistleblowers and prosecutors the critical role of this economic incentive to motivate high-level executives to take the substantial risk of exposing crime.

Whistleblowers also played a pivotal role in revealing massive fraud and deception by the tobacco industry. Paralegal Merrell Williams was one of the first to provide proof of the industry's deception when he smuggled out 4,000 pages of documents from Brown & Williamson Tobacco Co. in 1994 showing that the company knew their product was addictive and caused cancer.

Mississippi Attorney General Mike Moore, who led the first of several cases against tobacco companies, credits the documents Merrell Williams obtained as instrumental in refuting the industry's "three big lies - cigarettes don't cause cancer, nicotine is not addictive and we don't market to kids."[111]

In 1995, a former high-ranking executive at Brown & Williams, Jeffrey Wigand, became a whistleblower when he went public to confirm that the company had known tobacco was both addictive and caused cancer. Wigand's testimony enabled 39 state attorneys general in cases against the tobacco industry to recover an estimated $246 billion settlement from the industry. He also played a critical role at the successful federal racketeering trial where the court found that tobacco companies had conspired for decades to defraud the public about, among other things, the harms of smoking and the addictiveness of nicotine. His testimony at congressional hearings provided an invaluable education about the industry's long-term campaign of deception/

Whistleblowers also continue to be instrumental in uncovering fraud in the healthcare industry, particularly in unveiling kickback and fraudulent billing schemes and identifying companies that misrepresent research or illegally marketed drugs for off-label uses. Since 1986, healthcare whistle-blowers have helped to recover $26.7 billion in healthcare dollars through the False Claims Act, and they have received $3.2 billion in awards for their assistance. [112]

Healthcare whistleblowers have been particularly powerful in holding pharmaceutical companies accountable. In 2009, Pfizer agreed to pay $2.3 billion to settle a case brought by a group of six Pfizer whistleblowers concerning the company's illegal promotion of unapproved drugs and payment of bribes to healthcare providers.[113] In 2011, four whistleblowers from GlaxoSmithKline helped to secure a settlement of $3 billion from the company for marketing drugs for off-label uses, paying kickbacks to doctors, misrepresenting safety data about the drugs, and engaging in Medicaid fraud.[114] In 2019, a case brought by six whistleblowers led British pharmaceutical company Reckitt Benckiser Group to agree to a $1.4 billion settlement for falsely marketing Suboxone as a safe treatment for opioid addiction.[115]

$2.3B

PFIZER, 2009

In 2009, six whistleblowers brought a case against Pfizer for the company's illegal promotion of unapproved drugs and payment of bribes.

$3B

GLAXOSMITHKLINE, 2011

In 2011, four whistleblowers from GlaxoSmithKline secured a massive settlement for marketing drugs for off-label uses, paying kickbacks, misrepresenting safety data, and engaging in Medicaid fraud.

$1.4B

RECKITT BENCKISER GROUP, 2019

In 2019, six whistleblowers brought a case against Reckitt Benckiser Group for falsely marketing Suboxone as a safe treatment for opioid addiction.

In FY 2019 alone, the DOJ recovered $2.6 billion from False Claims Act cases related to healthcare fraud, of which a major portion was from pharmaceutical companies.[116] Of the $2.6 billion, whistleblowers brought 73% of cases, assisting in the recovery of $1.9 billion dollars.[117]

These cases provide important insights to fossil fuel industry insiders with knowledge of climate change fraud about how to become an effective whistleblower and hopefully will motivate them to step forward and assist law enforcement with investigations and prosecutions.

F. New policy is needed to strengthen and supplement enforcement

This report makes the case for enforcing existing securities fraud law as the primary pathway to addressing climate risk fraud by fossil fuel companies. However, the chances that the SEC and other regulators and prosecutors will take enforcement action would be enhanced if climate risk disclosure rules were made more rigorous. Under the current regime, companies essentially decide for themselves whether a particular climate change risk is sufficiently material to investors to be disclosed and, if it is, how it must be disclosed.

As noted in Section I, former Bank of England governor Mark Carney has called for rules to be enacted by countries around the world to ensure that climate risk disclosures are comprehensive and comparable. The SEC should follow this approach.

In 2010, the SEC issued a Commission Guidance Regarding Disclosure Related to Climate Change with the goal of clarifying companies' disclosure obligations related to climate change.[118] Unfortunately, the guidance is voluntary and does not appear to have prompted companies to adopt any standard disclosure methodologies. A February 2018 report from the U.S. Government Accountability Office (GAO) found that some investor groups and asset management firms were dissatisfied with the guidance, highlighting the need for companies to disclose more climate-related information.[119] A July 2020 GAO report confirms this finding. After surveying investors and asset managers on their experience reviewing Environmental, Social and Governance (ESG) disclosures, the GAO found that most respondents were challenged in evaluating disclosures because of inconsistencies in metrics: This problem with inconsistencies was most pronounced with respect to climate change reporting.[120]

Any disclosure rules for climate risks must address the problems with current fossil fuel industry accounting and auditing standards, which create major opportunities for deception. The 2010 SEC guidance states that companies must consider "any financial statement implications of climate change issues in accordance with applicable accounting standards, including Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 450, Contingencies, and FASB Accounting Standards Codification Topic 275, Risks and Uncertainties." However, it fails to explain how these existing accounting standards will provide investors with the information they need to evaluate whether a fossil fuel company's handling of climate risks in its planning and investments is consistent with its public statements.

Similarly, SEC rules require that the Management's Discussion and Analysis (MD&A) include discussion of risks and uncertainties associated with the recoverability of assets and detail the methods and assumptions used in impairment tests. Information about known events or uncertainties must be disclosed: Disclosure of other "forward-looking information" is not required. However, the rules fail to explain whether price assumptions can be concealed on grounds that they are "forward-looking information" or whether they must be disclosed, given that they reflect near-term risks of large-scale asset write-downs.

To provide clarity, the SEC must require standardized corporate climate disclosures and provide specific direction regarding fossil fuel accounting and auditing. Financial statements of fossil fuel companies must be designed to provide transparency regarding how transition risks and physical risks are affecting investments and long-term planning. As SEC Commissioner Allison Herren Lee recently commented, "[I]t is … clear that the broad, principles-based "materiality" standard has not produced sufficient disclosure to ensure that investors are getting the information they need -- that is, disclosures that are consistent, reliable, and comparable."[121]

New rules are also needed from the SEC and other financial regulators to ensure that climate risks do not destabilize the entire financial system. These rules must go far beyond disclosure to include stress tests for banks and a host of other actions. These policy needs, although important, are beyond the scope of this report.

SECTION IV

CLIMATE CHANGE CASES FILED BY STATES, SHAREHOLDERS & OTHERS SHOW A GROWING CONSENSUS ON THE NEED FOR GREATER ACCOUNTABILITY IN THE FOSSIL FUEL INDUSTRY

State law enforcement officials are taking promising action against fraudulent climate risk disclosures, but they need whistleblower protections and incentives

Shareholders are taking important actions on climate risk disclosures

States, local governments, children and others are addressing harms caused by fossil fuel companies beyond fraudulent disclosures to shareholders

A whistleblower case pending with the SEC could set an important precedent

A. State law enforcement officials are taking promising action against fraudulent climate risk disclosures, but they need whistleblower protections and incentives for whistleblowers

To date, three enforcement actions have been taken against fossil fuel companies by state officials to address fraudulent climate risk disclosures, one of which (Massachusetts vs. Exxon) remains pending. These cases highlight how states are playing an invaluable role in addressing climate fraud at a time when the federal government is largely absent from the field. They also highlight the relative weaknesses of state securities laws in comparison with federal securities laws due to the lack of whistleblower protections and incentives.

Two of the three actions were filed by the Attorney General of New York (NYAG) under the state's securities fraud law, the Martin Act. The Martin Act gives the NYAG authority to regulate, investigate and take enforcement action against securities fraud. It is arguably the most powerful state securities fraud law because it allows extensive, pre-litigation investigations and, given the presence of Wall Street, it has broad applicability.

New York v. Peabody Coal

In 2015, after a two-year investigation, the NYAG entered a settlement agreement with Peabody Energy Corporation, the largest private sector coal company in the world, in which Peabody agreed to revise its financial disclosures to reflect the potential impact of climate change regulations on its future business and cash flow, including providing a fuller presentation of International Energy Agency policy scenarios. This settlement represents the first and only success to date by law enforcement authorities to address fraudulent disclosures of climate risk.

Jessica Wentz, associate director of the Sabin Center for Climate Change Law at Columbia Law School, summarized the NYAG's key findings about Peabody's misleading climate risk disclosures:

> “**The NYAG found** that Peabody had repeatedly denied its ability to reasonably predict the potential impacts of climate change policies and on future operations, financial conditions, and cash flows. At the same time, Peabody had made market projections about the impact of future climate change policies, some of which concluded that regulatory actions could have a severe negative impact on Peabody's future financial condition...
>
> The NYAG also found that Peabody misrepresented the findings and projections of the International Energy Agency (“IEA”) by describing the IEA's highest projections for global coal demand and omitting any discussion of the IEA's less favorable coal demand projections (including the IEA's central scenario, the New Policies Scenario).[122]

The Peabody settlement agreement with New York demonstrates that a fossil fuel company has potential legal liability if it has in its possession material evidence of climate change risks and then makes misleading public presentations omitting or disregarding this evidence. However, given the absence of rigorous disclosure requirements or any civil or criminal penalties, the impact of the Peabody settlement on the company or overall fossil fuel industry behavior remains unclear.

In a 2018 scorecard, the Union of Concerned Scientists found that Peabody's most recent public statement on climate change downplayed the risk and emphasized the essential role of coal in the global energy mix.

It also noted that Peabody held leadership positions in a host of organizations that spread climate disinformation.[123]

The thinness of Peabody's follow-up on its commitments in the New York settlement agreement highlights the need to require more specific climate risk disclosures and to enlist whistleblowers to help ensure that such disclosures are consistent with internal company data and analyses.

New York v. Exxon

In 2018, the NYAG filed an action in state court under the Martin Act alleging that Exxon perpetrated a "longstanding fraudulent scheme" to deceive investors and the investor community about how it was managing risks posed to its business by climate change. The NYAG alleged the fraud centered around Exxon's failure to disclose its use of an internal carbon cost projection (which assumed low carbon costs and thus greater feasibility of new infrastructure) for project planning. According to the NYAG, Exxon's use of a higher (and more defensible) carbon cost in its shareholder communications than its internal planning document represented a material misstatement.

In December 2019, after a 12-day bench trial, the court dismissed the case, finding that the shareholder communications were not misleading, that no actual investors were misled, and that the information in question did not impact investors' analysis of the company or its stock. According to the court, "[n]o reasonable investor during the period from 2013 to 2016 would make investment decisions based on speculative assumptions of costs that may be incurred 20+ or 30+ years in the future with respect to unidentified future projects."[124]

It is possible to interpret this ruling as closing the door, under the Martin Act, to future enforcement of securities laws to challenge failures by companies to disclose to shareholders their carbon cost assumptions in internal project plans. It is noteworthy that the court applied federal case law in applying the "reasonable investor" standard, suggesting that both the Martin Act *and* federal securities laws allow such omissions from shareholder communications.

However, Hana Vizcarra of Harvard Law School's Environmental Law and Policy Program writes persuasively that the court's reasoning is specific to the facts presented by the NYAG:

> "
>
> **The state's argument** indicates a thin understanding of scenario analysis and climate economy modeling. The price assigned for the purpose of the [internal] *Outlook* document . . . did not represent a specific carbon price or project-level cost the company might expect to see directly applied to its operations and thus that should be incorporated into its budget planning process . . . .[125]

In other words, the first court ruling on climate risk disclosure – that "no reasonable investor" would make investment decisions based on cost projections 20-plus years out and thus such projections need not be disclosed – is based on a set of facts that will not likely be presented in a future case. A full presentation of energy industry economics would demonstrate that a company's analysis of potential future demand and costs over a 20-year or 30-year time frame is highly material to investors. Many fossil fuel infrastructure investments make sense only if prices maintain a minimum threshold through the 20- or 30-year life of those investments.

In an era of collapsing demand and prices, investors need to know how fossil fuel companies are justifying their infrastructure investments.

The good news is that the only court precedent on climate risk disclosure fraud is a fact-specific ruling by a state trial judge that has little precedential value. But the defeat in *New York v. Exxon* highlights a critical need for industry-connected whistleblowers to educate law enforcement authorities about company decision making before decisions are made on whether and how to pursue a fraud case.

Unfortunately, only two state securities fraud laws, Indiana and Utah, include provisions for incentivizing whistleblowers to step forward. Hopefully, the result in *New York v. Exxon* will spur state legislators to update their securities laws to include whistleblower protections and awards. The North American Securities Administration Association has put forward a useful model law for state legislators to consider.[126]

Massachusetts v. Exxon

As discussed in Section I, in October 2019, after a four-year investigation, the Commonwealth of Massachusetts filed a 205-page complaint in state court against Exxon alleging frauds in violation of the state's consumer and shareholder protection laws.[127] In May 2020, a federal court rejected Exxon's attempt to remove the case from state court on the ground that it is preempted by federal law. In June 2020, Massachusetts filed an Amended Complaint with even greater detail. With a clear path now set for a state court ruling on the merits, a major precedent could soon arrive on the fossil fuel industry's obligations to disclose climate risks.

Massachusetts' case reflects a truly in-depth investigation, relying on dozens of internal and difficult-to-find Exxon documents. (These documents cited in the original complaint can be retrieved at the website of the Climate Investigations Center.[128]) Like the NYAG, Massachusetts includes a claim that Exxon fraudulently chose not to disclose its internal analysis of the cost of carbon. But unlike the NYAG, Massachusetts cites to documents showing why the internal carbon cost analysis is material to shareholders. In addition, as noted earlier, Massachusetts includes a powerful claim not made by the NYAG: that Exxon has engaged in misrepresentations and omissions regarding "systemic risk" in communicating with shareholders. She defines these systemic risks as:

> "
>
> **[R]isks posed by** climate change to humanity, ecological systems, society, the global economy, the world's financial systems and markets, the fossil fuel sector, and ExxonMobil's business, as well as the role of ExxonMobil's products in exacerbating those risks, and ExxonMobil's plans, if any, to respond to those risks.
>
> *- Massachusetts v. Exxon*

Until a court issues a final ruling on the merits, it is difficult to assess the long-term impact of *Massachusetts v. Exxon*. However, because state courts have broad power to authorize discovery into Exxon's and other fossil fuel companies' files, this case, as well as the other climate fraud and nuisance cases discussed in Section IV, have the potential to produce major new revelations about industry deception long before any final ruling. Given the high stakes, industry-affiliated whistleblowers may be needed to expose any failures to respond properly to these discovery requests. This highlights again the need for state legislators to strengthen whistleblower protections and incentives.

B. Shareholders are taking important actions on climate risk disclosures

Shareholders have taken note of the deceptive tactics employed by one fossil fuel company, Exxon, and filed a series of cases challenging their disclosures as fraudulent in violation of the Securities Act and Securities Exchange Act. These cases provide a window into possible approaches that could be used by whistleblowers, law enforcement officials and regulators.

One major shareholder class suit in Texas, filed by the Greater Pennsylvania Carpenters Pension Fund and lead plaintiff Pedro Ramirez Jr., focuses on alleged fraud in connection with Exxon's 10-K forms. Plaintiffs claim that Exxon failed to account for losses at the company's operations in the Canadian tar sands and gas fields in the Rocky Mountains. They also challenge the company's statements on its use of proxy costs of carbon.[129]

Similar shareholder derivative actions challenging Exxon's disclosures of climate risk have been filed in New Jersey, Texas and elsewhere.[130] In the New Jersey case, the plaintiffs call attention to the highly deceptive tactics of former CEO Rex Tillerson, tactics first revealed in *New York v. Exxon.*

This breathtaking level of effort to conceal Exxon's deliberations about climate risk highlights both the company's culture of deception as well as the lengths to which companies like Exxon will go to cover up their weakening financial position.

It should be noted that progress with shareholder challenges to climate risk fraud is also being made in Europe. Shareholders represented by Client Earth recently enjoyed success, with the defendant energy companies agreeing to cancel their plan for construction for a coal plant to address shareholder concerns.[132]

Despite this important progress, there are limits to what shareholders can do to address the broad array of deceptions about climate risk that are taking place in the fossil fuel industry. The remedies available to shareholders under federal securities laws are money damages, rescission of the transaction with restitution of the consideration given, and an injunction against continuation of the specific fraud that is the subject of the case. The SEC and DOJ, in contrast, have a much wider variety of remedies, many of which are far more powerful than those available to shareholders. For example, the SEC can initiate an administrative proceeding that quickly produces an order to cease and desist certain activities and to

EXXON CEO USES FAKE EMAIL ADDRESS TO HIDE CLIMATE RISKS

"On March 13, 2017, the NYOAG submitted a letter to the Honorable Barry Ostrager presiding over the NYOAG Action, which revealed that Tillerson used an alias email account Wayne.Tracker@ExxonMobil.com "from at least 2008 through 2015" **to discuss sensitive "risk-management issues related to climate change" and reserve asset valuation process with Exxon's senior management**. (Emphasis added.) The letter further revealed that "neither Exxon nor its counsel have ever disclosed that this separate email account was a vehicle for Mr. Tillerson's relevant communications at Exxon, and no documents appear to have been collected from this email account, which also does not appear on Exxon's list of preserved custodial sources for its privilege logs." Although Exxon's outside attorneys were aware the Wayne Tracker account existed as of the first part of 2016, a full year's worth of emails were destroyed because the attorneys failed to place the account under a preservation hold."[131]

disgorge illegal profits; in court, it can obtain each of these remedies plus civil penalties. Perhaps most importantly, it can promulgate rules to prevent further violations. DOJ can launch a criminal prosecution for securities fraud that can result in criminal fines and, in the case of company executives, a prison term.

In summary, whistleblowers seeking to remedy wrongful conduct have strong reasons to pay attention to lessons learned from private shareholder cases, while working on investigations and cases in partnership with the SEC, DOJ and other regulators and prosecutors.

C. States, local governments, children and others are addressing harms caused by fossil fuel companies beyond fraudulent disclosures to shareholders

The Massachusetts case discussed above, as well as the consumer fraud and related cases discussed below, confront "what might be the greatest scam in history," in the words of historian Naomi Oreskes: the fossil fuel industry's disinformation campaign on climate change, focused on slowing action on climate policy by persuading decision makers and the public that climate change is not a serious problem.[133] Whistleblowers addressing climate risk deceptions by fossil fuel companies should be aware of the related deceptions discussed in these cases. Moreover, as noted in Section I, these cases against fossil fuel companies pose significant liability risks to these companies that they must disclose as part of their "transition risk" analysis.

At the heart of these cases is evidence of a strategy of intentional deception implemented over the past several decades. Key players in the fossil fuel sector obtained information several decades ago that their products were damaging the climate and actively withheld this information from consumers. Borrowing from the tobacco industry playbook, the fossil fuel industry used a host of front groups to perpetrate a false narrative about confusion regarding climate change in the scientific community. This large-scale disinformation campaign has been well-documented by the Los Angeles Times, Inside Climate News and a host of other publications.[134]

Like the private shareholder cases discussed above, these cases provide a window into fossil fuel industry strategies and tactics and possible approaches to counter them that could be used by whistleblowers working with prosecutors and regulators.

Despite having been caught red-handed, thanks in part to former industry employees, major players have not issued any *mea culpas*. Instead, the industry's response can be best summarized by Shell CEO, Ben van Beurden, who responded to questions about the deception by telling TIME Magazine, "yea we knew, everybody knew. And somehow we all ignored it."[135]

The fossil fuel companies named as defendants have fought back by arguing that the cases should be removed to federal court and preempted by federal statutes such as the Clean Air Act. However, unlike in an earlier round of nuisance cases filed by Alaskan tribes and others in federal court, to date the companies have not been successful with their procedural defenses.

The refusal by any company to acknowledge the legitimacy of public outrage about the industry's climate change disinformation campaign shows that fraud is seen as an acceptable method of doing business by many in the sector. It also should raise skepticism about claims about "net zero" carbon emissions by 2050 and other assurances that fossil fuel companies are meaningfully participating in the energy transition.

The next page has a summary of some of the most important cases.

Rhode Island v. Chevron, et al.

In July 2018, the State of Rhode Island filed the first in a wave of lawsuits by states asserting that fossil fuel companies should be held liable under state law for climate change impacts.[136] The state names 21 companies as defendants and described an array of harms that it is suffering and will continue to suffer, due to their actions, including sea level rise, more frequent and severe flooding, and a warmer and more acidic ocean. In addition to describing the companies' carbon dioxide emissions, the complaint alleges that the defendants' production, promotion, and marketing of fossil fuel products, along with their "simultaneous concealment of the known hazards of these products, and their championing of anti-science campaigns" caused Rhode Island's injuries. Asserting claims of public nuisance, strict liability for failure to warn, strict liability for design defect, negligent design defect, negligent failure to warn, trespass, impairment of public trust resources, and violations of the State Environmental Rights Act, Rhode Island seeks compensatory damages, equitable relief, punitive damages, disgorgement of profits, attorney fees and costs of the suit.

Minnesota v. American Petroleum Institute, et al.

In June 2020, the Minnesota Attorney General filed a massive consumer fraud lawsuit against the American Petroleum Institute, Exxon, Koch Industries and two Koch-affiliated companies.[137] This case is noteworthy because it is the first of climate cases to name the oil and gas industry's trade association as a participant in the illegal fraud. Likewise, it is the first one to name a company associated with Charles and David Koch, two brothers often credited with spearheading the funding of the climate disinformation campaign.

District of Columbia v. Exxon, et al.

In June 2020, one day following the filing of the Minnesota case, the Attorney General for the District of Columbia filed a massive consumer fraud case against Exxon, Shell, BP and Chevron.[138] Relief requested includes an injunction against further violations of D.C.'s consumer fraud law, damages and civil penalties.

Other Cases

A host of other important cases, filed both inside the U.S. and around the world, have been filed against fossil fuel companies by cities, counties, children and others, seeking compensation for climate-related costs as well as injunctive relief. These cases, which use an array of legal theories ranging from product liability to the public trust doctrine, can be tracked by visiting the Climate Case Chart website maintained by Columbia Law School.[139]

Whistleblowers can learn from these cases and potentially assist with them.

D. A whistleblower case pending with the SEC could set an important precedent

The SEC has not taken any recent enforcement actions with respect to fossil fuel company disclosures about climate change risk. In 2016, the agency announced that it was opening an investigation into how Exxon was disclosing the impacts of changing climate policy on its reserve valuations. However, it then closed the investigation in 2018 without taking action. No explanation was provided for this decision.[140]

Because SEC investigations and whistleblower filings with the SEC are confidential and anonymous, it is possible that the SEC is currently investigating other alleged frauds by fossil fuel companies with regard to their statements about climate risks.

One group of whistleblowers, led by former Exxon senior accounting analyst Franklin Bennett and including a former partner in a major U.S. accounting firm, has elected to publicize the key allegations of a pending complaint with the SEC challenging Exxon's asset valuations.

According to a July 2020 report in the Wall Street Journal prepared with his cooperation, Mr. Bennett left his Exxon job in 1995, filed the complaint in 2015, and has since supplemented it 30 times. In his most recent supplement, filed with the SEC in June 2020, Mr. Bennett focuses on Exxon's failure to write down assets to account for the dramatic recent declines in demand for shale gas. He highlights that Exxon's refusal to write down its shale assets is contrary to the approach taken by virtually every other oil and gas major.

Although the article describing Mr. Bennett's complaint does not mention climate change risks, the complaint apparently alleges fraud concerning a key climate change risk: the declining demand for oil and gas stemming from the energy transition. It will be important for whistleblowers to pay attention to whether the SEC acts on this complaint and if so, how approaches Exxon's obligations with regard to climate risk disclosures.

SECTION V

FINDINGS AND RECOMMENDATIONS FOR WHISTLEBLOWERS AND OTHERS

This report calls upon executives of fossil fuel companies and others with knowledge of improper climate risk disclosure practices to take the steps needed to obtain protected whistleblower status and work with the SEC, other regulators and law enforcement officials to help expose and prosecute fraud. We find sufficient evidence of deception in connection with the industry's climate risk disclosures to justify follow up investigations into possible legally actionable frauds.

The key to the success of such investigations will be a working partnership between whistleblowers, regulators and prosecutors. To help facilitate this partnership, we offer recommendations below for each of them as well as for other key actors, including everyday people concerned about climate change. The following key findings provide the foundation for these recommendations.

KEY FINDINGS

1 Deception about the financial risks of climate change is pervasive across the fossil fuel industry. Two categories of material information are routinely omitted from companies' statements to shareholders:

- The immediate risks that climate change poses to companies' financial condition.
- The risk that the company's asset deflation will contribute to an economy-wide financial implosion.

2 The growing role of whistleblowers in the fight against fraud means the handful of pending securities fraud cases challenging these deceptions represent just the tip of the iceberg."

- There are just five pending cases – all against Exxon – seeking judicial or administrative rulings on whether a company's statements on the financial risks of climate change constitute securities fraud under state or federal law.
- The number of cases and defendants will likely increase dramatically once potential whistleblowers learn about the protections and rewards offered by modern whistleblower law and provide detailed information about climate risk fraud to regulators and prosecutors.

3 Whistleblowers in the fossil fuel industry, like their predecessors in the tobacco, banking and health care industries, can play a central role in industry reform and help prevent a worldwide financial implosion.

RECOMMENDATIONS

We recommend actions that can be taken now by potential whistleblowers and others to improve detection and deterrence of climate risk fraud. Specifically, we recommend:

POTENTIAL WHISTLEBLOWERS

- Educate yourself about whistleblowing and how to secure legal counsel; NWC's website offers helpful resources
- Speak with a whistleblower attorney before using internal corporate compliance programs
- Learn how to protect yourself against retaliation through confidential disclosures of wrongdoing and how to secure awards

LAW ENFORCEMENT OFFICIALS AND REGULATORS IN THE U.S. AND ABROAD

- Launch investigations under securities laws and other corporate governance laws into fossil fuel companies' handling of climate risk
- Work closely with whistleblowers in detecting potential frauds and carrying out investigations
- When fraud is found, secure meaningful monetary sanctions (and where appropriate, prison sentences) to deter future frauds of the same type

FOSSIL FUEL INDUSTRY DIRECTORS AND OFFICERS

- Fully disclose climate change risks in accordance with legal requirements governing communication of material risks to shareholders
- Update corporate compliance programs to provide anonymous and confidential channels for whistleblower reporting in accordance with the Sarbanes-Oxley Act
- If you are aware of fraudulent behavior, consider becoming a whistleblower

EXECUTIVE BRANCH POLICY MAKERS IN THE U.S. AND ABROAD

- Craft climate risk disclosure rules, requiring consistent, comparable and specific information on how companies are addressing both transition risk and physical risk
- Include whistleblower protections in all climate risk disclosure rules
- Create and strengthen programs at regulatory bodies that educate potential whistleblowers about protections and incentives

LEGISLATURES IN THE U.S. AND ABROAD

- Direct regulatory bodies to promulgate climate risk disclosure rules and include whistleblower protections
- Provide funding for whistleblower-assisted investigations
- Address systemic risks of climate change to the financial system

EVERYONE WHO SUPPORTS POSITIVE ACTION ON CLIMATE CHANGE

- Persuade policy makers in the U.S. (federal and state) and abroad to:
    - Strengthen whistleblower protections
    - Prioritize funding for whistleblower-assisted climate fraud investigations
    - Strengthen climate risk disclosure rules
- Join NWC's action network through which our supporters engage in effective advocacy before key decision makers

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