REVOLVING DOOR PROJECT

CORPORATE CRACKDOWN PROJECT — CLIMATE

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Project Information

The **Corporate Crackdown Project** series of reports documents the power of the executive branch to pursue vigilant enforcement against corporate lawbreakers. Beginning in November 2022, the Corporate Crackdown Project has produced three full-length reports and one polling memo produced in conjunction with Data for Progress. More information on the Corporate Crackdown Project can be found on the Revolving Door Project **website**.

About the Revolving Door Project

The **Revolving Door Project** (RDP) is a project of the Center for Economic and Policy Research (CEPR), a progressive think tank focused on economic policy. RDP scrutinizes executive branch appointees to ensure they use their office in the public interest, not to serve entrenched corporate power or achieve personal advancement.

Introduction

"A resurgent nationalism, concerns about competitiveness and security, and regional conflicts push countries to increasingly focus on domestic or, at most, regional issues. Policies shift over time to become increasingly oriented toward national and regional security issues. Countries focus on achieving energy and food security goals within their own regions at the expense of broader-based development. Investments in education and technological development decline. Economic development is slow, consumption is material-intensive, and inequalities persist or worsen over time. Population growth is low in industrialized and high in developing countries. A low international priority for addressing environmental concerns leads to strong environmental degradation in some regions."

Does this future scenario sound plausible?

The narrative in italics above is **one of five potential futures** for the world forecasted by leading climate change researchers — one of five ways the rest of the century could pan out. Of the five scenarios, this is number three, and many consider it to be the worst likely option. With high challenges to both mitigation and adaptation, i.e. preventing the worst of climate change *and* learning to live with the unavoidable parts of it, we're looking at humanity — and most other species — facing possible extinction. If that sounds extreme, it's because the global consensus of climate scientists has yet to be widely understood by the public. And that's probably not by choice. UN Secretary General Antonio Guterres **warned** that we're "**firmly on track toward an unlivable world**," and it scarcely got headlines. The historically unparalleled abnegation of responsibility for educating and preparing the public for the future we're facing falls on the government, the media, and the corporations spending billions of dollars to deceive the public.

The latest report from the Intergovernmental Panel on Climate Change (IPCC) **asserted that** even *existing* fossil fuel infrastructure will doom the goal of keeping global warming below 1.5°C (i.e 2.7°F), and that the world is on track to warm by more than 3°C (i.e. 5.4°F). The same day the report was released publicly, progressive Democrats **got on board with** increasing fossil fuel production out of fear of public pushback over high gas prices. High gas prices are a challenge for working people everyday across the country — a symptom of our policymakers' decades-long aversion to public transportation, informed by the automotive lobby — but new fossil fuel infrastructure locking in greater supply in a decade or so will not ease that suffering now or, in the big picture, ever. The same low-income communities bearing the brunt of inflation today will also be (and often already are) the communities most vulnerable and exposed to far greater suffering from climate change-related disasters and shortages.

Simply put, America and the world are careening toward a partly irreversible ecological catastrophe greater than any in civilizational history. And most of our most powerful elites — lawmakers, corporate titans, media tastemakers, military officials — seem half-interested at best, regarding the climate crisis mainly as another

conversation point and political topic to hobnob about over cocktails. The fact that this alarming sentiment is itself a cliché is a testament to how dire the situation is.

However, our elites — who, for better or worse (mostly worse), control the levers of power that ***need*** to be wielded in the short term to stand any chance at preventing the worst future scenarios — have proven themselves highly motivated to undercut the perception that American institutions are collapsing amidst a crisis of legitimacy. President Joe Biden ran on a promise to "restore the soul of America," and has heavily prioritized returning Washington to a state of relative "business as usual" after the Trump administration.

This recently culminated in the Inflation Reduction Act, a law created mainly by two long-time politicians, Senators Joe Manchin and Chuck Schumer, who secretly deliberated for months on end to find a policy project which satisfied Manchin's (often arbitrary) parameters, then essentially demanded that the rest of their caucus sign on the dotted line. Where committed institutionalists might see this process as an inspiring display of Senators hashing out their differences and achieving legislative compromise, others might see a return of the "old boys club" carving out the country's future behind locked doors in smoke-filled rooms. Scientists, representatives of impacted communities, and other subject-matter experts had a place in the deliberations over the Build Back Better Act which the IRA replaced, and they frequently pleaded for more aggressive action than Manchin was willing to accept, again for mostly arbitrary and constantly shifting reasons.

The Inflation Reduction Act has been rightly hailed as a historic achievement on multiple fronts, most relevantly climate. But being historic is not the same as being sufficient. The IRA's tax credits for green energy development are often called the most significant climate programs in US Congressional history. This claim insults the intelligence of whoever hears it: the United States Congress has never passed meaningful legislation aimed at combating the climate crisis before, so any legislation with this goal gets this plaudit by default.

Assessed in terms of elite hagiography, the IRA is a smash success: "the system worked" and produced something that could be called climate policy, after much gossip, intra-elite haggling and deal-making. Assessed in terms of the actually relevant question — "does this legislation fight climate change?" — the prospects are much dimmer. It offers new tax incentives for green energy development, but does nothing to wind down existing fossil fuel infrastructure, and even includes plenty of **handouts** for the industry. The approach is all carrots and no sticks on an issue that demands rapid punitive action against the industry that got us into this mess in the first place.

Like everyone outside the right wing, we are glad to see the IRA signed into law and eager for more substantive policy to follow it. But strategically, we can see that vastly more needs to be done. It seems unlikely at best to come out of a US Congress that could soon see one or both branches change partisan control, and a Democratic caucus that seems unwilling to go to war over climate with its most obstinate and fossil fuel-funded member again soon. Even if conditions in Congress were better, it would still be the executive branch's responsibility to actually implement its mandates in a climate-conscious way, including the centuries of precedent that established the agencies and departments of the executive state. Moreover, we can see that

motivating policy action under the Biden administration requires a certain amount of appealing to the President's institutionalist sensibilities.

In that spirit, the Revolving Door Project is proud to present this report on a "Climate Corporate Crackdown" outlining what the Biden executive branch is already doing on climate change, and what more it could do under its existing authorities. We intend to show that there are still policy options available despite all of the obstacles our system imposes to climate action. If Congress refuses to act further, then executive branch actions which should already have been pursued become that much more urgent. If institutionalism is the elite mode of the hour, then we present a suite of policy options based in long-standing government authorities and aimed at revivifying the New Deal administrative state Biden idealizes.

In no way do we claim that these policies alone are enough to put the United States on track to reach its climate goals. There is ultimately no easy way out. Congress must pass much more sweeping, much more disruptive new laws to supplement the Inflation Reduction Act, which will require overcoming the aforementioned obstacles to at-scale climate action. We also don't claim that this report is all-inclusive of executive-focused policies that can and should be adopted to confront climate change. Scholars propose new and creative uses of existing law all the time, and moreover, even more powers are available to the President should he declare a climate emergency, **as our colleagues at the Center for Biological Diversity have documented in detail**.

The policy proposals herein are not *sufficient*, but they are *necessary*. Moreover, we hope this report pushes readers to think about the executive branch in a more holistic and creative way. Throughout the last two years, we have frequently heard climate-oriented executive policies (some of which are in this report) shot down by elite critics claiming that it is not a given agency's responsibility to combat climate change. This is a truly dangerous sentiment, pedantic literalism ("the agency's name doesn't include the word 'environment'") over structural sophistication. Any agency whose goals are threatened by climate change — which is all of them — has a legal obligation to address threats to its goals intelligently. That means acting on climate, consistent with each agency's powers and mandates. Climate change affects literally every aspect of human society, and so every arm of the United States government should prioritize action against it however possible. Failure is not a survivable option, and cowardice is the surest path to failure.

Environmental Protection Agency (EPA)

By **Dorothy Slater** and **Dylan Gyauch-Lewis**

I. INTRODUCTION

The **Environmental Protection Agency** (EPA) is one of the most powerful, most frustratingly under-utilized agencies in the executive branch. Following the enactment of the National Environmental Protection Act, President Nixon reorganized environmental divisions of various federal departments, consolidating them into the EPA in 1970. The agency was a response to elevated public concerns about calamitous air and water quality, oil spill disasters, and other environmental issues plaguing America.

The EPA's mission is to protect human health and the environment, including ensuring clean air, land, and water for all American residents. The existence of the EPA has translated to massive gains for the health of Americans: it's **estimated** that 230,000 lives are saved, 2.4 million asthma attacks are prevented, and 22.4 million lost school or work days are avoided each year as a result of the EPA's implementation of the Clean Air Act. Besides creating policy, the EPA's primary responsibility is to fairly administer and enforce federal laws protecting human health and the environment. Several existing laws provide the basis for the EPA's enforcement capabilities, including the **Clean Air Act** (CAA), the **Clean Water** and **Safe Drinking Water Acts** (CWA and SDWA), the **National Environmental Policy Act** (NEPA), the **Oil Pollution Act** (OPA), the **Pollution Prevention Act** (PPA), and the **Toxic Substances Control Act** (TSCA), among others.

Those laws have had profound impacts on the nation's wellbeing. For instance, the Clean Air Act alone saves **hundreds of thousands of lives each year**. The Clean Air Act also includes a variety of **other benefits**, including preventing tens of millions of lost workdays annually, and a total estimated economic benefit of $2 trillion. Other environmental laws have contributed to **significant improvements in American waterways**, **better project planning** procedures, and a host of other benefits.

Besides enforcement being a legal power and mandate of the EPA, cracking down on corporations that commit environmental crimes is extremely popular with American voters. A 2021 **Data for Progress memo** found that 83 percent of voters of all parties believe regular Americans pay the price when crimes of wealthy people and corporations go unpunished. 71 percent of voters across party lines agreed that the federal government should do more to punish corporations that break the law.

The EPA is split into 10 regional offices and an agency headquarters in Washington D.C. The regional offices (in ascending order from 1-10) are based in Boston, New York, Philadelphia, Atlanta, Chicago, Dallas, Kansas City, Denver, San Francisco, and Seattle. Each regional office is responsible for on-the-ground enforcement across several states and, where relevant, territories. Some also oversee specialized environmental programs specific to their territory. The D.C. headquarters contains divisions dedicated to agency rulemaking, administrative oversight, finance, research, specialized areas of enforcement, and other administrative functions. Those offices are the Office of Air and Radiation, Office of Chemical Safety and Pollution Prevention,

Office of the Chief Financial Officer, Office of Enforcement and Compliance Assurance, Office of General Counsel, Office of the Inspector General, Office of International and Tribal Affairs, Office of Mission Support, Office of Research and Development, and Office of Water.

The EPA also **collaborates with other governments**, including states, tribes, and local governments. For example, it works jointly with the Minnesota Department of Health on new ways of investigating dangers of chemicals. The EPA also collaborates on a variety of other issues including air and water pollution and safe drinking water. Since 1999, it has been substantially involved with Native American tribes via the EPA-Tribal Science Council and funding tribal research efforts.

II. ENFORCEMENT OVERVIEW

How The EPA Lets Corporations Repair Their Environmental Harms By Causing More Environmental Harms

The **Office of Enforcement and Compliance Assurance** (OECA) is the law enforcement arm of the EPA. OECA oversees investigations into noncompliance and imposes penalties, files court cases, and pursues a limited range of criminal charges. Within OECA, there are several offices with specializations in types of enforcement actions or particular noncompliance situations. There are offices dedicated to civil enforcement (Office of Civil Enforcement), compliance (Office of Compliance), federal facilities (Federal Facilities Enforcement Office), criminal enforcement (Office of Criminal Enforcement, Forensics, and Training), and site cleanup (Office of Site Remediation).

There are, broadly, three ways OECA can impose penalties on polluters: (1) levying fines, (2) pursuing criminal charges, and (3) referring cases to the Department of Justice's **Environment and Natural Resources Division** (ENRD). The EPA has authority to impose fines and civil penalties through both administrative action (internal to the agency) and through civil court cases. It also has its own criminal authority under the Clean Water Act, which allows it to investigate and charge criminal violations — defined as either meeting a standard of criminal negligence or knowingly violating the law. However, despite these internal mechanisms, OECA frequently opts to refer cases to the Justice Department when they want to impose penalties higher than the administrative cap or when a case calls for more complex or longer-term restitution.

One aspect of the settlement process which often proves problematic, however, is that the actor found to be at fault for environmental crimes is sometimes allowed to *choose their own third-party auditor* to ensure compliance with the settlement agreement. Take, for example, a **March 2022 case** where the EPA and DOJ announced a joint settlement with the North Slope Borough of Alaska to resolve federal hazardous waste and oil spill violations. The Borough failed to properly manage and store thousands of drums of oil and hazardous waste, which led to oil spills. It agreed to a laundry list of actions to remedy its violations, but it gets to "identify a full-time environmental official" and "hire an independent third-party auditor to ensure that the compliance requirements in the consent decree are successfully implemented." The practice of a corporation which

violated federal law being allowed to select *and pay* an auditor of their choosing is inherently corruptible and should be altered.

Another enforcement practice which deserves questioning is the restoration by EPA Administrator Michael Regan of Supplemental Environmental Projects (SEPs). SEPs, which had been used by the EPA as an enforcement tool for more than 30 years until the Trump administration ended the practice, require actors who harmed a community to pay for projects that benefit the environmental or public health of communities which they have harmed. For example, when the U.S. Steel Corporation **violated a number of Clean Air Act provisions** at a steel production facility in Braddock Pennsylvania, it agreed to provide funding to the county's Department of Economic Development to support the creation of a "multimodal connection trail for hikers and bicyclists" as part of its $1.5 million penalty.

Floodlight's Amal Ahmed **put it best**: "In theory, SEPs are meant to remediate industrial pollution and environmental harm by funding programs like cleanups at illegal dump sites, habitat restoration or household hazardous waste pickups in communities." But the projects which firms pay for through SEPs can be either incommensurate with the harms inflicted, or worse, actively inflict more harm. For example, the Texas Natural Gas Foundation, a lobbying group for the gas industry, **has qualified as an SEP recipient** in Texas since 2016.

When Formosa Plastics leaked harmful gasses from a plant in Point Comfort, Texas, it was able to square away the harms in the eyes of the Texas government by donating to the Texas Natural Gas Foundation, which lobbies on behalf of the interests of an industry adjacent to the plastics industry itself. More to the point, this **actively contributed to more environmental harm** from the gas sector. "The foundation's work has included developing curriculum for schoolchildren that energy experts have deemed 'incomplete or misleading information about energy that appears out of the fossil fuel industry's playbook,' according to a 2018 investigation from the Austin American-Statesman."

While the EPA has many powerful tools to enforce environmental laws, some are weaker or more corruptible than others, and many can inadvertently allow corporations to skirt true accountability.

III. ENFORCEMENT CAPACITY

EPA Capacity

Following the Trump Administration's **absolute evisceration of the EPA's** regulatory precedents and staffing levels, the Biden administration is still putting the pieces back together. While it is frustrating that this deep into Biden's term, the EPA has still not fully reemerged as a serious regulator to rein in pollution, 16 months is not much time for an agency that's had to reverse a wide array of disastrous rules from its predecessors.

Biden's EPA has been charged with rebuilding trust among staff throughout the entire agency, reestablishing standards around serving the public and trusting science, and regaining public confidence. As Buzzfeed News

reported in May of 2022, there is still a pervasive sense of internal distrust among career staff and scientists paired with a ballooning workload. One union representative from the Midwest said that each agency employee was being assigned more than twice the responsibilities they could manage.

Additionally, EPA staffing has been heading in the wrong direction since the turn of the century. A Revolving Door Project (RDP) report on STEM employee attrition also raised concerns about the ability of government regulators that manage climate change to retain scientists and other STEM professionals who are essential for their missions. The EPA, and other relevant agencies, have been facing very high attrition rates among STEM specialists, threatening their ability to implement their mandates. Another previous RDP piece showed the disturbing downward trend in resources and staff at the EPA. In 1999, the EPA had some 18,000 staff, but since 2019, it has hovered around 14,000. As the climate crisis intensifies and environments become more fragile, the EPA's workload will only continue to increase.

ENRD Capacity

While the EPA has a broad suite of regulatory powers, its effectiveness is also somewhat subject to downstream capacity issues. The EPA is able to refer criminal violations of several laws, including the Clean Air and Clean Water Acts, to the DOJ. It also often refers civil cases to the DOJ's Environmental and Natural Resources Division (ENRD), which is then responsible for deciding whether to prosecute. The EPA generally does this when they need to impose fines above the cap of their administrative process, want to ensure longer term injunctions or settlements, or when they need additional legal resources.

As RDP's Hannah Story Brown and Fatou Ndiaye have covered, and describe in more detail elsewhere in this report, the ENRD often lacks sufficient vision and resources to adequately pursue criminal charges. As a result of this, even though the EPA can be a powerful public champion, cracking down on polluters, it cannot accomplish enough on its own. A true crackdown on corporate crime and misconduct will require a whole-of-government approach.

The flow of cases from the EPA to the ENRD has also slowed to a trickle, with fiscal year 2021 seeing the lowest number in three decades and a year-over-year decrease of a third from FY 2020. The ENRD, for its part, has announced that it will seek to reverse the downward trend in criminal prosecutions that occurred under the Trump administration. However, the stated goal is only to return to Obama-era enforcement levels with the caveat that there is no intent to "dramatically exceed them." We believe goals for prosecutions should not be set by reference to past caseloads or current staffing, but whatever is necessary to hold corporate criminals accountable and ensure that rational but avaricious corporate executives believe compliance with the law is in their interest.

A Note on the Supreme Court

The Supreme Court is also impeding the EPA's execution of regulations. This came to the public's attention in the much-publicized ruling on *West Virginia v. Environmental Protection Agency* in June 2022.

It is important to contextualize this ruling within not only the Supreme Court's hostility to climate action, but also within a trend of the Supreme Court attacking the whole of the executive state. Recently, there has been a trend among the conservative supermajority of the Court to insert themselves into the process of Congressional delegation to the executive branch. Many of the most recent attacks have posited that agencies cannot regulate or oversee activity which has not been explicitly, word-for-word, granted to them by Congress — for instance, the Supreme Court ruled that the Occupational Safety and Health Administration (OSHA) could not set COVID-19-related workplace safety standards because Congress did not explicitly grant OSHA the authority to set health standards for workplaces in pandemics, even though protecting workers from exposure to deadly disease is quite obviously a workplace safety issue.

Agencies like OSHA and the EPA were deliberately granted broad authority under deliberately open-ended language. The entire reason Congress created agencies like these is that while it supports ideals like workplace safety and environmental protection, knowing how best to implement these ideals on every minute question is too complex, technical, and fast-changing for Congress to manage on top of all of its other responsibilities. By establishing bureaus of subject-matter experts and presenting them with clear values to uphold, Congress could delegate most of the more technical work to people better suited to it. In short, the lack of explicit word-for-word direction on every technical question is the whole point. If Congress always knew exactly how it wanted agencies to respond to every single issue in their purviews, it wouldn't bother making agencies at all; it would just write laws instead. But the level of detail – and updating – required is beyond both Congress' technical and procedural capacity.

Justices like Samuel Alito and Clarence Thomas are hellbent on undermining the capacity of the executive branch overall, seeking to invalidate even basic authorities such as the ability of a President to **issue an order to military service members** that directly pertains to military operations. In this light, it is hardly surprising that the **EPA has been targeted** in a series of legal proceedings that seek to stop effective regulation and enforcement.

In ***West Virginia v. Environmental Protection Agency***, West Virginia alleged that the EPA does not have the power to issue emissions rules that might require decarbonization of, or other significant changes to, power plants. The case concerned a provision of the Clean Air Act that gives the EPA broad latitude to regulate emissions, with the EPA arguing that the "Court should not read into the text an artificial restriction." West Virginia contended that broad delegation is unconstitutional and Congress must specifically authorize all individual powers being delegated.

Though the Supreme Court **ruled** against the EPA in June 2022, the decision was fairly narrow, and did not go as far as dismantling agencies' capacity to clarify laws' ambiguous language. The court ruled only that in the case of the defunct Clean Power Plan (CPP), the EPA could not implement a system-wide approach requiring existing power plants to shift from higher to lower CO2-emitting energy sources. The CPP was a project of the Obama administration that would have established requirements for energy grids' pollution levels, but it never actually went into effect. Because of that, the ruling will likely have very little immediate impact on EPA authority. That said, it does still **limit the options** on the table for EPA enforcement.

What is far more important is the grounds used by the conservative majority to reach that ruling. The court **invoked the major questions doctrine**, which says that executive agencies do not have the discretion to interpret legal ambiguities in questions of major economic or political importance, absent extremely explicit direction from Congress. While it was used narrowly in *West Virginia*, the fact that this standard has been further legitimated by the Supreme Court could imperil regulatory authority more broadly. Conservatives, such as lame-duck **Senator Pat Toomey**, are already **planning to use the precedent** from *West Virginia* to seek to crush agencies' (including the EPA's) ability to regulate.

However, the recent passage of the IRA included a surprisingly effective provision in which Congress officially designated CO2 as an air pollutant. This means that Congress has, according to legal experts and Democrats who wrote the legislation (as reported by The New York Times), "explicitly [given] the E.P.A. the authority to regulate greenhouse gases and to use its power to push the adoption of wind, solar and other renewable energy sources." Legal experts say that conservative organizations which seek to weaken environmental organizations will have a more difficult time winning legal fights using the major questions doctrine in relation to air pollutants.

Concerningly, the Supreme Court looks poised to run the same play used in an attempt to weaken the Clean Air Act to strip power from the executive under the Clean Water Act, which did not win the same protections in the IRA. Despite the Biden administration not having yet released an updated rule defining the extent of the Act's jurisdiction, the **Court opted to preemptively accept a case**, *Sackett v. EPA*, where landowners are seeking to impose a restrictive interpretation of the law to limit potential regulation. Such an approach is unusual, but mimics how the justices handled *West Virginia v. EPA*.

IV. ISSUE AREAS - WATER

Issue Overview

In the 1970s, American rivers were literally catching on fire because of absurd levels of pollutants in the water. It became apparent that someone had to protect the integrity of the nation's waterways from contamination. The EPA was tasked with being that someone. It was empowered through substantial environmental laws to protect the waterways and drinking water across the United States. Since then, however, the EPA's record on protecting our water has been decidedly mixed.

While there has been definite improvement since Nixon, the prospect of safe, clean water remains too often a promise rather than a reality; 50 percent of the nation's waterways and 55 percent of lakes remain **dangerously polluted**. The EPA has significant powers to protect American waters under the Clean Water Act, Safe Drinking Water Act, and more. The question is whether Biden EPA Director Michael Regan has the tenacity and resources to aggressively deploy these powers.

Clean Water Act

The Clean Water Act, in many ways a companion piece of legislation to the Clean Air Act (covered in the next section), is a landmark environmental law that created a federal regulatory framework for policing water quality. The Clean Water Act, along with the Safe Drinking Water Act and portions of an array of other laws, is enforced by the EPA's **Office of Water**.

The Clean Water Act (CWA) actually predates the creation of the EPA. The first version of the CWA was **passed in 1948** under a different name. However, after a series of high profile environmental calamities, the Act was reorganized in 1972 and expanded as part of President Nixon's legislative agenda to protect people and the environment from dangerous levels of pollution.

While the CWA has generally been a very successful federal law, it failed to achieve some of its objectives. A report from the Environmental Integrity Project **found** that half of the United States' waterways remain "impaired" by pollutants (too polluted to be safe for swimming, fishing, or use as a drinking water source). An original goal of the Nixon-era reboot of the bill was for all U.S. waterways to be fishable and swimmable by the mid-1980s. Needless to say, the nation remains well short of that benchmark nearly forty years after the target time period. As a result, while the CWA has resulted in water much safer than in the 1960s and 70s, it has **not come close to realizing its full potential**.

Additionally, conservative attacks have hollowed out the EPA's ability to fully extend the CWA's protections to all of America's waters, most recently when President Trump's EPA **rescinded an Obama-era rule** that was crucial to CWA enforcement. A specific clause of the Act authorizes federal oversight of the "waters of the United States," but does not define what that means. Real estate developers and other polluters have argued that the phrase does not refer to *all* waterways within the United States. In the early 2000s, courts ruled that the government was being overly expansive in understanding the phrase as referencing all water in the U.S.

The EPA under President Obama later countered this by creating a new rule that defined "waters of the United States" using a watershed based approach, asserting its authority to regulate all pollutants that impacted the flow of a watershed — that is, the flow of water from land areas into creeks, streams, and rivers and eventually out to the ocean. This rule was based on extensive research and was in line with the scientific consensus. However, in 2019, Trump rescinded this rule, opting for a highly restrictive definition that applies only to permanent waterways. This legalized polluting across any parts of a watershed that was not a continuously flowing stream or river. Areas where water basins only form during heavy rainfall or snowmelt were suddenly free to be polluted. The result was only about half of all watersheds across the U.S. being subject to EPA enforcement of rules established under the CWA.

The Obama-era rule, known as the Waters of the United States (WOTUS) Rule, has been **reinstated** under the Biden administration. However, some permits for projects likely to cause water pollution issued under the Trump rule are not being rescinded. If projects **had received both** a determination of applicability and a permit prior to the Supreme Court striking down the Trump rule in 2021, the Biden EPA will honor them. Otherwise, all pending and new applications will be evaluated under the pre-2015 standard until a new definition is formalized. Biden, however, was under no legal obligation to allow projects permitted under the struck-down definition to proceed.

One specific drawback of the CWA is that it only extends to "point-source" water pollution. That means that pollution has to be emanating from a specific facility. Functionally, CWA protections do not extend to things like fertilizer runoff from agricultural activities.

Safe Drinking Water Act

In 1974, the Safe Drinking Water Act (SDWA) empowered the EPA to protect the public from unsafe, contaminated drinking water. The scope of the act **covers** "all waters actually or potentially designed for drinking use, whether from above ground or underground sources." While less powerful than the Clean Water Act — it is narrower in scope and in the authority designated to the EPA — the SDWA is the other major component of the EPA's suite of Congressionally-delegated tools to protect Americans from polluted waters.

Notably, because the SDWA covers underground water, it gives the EPA authority to regulate groundwater contamination. While an expansive definition of the WOTUS rule would also include underground water as part of a watershed-based approach, the SDWA provides a useful backstop. In addition, the SDWA also extends protections to aquifers and groundwater that is not a part of any watershed.

This is a crucial piece of legislation because it provides a legal basis to protect the access to safe drinking water for American residents. The SDWA also **instructs** the EPA and the states to create minimum standards for safe water to protect sources of drinking water from pollution, including the injection of fluids into the ground (as happens with fracking). Moreover, a set of amendments from 1996 require the EPA to use the best peer-reviewed scientific evidence available when making its standards and utilize "detailed risk assessment."

Policy Options - What More Should Be Done

With the EPA's expansive power to regulate water systems and drinking water, today's America should be a land of pristine wetlands and safe water systems. All too often, though, it is not. While rivers catch fire far less frequently, water pollution is still far too common. Corporations are still permitted to seriously jeopardize public safety. The EPA can and should do more to protect people and the environment.

One area in which the EPA has **consistently attempted** to **strengthen regulation** is in the presence of Per- and Polyfluoroalkyl Substances (PFAS), or "forever chemicals," in water. PFAS are **widely used chemicals** that have been linked to dangerous health risks, even at small doses. For decades, companies like DuPont worked to conceal those risks from the public and prevent regulation. **Under the Biden administration**, the EPA has accelerated research into the nature of PFAS as well as stepping up regulation, and including PFAS in consideration of permits to discharge pollutants.

The EPA also **reversed a Trump-era policy** that functionally turned a blind eye to poor waste management and exposure to unsafe water in impoverished areas. The measure, which was billed as ensuring affordable water, gave utility companies that served poor communities looser requirements to comply with water regulations and longer timelines (up to 25 years) before the EPA would take additional action. While revising

the rule is an excellent first step, it must be paired with oversight to ensure that Americans have access to clean water, regardless of socioeconomic status.

Another area of particular concern is a lack of action on wastewater and coal ash. There are giant piles of **fertilizer waste** in Florida that have been contaminating groundwater. So far the EPA has declined requests to require testing runoff from the piles. Under the SDWA, the EPA has the authority to regulate contamination of an aquifer that is used to source drinking water — they should use it to investigate toxic runoff from these piles of fertilizer waste and ensure that corporations dumping their toxic byproducts are not undermining public health.

The EPA should also pursue a more aggressive inspection regime broadly. On random municipal combined sewers (where a single sewage system handles waste, stormwater, and runoff) inspections in the early 2000s there was a staggering **61.4 percent noncompliance rate** with the Clean Water Act. It's not good when less than half of inspected facilities are actually complying with a law that keeps toxic pollutants out of watersheds. For other projects subject to CWA oversight, data is entirely self-reported by facilities or states, which the EPA's Inspector General has found to be **massively underreported**.

Money appropriated to hire more inspectors to protect people from dangerous and disgusting stuff in the water they drink and cook with is a political no-brainer, and the Administration ought not to duck from fighting for it.

Prevent Wastewater Dumping Under CWA Authorities, And Stop Wastewater Runoff With Toxic Chemical Authorities

The EPA has mostly abdicated its responsibilities for decades to regulate toxic, sometimes radioactive wastewaters. These wastewaters are a byproduct of fossil energy (including oil and gas) production and pose serious health risks. Some wastewater is generated at power plants, but most is a result of hydraulic fracking used to access oil and natural gas. Additionally, absent federal leadership, many state and local regulators have been scrambling to figure out how to manage wastewater. The task is made far more difficult because the EPA has **not developed safety standards** for many of the chemicals that can be mixed in with the water. Making matters worse, these toxic byproducts have historically been **exempted from regulation covering nuclear materials**, despite the fact that wastewater can be radioactive.

In some states, this has led to truly horrifying methods of disposing of wastewater. For instance, in Pennsylvania, oil and gas companies sent their toxic byproduct to **municipal sewage plants and landfills that were unequipped to handle it**. This led to the wastewater being dumped on dirt roads, farmland, and into waterways – on purpose. The idea has actually been sold to municipalities as **a way of keeping dirt roads from getting too dusty or icy**. In Ohio, it is legal to dispose of wastewater simply by **spreading it on the ground**.

Because of these inconsistent disposal practices, toxic wastewater is also entering into food and water consumed by the public. Even when it is not dumped straight on the ground, the "proper" disposal method is to

store it underground, where it has tainted groundwater and, in turn, the **well water that people rely on to drink**. The EPA has also **allowed food grown with this toxic water** to be sold. Companies involved in using wastewater, which they prefer to call "produced water," say that it is safe, but **those assertions are backed by bad science**.

Toxic material is also entering into the food chain. For example, freshwater mussels from the Allegheny River, which are undergoing a mass extinction event likely due to anthropogenic degradation of water quality, have been found to contain chemicals from fracking wastewater dumped there **over a decade ago**. As a result of that same practice there are **elevated levels of radium** downstream of the dumping site.
There is an array of actions that the EPA could take to address the medley of wastewater disposal issues. As mentioned above, the CWA only regulates point-source pollution, which means that the EPA can use that authority to crack down on dumping, but not to regulate runoff from spreading toxic wastewater on the ground. However, the EPA could regulate wastewater runoff using authority to control toxic and radioactive chemicals (described later in this report). Additionally, the tainting of well water could be prevented by more stringent enforcement of the SDWA.

Enforce Closure Of Coal Ash Storage Ponds

Under the Biden administration, wastewater regulations, while still nowhere near strong enough to protect the public, are forcing power plants to **switch away from coal** by requiring the removal of coal ash. Coal ash is a toxic byproduct of burning coal for energy which can leak dangerous levels of mercury, cadmium, radium, arsenic, and other carcinogens into groundwater and drinking water sources — it's the **leading source of water contamination** in the U.S.

As of January 2022, there were **738 regulated coal ash dump sites** across the country, and communities around these sites have higher rates of cancer, asthma, and other diseases. So it was welcome news that the Biden administration in January **denied all of the nine power plants** which applied to delay closure of their toxic ash storage ponds. **As Earthjustice describes**, this is the first time the EPA is enforcing federal coal ash rules since they were passed in 2015. This is a welcome and necessary start, but due to the coal industry's relentless attempts to hide toxic coal ash contamination and avoid closing the toxic ponds, the EPA needs to actually enforce the closures they deem necessary and force utilities to act with speed where there would otherwise be deadly delays.

The EPA's Relation to Other Regulators

While the EPA is the lead regulator on issues of water quality, responsible for establishing and enforcing standards and determining when pollution discharges are legal, it is not the only federal agency involved. Most notable is the Army Corps of Engineers (ACE), which **describes itself** as "the nation's environmental engineer." Read more about the powers of the Army Corps of Engineers and its current leadership **here**.

ACE has **oversight responsibility** of all navigable waters within the United States, per the Rivers and Harbors Act of 1899. Section 10 of that law gives ACE authority to regulate all dredging and construction projects that

impact navigable waters and “territorial seas,” ocean waters that extend from the shore out three miles. Between the authority delegated from Section 10 and Section 404 of the CWA, ACE is responsible for two main categories of water: navigable waters (Section 10) and Waters of The United States (Section 404). Section 404 also extends protection to tributaries and wetlands along these waterways. Both Section 10 and Section 404 also grant authority to police pollution in “tidal waters” which extend up to the high water mark of bodies of water.

Moreover, while ACE is generally in charge of permitting for construction and industrial activity that can impact water quality, the Maritime Administration (MARAD) has statutory **authority** to police the environmental practices of vessels and companies involved in trade along American waterways.

Despite ACE’s authority, the EPA generally remains the lead regulatory body on issues of water pollution. ACE’s authority from section 404 primarily relates to permitting, while Section 10 in the River and Harbors Act is mostly concerned with construction and engineering projects (which also includes more permitting.) While the EPA and ACE both have environmental regulatory authority, the EPA’s is both broader and more directly tied to pollution. As a rule of thumb, the EPA has oversight over all waters, dependent on rulemaking around “Waters of the United States,” while ACE controls some permitting authorities and has separate authority over navigable waters.

V. ISSUE AREAS - AIR

Issue Overview

The Clean Air Act (CAA), which was established by Congress in 1970 with major revisions in 1977 and 1990, was designed to control common air pollutants in order to protect public health and welfare. In the decades following the implementation of the Clean Air Act (CAA), air quality improved and fewer Americans fell ill or died as a result of toxic air pollution. That **changed** during the Trump years as political appointees slashed regulations and sufficient enforcement was nonexistent. A **Harvard study** found that, in 2018, air pollution from burning fossil fuels was responsible for about one in five deaths worldwide.

The Biden administration does appear to be aware of its power and responsibility to reduce air pollution in this country — the EPA in March **proposed** stricter limits on pollution from trucks, vans, and buses, and in January **announced** it would hold surprise inspections of power plants in Cancer Alley, a stretch of Louisiana with such poor air quality that it’s almost more common to have cancer than not.

But if Biden hopes to win on multiple fronts at once, by decreasing toxic air pollution, reducing planet-warming emissions, and keeping Democrats in office, his administration needs to be louder, more creative, and more specific about its enemies as they relate to air pollution. As labor organizer and folk singer Utah Phillips famously said, “The earth is not dying. It is being killed, and the people killing it have names and addresses.” Even if the planet was not in the midst of a warming catastrophe (which it **unequivocally is**), ending the reign of fossil fuels would be worthwhile for the air quality health benefits alone. Even beyond the immutable value of

human health, it's **estimated** that the Clean Air Act provides $30 in health benefits for every $1 invested in compliance.

The states and the EPA share responsibility to implement air quality standards. The states are each required under the CAA to develop their own enforceable plans for air quality control. If a state fails to implement an adequate plan, the EPA is required to issue a federal implementation plan instead.

If a state finds a violation of the CAA, it has **authority** to take action against the violator. But so does the EPA. If the EPA decides to take enforcement action for a specific violation outside of a state-led decision, it must notify both the offender and the state in advance. At that point, the EPA can **assess** administrative penalties for civil violations of up to $46,539 per day of violation, but only up to $359,901. (These numbers increase periodically with inflation and are based on 2013 values of $37,500 and $290,000, respectively.). However, there is an exception. If the EPA Administrator (currently Michael Regan) and the Attorney General (currently Merrick Garland) jointly decide that a violation is particularly egregious, they can impose a fine in the amount of their choosing, with no maximum. The EPA can also seek higher penalties (and imprisonment) for criminal violations.

One more interesting **tactic** available for CAA enforcement is the ability of any individual to sue the EPA to force them to perform enforcement duties under the CAA. Courts are then able to impose civil penalties in lawsuits brought under this provision and can require fines of up to $100,000 to be used for public health-related mitigation. Of course, the extent to which the EPA can settle existing and new lawsuits with greater speed depends heavily on staffing resources as well as political will.

Within the EPA, it is the responsibility of the **Office of Air and Radiation** (OAR) to administer the Clean Air Act. Its four offices each play a role: the Office of Air Quality Planning and Standards (OAQPS) compiles air pollution data, develops regulations to limit and reduce air pollution, and assists states and localities with controlling air pollution; the Office of Atmospheric Programs (OAP) is tasked with protecting the ozone layer and addressing climate change; the Office of Transportation and Air Quality (OTAQ) focuses on transportation-related emissions and pollution; and the Office of Radiation and Indoor Air (ORIA) regulates radiation levels and indoor air quality issues.

We recommend reading ProPublica's investigation titled "**Air Monitors Alone Won't Save Communities From Toxic Industrial Air Pollution**" for a deep dive into the various issues related to the federal government's monitoring and regulating of air pollution.

What Is Already Being Done

The current status of Clean Air Act enforcement against greenhouse gas emissions is abysmal. **A July 2022 Associated Press investigation** into methane leaks found that "Though the Clean Air Act requires companies to accurately report greenhouse gas emissions, the EPA could not provide AP with a single example of a polluter being fined or cited for failing to report, or underreporting." This is in spite of the fact that AP's analysis found that more than 140 of the 533 "super-emitting" facilities identified by Carbon Mapper (a partnership

between NASA and university researchers which tracks methane emissions across the Permian Basin) were on track to exceed the EPA's methane reporting limit.

Underreporting of methane, an extremely potent greenhouse gas that is released as a result of natural gas extraction, is a massive problem with deadly implications. The newly signed Inflation Reduction Act of 2022 (IRA) **empowers** the EPA to charge oil and gas companies for excess methane emissions to the tune of $900 per ton in excess of an EPA-set threshold, incrementally rising to $1,500 by 2026. But companies are **required to self-report** their methane emissions using a set of unclear equations based on the equipment they use, which **scientists say** could be leading to a 60% undercount in methane emissions compared to the EPA's estimates.

According to Bloomberg, **companies' self-reporting** means they have "broad leeway to decide how much pollution they report, based on how they interpret more than 100 pages of complex agency rules," and that an EPA spokesperson said that while regulators are supposed to review the reports for potential inconsistencies and can request resubmissions, the figures are "ultimately the companies' responsibility."

For the IRA's new methane fee provision to be effective, as *The American Prospect* **details**, the EPA should require more facilities to report their methane emissions by lowering the threshold for required reporting. It should also close the loopholes that allow companies to underreport their actual emissions, including by providing clear guidance on the measuring protocols. The IRA requires that the EPA revise its reporting requirements within two years of the law's signing to ensure calculations are based on empirical data that accurately reflect actual emissions.

Before the EPA knew whether or not the IRA would exist, it had tentatively announced a plan for a crackdown on air-polluting corporations which was nowhere near expansive or, perhaps more importantly, specific enough. In January, the EPA announced it would begin surprise inspections of chemical plants in the "Cancer Alley" of Louisiana. EPA Administrator Regan **promised** that "When facilities are found to be non-compliant, we will use all available to to hold them accountable." The potential here is unmatched, but will only be successful if enforcement is swift, serious, and specific.

Corporations whose plants are found to be spewing unsafe levels of toxic chemicals should be slammed with a high fee (which has no upper limit as long as Regan and Attorney General Merrick Garland agree on the amount). It's unclear to what extent Garland will agree to raise fees for environmental corporate crimes, but cases like the recent **$1 billion penalty against mining giant Glencore** over a bribery investigation, as well as the **creation of the DOJ's new Office of Environmental Justice**, present an encouraging view on what he may find politically palatable.

The fee should be assessed with enough speed that corporations feel it as a direct consequence of the harmful actions. The crackdown must also be extremely well-publicized — people want to see corporations they know to be poisoning their families punished, and showing the American people that the government is on their side will help restore faith in government. And that corporation's wrongdoing should be documented and held against them when they inevitably attempt to expand their operations.

Biden's EPA has also rescinded a Trump-era rule that barred states from imposing emissions standards more stringent than the federal government's. The most important consequence of this move is that **California will no longer face federal pushback** for maintaining higher environmental standards for cars. Because of the size of the state's population and economy, vehicle manufacturers tend to make their automobiles compliant with California regulations, pulling the entire country towards more environmentally friendly cars. In addition to restoring California's waiver to the Clean Air Act standards, the EPA also **removed a rule that preemptively blocked other states** from following them by adopting higher standards.

What More Could Be Done

The EPA in March **announced** the first new limits in over 20 years on pollution from large vehicles including buses, delivery trucks, and tractor-trailers. These so-called "tailpipe standards" would **require large trucks to reduce emissions** of carcinogenic nitrogen dioxide and carbon dioxide. The EPA also **proposed new regulations** for diesel engine tractor-trailer rigs which would require the industry to cut nitrogen oxide emissions by up to 90% per truck by 2031 compared to current standards. Both of these rules are encouraging (though not as strong as they should be, **according to environmental advocates** who say the only way to truly solve air pollution issues is to embrace zero-emission vehicles) but will only make a measurable difference in air quality if the EPA follows up with consistent enforcement of the trucking industry. Once the rule takes effect, the EPA must be vigilant and enforce it stringently, otherwise major corporations will shirk their requirements to avoid spewing poisonous toxins into air across the nation.

In January of 2021, the EPA **affirmed its authority** to curb mercury from smokestacks in a reversal of a 2020 Trump-era policy. The agency determined that it is "appropriate and necessary" to limit the toxic air pollutant from coal plants and also laid the groundwork for tightening mercury rules in the future. But affirming its authority to regulate mercury means nothing if the agency doesn't pair that with real enforcement measures.

The EPA could also enforce requirements under its **newly expanded "good neighbor" rule**. The good neighbor rule is the part of the Clean Air Act which mandates that states not allow emissions that contribute to compliance problems outside their borders, usually from chemical pollution traveling downwind into a state that claims it did not create the pollution in the first place. In the expansion proposed in March of 2022, power plants, paper mills, and other industries in 26 states would be required to cut smog-forming emissions to fit into stricter "budgets" of nitrogen oxide, a chemical which is a key contributor to smog. The EPA should strictly enforce this system to decrease smog across the country.

In some cases, the EPA has the opportunity to apply new rules to simple problems that are unaddressed due to poor definitions. For example, emissions from heated tanks containing asphalt and No. 6 fuel, which are classified as "heavy refinery liquids" and sit in storage tanks in refineries and terminals across the country, can be highly dangerous to human health. But it's difficult to tell exactly how dangerous the emissions are, because the EPA for decades used an estimation process which was **developed by the petroleum industry**. The EPA has known that the equations used in estimating emissions were severely underestimating the present dangers

since at least 2007. The EPA should revoke approval of the process, create a new one that actually works, and then take appropriate action to enforce clean air law against the mega-companies which store fuel in tanks.

Lastly, as mentioned in the above note on the Supreme Court, the Inflation Reduction Act officially and legally directed the EPA to regulate carbon dioxide emissions from fossil fuel pollution as an air pollutant. The implication of this is that the EPA has the authority to regulate carbon dioxide emissions under the Clean Air Act and thus push for the transition to renewable energy including wind and solar. Further analysis, and surely many legal challenges, will be required to fully explore the bounds of this new provision, but what is unambiguous is that the EPA should be creative and aggressive in developing strategies to regulate the air pollutants that harm both human health and the ever-warming planet.

VI. ISSUE AREAS - OFFICE OF POLLUTION PREVENTION AND TOXICS AND THE OFFICE OF PESTICIDE PROGRAMS

On another side of the EPA sits the **Office of Chemical Safety and Pollution Prevention** (OCSPP). We and **others** have written previously on the problems that plague the offices within, including at the **Office of Pollution Prevention and Toxics** (OPPT), which reviews chemicals to assess their safety, and at the **Office of Pesticide Programs** (OPP), which does the same for pesticides.

The enforcement in these offices works a bit differently than others in the EPA. While the staff within are working to enforce laws passed by Congress, like the Toxic Substances Control Act and the Pollution Prevention Act, their enforcement capabilities have less to do with cracking down on corporations which violate laws (though that is part of it) and more to do with deciding which chemicals and pesticides are allowed on the market. Corporations which produce chemicals and pesticides have a singular interest — selling their product — and therefore do all they can to convince (and pressure and lobby) EPA officials to allow them to do so. EPA officials in the New and the Existing Chemicals Division of OPPT are tasked with reviewing chemicals for their health and safety risks and either approving them fully, approving them with reservations or guidelines relating to concentrations, amounts, or protections needed, or denying them.

Because of this, a corporate crackdown at these EPA offices would look like actually removing chemicals from the market, or blocking them from going to market in the first place when they pose an unreasonable risk to human health or the environment.

This is the opposite of what's happening now — the **new chemical approval rate** from June 2016, when the first substantive reform to the Toxic Substances Control Act was signed into law, to April 2022 was a mind-boggling 100 percent. Not a single chemical that came before the reviewers in the New Chemicals Division was determined to pose an unreasonable risk. And that's not because every single chemical was free from risk. In fact, the EPA **withheld reports of substantial risk** posed by 1,240 chemicals beginning in January 2019. Even when one chemical was widely known to be a carcinogen, a higher-up EPA official **prevented the staff member tasked with reviewing its safety from warning the public about its risks**.

Delays in the OCSPP can be deadly. The EPA **said it would begin monitoring for DINP**, a chemical phthalate that causes cancer and dangerous birth defects, over 20 years ago, and even issued a proposed rule. But the rule was never finalized, DINP has still not been added to the EPA's toxics inventory list, and companies have continued to expose Americans to the chemical every day since. Other "forever chemicals" like PFAS are **known by the EPA to be widely present** in water across the country but so far have limited oversight. And even when the EPA is sued, like it was **by environmental groups** demanding the agency fully regulate pesticide-treated seed, it still engages in what the plaintiffs called an "unlawful delay."

Delays like these are at least partially influenced by the EPA's capacity issues, detailed in part by OCSPP Director Michal Freedhoff in **this ProPublica investigation** which found that the office "is facing a bare-bones budget, demoralized staff and increasingly angry advocates." But other barriers, including intense lobbying from the chemical industry, **play a role** as well.

If the OCSPP were to succeed in removing dangerous chemicals or pesticides from the market, or putting limits on pesticides that were approved with restrictions there should also be continuous enforcement to ensure that said chemicals did not continue to be sold or used, but the primary task ahead of this section of the EPA is to actually review the chemicals in the first place.

One example of (semi)-effective enforcement is from December of 2021, when pesticide giant Monsanto **plead guilty** to 30 environmental crimes related to their use of a pesticide called Forfeit 280 on corn fields. The EPA had approved the pesticide conditionally, with the stipulation that there would be a six-day "restricted-entry-interval" after the product was applied before workers would come into contact with it. Their failure to comply with the stipulation landed the corporation three years of probation, a $12 million fine, and a "comprehensive environmental compliance program that includes [a] third-party auditor." For reference, Monsanto is owned by Bayer, which reported over $45 billion in sales (approximately, based on reported 44 billion euros in **2021 annual report**).

VII. CONCLUSION - LEVERAGING THE EPA FOR ENVIRONMENTAL JUSTICE

The EPA can be one of the most powerful governmental actors in the United States when it is given the resources and direction to effectively implement its mandate. It has broad authority to police pollution and environmental degradation to minimize environmental destruction and public health impacts. Unfortunately, the EPA is still reeling from the Trump administration's brutal assault on even its most basic functions. Who would've thought that a real estate developer would fight so hard to block environmental protections? The Biden EPA cannot be judged without this critical context; while it has made tremendous strides across a variety of areas, too often it seems to be mostly treading water. Of course, after Trump and company tried to drown it, even that is a substantial improvement.

As the Biden EPA comes more into its own, there are serious obstacles that stand in its way. Capacity shortfalls and difficulty retaining STEM employees at the EPA and across the federal government will also need to be addressed, as will the robustness of the EPA to ENRD referral program. Adjustments may also have to be made following the Supreme Court's pending ruling in *West Virginia v. EPA*. But, there are positive signs to suggest that these problems will not keep the EPA from achieving great things. Initiatives like the Office of Environmental Justice and long overdue actions to regulate toxic chemicals, along with a flurry of important rulemakings, might indicate that there is light at the end of the tunnel.

Department of the Interior (DOI)

By **Daniel Boguslaw**

I. INTRODUCTION

The **United States Department of the Interior (DOI)** is one of the oldest and largest federal agencies, regulating natural resources, public lands, and programs related to Indigenous Americans. It oversees more than 500 million acres of federal lands, and exercises oversight over U.S. domestic energy production on leasing, mining, and drilling rights on them.

Oversight of recreational and public land leased for energy extraction is shared by several sub-offices housed within Interior — the Bureau of Land Management, the National Park Service, and the Bureau of Ocean Energy Management. The Bureau of Ocean Energy Management leases offshore waters for extraction (waters outside of the territorial bounds of the United States, generally within about 150 miles from land), and the **Bureau of Safety and Environmental Enforcement** regulates the industry operating in coastal waters (waters within the territorial bounds of the United States, generally within about 20 miles from land). Elsewhere in the Department, the Bureaus of Trust Fund Administration, Indian Affairs, and Indian Education oversee issues relating to Indigenous peoples.

While agencies like the Environmental Protection Agency and the Department of Justice can respond to the dramatically unfolding effects of climate change with enforcement actions, the Department of the Interior controls the permitting, leasing, and regulation of corporate use of public land. In this way, it holds tremendous power to cut out bad actors at the root, preventing them from seizing government-owned parcels and beginning the drilling and polluting activity which gives cause to enforcement actions in the first place.

In order to make good on his dual promises of a green energy transition and an economy that serves all people — rich and poor, rural and urban — Biden must direct the DOI to block future leasing of coastal waters and pristine natural landscapes to fossil fuel and mining interests. These leases needlessly contribute to both global warming and domestic environmental deterioration. But ending leasing (as he **promised** to do during his campaign) is only the start — the DOI can do much more to crack down on the corporations polluting this country.

II. PLUG ABANDONED WELLS

Across the U.S., planet-warming greenhouse gas is seeping out of **millions** of gas and oil wells, which are the tunnels dug deep underground to extract petrochemicals. Abandoned by the fossil fuel companies that first dug them after exhausting their productivity, many of these wells have since become the Department of the Interior's purview. Reports estimate over 280 kilotons of methane were released into the atmosphere from

abandoned wells in 2018 alone, the equivalent of tens of thousands of cars' annual emissions. While its heat capture efficiency slowly degrades, in the first years after it is emitted, methane traps heat in the earth's atmosphere at more than 25 times the rate of CO2. Preventing methane emissions is therefore hugely urgent to prevent the worst effects of climate calamity.

The high-end **cost estimates** to plug America's documented wells, and therefore stop the unmitigated release of methane, stands at $19 billion according to the GAO. According to **the EPA**, the combined total number of both gas and oil wells abandoned by the extraction industry could stand at well over 3 million.

Despite the vast number of wells and their relentless contribution to U.S. emissions, only $1.15 billion has been allocated for the DOI to begin cleaning them up — just six percent of the government's own low-end estimate of the actual cost of effectively addressing this problem. This shortfall comes *despite* the fact that cleaning up wells creates new jobs and **directly improves health outcomes** for local communities.

At Biden's disposal are **vast powers** under the Disaster Relief and Emergency Assistance Act which, if activated under the auspices of a national climate emergency, could be used to redirect millions in government spending towards plugging wells and cleaning up communities across America. For more on the opportunities and legal justifications for declaring a national climate emergency, see "**The Climate President's Emergency Powers: A Legal Guide to Bold Climate Action from President Biden**," by the Center for Biological Diversity.

Through the myriad powers afforded by a climate emergency **declaration**, Biden could use his presidential authority to command the fossil fuel companies that dug and abandoned wells to pay for parts of the requisite cleanup. While oil and gas companies are required to sell bonds on each well, often these reclamation bonds actually represent **only a fraction of the cost** needed to reclaim the abandoned wells. Biden should command the Bureau of Land Management, which oversees these bonds, to raise bond rates, and encourage states to cease bonds and extract compliance from polluting extraction firms.

III. SHUT DOWN FURTHER LEASING

Repairing damaged wells only makes sense if paired with another Biden campaign promise, **dating back to February 2020**, that has failed to materialize: a ban on new drilling for gas and oil. According to the White House, a **court order** granted by a Trump-appointed federal district judge on behalf of Republican-led states is the chief cause of resumed leasing. The DOI is once again **authorizing** public lands to fossil fuel companies for extraction.

While the Biden administration has **claimed** blocking leasing is out of its control, the administration can do more than it has been to challenge these leases, including **legal strategies** that have failed to materialize. Foremost among these is pursuing stringent Conditions of Approval (COAs) overseen by the Department of The Interior. The DOI has a broad mandate to place COAs on new projects, and some of these have already been implemented, like required consultations with Indigenous tribes and consideration of climate impact. But

with a **broad mandate** for COA use, Biden's Interior could create such restrictive conditions that new drilling would be effectively nullified.

There has, however, been some positive action. The Bureau of Ocean Energy Management has refused to **finalize** a new five-year leasing program for offshore drilling, despite **legal challenges** from the fossil fuel industry. If it continues to delay a new structure for leasing, it could prolong the further extraction of fossil fuels and give environmental groups more time to erect legal roadblocks to block or stave off new drilling in coastal waters. Advancing **offshore wind leasing** at the same time as intentionally blocking fossil fuel companies from polluting coastal waters isn't just good policy, it's also **good politics** given that a majority of Americans support increasing wind energy production.

If Biden wants to make good on his campaign promises to stave off climate cataclysm, he must take the corporations that have profited off the pillaging of America's natural resources to task for their failures to clean up the mess of their own making. That starts with making sure they don't receive even more government-owned land to drill on.

III. REFORM MINING LAWS TO PROTECT THE ENVIRONMENT

In February, the Department of the Interior **announced** a comprehensive review of one of the most damaging laws affecting America's public lands: the General Mining Act of 1872. The law allows mining companies pursuing metals like gold and copper, energy sources like uranium, and critical minerals like lithium to take over public lands with practically zero oversight, all thanks to a law that owes its existence to a rabid band of prospectors striking out during the California Gold Rush. "The law does not require royalties to be paid to the taxpayer for the extraction and sale of valuable minerals, and does not include any environmental, reclamation or financial assurance provisions," the DOI **wrote in a press release**.

Like the extraction of fossil fuels, mining creates a number of **lasting impacts** on the natural landscape, from taxing water consumption to poisonous effluent discharge and the resulting toxification of natural waterways and reservoirs, all regulated by an increasingly **embattled** EPA. Mining companies have also laid stake to sacred Indigenous sites in their quests for boundless profits and **disrupted critical biodiversity corridors**. All of this has been done without accountability thanks to a law from the 1800s. In reforming implementation of the 1872 law, Biden's DOI has a historic opportunity to reshape a policy that cuts out the American taxpayer and the needs of American communities in favor of corporate profits.

The Working Group on Mining Reform — **DOI's interagency working group** tasked with updating the General Mining Law's implementation, partly in response to Biden's executive order on supply chain management — will consult with tribal nations, state and local governments, environmental justice groups, labor organizations, the mining industry, environmental and conservation groups, outdoor recreation industry leaders, scientists, and legal experts to inform the rulemaking process. But the DOI will have the ultimate say on whether mining companies still come out on top after the law is reformed.

At the same time that the Biden administration has signaled its willingness to reform certain parts of America's mining regime, the White House has also expressed a desire to **fortify America's production of rare earth metals** like lithium, which is critical for the production of microchips and batteries for electric vehicles. **Biden invoked the Defense Production Act** to accelerate production of "strategic and critical minerals" including lithium in March. The announcement thankfully did not strip away environmental protections in the process.

More notably, the Inflation Reduction Act included "critical minerals processing" as an industry eligible for its billions in production tax credits, the same provision which applies to solar panel and wind turbine producers, which is being hailed as America's first-ever climate policy. The bill also provides an additional $500 million for critical minerals under the same provision paying for new heat pump installations. Lithium-ion batteries are **one of the main ways** of storing solar-generated energy.

Due to the supply chain breakdown, America has seen prices for automobiles skyrocket, most especially for the electric vehicles the White House wishes badly to promote to American consumers. This is because electric vehicle batteries require rare-earth minerals to produce, and the US is dependent on foreign production of rare-earth metal based components (at present, there is only one lithium mine in the United States.) However, the need for domestic production security should not derail the current effort to force mining companies to pay their fair share, even those extracting rare earth metals.

Expanding lithium mining in the continental United States presents some real long-term benefits to the emerging clean-energy economy, but also comes with significant risks. **Nearly 80 percent** of American lithium deposits are within 35 miles of Indigenous lands, but under current rules, tribes needn't be consulted before projects begin. This is not a theoretical concern: the Trump administration fast-tracked approval of what would be the country's second lithium mine near the Nevada-Oregon border. Protests and legal challenges have blocked production so far, since the dig site **includes** "a massacre site, historic properties, and hunting and gathering grounds important to the region's tribes." Responsibly scaling up lithium production should be executed with significant Indigenous input, strong labor and environmental protections, and **paired with other policy interventions** like lithium recycling.

The Biden DOI must ensure that mining companies are responsible for expenditures that safeguard the environment, including cleaning up the toxic byproducts of their facilities. It must also ensure strengthened labor protections for the workers who power their mines, and that taxpayers receive a cut of the profits generated off of public lands.

IV. CREATE A UNIFIED WILDLAND FIREFIGHTING TASKFORCE

In December of 2021, the Department of the Interior announced the formation of the Wildland Fire Mitigation and Management Commission. The commission, created by a provision in Biden's Bipartisan Infrastructure Law, adds one more working group to a list that already contains the interagency **Wildland Fire Leadership Council** and the White House's Wildfire Resilience Interagency Working Group, which all share the same mandate of setting better wildfire policy. However, neither the infrastructure bill, nor any of the working groups,

nor the White House has provided an effective overhaul of the American wildland firefighting workforce that meets the need for fighting **increasingly out-of-control wildfires**. Creating so many executive groups with fundamentally similar goals reflects that the biggest reform needed is one which the executive branch itself generally cannot provide: more manpower, in the form of more firefighters paid higher wages, which must be allocated by Congress.

On the campaign trail, Biden advocated for the creation of a Civilian Climate Corps, harkening back to the New Deal era when FDR's Civilian Conservation Corp employed millions of young people to stimulate job growth and transform the country.

The Biden administration has failed to secure billions of dollars in federal funding through the 2021 budget reconciliation process it once hoped could be used to fund the kind of transformative civilian army mustered by Roosevelt. However, the Civilian Climate Corps did not survive the death of the "Build Back Better" reconciliation bill, and does not appear in the skinnier Inflation Reduction Act..

There are limited workarounds, however. By enacting a climate emergency and martialing the **combined powers** afforded by the National Emergencies and Stafford Act, the Biden administration could swell the ranks of the CCC not only to engage in public works projects like murals and trail creation, but also to combat the year-round blazes that threaten to consume vast swaths of America's west coast and drying southwestern scrublands.

Biden was **reportedly** shocked to hear of the poor pay, lack of health benefits, and brutal conditions that the country's largely seasonal wildland firefighters endure. Last year, after meeting with wildland fire advocacy groups, he **commanded federal agencies** to raise wildland firefighters' hourly wages, extend mental health benefits to the backcountry workforce, and transition hundreds of seasonal jobs to full time. He demonstrated a willingness to pick up the West Wing pen to enact the powers granted to the chief executive. But a small pay raise is not nearly enough.

As the rich and powerful contract with well-paid **private wildland firefighting teams** to protect their estates, public workers have been sold short on pay, healthcare, and enough federal funding to get the job done right, with adequate staffing and equipment. Biden should prioritize condemning the fossil fuel corporations stoking the flames of year-round fires, and connect the funding of the CCC with a reduction in subsidies to major gas and oil producers.

If Biden wishes to simultaneously secure a legacy of being a transformative leader akin to FDR, and make good on his promises to wildland firefighters, he must activate the full powers of the presidency to combat the climate emergency and America's deepening economic woes by creating a Civilian Climate Corps on the order of what was promised on the campaign trail, and that can truly meet the task of a rapidly warming planet.

U.S. Department of Agriculture (USDA)

By **Toni Aguilar Rosenthal** and **Vishal Shankar**

I. INTRODUCTION

The **United States Department of Agriculture (USDA)** is one of the nation's oldest and most important federal agencies. Established as an independent agency in 1862 by President Lincoln, the USDA was called "**the people's department**" by Lincoln and others at the time, reflecting the fact that nearly half of all contemporary Americans lived on a farm. As the demographic breakdown of the country changes, so did the USDA, which grew from solely supporting the nation's food and agricultural policy to include a diverse array of issue areas and governance items. From its management of over 150 national forests and grasslands to its provision of vital infrastructure to rural communities to its oversight of the nation's food production and safety, the USDA's actions affect all Americans — especially those who live in rural areas, whether or not they work in agriculture.

Nowhere is the USDA's importance clearer than with the role the agency could play in tackling climate change. The USDA has a climate responsibility that is wildly under-discussed in the fight for a sustainable future: many populations it serves – such as family farmers or rural communities – are acutely **vulnerable** to the impacts of climate change. Under its existing executive powers and statutory authority, USDA's environmental protection tools are also vastly underutilized. The Inflation Reduction Act puts USDA front and center by providing it with $10 billion to pay out directly to rural electricity co-ops for retiring coal-fired power plants. The IRA also includes $20 billion to expand USDA's "Conservation Stewardship Program," which essentially pays farmers to adopt more sustainable practices that also help grow their farms' potential to store carbon.

From the **increasing** frequency and devastation of wildfires on (and near) Forest Service lands to the destruction of crop yields from increasingly **common** extreme weather events, the climate crisis is affecting almost every facet of the USDA's stewardship responsibilities. Of course, the USDA's intersection with the climate is also one that is intimately intertwined with class and geographical equity, as it is one of, if not the, primary federal point of contact for much of the nation's rural population, a **disproportionately low-income** demographic that is itself particularly at risk to the consequences of climate change.

II. AGRICULTURE AND THE CLIMATE

Climate change is already devastating the lived environment of many communities across the country. This is particularly true of much of the USDA's jurisdiction, which is significantly located in rural America and the nation's farmlands. While just **19** percent of the country's population is located in rural districts, over 95 percent of the nation's landmass is considered "rural."

Some of these vulnerabilities have already begun to manifest **via** sustained crop and livestock losses due to (worsening) extreme weather events, extensive infrastructure crises, **changing** seasonal weather patterns impacting crop yields, **hastening** soil erosion, and more. Of course, climate change has also fostered extended and consistent droughts that increase water scarcity, long summers that aggravate destructive pest crises in agriculture and forestry, and other issues that have the potential to be terminal threats to the health of rural lands themselves and the lives and well-being of the people who reside upon them.

Climate change is also being fueled, and subsequently profiteered off of, by the agricultural industry. Specifically, large-scale industrial agriculture corporations have destabilized entire ecosystems and environments over the course of decades through practices **that** poison local drinking water sources, destroy topsoil, dissolve and displace ecosystems, and otherwise prompt ecological collapse. These Big Ag firms sacrifice the long-term health and safety of the rest of their industry — and the rest of the country — in the interest of their own bottom lines.

The USDA is the primary regulatory oversight body for these notoriously consolidated giants. Not only are these firms **bad** for rural communities, economies, and small and family farmers, they are also incredibly destructive **nation-wide polluters**. From livestock production conglomerates to industrial processing plants, the breadth of the climate devastation these bad actors regularly perpetuate is immense, and all under the USDA's responsibility. Due to the extraordinary risk that climate change poses to farmers and others under the USDA's purview due to its impact on soil health, seasonal weather cycles, crop viability and more, it is specifically critical that the USDA act to proactively regulate against climate-damaging agricultural practices as well as to insulate their charges from the already-prescient impacts of climate change.

Not only does environmental concern merit executive intervention on climate-cancerous corporate behaviors, but cracking down on Big Ag's environmental malfeasance is a **savvy political move**, too. Small farmers and rural communities more broadly have been suffering under the tilted political scales dictated by agribusiness conglomerates, and there is **little love lost** between rural voters and the massive businesses that **corrupt** these communities' ground and drinking water, **pollute** the air, and **exploit** their own anti-competitive business models to devastate small farmers' profitability. It is more than a little bit frustrating that Democrats in Washington have pondered how to attract rural votes for years without ever really trying the most obvious tactics, which actual rural voters have begged Democrats to enact for decades and which would yield policies beneficial to the rest of the country and the planet anyway.

A big part of the reason for this inaction is that Big Ag has one of the **most** powerful **lobbies** in Washington, and with its massive donations totalling **$150,180,980** in 2021 alone, it has successfully bought the freedom to exploit, extract, and pollute at will for decades. Biden has a responsibility, and an incredible opportunity, to connect with rural voters through addressing — and finally rejecting — Big Ag's buying power in favor of the real everyday people who the USDA was founded to serve.

III. CONDITIONING FUNDS

In order to begin, or in limited instances continue, proactively regulating against corporate environmental devastation, and to start building the climate resiliency of rural communities themselves, the USDA should approach the issue in three primary action areas: conditioning funds, subsidies, and grants to reflect environmental concerns; bolstering and aggressively enforcing existing regulatory policies relating to climate change; and pursuing antitrust actions against hyper-pollutive, extractive, and exploitative Big Ag firms.

The USDA is a massive awarder of grants, subsidies, loans, and other forms of financial assistance within the agricultural industry. In FY21 the Agency awarded over **$220 billion** in these funds — constituting almost **85** percent of the agency's total financial obligation for that year.

These funds are critically important to the health and financial well-being of small- and medium- sized actors throughout the industry, and are doubly critical for making sustainable alternatives to current farm standards financially accessible and attractive. Unfortunately a significant portion of these funds has been **functionally** co-opted by large agribusiness to the continued detriment of the environment and small and family farmers due, in part, to a lack of specificity in eligibility standards and few protections against such abuses.

To combat this, the USDA can and should condition these funds by requiring all agricultural businesses seeking agency money to implement practices that reduce emissions in order to receive agency-awarded incentives. Specific conditions can and should place factory size limits on awardee eligibility standards, as well as force recipients to maintain specific emissions standards, water and land consumption standards, and to mandate clear waste management and disposal practices with particular emphasis on highly concentrated industrial farms.

In particular, the USDA should **better utilize** programs like the Environmental Quality Incentives Program (EQIP), located within the agency's Farm Production and Conservation Division, to actually fulfill its stated purpose of **creating** "cleaner water and air, healthier soil and better wildlife habitat, all while improving agricultural operations." EQIP is intended to incentivize novel and innovative approaches to farming to mitigate natural resource shortages and to insulate the industry from changing global environments.

Unfortunately, the program has been **drastically** **abused** by factory farms capitalizing upon, and profiteering off of, practices antithetical to the program's stated goals. In particular, EQIP has been co-opted by large factory farms and their operators (**with** JBS, Tyson, Cargill, Smithfield, and Perdue the largest among them) that use it to fund their own false climate solutions **like** highly-polluting liquid manure systems. Not only does this undermine USDA's climate-facing infrastructure, it actively detracts from small farmers' ability to construct for themselves sustainable, long-term, climate-resilient and regenerative farming practices because large corporations (and **particularly** concentrated animal feeding operations (CAFOs)) **co-opt** the **funds**. While it would require congressional action, the next farm bill should specifically **exclude** CAFOs and other large agribusiness from eligibility for EQIP. In the meantime, USDA should **work** with states to deprioritize harmful industrial practices in EQIP funding and to extend better outreach and support to small and socially disadvantaged producers to better support them through the application process and ease access to historically exclusionary federal funds. Such actions would restore EQIP to its original purpose and better

complement the **Conservation Stewardship Program** (CSP), which requires ongoing conservation efforts as part of its eligibility mandate and which primarily serves small, non-industrial, farms.

Of course, the USDA should also ensure that its sustainably focused programs are not propping up false climate solutions such as biogas, another practice met with **enormous subsidies** by the agency. Biogas is gas produced from sources like waste, manure, and plant material, rather than so-called "natural gas," or fossil gas, which is drilled and pumped up from underground reserves.

Biogas is **not sustainable**, nor is it a real climate solution, and instead is a **highly toxic** resource that produces many of the same air contaminants as natural gas when burned while simultaneously is known to release polluting nitrates into groundwater. Biogas incentivizes a gross capitalization on agricultural climate destruction instead of any real attempt at stopping the source of such pollutive materials. The USDA should thereby institute strict definitions as to what constitutes "sustainable" agricultural practices in deliberate consultation with independent scientists, environmental activists, watchdog groups, and small and family agricultural businesses.

The USDA should also implement a robust accountability framework in its financing of dirty energy through the **Rural Utility Service** (RUS). RUS was established by Congress in the early 20th century to incentivize rural electrification. Millions of dollars flow through the program every year, and it is one of the USDA's many programs that is inextricably intertwined with rural accessibility and basic infrastructure initiatives. These funds can and should be incentivizing the development of long-term sustainable infrastructure in rural regions.

However, the Center for Biological Diversity (CBD) has previously **called attention** to RUS' further entrenchment of fossil fuels throughout rural America. CBD **found** RUS recipients Arizona Electric Power Cooperative and North Carolina Electric Membership Corporation were propping up corporations mired in (itself aging) pollutive infrastructure. As suggested by CBD, the USDA should agree to forgive the immense loan debt owed by many of these fossil fuel entrenched entities, so long as they agree to invest in proven sustainable energy resources. The USDA should further investigate their independent authority to integrate sustainable infrastructure conditionals via its loan oversight mandates with and without the aid of Congress.

The agency should also use its grantwork oversight authorities to demand the tracking, reporting, and subsequent reduction of methane emissions from industrial agribusiness grant recipients. Currently, despite the fact that agriculture is the country's **largest** domestic emitter of methane, a gas that is "86 times to 89 times more potent than carbon dioxide and is responsible for more than a quarter of current warming," industrial agribusiness evades responsibility for these emissions in part through the fact that they simply **refuse** to track them. Just because Big Ag refuses to collect data on methane emissions does not mean that these emissions (and the subsequent speed warming of the planet which they cause) cease to exist. Industry has proven themselves unwilling to address climate change and that 'voluntary solutions' do not work. The USDA must acknowledge this, and begin strictly safeguarding public funds with climate-aware conditions.

The agency can also promote sustainability and undermine corporate villainy through active divestment from polluting practices and the mega-farms reliant upon them. For example, the **Commodity Credit Corporation**

(CCC) is a wholly-owned government corporation mostly administered by the Natural Resources Conservation Service that finances USDA's farm production, price support, agricultural export subsidies and more. CCC has broad borrowing authority that **can be used** to reward and financially incentivize conservation practices relative to their estimated climate benefit values. This would make sustainable agriculture more accessible and financially attractive while disincentivizing unsustainable farming practices.

Practices included under this banner should be proven sustainable farming strategies, such as incentivizing **no-till farming practices** and **managing cover crops** so as to protect and rebuild top soil. To be clear, these funds should not be appropriated to reward industry propagated frauds– like biofuels – that actually contribute to climate chaos under the guise of green energy solutions. At bare minimum, USDA should clarify such standards to prevent its funds from fueling practices that produce more greenhouse gas emissions.

The USDA, as a significant funder of most of the country's agricultural industry, has the opportunity to powerfully shape what American agriculture looks like, what agricultural practices are financially accessible, and who is prioritized in its funding structures. Historically, USDA has ignored its capacity for conditioning and otherwise engaging in legitimate oversight of these funds, which has fostered a system ripe for abuse and which disproportionately benefits the short-term profiteering of industrial agribusiness conglomerates, at the expense of the health, financial well-being, and environmental stability of the very people USDA was founded to serve.

IV. AGRICULTURAL ANTITRUST AND THE CLIMATE

Big Ag is bad for the environment, bad for independent and small farmers, and bad for the rural communities in which they reside. The USDA is a **notoriously** **captured** **agency**, with a historically **huge** **revolver** **portfolio** and a cozy relationship to the ag lobby in Washington. This has **created** a pay-to-play system at the agency in which USDA sacrifices the communities it is built to serve while ignoring the extraordinary environmental, labor, animal, and land abuse of huge corporations.

Of course, its funding practices have also contributed to the very hyper-consolidation which plagues the industry now, with the USDA's own studies **finding** that "from 1986 to 2016, the top four companies' market share rose from 55% to 84% in beef processing, 33% to 66% in pork, and 34% to 50% in chicken." To finally begin rectifying this legacy of corporate complicity, the USDA must finally stop falsely propping up anti-competitive Big Ag firms, and to begin pursuit of an aggressive regulatory regime focused on restoring competition to the agricultural sector.

Antitrust work in agriculture is also intrinsically an environmental issue because Big Ag corporations are some of the nation's worst domestic polluters. For example, the five largest livestock-based producers—JBS, Tyson, Cargill, Dairy Farmers of America (DFA) and Fonterra—**emitted more greenhouse gasses** than oil giant **ExxonMobil**. Of course, Tyson alone was found in 2016 to have dumped **more** toxic pollution by volume into waterways than either Exxon or even Dow Chemical.

Big Ag giants also **spend millions lobbying against** climate action and spreading climate denialism. Animal agriculture accounts for **14 percent** of global greenhouse gas emissions, but industry has sought to downplay the ties between itself and its climate responsibilities through **intense** **lobbying** efforts that total more than $200 million between 2001 and 2019. The industry's devastating environmental record stems, in part, from Big Ag's fertilizer runoff, nitrogen fertilizers, **high methane emissions** from livestock, livestock manure runoff, land deforestation, land grabs, water waste, and more.

Consolidation entrenches and in many ways encourages these poisonous activities. It makes barriers to industry competition far too high for other would-be disruptors with more sustainable practices to achieve the market position necessary to actually challenge the national actors. Consolidation instead fuels Big Ag oligopolists to keep oversight costs low and profitability high across their industry, sometimes through illegal **coordinated** **price-fixing** campaigns and other times through an unstated alignment of interests, even if at the cost of people or the planet. USDA has for too long shelled out money to these industrial polluters, and in doing so has falsely propped up damaging industries and the most vile corporations within them, for years.

To ensure the restoration of long term and effective antitrust activity at the USDA, the agency must do all it can to enforce the watershed **Packers & Stockyards Act** (PSA) which sought to regulate monopoly activity in the agricultural industry. To do so, the agency must restore the Grain Inspection, Packers and Stockyards Administration, otherwise known as GIPSA. GIPSA was a standalone antitrust agency housed within the USDA that was charged with promoting fair and competitive trading practices within the agricultural industry as guided by the PSA, but Trump's USDA Secretary, Sonny Perdue, formally **killed** the agency in 2018. Once restored, an act delayed simply by a lack of political will, USDA and its GIPSA subdivision should enact tough new anti-monopoly rules for ag's worst offenders, such as meatpacking, that **include**:

> "banning packers from owning livestock, abolishing abusive tournament payment systems, requiring packers to demonstrate that the prices they pay to farmers are based on fair market value, explicitly protecting farmers from retaliation and discrimination for speaking in public about the actions of packers, and granting farmers greater legal standing to sue meatpackers without proving harm to industrywide competition."

The agency's antitrust activities should also extend far beyond meatpacking, and the USDA's antitrust activities should **also**,

> "establish a presumptive ban on price discrimination, prohibit packers from using short-term contracts that they can terminate at will, outlaw retaliation against growers for airing grievances or engaging in cooperation with other producers, and grant producers an effective right to decline arbitration of legal disputes. USDA should also ban the tournament system and create clear criteria for unfair and discriminatory practices in each livestock sector."

Such rule changes would begin the arduous process of breaking up entrenched agribusiness monopolies via simple rule changes that the USDA already has the power to implement and oversee. Nothing, except institutional apathy and industry complicity, is stopping them from doing so.

Monopolization in the agricultural sector is bad for everyone, and for everything. It contributes to the impoverishment of rural America, enables labor abuses throughout the region, and fuels corner-cutting industry practices that devastate the climate. Anti-monopoly enforcement in the agriculture sector is also responsible environmental policy for a sustainable food system, there cannot be one without the other.

V. CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFOs)

Among the worst examples of the Ag industry's worst environmental offenders, particularly those propped up by public dollars, is the USDA's financing of Concentrated Animal Feeding Operations (CAFOs). CAFOs are essentially industrial livestock corporations, some owned by independent corporate interests but the vast majority – **95 percent** – owned or contracted under the largest of BigAg corporations (like Cargill, JBS, Perdue, etc) independent that produce the **majority** of the animals raised for food in the United States each year.

Between 1990 and 2017, methane emissions related to manure management rose **66 percent**, with the **majority** of these increases tied to huge dairy and swine CAFOs. These incredible environmental costs are in part the result of the extraordinary amount of waste produced by even the smallest of CAFO operations. Even small CAFOs produce the same amount of urine and feces that is the **equivalent** of the waste produced by 16,000 humans, and this waste sits in anaerobic waste storage systems or pits for months, and then (because of **unique** agriculture specific environmental regulations) is allowed to be left untreated and unprocessed until disposed of by being spread across **land** **incapable** of absorbing it all.

This then leads to the **leaching** of manure into local groundwater and surface water sources, all the while **emitting** over 168 gasses, including ammonia, hydrogen sulfide, and methane into the air. In so doing, CAFOs effectively pass the **costs** of disposal for the pollutive byproducts of their farms to the general public via local, state, and federal cleanup and **intervention** costs when sewage poisons community land, water, and air with little opportunity for recourse. Unfortunately, aggressive lobbying from CAFOs has left the industry to enjoy little oversight from federal regulators, including the **Environmental Protection Agency** (EPA) and the **USDA** itself.

CAFOs have **broad ranging** environmental harms, from the poisoning of the land and the air to everything in between, but these organizations are also propped up by massive handouts from the USDA itself. The **majority of loans** for new CAFOs are guaranteed through USDA's Farm Service Agency, **leading** to "over-supply and low prices for independent family farm livestock producers, [and] contributing to further consolidation of the marketplace." Federal dollars should not be used to prop up, and further consolidate, an industry that indiscriminately poisons the public.

The USDA should challenge consolidation in the ag sector by specifically orienting its loans and financial support towards the small and family farms who need it through rulemaking and congressional collaboration. At bare minimum, if the USDA is intent on distributing these funds to large corporations, such funds should come with significant conditions attached that mandate strict emissions control, stringent waste management

standards, and robust compliance mandates. At present, without the extensive, unconditioned, taxpayer subsidies that CAFOs benefit from, most of them would **fail**.

Meaning, without federal EQIP money (and other USDA-administered grants) as well as unique tax breaks and other favorable economic positions, CAFOs simply could not sustain themselves. This means that taxpayer subsidies are falsely propping up an industry that is bad for the **environment** and bad for the **communities** in which they operate, all while making it **harder** for small – and more sustainable – livestock operations to compete.

VI. OTHER REGULATORY ENFORCEMENT TOOLS

Beyond antitrust, there are other regulatory enforcement tools the USDA can harness if it wishes to crack down on corporate America's environmentally-harmful practices. One set of tools is housed at the Department's Animal and Plant Health Inspection Service (APHIS), an agency that protects the public from invasive species and agricultural diseases. Climate experts believe that both of **these** **threats** are set to increase as a direct result of worsening climate change, making APHIS' enforcement role all the more crucial.

During the Trump years, the agency **sharply reduced its issuance of citations** to companies that violated the Animal Welfare Act and heavily redacted information from inspection reports published online, effectively shielding corporate law-breakers from public scrutiny and accountability. The Biden USDA could reverse this deregulatory trend by not only increasing investigations of suspected corporate violators of plant and animal safety laws, but also by releasing more detailed reports to the public and pursuing more aggressive enforcement actions against corporate law-breakers, such as **referral to the DOJ** for civil or criminal actions.

Similarly, the USDA's Food Safety and Inspection Service — which regulates the production of meat, poultry, and egg products — can crack down on environmentally-harmful practices by corporate agribusiness. Like APHIS, FSIS has both an investigative and enforcement arm to carry out its duties. The Trump administration's deregulatory approach to FSIS, **which saw the USDA permit** corporate meatpackers to reduce the number of FSIS inspectors assigned to their facilities and run slaughter lines without any speed limit, had severe impacts on both **workers** and **the climate**.

A **recent Congressional investigation** found that the Trump USDA actively coordinated with meatpacking companies to keep dangerous plants with high Covid-19 transmission risk open at the height of the pandemic, flagrantly disregarding FSIS' own mission to protect public health. Under Biden, FSIS has yet to reverse Trump's reduction in plant inspectors. Alarmingly, despite reversing Trump's line speed rule, the Biden USDA has implemented a **dangerous new pilot program** that would allow meatpackers to increase line speeds at hog plants. If the department wishes to rein in agribusiness, it must immediately reverse these corporate-friendly deregulatory moves and increase inspection and enforcement measures.

IX. NATIONAL FOREST SERVICE

One of the USDA's most direct roles in environmental management is its oversight of the National Forest Service (NFS). Created in 1905 during the presidency of conservationist Theodore Roosevelt, NFS manages over 193 million acres of public lands that include a diverse array of forests, grasslands, wetlands, campgrounds, and trails. Because these lands are under the jurisdiction of USDA, the department has the power to protect them from exploitation by fossil fuel companies. Unfortunately, the department has too often done the opposite.

This is most evident in the Minerals and Geology Management (MGM) program, in which NFS leases public lands by issuing permits to fossil fuel companies to extract federal **oil**, **coal**, and **natural gas resources**. NFS regularly **works with** the Interior Department's Bureau of Land Management (BLM) on approving drilling permits on federal oil and gas leases involving NFS lands, as official consent is required from both agencies for a drilling permit to be issued. This condition is **also true for leasing federal coal resources** on NFS lands: BLM must have the consent of the NFS before leasing the latter's lands for coal extraction, and NFS can provide BLM with stipulations to protect surface resources for coal leases. In FY 2020, the NFS **administered** more than 5,500 mineral leases, including approximately 4,000 wells for mineral, oil, and gas operations.

The Biden USDA, if it wishes to combat the direct role that the use of fossil fuels plays in accelerating climate change and endangering frontline communities of color, should take immediate action to reform NFS mineral leasing. To start, it should heed the advice of environmental groups like **EarthJustice** and issue an immediate moratorium on new NFS oil, gas, and coal leases, as part of Biden's campaign promise to end new oil and gas leasing on public lands. (See this report's chapter on the Department of the Interior for more on this subject.) Biden's USDA should also terminate a **proposed rule issued by the Trump administration** that would make it easier to lease NFS lands to oil and gas producers. **The Trump rule** eliminates requirements for the USDA to issue public notice of decisions approving plans for oil and gas leases, allows USDA to skip environmental assessments, permits oil companies to extend compliance deadlines, and relinquishes much of the NFS' oversight and approval power to the Interior Department (which was **captured by corporate revolvers during the Trump years** and continues to be **quietly run by industry allies today**). Beyond that, the USDA should also explore ways to cancel or revoke existing fossil fuel leases on NFS lands, and instead — as Biden **himself recommended** in a January 2021 executive order — explore ways to increase or prioritize permitting of renewable energy production on NFS lands.

Much like its power to directly lease public lands for energy extraction, the NFS also has considerable authority to regulate the transportation of fossil fuels over its lands. This has most recently come into focus with the proposed **Uinta Basin railway project**, a plan to build an 88-mile railway connecting Utah's oil- and coal-rich Uinta Basin to the national rail network that would traverse through NFS' Ashley National Forest. The Center for Biological Diversity and over 100 climate advocates have **raised alarms over the project**, which would quadruple the Uinta Basin's current fossil fuel extraction levels, heighten the risk of wildfires and oil spills, and increase worldwide pollution by 53 million tons of carbon annually.

These groups have **criticized** NFS Chief Randy Moore's enthusiastic support for the project — which he has **erroneously** **claimed is in line** with Biden's climate goals — and issuance of a right-of-way approval for the railway's construction. They have **urged Agriculture Secretary Vilsack** to order Moore to reconsider his

decision. The Department should heed the words of climate advocates and deny the right-of-way approval for the Uinta Basin project, as well as any future requests to expand fossil fuel transportation infrastructure over NFS lands.

A final area of climate focus for the NFS is deforestation and logging. As the agency's name implies, much of the 193 million acres of NFS public lands consists of wooded forests that serve as **crucial "carbon-sinks"** by slowing the buildup of atmospheric carbon dioxide. These include "old-growth forests" which, unfortunately, NFS has regularly allowed to be exploited by the logging industry through **timber sales**, wherein logging companies **can purchase contracts** to cut and remove timber from NFS lands.

During the Trump years, both the **President** and the USDA frequently acceded to the logging industry's requests to expand timber extraction in NFS lands. Although the Biden administration has **reversed some Trump-era deregulatory moves**, it has failed to meaningfully challenge the industry-deferential status quo. Under Biden, NFS has approved a slate of anti-climate logging requests in the **Kootenai** and **Pisgah-Nahtahala** National Forests.

To uphold Biden's pledge to use forests to combat climate change, the NFS must reverse this trend, starting by freezing any pending timber sale requests and exploring the possible termination of current timber sales. While Biden's NFS has pledged to define and inventory mature and old-growth forests nationwide within the next year, it should also go further — as **leading environmental groups have urged** — by enacting regulatory rules that protect NFS old-growth forests from current and future logging entirely. Finally, the NFS should move to **reverse a Trump-era rule** easing relaxing National Environmental Policy Act (NEPA) standards in the logging project review process, which has made it easier for the logging industry to bypass environmental safeguards and public oversight.

X. CONCLUSION

The USDA is a crucial federal agency, with an equally crucial role to play in any whole-of-government address of the climate crisis. The Agency – and its leadership – must use the tools already at its disposal to exercise desperately needed oversight over the agricultural sector, both to regulate its emissions and other pollutants as well as to insulate our food system from the devastating consequences of climate change on agricultural practices. From antitrust enforcements to Forest Service oversight mechanisms, the broad responsibilities vested in the USDA offer an equally broad spectrum of opportunities to proactively address (and to mitigate) the climate crisis.

Department of Justice (DOJ)

By **Hannah Story Brown** and **Fatou Ndiaye**

I. INTRODUCTION

During his campaign, Biden **pledged** to hold polluters accountable:

> "Allowing corporations to continue to pollute – affecting the health and safety of both their workers and surrounding communities – without consequences perpetuates an egregious abuse of power. Biden will direct his EPA and Justice Department to pursue [criminal anti-pollution] cases to the fullest extent permitted by law..."

Yet according to government records, thousands of polluters from Trump's final years in office continued to violate environmental laws throughout Biden's first year in office. The EPA's Enforcement and Compliance History Online (ECHO) **database** identifies thousands of facilities across the country with multiple significant violations[1] that have been non-compliant for 3 years. (The severity of the problem varies between but is present across states: Louisiana has 1,675 facilities with significant violations; Maine has 64; Michigan has 516; Oregon has 69.) These facilities have committed violations of the Clean Air Act, Clean Water Act, Safe Drinking Water Act, and the Resource Conservation and Recovery Act—America's bedrock environmental laws.

Environmental litigation is key to ensuring that companies and individuals comply with environmental laws. Without the threat of litigation, the laws protecting ecosystems and public health are toothless. The Environment and Natural Resources Division (ENRD) is one of seven litigating components of the Department of Justice (DOJ) and the largest environmental litigator in the country. ENRD attorneys take on both affirmative civil and criminal enforcement and defensive cases. Cases arise under approximately **150 federal environmental and natural resource laws** like the Clean Air Act, Clean Water Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), National Environmental Policy Act (NEPA), and the laws which govern the management of public lands held in trust for Native American tribes. The ENRD receives case referrals from agencies like the Environmental Protection Agency (EPA) and handles the prosecution of environmental violations and crimes.

Despite Biden's promises, Public Employees for Environmental Responsibility (PEER) **found** that EPA referrals for prosecutions in FY 2021 fell by one-third compared to FY 2010. This represents less than half of the new cases that EPA referred to DOJ in 2013, and "the lowest number of new cases developed in 33 years." The decline in cases was matched by **a decline in litigators**; the ENRD had 433 attorneys in 2010, and only 373 in 2021. The drop-off in attorneys happened largely in Trump's first two years in office; the division had 439

[1] **Facilities with Significant Violations** are facilities with current significant violations based on a count of unique facility IDs where the current compliance status for at least one statute is in significant violation.

litigators in 2017, 427 in 2018, and only 370 in 2019, meaning that it lost sixteen percent of its litigators over two years.

By comparison, the **ten largest US law firms** in 2020 had between 2,000 and 4,700 attorneys apiece. Losing staff naturally undermines the ENRD's ability to **promote** public health, protect American taxpayers, recover federal funds, and deliver other benefits in the interest of American residents. The lack of attorneys could also slow down the implementation of new initiatives such as those expressed in **Executive Order 14008**.

Biden's Executive Order 14008 calls upon executive branch agencies to develop programs, policies, and activities to address high and adverse human health, environmental, climate-related, and other cumulative impacts on disadvantaged communities. It specifically **directs** the Attorney General to consider "creating an Office of Environmental Justice within the Department to coordinate environmental justice activities among Department of Justice components and United States Attorneys' Offices nationwide," among other expansive environmental justice priorities. In May 2022, the Attorney General **announced the creation** of an Office of Environmental Justice within the ENRD.

Implementing strategies to better identify and manage cases with environmental justice implications **can be resource-intensive**, as it requires ENRD attorneys to do "additional research and information gathering, sensitive client counseling, and manage the usual pressures of defensive litigation." Considering the time and resources needed to carry out Executive Order 14008, the ENRD is in dire need of more attorneys.

The ENRD's budget request is first composed by the Justice Department and sent to the White House's Office of Management and Budget. The White House takes that information and comes up with its own budget proposal, which then goes to Congress, where the budget is haggled over and eventually some version is passed into law. So the blame for falling staff numbers and stagnating budget falls among many parties. It's imperative that Biden goes to bat for the increases that environmental litigators and other vital protectors need to actually enforce existing environmental laws.

Other agencies play a part in this effort, too. The Department of Interior (DOI) and the EPA have been the **two most active** agencies in environmental enforcement since the DOJ began systematically tracking environmental prosecutions around 1986. DOI's Deb Haaland and EPA's Michael S. Regan must boost their own hiring alongside other changes to ensure that their agencies increase their case investigation and referral capacity, and do their part to crack down on corporate polluters.

II. CIVIL ENVIRONMENTAL ENFORCEMENT

Civil environmental enforcement cases are an essential tool for the government to hold corporations accountable for their environmental impact. The authority to bring such cases falls either to the ENRD—as the Attorney General's authority to handle the civil enforcement of environmental laws is formally **delegated** to ENRD's Assistant Attorney General (currently Todd Kim)—or else to the U.S. Attorney's Office. Within the

ENRD, the approximately **155 staff attorneys** of the **Environmental Enforcement Section** specially handle the civil enforcement of environmental laws.

Between civil and criminal cases, one crucial difference is the standard for liability: civil cases can hold corporations and individuals responsible for violations of environmental laws regardless of whether they knew they were breaking the law, while criminal cases must involve "knowing violations." Another fundamental difference is that only in criminal cases can individuals be incarcerated for their crimes. Otherwise, monetary penalties and mandatory actions to remedy environmental harms are possible outcomes in both types of environmental enforcement cases. The ENRD can also pursue **parallel civil and criminal** suits against the same defendant, opening up more avenues for relief and potentially strengthening the deterrent effect of environmental enforcement.

Most settlements of civil environmental enforcement cases must ultimately be approved by AAG Kim, but U.S. Attorneys still have **significant authority**. The AAG can delegate individual cases to U.S. Attorneys, and some types of cases are referred directly to U.S. Attorneys, like wetland cases referred by the Army Corps of Engineers. Whether a case is ultimately brought by the ENRD or the U.S. Attorney's Office, it most likely starts with a referral from **another federal agency**, such as the EPA or the Departments of the Interior, Agriculture, Defense, or Energy. This referral dynamic means that the effectiveness of environmental enforcement depends upon the leadership, resources and staffing of investigative offices at other agencies too. When the EPA's investigative staff was **gutted under Trump**, the whole pipeline of environmental enforcement suffered, **civil prosecutions included**.

When the DOJ negotiates settlements in civil enforcement cases, they have a variety of tools at their disposal. They can negotiate "injunctive relief," banning corporations from certain behaviors or requiring them to take certain actions, like cleaning up environmental contamination. In May 2022, Garland **reinstated use of supplemental environmental projects** (SEPs), banned under Trump, which allow for third-party payments as part of civil settlements to fund environmentally beneficial projects in the harmed communities. Settlements can also stipulate future environmental audits or require a company to adopt an **environmental management system** to help it comply with regulations. They can require the installation of **monitoring devices**—as a recent **settlement with Chevron Phillips** did, requiring fence-line monitoring of benzene emissions—and prescribe corrective actions if and when the monitoring devices report excess emissions. Creative and targeted settlements can mitigate harm and deter future noncompliance. But weak settlements leave intact the attitude that breaking environmental laws is ultimately more lucrative than complying with them.

It can be challenging to measure the impact of enforcement on compliance with environmental laws. Nevertheless, **one study** found a way to quantify the deterrent effect of enforcement by documenting the increase in pollution after the EPA announced in March 2020 that it would stop enforcing certain environmental regulations because of COVID. Over the next several months, counties with more **Toxic Release Inventory** sites experienced a "large, sustained, and statistically significant increase in air pollution," suggesting "that firms respond in the absence of regulatory incentives to increase pollution." Not only that, but "increases in pollution resulting from the rollback of EPA enforcement led to large and statistically significant increases in COVID-19 cases and deaths." As soon as the EPA indicated it would stop seeking penalties for certain

environmental violations, polluters had no incentive to self-regulate, the cost of which can be measured in illness and death.

While some enforcement is undeniably better than no enforcement, enforcement today is chronically underfunded, and nowhere near comprehensive enough to detect or deter most environmental violations. Correspondingly, the literature on the effectiveness of enforcement as a deterrent is mixed; some studies find an important deterrent effect, while others find that current monetary penalties have a negligible or only short-term effect on corporate behavior.

A common thread among many studies is that current fines are insufficient to deter larger corporations from re-offending. For civil environmental enforcement to deter violations by the biggest corporations, fines must be large enough that powerful corporations don't feel they can just "pay to pollute," and fines must be paired with mandatory mitigation actions to address the harm done to people and ecosystems. Practically speaking, most violations allow for considerable damages[2] if the government's case and spine are both strong enough.

Noteworthy civil settlements with corporate polluters include a **2016-2017 multi-part settlement with Volkswagen** for violating the Clean Air Act by selling cars equipped with "defeat devices" to cheat on federal emissions tests, requiring among other things for Volkswagen to pay $1.45 billion civil penalty, fund a $2.7 billion mitigation trust fund, and spend $2 billion on Zero Emission Vehicle promotion and charging infrastructure. 1.84 percent of the mitigation trust fund was reserved for recompense to Native American tribes—**the first time** tribal governments have been recognized in a major public settlement.

In this case, the path to prosecution began with a group of **transportation researchers** tipping off the EPA. The EPA **informed Volkswagen** that they were in violation of the Clean Air Act, and then referred the case to the ENRD, which **brought the case** in **District Court**, leading to a landmark **$14.7 billion dollar civil settlement**. International lawsuits followed, as defeat devices were **installed globally**; Volkswagen has paid out over **€30 billion euros** since 2015.

It should be noted that the Volkswagen case is one of a handful of "outlier" historic settlements, along with cases against BP, Transocean, Fiat Chrysler and Mercedes-Benz (**see Table 3**). When the past two decades of civil environmental enforcement are evaluated without these handful of landmark cases, an **even steeper decline** is apparent.

III. CRIMINAL ENVIRONMENTAL ENFORCEMENT

Criminal environmental enforcement targets deliberate violators of environmental laws, both individuals and corporations, whose actions directly harm human and nonhuman life. For the past two decades, however, the number of federal criminal cases against polluters has **fairly steadily diminished**. Case referrals from the EPA

[2] Some environmental statutes (including the Clean Water Act) do not have a statutory cap on civil penalties for multiple violations in one case, though many have maximums by day and per violation; the discretion of the Environmental Enforcement Section attorneys involved in the case, and the scope of the client agency's monitoring and investigation, impact the degree of leniency or strictness with which violations are penalized.

to the DOJ reached a **30+ year low in 2021**—just 152 referrals, many of which weren't even pursued; only 105 defendants were charged with pollution crimes in 2021.

The Environment and Natural Resources Division (ENRD) has recently articulated a goal of bringing environmental criminal enforcement back up **to Obama-era levels**. But that goal is hardly inspiring; the DOJ **prosecuted more environmental crimes** under George W. Bush than Obama. (The Bush administration **brought pollution charges** against an average of 148.75 defendants a year, while the Obama administration averaged 139.25, and Trump a stunningly low 82.5.)

Though ENRD head Todd Kim has called criminal environmental enforcement a division "**priority**," and emphasized his willingness to "prosecut[e] individuals who commit and profit from corporate malfeasance," a large gap remains between current criminal enforcement levels and the impact and extent of corporate environmental crime. Former EPA administrator Cynthia Giles writes in "**Noncompliance with Environmental Rules Is Worse Than You Think**" that "Serious noncompliance with environmental rules is common. It is common across all programs and industry types. Significant violations occur at 25% or more of facilities in nearly all programs for which there is compliance data. For many programs with the biggest impact on health, serious noncompliance is much worse than that. Significant violation rates of 50% to 70% are not unusual."

As RDP's Fatou Ndaiye reported: "In 2019 and 2020, the Division successfully resolved **94 percent** of its cases. But there's a catch. Both the number of attorneys and **cases** they take on have steadily declined. Most of the EPA's criminal referrals in FY 2021 **were not prosecuted**, and nearly eight of ten cases have been closed primarily due to 'insufficient evidence.'" The Environmental Crimes Section of the ENRD has only **forty-three prosecutors and twelve support staff** to bring complex criminal cases against the nation's most brazen environmental offenders across ninety-four federal judicial districts.

As with civil environmental enforcement, the fact that other federal agencies must refer cases to the Justice Department means that the leadership, staffing and resources of those agencies also impacts potential criminal environmental litigation. In recent years, the Department of the Interior and the EPA have **referred the most criminal environmental prosecutions** to the DOJ, followed by the Coast Guard, Forest Service, and the National Oceanic and Atmospheric Administration. Under Trump, many agencies adopted anti-environmental practices, repealing environmental protections and bowing to the interests of the fossil fuel, chemical, hunting, logging and other industries. Internal support and resources for strong environmental enforcement diminished. Trump-era EPA Administrator Scott Pruit even **diverted EPA special agents** from investigative work to provide him with a personal security detail, **costing taxpayers millions**.

Trump-era ENRD head Jeffrey Clark, who was **facing criminal contempt charges himself** before agreeing to meet with the Jan. 6 committee this spring, worked on **expanding the leniency policy** for corporate crimes at the DOJ. In Trump's first two years, the number of criminal Clean Air Act and Clean Water Act prosecutions **plummeted by 50 percent and 70 percent** respectively. And the number of EPA inspections, criminal investigations and prosecutions **declined by 50 percent** between 2018 and 2021. The Environmental Crimes Section of the ENRD, as with the understaffed Criminal Investigation Division at the EPA, is facing an uphill climb to resuscitate strong environmental crimes enforcement.

The recent omnibus spending package for 2022 allocates far less to the ENRD and EPA than they need to vigorously increase enforcement, much less advance urgent climate priorities. The EPA only received a **meager 4 percent increase** in funding, which accounting for inflation is actually a budget reduction, and the ENRD will be vying with other Department of Justice divisions for their share of "General Legal Activities" funding, for which Congress only appropriated $40 million. RDP's Eleanor Eagan **assessed that number** to be "well short of the $100 million increase that President Biden requested and almost $200 million shy of where 'General Legal Activities' funding would be had it simply kept pace with inflation since 2010." The Center for Biological Diversity **called the omnibus budget** "an environmental catastrophe and a colossal failure of leadership by the Democratic establishment."

The Environmental Integrity Project reports that "from a longer-term perspective based on twenty years of data, almost every measure of performance – inspections, criminal investigations, civil cases referred to or concluded by the Justice Department, criminal defendants charged, civil penalties or criminal fines paid, cleanup costs recovered from polluters – points to a serious decline in EPA's capacity to enforce our environmental laws. That is a wake-up call the Biden Administration needs to answer before it is too late."

Congress's devastating ongoing failure to address the climate crisis, including through authorizing spending, is not an excuse for the government's environmental crimes investigators and prosecutors to think small. They must still levy all available resources to bring targeted prosecutions under environmental statutes against the most egregious offenders. While the ENRD **sided repeatedly with fossil fuel companies** under Trump and AAG Clark, it should now turn its scrutiny to these and other firms who profit most from environmental destruction.

Given its limited resources, the ENRD could adopt a two-pronged enforcement strategy: first, directing a bulk of expertise and resources to the biggest cases; second, applying strategic pressure through low-cost, time-efficient methods like filing amicus briefs and statements of interest in local courts across the nation to hasten progress in climate litigation. Over the past few decades, environmental enforcement has been increasingly occupied with the biggest, most landmark cases. But the ENRD must go further to shake up corporate complacency, and go to the press to talk up—**not downplay**—their enforcement priorities. The division could take Rohit Chopra's robust leadership at the Consumer Financial Protection Bureau as an example of **how to put pressure on large corporate re-offenders**.

ENRD lawyers have considerable capacity to lead a climate corporate crackdown in the courts. As RDP's Hannah Story Brown **wrote in *The American Prospect***, the ENRD "enjoys **prosecutorial discretion** in deciding which enforcement cases to pursue and how to pursue them. And according to two career ENRD attorneys, the division must '**exercise its independent judgment** as to what is in the best interests of the United States.' This balancing act, though challenging, affords the ENRD significant room to maneuver, with big consequences for the direction of environmental litigation. [...] Prosecutorial discretion can amount to the difference between enforcement as a slap on the wrist or a significant deterrent."

University of Michigan Law Professor David Uhlmann **elaborates**: "If the same violation often could give rise to criminal, civil, or administrative enforcement — and if mental state requirements only preclude criminal enforcement for a small subset of violations — what determines which environmental violations result in criminal prosecution? The answer is the exercise of prosecutorial discretion, which exists in all areas of the criminal law, but assumes a particularly critical role in environmental cases because so much conduct falls within the criminal provisions of the environmental laws." He adds that our understanding is limited by the "broad and unreviewable" nature of prosecutorial discretion, as well as the fact that "prosecutors are never required to state publicly what factors prompted them to pursue criminal charges."

These points underscore how the expertise, motivation and capacity of the government's environmental lawyers tangibly impacts the strength of existing environmental law.

IV. WHY WE NEED EFFECTIVE ENFORCEMENT

Effective environmental enforcement improves people's health, prevents premature deaths, protects the fragile and fast-dwindling biodiversity essential to life on earth, and saves the government and individuals massive amounts of money. Not only does enforcement litigation bring in fines from corporations profiting from breaking environmental laws; those laws themselves are incredibly beneficial to the public, and would lose much of their efficacy without the threat of enforcement. It's **estimated** that the Clean Air Act saved Americans $22,000,000,000,000 in health care costs between 1970 and 1990 alone. That's right—*$22 trillion dollars* saved over two decades from one environmental statute.

Astounding big-picture statistics aside, individual enforcement cases can also be important successes. In September 2013, the ENRD settled a **case** against Safeway for violating the Clean Air Act by failing to promptly repair leaks of a greenhouse gas and ozone-depleting substance used in refrigerators. Safeway **agreed** to pay a $600,000 civil penalty and, more importantly, implement a corporate-wide plan to significantly reduce emissions from refrigeration equipment at over 650 stores nationwide. Safeway's **Refrigerant Compliance Management System** now involves a centralized electronic refrigerant tracking and repair record system **to ensure compliance** with stratospheric ozone regulations. Additionally, the grocery chain **pledged** to reduce its refrigerant leak rate across all facilities from 25 percent in 2012 to 18 percent in 2015.

Such enforcement actions, especially when they mandate changes in corporate behavior, help protect the climate and public health. The hydro-chlorofluorocarbon that Safeway refrigerators leak is **up to 1,800 times more potent** at warming the earth than CO2, and depletes the ozone layer, increasing the number of cancer-causing ultraviolet rays reaching earth. Then-Acting Assistant Attorney General for the ENRD Robert G. Dreher **referred** to the settlement as the first of its kind, presumably both for the type of corporate actions it required, and the large number of facilities it involved (**659**). Dreher called the settlement a model "for comprehensive solutions that improve industry compliance with the nation's Clean Air Act." Such enforcement cases also require ongoing monitoring and enforcement actions to ensure **compliance requirements** are met. For example, in the **Consent Decree**, clear consequences were outlined in the event that Safeway failed to

reduce the Corporate-Wide Average Leak Rate to below 18 percent in 2015. To maximize the benefits of a given settlement, the EPA will need sufficient resources to monitor corporate compliance.

Enforcement actions also have direct economic benefits. Through fines, the federal government is able to **fund** conservation efforts like reducing environmental contamination and restoring natural resources damaged by oil spills or releases of hazardous substances into the environment. Additionally, by imposing civil fines and criminal penalties on bad actors, the ENRD can **remove, or at least reduce**, the economic benefits of non-compliance.

As with enforcement efforts at other agencies, it is clear that for the largest firms, fines are often an accepted "cost of doing business," with the profits made from breaking environmental laws exceeding the penalty incurred when caught. One 2020 study on corporate violations of the Clean Air Act **found that** "the aggregate value of all penalties imposed would need to be increased five fold in order to achieve the EPA's goal of removing the economic benefit from noncompliance." Of the many companies for whom noncompliance is still more profitable than compliance, the study found that the companies committing the largest violations stood to profit most. These findings underscore the need for stronger enforcement and steeper penalties; it should not be highly profitable to do great damage to the environment and public health.

The amount of fines and penalties levied each year varies quite a bit, with large settlements every couple of years ballooning the numbers. **In the past decade**, yearly civil and criminal fines, penalties and costs hit a high of $14 billion in 2016, and a low of $260 million in 2018. Likewise, the value of clean-up and corrective actions secured from environmental violators has varied from a low of $1.16 billion in 2020 to a high of $18.7 billion in 2017. For a division with a budget that's stagnated around $130 million for over a decade, and only a couple hundred attorneys, the relief they secure is significant. But it's far less than they could be bringing in, given the rampant numbers of facilities committing repeat and long-term violations of environmental statutes.

Particularly given the grave ecological crisis that we find ourselves within, corporations should not be able to commit serial, documented environmental violations for years with impunity. Robust enforcement of existing environmental laws is an underrated avenue for environmental protection, and urgently needs more funding.

V. FORWARD-LOOKING CORPORATE CLIMATE CASES

Why Isn't Biden Joining Them?

As Congress has stalled on climate change legislation for decades, executive agencies and the courts have been under increasing pressure to fill that void. Even if the executive and judicial branches of government fully embraced their capacity to equip the nation to address the climate crisis—which is a big *if*—there would still be need for legislation. But the courts and executive agencies can do much more to fight climate change than they are and have. That's where forward-looking climate lawsuits come in, as an opportunity to leverage the judicial system's powers to compel climate action.

Environmental groups have long sued federal agencies under environmental statutes to argue that they are failing to enforce existing laws, or taking actions that are illegal under existing laws. (See **how routinely the EPA is sued**.) This is enabled by the **"citizen suit" provisions** of most federal environmental laws, which allow private individuals to sue corporations, the government, or other citizens for violating those laws. RDP's Hannah Story Brown **has argued that** DOJ Environment and Natural Resource Division lawyers "should embrace settlements with environmental groups as a tool for advancing the nation's interests, which would be difficult for the fossil fuel industry to undercut legally." Rather than automatically opposing legal challenges to government actions, even when those challenges seek to make the government better enforce its own laws, the government should embrace accountability, especially in a climate context in which government inaction and malfeasance seriously imperils the nation.

Over the past several years, new strains of legal arguments have emerged, seeking to hold the government and corporations accountable for the climate crisis. These **newer types of climate cases include** public trust and constitutional rights cases; public nuisance/torts lawsuits; fraud and consumer protection cases; and securities and financial regulation cases. In many of these cases the federal government may be directly implicated as defendant, have standing to intervene as an interested party, or be able to file an amicus brief in support of the plaintiff or defendant's position. This section will briefly touch on each of these kinds of suits, focusing on how Justice Department lawyers can intervene or lend support to cases against the corporations culpable in causing and accelerating climate change, and sabotaging climate action.

Public Trust and Constitutional Rights Cases

Constitutional climate cases have invoked the Commerce Clause and the First, Fifth and Fourteenth Amendments, among other claims. Climate **public trust cases**—frequently led by young plaintiffs—often target state and federal governments who have failed to protect the natural resources held in public trust and managed by the government under the **public trust doctrine**. (The public trust doctrine in the United States was inherited and adapted from English common law, and holds that the government as trustee of the public has the responsibility to manage and preserve certain natural resources on the public's behalf.)

Such cases run the gamut from *Juliana v. United States,* in which American teenagers **sued the government** for violating their constitutional rights to life, liberty and property and failing to protect public trust resources by subsidizing fossil fuel dependency, to *Exxon Mobil Corp. v. City of San Francisco,* where ExxonMobil brought legal action against the California officials who brought climate suits against ExxonMobil, **arguing that** the officials' suits infringed upon ExxonMobil's alleged First Amendment right to deny climate science.

In *Juliana,* DOJ lawyers continue to oppose the young plaintiffs, while corporate polluters like the American Fuel & Petrochemical Manufacturers and the American Petroleum Institute have intervened in support of the government's position. The government could rethink its position in this case, and support the plaintiffs' request to amend their complaint and proceed to trial. In the ExxonMobil case, meanwhile, DOJ lawyers could file an amicus brief in support of the California officials' claims, or in objection to ExxonMobil's legal claims about its First Amendment rights.

It is worth noting that public trust and constitutional rights climate cases have been largely unsuccessful, often on procedural grounds of jurisdiction and standing. One could argue that the legal system is unequipped to deal with the "**super wicked**" problem of climate change, which transcends jurisdiction, affects everyone and so challenges the legal notion of injury as "concrete and particularized," and is all too easy to offload onto some other (perhaps nonexistent) entity to solve. On the other hand, the legal system is what we've got. And its tools can either be used to protect this nation—not the idea of it, but the people and ecosystems that constitute it—or to abnegate responsibility for it.

Torts/ Public Nuisance Lawsuits

A "tort" is an act which injures another, for which one can be found liable in civil proceedings. Public and private nuisances fall under torts, and while private nuisances harm specific individuals, public nuisances harm the public in general. Over a decade ago, several plaintiffs brought federal suits against power companies claiming that they were public nuisances for emitting greenhouse gasses that worsen climate change. In 2011, the Supreme Court decided in ***American Electric Power Co., Inc. v. Connecticut*** that federal public nuisance claims were displaced by the Clean Air Act as administered by the EPA. But the case **left open the possibility** of state public nuisance claims. Since *AEP v. Connecticut,* many public nuisance cases have been opened in state court, relying on state law, against fossil fuel companies.

Fossil fuel companies have been stalling these cases for years on procedural grounds, favoring the tactic of **arguing that** federal law, not state law, governs the plaintiffs' claims—and thus such claims are displaced by the Clean Air Act, and should be dismissed. That was the result in ***City of New York v. BP*** and ***City of Oakland v. BP***. An ongoing case to watch is *Mayor and City Council of Baltimore v. BP,* which **finally overcame a procedural hurdle** in April 2022 when a federal court remanded it back to state court, and could eventually be precedent-setting.

In *Baltimore v. BP,* Baltimore is seeking damages and equitable relief from BP and 25 other fossil fuel companies **in order to ensure** "that the parties who have profited from externalizing the responsibility for…results of the changing hydrologic regime caused by increasing temperatures, and associated consequences of those physical and environmental changes, bear the costs of those impacts on the City." BP is arguing, among other things, that federal jurisdiction applies and that "the Maryland court has no personal jurisdiction over the defendants due to the global nature of climate change."

Justice Department attorneys from the ENRD filed an amicus brief **on the side of the fossil fuel defendants** on March 20, 2020, agreeing with their arguments regarding federal law. This amicus brief should be withdrawn by Garland's Justice Department; it undercuts the potential for states to address climate change at the same time that climate change mitigation stalls on the federal level, and the EPA's authority to regulate emissions is endangered by the **current Supreme Court case *West Virginia v. EPA***.

Fraud and Consumer Protection Cases

Consumer protection cases against fossil fuel companies have targeted their lies and misleading claims about the harms of their product and the impact of climate change. **Massachusetts**, the **District of Columbia**, and **Vermont** are among the states and territories which have recently filed lawsuits against fossil fuel companies under consumer protection statutes. In *Commonwealth of Massachusetts v. Exxon Mobil Corp*, like the aforementioned California case, ExxonMobil is **seeking to dismiss the lawsuit** on the grounds that it violates ExxonMobil's right to protected free speech. A trial judge rejected ExxonMobil's attempt to dismiss in 2020, and now the case is before the Massachusetts Supreme Judicial Court, which also appears skeptical of ExxonMobil's argument. This would be another opportunity for the Department of Justice to file an amicus brief in support of the plaintiffs, refuting ExxonMobil's interpretation of the First Amendment and affirming state jurisdiction.

The fraud case currently furthest along may be *City & County of Honolulu v. Sunoco LP.* On February 22, 2022, the trial court denied the fossil fuel defendants' motion to dismiss, and **affirmed that** though the case was unprecedented, it was "still a tort case" and "based exclusively on state law causes of action," including failures to disclose, failures to warn, and deceptive marketing. This case may be precedent-setting if decided on the merits in favor of Honolulu, as it would chart a clear path forward for how to successfully seek targeted damages at the state level for the impact of climate change on regional communities from the fossil fuel industry.

In this, like so many other forward-looking climate cases, the Department of Justice could affirm the appropriateness of these claims under state law, helping to dispel the constant jurisdictional disputes that fossil fuel companies use to delay and exhaust climate lawsuits in state court. This is not a new or radical idea; the Department of Justice **regularly files "statements of interest"** in state and federal courts. Vanita Gupta, now Associate Attorney General, previously **described the DOJ's use of statements of interest** in 2015 as "helping clarify the law, and helping courts interpret the law in the right way."

Securities and Financial Regulation Cases

The lion's share of **securities and financial regulation climate cases** involve greenwashing claims, where companies have misled or failed to disclose important information related to a product's environmental impact. Some are class action lawsuits; some are shareholder derivative suits; some are brought by state attorney generals. When cases are brought against federal financial regulatory agencies, like the Securities and Exchange Commission, Department of Justice lawyers are directly involved in that agency's defense. As the Securities and Exchange Commission **released a proposed climate disclosure rule** in March 2022, which would strengthen the disclosure requirements for public companies on their exposure to climate risk, it is expected that **climate-related securities lawsuits will increase**. The Department of Justice will be involved in any suits against the SEC, and should vigorously defend the SEC's authority to mandate climate disclosures.

Past climate securities fraud cases, including ***New York v. Exxon***, have not met with much success. *New York v. Exxon* was decided on the merits, and the New York Supreme Court found that New York's Attorney General **failed to prove** that ExxonMobil materially misled its shareholders about the cost of climate change. The judge did assert that "nothing in this opinion is intended to absolve ExxonMobil from responsibility for contributing to climate change through the emission of greenhouse gases in the production of its fossil fuel products." But the ruling proves an obstacle to future cases asserting that ExxonMobil deceived its investors about climate change.

The Stakes of Corporate Climate Cases

Filing motions to intervene, amicus briefs, and statements of interest are all tools at the Department of Justice's disposal to lend strategic support to forward-looking climate lawsuits against fossil fuel corporations in state and district courts. There is, however, an even more impressive option: the Department of Justice **commencing its own investigations** into the fossil fuel industry's fraud, negligence, and violations of constitutional rights and the public trust doctrine. This prospect has been raised by a number of voices, including Senators Sheldon Whitehouse and Richard Blumenthal. But Attorney General Merrick Garland, and AAG Todd Kim of the ENRD, appear content to do little to meet this nation's extraordinarily urgent need for climate change mitigation and adaptation and environmental justice. If they continue to squander the Department of Justice's many tools to strategically support and advance climate-forward litigation across the country, they will join the ignominious ranks of powerful Americans who saw the existential stakes of climate change, held the tools to address it in their hands, and chose to do little about it.

VI. THE REVOLVING DOOR BETWEEN BAD-ON-CLIMATE BIGLAW FIRMS AND THE DOJ

A corporate crackdown is not just about fighting outside offenders. It is also about critiquing the corporate ties of those within the government, particularly when those ties provide ample reason for regulators to fail to act against the industry they revolve in and out of, whether for ideological, political, or financial reasons. Revolving in and out of BigLaw is a typical path for many Justice Department employees; this regular occurrence deserves scrutiny for creating overt conflicts of interest.

The following Environment and Natural Resource Division attorneys have recently revolved in or out of the DOJ to or from BigLaw firms with records for representing some of the most egregious corporate environmental offenders:

- **Jeffrey Clark:** Clark joined Trump's DOJ after over a decade spent at notorious BigLaw firm Kirkland & Ellis. He had **previously revolved** between Kirkland & Ellis and the DOJ during George W. Bush's presidency. As mentioned in Section III, Trump's ENRD Assistant Attorney General **Jeffrey Clark** weakened corporate crackdown efforts from within by expanding the leniency policy for corporate crimes at the DOJ and furthering the abrupt decrease in civil and criminal environmental prosecutions. To echo **Bloomberg Law**, Clark championed the Trump

administration's "deregulatory agenda" and "revamp[ed] policies that guide environmental settlements and internal processes." Clark is now under investigation for seeking to weaponize the Justice Department to help Trump invalidate the election results. Viewed in the legal community as "radioactive," Clark did not return to Kirkland & Ellis.

- **Jeffrey Wood:** Jeffrey Wood was the ENRD's Acting Assistant Attorney General and Principal Deputy Assistant Attorney General under Trump. He was asked to recuse himself from dozens of cases facing the government, due to his past work for Alabama law firm Balch & Bingham LLP. In a February 2017 memo, ENRD ethics official Karen Wardzinski listed over 40 cases Wood could not participate in, including enforcement actions stemming from the Volkswagen emissions cheating scandal and litigation over the EPA's Clean Power Plan and Cross-State Air Pollution Rule update. A year after leaving the ENRD, he became a partner at Baker Botts, a law firm that received an F on The Law Students For Climate Accountability's 2021 climate scorecard. Going from the ENRD to a law firm with a terrible climate record seems counterintuitive at best and deeply troubling at worst.

- **Jonathan Brightbill:** Before joining the ENRD, he was a partner at Kirkland & Ellis LLP, a law firm regularly targeted in class actions and environmental investigations. He occupied multiple positions at ENRD. Jonathan Brightbill was the Deputy Assistant Attorney General from 2017 to 2019, Principal Deputy Assistant Attorney General from 2019 to 2020, and Acting Assistant Attorney General in January 2021. In 2019, Brightbill represented the EPA in ***League of United Latin Am. Citizens v. Wheeler***, wherein the EPA failed to ban the pesticide chlorpyrifos that adversely affects adults and the neurodevelopment of children. Three months after leaving the ENRD, Brightbill revolved back to private practice and became a partner at Winston & Strawn LLP. Winston & Strawn received a D on The Law Students For Climate Accountability's climate scorecard.

- **Eric Grant:** Eric Grant left law firm Hicks Thomas to serve as the Deputy Assistant Attorney General at ENRD during the Trump years. At the ENRD, Grant helped defend the application of Nationwide Permit 12 to an oil pipeline near Beaumont, Texas from attacks under the Clean Water Act, the Endangered Species Act, and the National Environmental Policy Act. In January 2021, Grant returned to Hicks Thomas, a firm with a Tier 1 ranking both nationally and in the Houston metro area for oil and gas law.

- **Corinne Snow:** Snow left law firm Vinson & Elkins to join the ENRD as Counsel and Chief of Staff from during the Trump years. Vinson & Elkins received a F on The Law Students For Climate Accountability's climate scorecard. While at the ENRD, Snow defended the Bureau of Land Management (BLM)'s approval of oil and gas drilling permits in *Dine Citizens Against Ruining our Environment v. Bernhardt,* a suit brought by environmental groups in Federal District Court in New Mexico challenging the agency's National Environmental Policy Act (NEPA) environmental analysis. When she left the ENRD in 2020, she returned to Vinson & Elkins.

- **Stacey Bosshardt:** Bosshardt spent **nearly 14 years** at the ENRD as a trial attorney, senior attorney, and assistant section chief. In September 2020, she was hired by international law firm Perkins Coie where she **represented** mining, energy, pipeline and other business and governmental clients. Perkins Coie **received a D** on The Law Students For Climate Accountability's climate scorecard. While working at Perkins Coie, Bosshardt represented the intervenor, Mountain Valley Pipeline, in ***Wild Virginia v. United States Forest Service***. The Fourth Circuit **concluded** that the Forest Service and the Bureau of Land Management (BLM) inadequately considered the sedimentation and erosion impacts of the Pipeline which covered three and a half miles across Jefferson National Forest in Virginia and West Virginia.

OIRA and Financial Regulators

By **Max Moran** and **Fatou Ndiaye**

I. INTRODUCTION

The fossil fuel and renewable energy industries are both private economic actors who navigate the market incentives, limitations, and procedures established by federal economic policy. Energy is a necessary input to almost all economic activity in 21st-century America, which accounts for much of the fossil fuel industry's economic leverage, and the political leverage which follows from it. Naturally, however, fossil fuels are also susceptible to shifts in economic policy, and the industry relies on certain economic policies for its continued existence.

Many crucial economic policy shifts will require acts of Congress. But shifts in executive branch regulation will play an indispensable role to both clear a path for those heavier lifts in Congress, as well as directly impact economic incentives to favor an energy transition. Put another way, even if President Biden and all of his appointees used all of their existing powers fully and perfectly, those powers alone cannot achieve the mass economic restructuring necessary to preserve our planet — Congress absolutely must act.

Congress achieved a significant first step in this economic restructuring with the clean energy tax credit provisions of the Inflation Reduction Act, but these crucially are only a first step, and a tentative one at that. As **observers** and **critics** of the bill have noted, these tax credits alone would deliver a scenario where we all hope the clean energy industry is lucky enough to outperform one of the most entrenched industries in human history in the free market — indeed, an industry entrenched enough to get **massive handouts** in the same bill supposedly challenging it. The fossil fuel industry has repeatedly proven it is fully willing to exert political influence and power to crush its opposition, and the greenhouse gas emissions they will release over the course of that long, drawn-out market competition will still drastically worsen climate change and cause immense suffering.

In short, the Inflation Reduction Act's tax credits do not "solve climate change," nor even represent all that must be done within economic policy specifically on climate change. Many of the most desperately-needed economic interventions — mass public spending, shifts in tax policy, etc. — must come from Congress, which has the power of the purse, but fully utilizing existing executive branch powers is an indispensable component of achieving that economic restructuring. Though the White House cannot do everything, it must do its part.

It would be beyond the scope of this report to cover every economic policy option available to the Biden administration in granular detail. We strongly recommend the Center for Biological Diversity's "**Climate President's Emergency Powers**" report for some of this legal and technical minutia. Instead, over the following pages, we will discuss two general categories of economic policy conducted by the executive branch, and how it can and must shift toward a climate-oriented, populist lens. The first of these categories relates to

the executive branch's key role in conducting cost-benefit analysis and quantifying the financial costs of proposed policies, which we are calling "scoring policy." The second relates to regulation of the financial sector, which naturally has spillover effects on the entire economy. We call this "financial regulatory policy."

Scoring Policy: Rethinking Pay-Fors In A Transitioning World

"Scoring policy" is our term for the methods the federal government uses to analyze the costs of potential policy options and recommend to both Congress and the executive branch which policies to adopt or avoid. While fiscal policy — how the government actually spends its money — is solely in the legislature's jurisdiction, the process of implementing a given law's spending provisions requires the executive branch to determine the costs and benefits of various potential implementations.

This is especially thanks to a Clinton-era Executive Order meant to promote government efficiency and reduce waste. This cost-benefit analysis primarily takes place in the powerful **Office of Management and Budget** (**OMB**), and especially in its sub-agency, the **Office of Information and Regulatory Affairs** (**OIRA**). Congress also runs and manages its own **Congressional Budget Office (CBO)**, which assesses the fiscal costs of bills. The CBO is not part of the executive branch, so it is not included in this report for the sake of thematic focus, but **we have written an accompanying paper on the topic**.

I. OFFICE OF INFORMATION AND REGULATORY AFFAIRS (OIRA)

The Office of Information and Regulatory Affairs (OIRA), which is a sub-agency of OMB, was created by the 1980 Paperwork Reduction Act as a clearinghouse for federal requests for information and public comment periods on proposed regulations. OIRA also had a subsidiary function to provide "cost-benefit analysis" to most agencies, offering advice on whether a given regulation was achieving its goal efficiently. This was initially non-binding: OIRA would just offer its perspective for the actual agency writing a regulation to consider, and whether the agency writing the regulation accepted or rejected any part of the advice was their choice.

That all changed when President Bill Clinton signed Executive Order 12866 in 1993. That Order mandated that "significant regulatory actions" — regulations with a potentially large impact on the economy — receive OIRA's explicit endorsement before they can proceed. This effectively gave one sub-agency with less than 50 staffers total veto power over the policies of most of the executive branch. Subsequent presidents have tweaked the specifics of Executive Order 12866, but OIRA's ability to unilaterally veto regulations which don't pass its particular cost-benefit analysis remains intact.

Regulatory mavens thus frequently refer to OIRA as "**the most powerful government agency you've never heard of**," and **declare it K Street's ace in the hole**: even if a bill which corporate America despises does pass Congress, appealing to OIRA can jam up the process of actually implementing it for so long, and neutralize its most powerful effects so thoroughly, that it would be as if nothing passed at all. This is not a theoretical problem: as of this writing, five of the Department of Energy's eight appliance standards proposals this year have **blown past OIRA's 90-day review period**. According to the Center for Progressive Reform, one out of every five OIRA regulatory reviews misses this 90-day goal.

Before President Biden's inauguration, left-of-center economic policy experts **debated heavily** whether he ought to revoke OIRA's review powers at the start of his administration, but no such revocation has occurred. If we are to live under OIRA, then it must jettison the practices that have made it corporate America's ace in the hole, and instead retool its work to favor practices which preserve our planet and serve the public.

Most of the problems with OIRA circle back to the so-called "cost-benefit analysis" which it employs to determine if a proposed regulation is worth the alleged economic costs it will create. The Center for Progressive Reform, which has closely followed OIRA through an environmental lens for years, **writes** that "since there are no natural prices for a healthy environment [...] Economists create artificial prices for health and environmental benefits by studying what people would be willing to pay for them."

OIRA's methods include surveying the public about how much they'd pay for things like clean air and water (called "contingent valuation"), even though it's as difficult for the public to quantify abstract hypotheticals as it is for OIRA employees. OIRA also studies how existing private markets already price in non-quantifiables, like how physically dangerous jobs may offer a wage premium (though employers always have a stronger incentive to keep labor costs low than to pay a just wage for dangerous work).

These methods are imprecise at best, but even less verifiable is OIRA's main method for determining the "cost" side of the cost-benefit ledger: asking affected industries how much they think it would cost them to comply with new rules. Corporate entities are only too happy to project wildly inflated compliance costs for regulations.

Most worrisome for the climate is OIRA's practice of *discounting* potential benefits that would come years after implementing a regulation. That means that as a matter of mathematics, OIRA artificially reduces the projected benefits of a less polluted world with fewer natural disasters while taking industry at its word as to the short-term costs of switching to cleaner and more sustainable practices. OIRA, in other words, knowingly depresses the "benefits" side of the cost-benefit ledger.

There are strong cases for both revoking OIRA's regulatory review powers *and* for eliminating cost-benefit analysis as currently constructed as much as possible. If both precedents continue, however, then OIRA can and must be radically retooled. Several options are laid out below.

Option: Consider Revoking OIRA's Ability To Veto Regulations Based On Its Proprietary Regulatory Review

OIRA only became a veto point for regulation when President Clinton granted it that power via executive order. Another president could just as easily issue an executive order rescinding that power. This would return OIRA to being essentially an archive and clearinghouse for paperwork related to government regulations, instead of a political actor itself. It might still be able to offer cost-benefit analysis of regulations, but these would simply be one agency's opinion, not anything legally binding.

Even progressives are of differing opinion about whether to revoke OIRA's veto powers outright, or to instead reinterpret their implementation. **As Kalen Pruss argued**, the former option is far easier to implement, and runs no risk if corporate interests recapture the organization. This is the most drastic, but ironically perhaps most efficient, means of reforming OIRA.

Option: Consider Eliminating Quantitative Cost-Benefit Analysis As Much As Possible

OIRA-style cost-benefit analysis attempts to reduce fundamentally qualitative, political, and even philosophical decisions down to a simple equation, which is impossible to do consistently, ethically, and with accountability.

For example, OIRA believes — due to observing customer behavior in market settings — that people generally prefer when they can purchase something immediately versus only being able to purchase it in the future. Since social benefits are what regulations "purchase" by the market logic of cost-benefit analysis, OIRA applies a "**discount rate**" to regulatory benefits which only appear in the future, to reflect presumed diminished interest due to the time delay.

The logic behind the discount rate assumes that the revealed preferences of the market are somehow more "honest" than people's stated preferences. But what people do with their limited money in an uncertain world, in which they only have the menu of options that the market happens to offer, is not the only way to gauge what they actually want. Working through the far more complex, collective problems of things like climate change is what the democratic process — and all of the qualitative arguments and philosophical debates that go along with it — is supposed to be for.

The assumptions of cost-benefit analysis reflect only a narrow circle of facts and assumptions which a small set of unelected officials have subscribed to, not something to which the broader public has consented. Cost-benefit analysis assumes that the epistemology of economists is so obviously optimal that it overrides the logic of any other discipline.

This system is also, conveniently enough for corporate elites, extremely easy to game by market actors who do not have the public's interest at heart: after all, cost-benefit analysis "sets out to do for government what the market does for business," **in CPR's words**.

The Regulatory Right-To-Know Act of 2000 requires OMB to submit an annual cost-benefit analysis report to Congress, a task delegated to OIRA. This statute means that cost-benefit analysis can't be rooted out entirely, but it can be principally eliminated from OIRA's regulatory review work, which is where it has actual policy impact. (Indeed, **OMB's most recent cost-benefit analysis report to Congress** opens with several pages of listing the methodological flaws of cost-benefit analysis, showing that the task put upon the agency by this statute is impossible.)

Option: Massively Re-Weight Health Benefits Of Environmental Regulation

The Health Effects Institute, a group co-funded by the EPA and the auto and fossil fuel industries, found that even low levels of smoke and exhaust inhalation massively reduces lifespans **in a study this year**. That means OIRA has been undercounting the benefits of stringent Clean Air Act regulations for decades. While, as stated previously, we object to forcing all political judgments into an economic framework, this report indicates that even in purely economic terms, OIRA should radically rethink the benefits of anti-pollution regulations that promote public health. Indeed, enforcement of the Clean Air Act alone is estimated to have saved Americans a

staggering **$22 trillion in healthcare costs** between 1970 and 1990 alone. That is a massive reduction in government and social expenditures. Longer-living people can work, pay taxes, and generally contribute to the economy for more years, leading to greater GDP growth. Factors like these have been systematically under-considered in OIRA analysis. Regulations that promote longer lifespans at short-term costs to industry are thus an excellent tradeoff, even if OIRA remains wedded to its narrow analytical tools.

Option: Stop Discounting Benefits That Accrue Later In A Regulation's Existence

It makes little sense in the first place to discount the benefits of a regulation which only materialize some time after it is implemented. This methodology is particularly short-sighted when considering climate-related regulations, part of the intent of which is to stave off possible futures which could appear 30, 40, or 50 years from now.

OIRA justifies factoring a "discount rate" into its projections to account for two assumptions: that people prefer benefits they can receive today instead of in the future, and that money invested in productive projects instead of being spent on regulatory compliance can reap greater returns in the future, growing the economy and (presumably) benefiting everyone. But weighting consumer preferences for immediate gratification ahead of the basic need to preserve a livable planet is simply an extraordinary case of misplaced priorities.

This again speaks to the shortcomings of forcing policies with a fundamentally qualitative intent into quantitative and marketized frameworks. If we are to follow the logic of existing cost-benefit analysis, then the value of a hospitable planet ought to be weighted enormously highly. The first step to a fairer quantification would be undoing methodologies which deliberately shortchange the future for no clear reason.

II. FINANCIAL REGULATORY POLICY: INCENTIVIZING THE PRIVATE SECTOR TO SAVE ITSELF

Some of the most muscular economic powers within the executive branch lie in the U.S. financial regulatory apparatus, which collectively set rules for private investment activity and (in theory) punish actors who break these rules. These agencies — including the **Federal Reserve**, **Office of the Comptroller of Currency**, **Securities and Exchange Commission**, **Commodity Futures Trading Commission**, **Consumer Financial Protection Bureau**, and more — collectively determine financial regulatory policy, or "finreg" policy for short.

While the specific mandates of financial regulatory agencies vary, their general purpose is to maintain the safety and stability of the financial system and protect consumers of financial products — not to force the allocation of capital away from disfavored industries, even ones disfavored because they directly destroy the Earth's ability to sustain life. However, such planetary destruction, and the consequent natural disasters through which it manifests, pose obvious and unprecedentedly enormous risks to the financial system and financial consumers. It is thus both well within regulators' mandates to act on climate-related financial risks, and a duty of the utmost importance. Experts in this field have identified so-called "physical risks" and

"transition risks" for the financial system, and laid out the legal and **regulatory** arguments for robust action elsewhere.

It is a fortunate coincidence that most of the measures needed to de-risk the financial system from climate-related risks are also the measures needed to undo **the financialization of the US economy**. If these two goals required different policy regimes they would still be both well worth pursuing, but the fact that they intersect makes it easier to build political alliances and coalitions. That said, the prospect of challenging two of the most powerful industries on earth at the same time — two industries which provide necessary inputs (energy and capital) to most other economic activities — makes the path to greening the financial system that much more challenging. While many major actors on Wall Street have at least **sought to be perceived** as concerned about the climate in their public relations, **few have quite literally put their money where their mouths are** or expressed anything close to support for new regulations. No one ever said saving the planet from fuel emissions or financial capitalism would be easy.

The mere prospect of climate-related rulemakings in 2021 kicked off a furious and fast-moving reactionary movement from the fossil fuel industry and the right-wing politicians it courts. By drawing on **a once-obscure node** in the **Charles Koch-backed** libertarian American Legislative Exchange Council network, conservatives have **sought to ban** any financial firms which consider climate in their investment decisions from doing business with right-wing state governments, applying cross-pressures against more progressive government efforts to incentivize this decision-making. The fact that fossil fuels and the libertarian right have openly sought to violate their supposed first principle of capitalism — that buyers and sellers shouldn't be pressured by the government — is a relevant point which a more aggressive administration might raise in court filings and press briefings.

What Is Already Being Done:

I. Requiring And Standardizing Climate-Related Risk Disclosures

Most of the federal government's work on climate-related financial regulation so far has focused on requiring firms to disclose climate-related risks in their products to investors. If a company or a project seeking capital would contribute to climate change, regulators are trying to require the capital-seekers to accurately disclose the extent of this to would-be investors, so the investors can understand what their money would be going toward and decide whether it is a sound investment. These include both physical risks (investing in beachfront property which could soon face climate change-driven storms and flooding, for example) and transition risks (investing in coal plants which could soon be banned from the energy grid, for example.)

The Office of the Comptroller of the Currency began **formally gathering information** on identifying climate-related risks in December 2021. More impactfully, the Securities and Exchange Commission **published draft rules** on climate-related risk in March 2022 after over a year of preparation.

Disclosures are a necessary, if unexciting, first step to establishing a climate risk regulatory regime. Legally, much of the American financial system is premised on a "buyer beware" first principle, meaning the system

prefers to let a fairly-priced and transparent free market decide if a risky product still has value, rather than having regulators ban it outright. Even if it is already clear that regulators will have to rely on some of the more coercive tools in their toolbox to meet their statutory responsibilities, they must first establish what climate risks are and how to calculate them.

Developing federal disclosures for climate-related risk will standardize the proper metrics for judging and quantifying climate effects in the financial system. In recent years, more and more investors have prioritized so-called environmental, social and governance (ESG) factors when deciding where to put their money. But the ESG "movement" has no uniform metrics, in part because it's difficult to quantify more qualitative impacts of corporate policies on the environment and human rights, and in part due to unscrupulous actors throwing the acronym on practically any investment product they can.

Gasoline companies even brand themselves as ESG, because investing in gas is technically more environmentally responsible than investing in coal, which has earned skepticism from fossil fuel **critics** and **supporters** for diametrically opposed reasons. Regulators can set clear and well-enforced standards for what constitutes a risky or safe investment for the planet, which will allow ESG investors to actually make decisions based on standardized criteria.

Not all regulators have taken an assertive, central position in setting these standards. The Commodity Futures Trading Commission in March 2021 **created** a "Climate Risk Unit" dedicated to "early CFTC engagement in support of industry-led and market-driven processes in the climate—and the larger ESG—space critical to ensuring that new products and markets fairly facilitate hedging, price discovery, market transparency, and capital allocation." By merely facilitating market-led standardizations and plans, this unit could find itself accepting too lenient of a standard for climate risk in derivatives.

The agencies' climate disclosure rulemakings have rightly attracted broad media and industry attention. **One poll** found 70 percent of investors support the SEC's climate disclosure proposal, and strong majorities said they'd factor climate risks into their investment decisions if the data were standardized, audited, and disclosed by the SEC.

Agencies must treat these rulemakings as only a first step, with both stringent enforcement and bolder regulatory action to follow.

II. Issuing Reports Which Identify Climate Issues, But Which Don't Advance Solutions For Them

In May 2021, President Biden issued an initial **executive order** on climate-related financial risk. The order itself had few policy specifics; it mostly required the Treasury, in consultation with the rest of the regulatory agencies on the Financial Stability Oversight Council (FSOC), to begin researching climate-related risks and prepare a report on the subject for the President and other officials.

The Treasury released its **report** in October to almost no fanfare. As the Revolving Door Project's Jeff Hauser **said at the time**, "The report fails to mention fossil fuels as the key driver of climate risk. It offers no specific timelines for any of its recommendations. And it does not include specific policy recommendations beyond

disclosing and assessing risk. A terse summary of the report would read 'it's good to notice that our planet is burning, but we won't do anything to fix it.'"

Other readers raised similar frustrations. Alex Martin of Americans for Financial Reform **said** "it largely avoids laying out specific policy recommendations for U.S. regulators to catch up and surpass our international peers in *mitigating* climate risk — an urgent task needed to protect the financial system." David Arkush of Public Citizen **said** the report "includes only the bare-minimum first steps—ones that should have been taken long ago. One of the report's final recommendations [number 4.7] is that regulators should review existing rules and guidance to consider whether they need to do more. That's what this report should have done."

This is not the only report by federal financial regulators which identifies climate risk as a huge problem, but then fails to recommend steps to actually solve it. The Commodity Futures Trading Commission was the first federal regulator to even begin studying climate risk, and released **a report on the subject** in September 2020. The report was led by Commissioner Rostin Benham, who now chairs the CFTC. **As RDP's Toni Aguilar Rosenthal wrote in December 2021**, "While the report opened with an acknowledgement of climate risk, it did not go far enough in its proposed interventions on the issue." Aguilar Rosenthal noted that the CFTC said nothing about setting speculation limits on fossil fuels or mandating capital and margins requirements for fossil fuel investors and was generally riddled with qualifications and tentativeness toward adopting any actual mitigation strategy for the challenge it rightly identified as existential.

Other Biden administrative actions have been similarly underwhelming (to say the least). For example, in October 2021,Treasury's Financial Literacy and Education Commission (FLEC) **began exploring household-level financial resilience strategies** "in order to help families prepare for climate-related financial risk and assist local governments, philanthropic agencies, and financial intermediaries in building community financial resilience," in the words of Treasury Undersecretary for Domestic Finance Nellie Liang. This is not a proposal for actually undoing climate risks in the system, but instead to "educate" consumers about them. There is **a long and frustrating tradition** of regulators using public education about harmful practices to deflect from actually regulating and banning those harmful practices in the first place.

It's good for the federal government to explore how climate change, and the financial system's fueling of it, affects average people on a household level. But too little is being done to de-risk the largest and most interconnected financial actors, reflecting a bizarre misalignment of priorities, especially since climate risks in one portfolio exacerbate risks across the system as climate change grows steadily worse. Put another way, the most important way to preserve local-level financial networks on a heating planet is to stop the planet from heating, before storms, drought, and disaster wipe the community off the map.

What More Could Be Done:

I. Overturn Trump's Shift To "Activities-Based Oversight" On FSOC

The **Financial Stability Oversight Council** (FSOC) is a consortium of all major financial regulators which designates and oversees systemically important financial institutions (SIFIs), the largest financial companies which are most economically interconnected with the financial system and economy.

The Trump administration formalized a titanic shift in FSOC's basic approach to its duties, toward a regime of so-called "activities-based oversight." In simple terms, FSOC was created with the goal of *preventing* a repeat of the 2008 financial crisis, and was designed to provide all federal regulators with a holistic view of the most important private financial firms. The idea was for each regulator, which may have only a partial window into a firm's activities (securities trading for the SEC, derivatives for the CFTC, etc.) to come together and swap information to gain a thorough picture of the activities of the most powerful firms, in order to spot and quash any dangerous risk-taking before it got out of hand.

The shift to "activities-based oversight" overturned this preventative goal. Instead, Trump regulators shifted FSOC to simply monitor the public activities of SIFIs, with a stated intent to intervene if the activity was deemed too risky. In other words, FSOC's approach shifted from *preventing* crises before they happen to *intervening* in ongoing crises or potential crises after at least some damage had already been done. Treasury Secretary Janet Yellen **warned against this shift at the time**, but has failed to reverse it thus far in her tenure. FSOC must return to the preventative approach, which is the only way the Board can carry out its duties in a manner that promotes general welfare by preventing economic cataclysms.

II. Expand The List Of Systemically Important Financial Institutions

There are currently only eight American banks domestically designated as "systemically important financial institutions" (SIFIs), and no non-banks have the designation at all. The SIFIs are required to hold an extra layer of capital in case of a sudden shock to their finances, and are subject to closer scrutiny and more intense regulations by members of the Financial Stability Oversight Council (FSOC).

As long as we live in a world with globe-spanning multi-trillion dollar banks and financial institutions, whose investment and lending decisions in turn influence a real economy dependent on fossil fuel infrastructure, these institutions must be closely overseen. The fact that only banks, and not any other types of financial firms, are currently designated systemically important leads to a dangerously limited window into the current financial health of key economic actors. In particular, asset managers like BlackRock directly manage many times more value in assets than do any of the SIFI banks. Yet more investment decision-making happens on BlackRock's Aladdin computer system, which is not considered a systemically important financial market utility (SIFMU).

SIFI-designated firms know that they face greater scrutiny from regulators and are more likely to both closely check their books for regulatory compliance and avoid riskier bets because of it. That means SIFI-designated large institutions are the most likely to be fully compliant with each agency's eventual full suite of climate regulations. Certainly nothing close to all financial institutions need SIFI designation, because not all banks are massively interconnected with the global economic system. But for deeper insight and prevention of both traditional and climate-related risks, SIFI usage must be dramatically scaled up.

III. Fully Mobilize The Federal Reserve's Regulatory Powers

Since the passage of the Dodd-Frank Wall Street Reform Act of 2010, the Federal Reserve has wielded **some of the most significant regulatory powers** over the American financial system. This is often overshadowed by the Fed's role as the most powerful central bank in the world, but **among other things**, the Fed can act on climate by implementing climate considerations into its stress-tests on the biggest banks; increasing margin

requirements on securities deals for major corporate polluters; capping the overall size of polluting assets in lending and investment portfolios using Section 165 powers; and, **most tantalizing**, mandating that SIFIs divest from fossil fuel assets to protect financial stability under Section 121.

The Biden administration was very much on the right track with this. Biden nominated Sarah Bloom Raskin, a leading voice on climate-related financial regulation, to the Fed's top regulatory position, the Vice Chair for Supervision. Infuriatingly, Republicans and Democratic Senator Joe Manchin **killed Bloom Raskin's nomination** precisely because she would take necessary action (consistent with the Federal Reserve's financial stability mandate) to price climate risks into lending decisions. Michael Barr, a former Treasury official and academic ally of the financial technology ("fintech" for short) industry, has since been confirmed in the role. At his confirmation hearing, Barr said the Fed has an **"important but quite limited"** role on climate change, primarily by assessing risks rather than regulating to disincentivize taking them. This constitutes a significant victory for the conservative reaction against the climate finance movement.

Overall, the Fed's highly insular and conservative culture, and eagerness to accommodate its more conservative critics, poses a threat to any would-be crackdown on climate risks, which is a serious challenge given the Fed's unique suite of indispensably potent regulatory tools. Even Board of Governors members who have begun to acknowledge the seriousness of climate-related risks, like Vice Chair Lael Brainard, tend toward deference to industry interests. Perhaps most concerning is the tremendous power which **Chief of Staff Michelle Smith**, an unelected and largely known figure, has consolidated for herself over the central bank's policy priorities, staff directives, and public persona. The broad project of making the Fed transparent and democratically accountable inevitably will intersect with the urgent need for the Fed to ramp up its scrutiny of the immensely powerful industry it oversees, including on climate issues.

The massive institutions which the Fed oversees should be prohibited from fossil fuel investment. These investments only exacerbate climate instability and the subsequent physical risks and transition risks inherent to it. (If systemically important firms have massive sunk-cost investments in fossil fuels when continued use of fossil fuels finally becomes untenable, their losses could have dangerous impacts.) Moreover, climate concerns must be integrated into stress tests conducted by the Fed.

III. Overturn OCC Rule Requiring Big Banks To Lend To Big Oil

The Office of the Comptroller of Currency needs to throw out its so-called "Fair Access to Financial Services" rule, which was finalized in January 2021. This rule was **rushed through the regulatory process** inappropriately by Trump-era figures wholly captured by the financial services and fossil fuel industries. The rule, which is currently **paused** but has not been tossed out, essentially pressures and, in some cases, requires national banks to lend to the fossil fuel industry under the thin justification that "banks should not terminate services to entire categories of customers without conducting individual risk assessments."

As the OCC and other agencies finalize their metrics for assessing climate risk, it should be beyond debate that propping up the fossil fuel industry, which is the industry most directly responsible for the climate crisis, not only adds to an individual bank's climate risk portfolio but agitates all other climate risk factors the bank faces, as well as *risks that the entire world economy faces*. In other words, continued lending to fossil fuels always

and inescapably makes climate-related financial risks for the entire world economy greater. Therefore, such risks should not require detailed individual assessments.

IV. Set Speculation Limits On Fossil Fuel-Heavy Industries Via CFTC Authorities

Public Citizen and Americans for Financial Reform have **argued** for the Commodity Futures Trading Commission to set limits or bans on speculative positions in fossil fuel firms since "excessive speculation distorts prices and interferes with effective price signaling, contributing to market failures and making solutions more difficult to implement." In other words, the more derivatives traders bet that the price of oil or fossil fuel stocks will rise, the more other traders assume such prices will rise and that they should join the speculative rush, making continued fossil fuel investment a self-fulfilling prophecy unrelated to actual market fundamentals and risks. **Speculation is currently rampant across the American economy**, but if there is one sector in which it must be clamped down upon with particular urgency, that sector is fossil fuels.

VI. Address Key Capacity Limitations:

The Revolving Door Project has released a series of reports on how limited staffing, funding, and overall capacity at the financial regulators has impacted climate ambitions and could pose long-term threats to the system's ability to handle these new threats. Some key insights from these reports include:

- **The Office of Financial Research**, the Treasury Department's in-house think tank for financial policy and particularly FSOC-related policy, should significantly expand use of its broad subpoena authority. OFR subpoenas can acquire documents that will both help climate-related financial regulations stand up to inevitable court challenges, and better target and direct climate-related enforcement capacity.

- **The Office of the Comptroller of Currency** not only needs dedicated climate risk sections and experts in its operations, it also needs to push back against its decades-long history of industry capture. Though independently funded, the OCC's internal culture has long tilted away from independent scrutiny and toward back-scratching with Wall Street, which is part of what drives many banks to seek a national bank charter. This must be fought against.

- **The Securities and Exchange Commission**'s staff only increased by 16 percent in the last decade, a period in which the market it regulates grew by 108 percent. Tremendous staff attrition during the Trump years, exacerbated by artificial hiring freezes, only exacerbated this problem. SEC Commissioner Gary Gensler has pleaded with Congress for additional funding, particularly as the SEC conducts vital rulemakings on climate risk, among other risks, and requires extra capacity to handle these new responsibilities.

- **The Commodity Futures Trading Commission** has gained just 113 new full-time staffers since the passage of Dodd-Frank, while the derivatives market it regulates has more than octupled in size. The agency itself was an early climate risk leader, but it has taken an approach heavy on industry collaboration — including directly staffing bankers at JPMorgan Chase and

Citigroup, two major fossil fuel financiers, on its sub-committee exploring climate risk. The agency needs to toughen its approach and staff up to support it.

III. CONCLUSION

Many of the most important economic interventions to fight climate change have to come through Congress, which seems infuriatingly disinterested in making them. However, this is no excuse not to pursue what urgently-needed reforms are possible under existing procedural and regulatory powers. Onlookers have called for reforming OIRA for decades now, and the United States is far behind peer nations on regulating its financial sector for climate risk. OIRA constitutes a major choke-point for climate action across the agencies and departments included in this report, so the relatively straightforward reforms available there would have ripple effects making climate action far easier across the whole federal government. And access to capital is the lifeblood of the economy, so the kind of major economic shifts needed in a warming world naturally have to include reforms to the ways businesses access funds.

These are not the sexiest parts of a climate agenda, but they are necessary changes to the underlying governance systems that enable policy action and capital access in the real economy respectively. Moreover, reforming OIRA and enacting climate-oriented financial regulation are both truly a matter of political will — in OIRA's case, that will must come from the White House, and in financial regulation's case, it must come from the regulatory agencies and their leaders. The climate crisis requires all parts of the federal government apparatus to update their practices and contribute to the goal of a hospitable world. These simple reforms are good places to start.

Department of Energy (DOE)

By **Aidan Smith**

I. INTRODUCTION

The **Department of Energy (DOE)** is **responsible** for matters of federal energy policy and the management of U.S. nuclear infrastructure. Tracing its origin to the **Manhattan Project**, the DOE's broad portfolio encompasses matters of energy policy and national security. Through the department's **Office of Enforcement**, the DOE is able to ensure compliance with safety and security guidelines, including at **nuclear facilities**. The DOE possesses **grantmaking** authority for private energy ventures and state, municipal, and tribal energy projects.

Within the DOE are a number of federal agencies with key roles to play in securing a just transition. DOE units such as the **Office of Science** (SC) and the **Advanced Research Projects Agency–Energy** (ARPA-E) promote and fund scientific research in the realm of energy. The four **Power Marketing Administrations** (PMAs), which sell power to 34 states, are also administered by the DOE. The **Federal Energy Regulatory Commission** (FERC) — which is a fully independent agency, though it is housed in DOE — regulates interstate transmission of gas, oil, and electricity, and also oversees the review of proposals to build gas pipelines and terminals.

Under the Trump Administration, the DOE championed liquefied natural gas (LNG) despite its **detrimental impact** on the environment, with department press releases referring to LNGs as "**freedom gas**." As Secretary of Energy, Rick Perry prioritized the financial interests of his personal associates over **climate** concerns. At the tail-end of Donald Trump's presidency, the DOE revised National Environmental Policy Act (NEPA) regulations in order to **eliminate** evaluations of natural gas exports on the environment.

To lead the DOE, Biden selected former Michigan Governor **Jennifer Granholm**, who has a record of **criticizing** environmentally harmful projects such as the Dakota Access and Keystone XL pipelines. Through the Bipartisan Infrastructure Law, 60 new DOE programs as well as a dozen Research, Development, Demonstration, and Deployment (RDD&D) programs that develop energy technologies will **receive funding**. Top priorities for the DOE must include intensifying green energy research, setting stronger efficiency standards, and backstopping low-interest loans to clean energy companies.

II. THE BIDEN ADMINISTRATION'S RECORD ON THE DOE

Issued New Efficiency Standards

The Trump Administration presided over a **mass dismantling** of environmental regulations, including the sabotage of key energy efficiency standards set by DOE. To take just one example, under the Obama

Administration, the DOE proposed new lightbulb efficiency standards in an effort to curb greenhouse gas emissions.

Following **substantial lobbying** from lightbulb manufacturers, the Trump-era DOE issued rulemaking in 2019 reversing the proposed rules. In doing so, the DOE enabled the continued dependence on environmentally destructive incandescent light bulbs, which **produce** 4,500 lbs of carbon dioxide each year, compared to just 451 lbs created by popular LED bulbs.

Since his time in the Senate, Biden has **advocated** for easing dependence on incandescent light bulbs, arguing in 2007 that transitioning to compact fluorescent light bulbs (CFLs) would help "reduce environmental damage while saving money on electricity costs." In May 2021, the Biden DOE took **formal steps** to reinstate the Obama-era standards, and **officially proposed** the imposition of lightbulb efficiency standards in December 2021.

As **documented** by the Revolving Door Project's Fatou Ndiaye, this effort, alongside a dozen other efficiency standards proposed by the Biden Administration, stands to meaningfully reduce U.S. carbon emissions. Per the American Council for an Energy-Efficient Economy (ACEEE), these efforts can lead to a **reduction** in some 2.9 billion metric tons of carbon emissions by 2050.

Launched New Initiatives and Proposed Organizational Overhaul

Proposals for a "Clean Energy Corps" to help secure a just transition have existed for **at least a decade**. In 2022, the DOE officially launched its Clean Energy Corps initiative, whose ranks include current department staffers alongside 1,000 new employees. The initiative, which marks the department's **largest staff expansion** since 1977, is responsible for investing the $62 billion allocated by the Bipartisan Infrastructure Plan to clean energy projects. An expanded Clean Energy Corps can feasibly help develop America's clean energy infrastructure and climate change mitigation efforts.

The Biden Administration notably spent **$7.4 billion** of the $1.2 trillion in the Bipartisan Infrastructure Plan investing in the DOE's Office of Science, which marks a spending increase of over $400 million for the agency compared to 2021. The DOE has also sought to overhaul its leadership structure. In February 2022, the DOE proposed a **new position** within the department: An Undersecretary of Energy for Infrastructure, who will be subject to Senate confirmation.

Unfortunately, the Biden Administration's proposal for an **Advanced Research Projects Agency–Climate** (ARPA-C) program, modeled after the existing **Advanced Research Projects Agency–Energy (ARPA-E)** initiative, did not materialize. The proposed DOE agency would have focused on **policy areas** such as climate resiliency and environmentally-sound agriculture.

Though the DOE **requested** funding for the agency in its FY 2022 congressional budget request, funding was never allocated for the proposed initiative. The Biden Administration's budget request for FY 2023 does not include a request for funding the proposal, though it **does request** $700 million for ARPA-E versus the $450 million it received in FY 2022.

Issued Draft FERC Guidelines on Gas Pipelines

The **Federal Energy Regulatory Commission** (FERC) oversees interstate commercial activity in the electricity and natural gas sectors. Composed of five commissioners subject to Senate confirmation, the agency is tasked with overseeing the review of natural gas pipeline and storage proposals. Additionally, FERC has the power to license non-federal hydropower project initiatives. Due to FERC's long history of rubber-stamping fossil fuel industry efforts, key progressives including Senator **Bernie Sanders** (I-VT) have endorsed calls to transform the agency into a "Federal Renewable Energy Commission" that would operate as a climate regulator.

In February 2022, FERC announced it was modifying guidelines for certifying interstate natural gas pipelines. This policy revision, made under Section 7 of the **Natural Gas Act of 1938**, was the first of its kind since 1999. It will lead FERC to "consider all impacts of a proposed project, including economic and environmental impacts" during the deliberation process. Additionally, FERC moved to set an annual threshold of 100,000 metric tons of greenhouse gas (GHG) emissions for proposed projects, which would mandate relevant natural gas projects to prepare **Environmental Impact Statements** (EIS). Per the EPA's Greenhouse Gas Equivalencies Calculator, 100,000 metric tons of carbon dioxide is **roughly equivalent** to GHG emissions from 21,547 gasoline-powered passenger vehicles (note on **methodology**) driven for an entire year.

Food & Water Watch, an environmental advocacy group, applauded these developments, though staff attorney Adam Carlesco **noted** that "guidance is not the same thing as action, and we still need to see FERC make substantial improvements in its evaluation of fossil gas projects in practice." Unfortunately, FERC Chair **Richard Glick**, a Democrat named by Biden to lead the agency, **recast** these policy statements as mere "drafts" in March 2022. This move is a concerning sign that the agency is bowing to industry and conservative political pressure: Senator **Joe Manchin** (D-WV), who has criticized Glick and stands to make or break Glick's potential reappointment, welcomed the move as a "**course-correction**."

It is worth noting that positive developments related to FERC have occurred as a result of judicial mandate. In August 2021, the Court of Appeals for the District of Columbia determined that FERC failed to account for potential environmental harm upon approving two **fracked gas export terminals** in Texas' Rio Grande Valley (RGV). In March 2022, the Court of Appeals for the District of Columbia **determined** that the Tennessee Gas Pipeline Company, a subsidiary of Kinder Morgan, "failed to account for the reasonably foreseeable indirect effects of" its pipeline upgrade project on the environment.

Moved to Promote Carbon Capture and Storage (CCS)

Carbon capture and storage (CCS) technologies aim to remove carbon dioxide emissions from the atmosphere through "negative emissions." As documented in a 2021 report by **Data for Progress**, CCS technologies potentially serve the useful function of reducing carbon emmissions in "sectors that are societally useful but difficult to decarbonize such as heavy shipping, aviation, and the production of steel and cement." However, while CCS has a supplementary role to play in *reducing* carbon emissions in relevant industries, fossil fuel interests have dishonestly pushed CCS as a means to "**greenwash**" their own detrimental impact.

Industry interests have promoted CCS as a *de facto* "get out of jail free card" to justify their harmful activities. As it stands, CCS is not functional at scale and will not be for quite some time: Even in a best case scenario, CCS only has the potential to reduce the impact of *existing* carbon emissions. It does not, however, stand to permit heavy industry — especially the industry at the root of the climate crisis — to continue business as usual under the false pretense that its environmental impact can be negated. Notions to the contrary are scientifically illiterate, technologically impossible, and ethically unjust.

Unfortunately, to lead the **Office of Fossil Energy and Carbon Management** (FECM), Biden nominated Brad Crabtree, a former director of the Carbon Capture Coalition. As noted by the Revolving Door Project's Dylan Gyauch-Lewis, Crabtree has **advocated** for carbon captured through CCS to accelerate oil production through enhanced oil recovery (EOR). EOR has been **condemned** by a broad coalition of environmental groups due its detrimental impact, particularly for the water supply. The FECM must lead the way in America's transition from fossil fuel dependency, and the nomination of Crabtree, who has not yet been confirmed, suggests the office will prioritize CCS and EOR research under his leadership.

Selected Record on Personnel

In 2021, clean energy consultant **Tarak Shah** was chosen to serve as Chief of Staff within the DOE. Upon his appointment, Shah became the first person of color, first openly LGBTQ person, and first Indian-American to serve in the role. A strong environmental justice advocate, Shah notably contributed to Data for Progress' "**Progressive Cabinet Project - Shaping a Progressive Administration**" project released in July 2020. Shah left the DOE in March 2022, and was **replaced** by Senior Advisor Christopher Davis.

Shalanda Baker, nominated to lead the DOE's Office of Economic Impact and Diversity within the DOE, is a progressive who has **endorsed** an approach to the Green New Deal that centers frontline communities. **Sam Brinton**, Deputy Assistant Secretary of Spent Fuel and Waste Disposition within the Office of Nuclear Energy, is a nuclear engineer who has made history as the highest-ranking genderfluid person to hold federal office. **Jigar Shah**, chosen to lead the DOE's Loan Protection Office (LPO), has advocated for utilizing the agency's functions to assist frontline communities of the climate crisis. **Wahleah Johns**, a member of the Navajo (Dine) tribe, is a celebrated renewable energy champion serving as Director of the Office of Indian Energy Policy and Programs.

***Author's Disclosure**: In 2020, I served as lead researcher on the "Progressive Cabinet Project - Shaping a Progressive Administration" project, where I had the pleasure of collaborating with Shah.*

As noted previously, the nomination of Brad Crabtree to lead the Office of Fossil Energy and Carbon Management (FECM) is concerning due his support for ramping up investment in CCS. As noted by the Revolving Door Project's **Dorothy Slater** in September 2021, the nomination of Maria Robinson as Assistant Secretary in the **Office of Electricity** is potentially concerning due to Robinson's "advoca[cy] for the use of methane gas as a clean "advanced energy" option." As Slater notes, increased use of methane instead of environmentally-sound renewable energy options stands to make meeting the United States' minimum emission reduction target unattainable.

Though there have evidently been strong choices for roles within the DOE, the department still suffers from inefficiencies in replacing past officeholders who left their roles. **Jennifer Kropke**, who served in the newly-created position of Director of Energy Jobs, left in September 2021 and has **not been replaced** in her role as of March 2022. Given the importance of the role in coordinating the DOE's efforts to promote high-paying jobs in clean energy, it is urgent that she is replaced in her position promptly, especially since it is appointive and does not require an extended confirmation battle.

III. LEVERAGING THE DOE TO PROTECT THE ENVIRONMENT

Building Agency Capacity

In November 2021, the Revolving Door Project released its **Climate Capacity Crisis Report**, which found that the DOE had relatively higher staffing levels compared to other agencies, though certainly not enough to fulfill its mandate. As noted by the Revolving Door Project's Fatou Ndiaye, DOE **hiring slowed** during the Trump era despite the increased funding for the department itself, with units such as the Office of Energy Efficiency and Renewable Energy being worst affected.

As of June 2021, Biden's DOE had hired 79 more STEM employees than were employed by the department in September 2016. Department-wide, however, the DOE is operating with some 2,645 fewer employees than in the year 2010, despite the fact that the issues facing the department, including **climate change** and **nuclear insecurity**, have only intensified. The DOE has submitted a request to add 198 additional full-time equivalent employees to the department's payroll, and while Congress absolutely must appropriate funds to hire those individuals, that paltry number is unlikely to solve the DOE's capacity crisis.

Forging a Progressive Future for FERC

As noted in Section 2, the **Federal Energy Regulatory Commission** (FERC) has a crucial role to play in securing a just energy transition. Personnel is policy, and, as noted by Representative **Sean Casten** (D-IL), FERC has unfortunately become a focal point of the revolving door between government and the energy industry. Indeed, FERC appointees of both parties have often come from fossil fuel and utility corporations they regulated in office, only to **return to the sector** after their term in office. Closing the revolving door at FERC is necessary to ensure that decisions made by the agency are done in the public interest and not to the benefit of lucrative energy interests.

In August 2021, a **wide coalition** of environmental groups led by the Center for Biological Diversity wrote to the Biden Administration in favor of appointing one of Sierra Club Georgia's **Daniel Blackman**, Sowing Justice's **Marquita Bradshaw**, or Portland General Electric's **Nidhi Thakar** to FERC. Ultimately, though, Biden nominated utility regulator **Willie Phillips** to FERC in September 2021. His nomination was **met with concern** from many environmental advocates.

As a member of the **District of Columbia Public Service Commission** (DCPSC), Phillips voted to approve energy giant Exelon's acquisition of Pepco. As noted by the Revolving Door Project's Dorothy Slater, Phillips **supported** the deal despite the fact that Pepco continues to use coal and fossil gas for most of its energy production in D.C. In order to fulfill the Biden Administration's efforts to **promote competition across sectors**, it is imperative that Phillips does not support similar monopolistic efforts while on FERC.

As **articulated** by FERC, "[t]he Commission's goal has always been to find the best possible mix of regulation and competition to protect consumers from the exercise of monopoly power." Combating monopoly power in the sector is important to curbing the dominance of electric utility giants that, as the **Institute for Local Self-Reliance** (ILSR) noted, regularly engage in political lobbying against clean air and water initiatives.

As FERC now has a Democratic majority, it is imperative that the agency advocates for the cause of climate justice. FERC must close the revolving door within the agency and ensure compliance with an order on distributed energy resources (DERs), which **refers** to electrical generation at or near the site they will be used. Issued in September 2020, **FERC Order No. 2222** aims to level the commercial playing field for clean energy projects by allowing DERs, including battery storage and rooftop solar initiatives, to fully participate in wholesale energy markets.

According to FERC, this initiative **stands to** increase competition in the energy sector to the benefit of consumers while encouraging innovation in the clean energy sector to the benefit of the climate. As noted by Hampden T. Macbeth and Jessica R. Bell of New York University School of Law in **July 2021**, the compliance process has been sluggish to the detriment of both decarbonization and competition in the energy sector.

Decarbonization of the U.S. economy requires reinvigorating the country's power infrastructure. As it stands, the country's **transmission infrastructure** does not have the capacity to support the number of proposed wind and solar power projects currently in queue. In July 2021, FERC took early steps towards new rulemaking on transmission lines to help clear up interconnection queues. Though the agency **did not specify** any specific proposals at the time, FERC **formally issued** a Notice of Proposed Rulemaking in April 2022 on regional transmission planning. Organizations such as the Union of Concerned Scientists (UCS) **praised** this development, noting that this rule would remove current barriers to transmission that prevent the expansion of clean energy infrastructure.

Leveraging Climate Justice Through The LPO

With over **$40 billion** in spending authority as of 2021, the DOE's **Loan Programs Office** (LPO) has a crucial role to play in securing a clean energy transition. The LPO administers the **Title 17 Innovative Energy Loan Guarantee Program**, which issues loan guarantees for domestic clean energy projects that serve to sequester or reduce greenhouse gasses (GHG). **According** to the Department of Energy, LPO projects "have directly and cumulatively avoided more than 200 million metric tons of carbon dioxide emissions" between 2009 and 2021. The program has **received** some $70 billion in active applications per a March 2022 estimate.

During the Trump Administration, the LPO's crucial functions were effectively sabotaged. A report in *The New York Times* at the beginning of the COVID-19 pandemic **documented** the LPO's failure to disburse some $43 billion in low-interest loans for clean energy initiatives. Going forward, the LPO must be utilized to its full potential to boost the clean energy sector, especially efforts that **center communities** most harmed by the climate crisis.

On his part, **Jigar Shah**, who was chosen to lead the LPO, has indicated support for an agency approach that centers on climate justice. Potential tangible ways for the LPO to promote climate justice include prioritizing low-interest loans to projects that **respect labor rights** and operate in frontline communities. In March 2022, it was announced that the LPO's portfolio was **upgraded two levels** from "high-risk" single-B to "investment-grade," which Shah stated "will make [the DOE] the single largest provider of commercial debt for B and CCC+ shadow-credit-rated deals in the energy space."

It must be noted that the LPO also retains the authority to provide loans to fossil energy projects through the Title 17 Innovative Energy Loan Guarantee Program. Going forward, it is crucial that the office does not use its authority to assist fossil fuel efforts, even if they are **branded** as "innovative fossil energy technologies." Furthermore, the federal government must itself lead the way in the transition to a clean energy economy: As **suggested** by Evergreen Action, the DOE's **Federal Energy Management Program** (FEMP) "must aggressively pursue energy performance savings contracts advancing efficiency and electrification improvements for partner agencies."

Utilizing the TVA and PMAs' Clean Energy Potential

The **Tennessee Valley Authority** (TVA) is an electric utility corporation owned by the federal government. Created in 1933 as part of the New Deal, the TVA is the single largest public utility in the United States, serving some ten million Americans in Tennessee and surrounding states. In 2021, a **coalition** of nearly 90 advocacy groups wrote to the DOE in support of prioritizing the TVA as a "national laboratory" for the United States' renewable energy revolution.

While the TVA has indicated its intent to retire two of its four coal plants presently in operation, as it stands the TVA is not adequately prepared for a needed transition to 100 percent clean energy by 2030. In March 2022, the TVA chose to invest over $3.5 billion in gas-burning electric plans, a move described by *The New York Times* as being in **direct conflict** with the Biden Administration's stated climate goals. As **noted** by the Revolving Door Project's Dorothy Slater, TVA CEO Jeff Lyash is a former Duke Energy executive who has advanced industry interests in his role. Per Slater, Biden "has the power to nominate an entirely new slate" on

the TVA board that could remove Lyash from the role and replace him with someone who works in the interest of the climate.

The DOE oversees the administration of the four **Power Marketing Administrations** (PMAs), which together generate and transmit power to 34 states. During his 2020 presidential run, **Senator Bernie Sanders** (I-VT) endorsed using the TVA, the existing PMAs along with a new PMA to cover remaining states, and the Department of the Interior's **United States Bureau of Reclamation** (USBR) to help achieve a Green New Deal. Under his plan, the agencies would coordinate the sale of renewable energy to distribution utilities, which would be paired with DOE oversight to ensure technical support.

Strengthening Oversight of Nuclear Weapons Technology

Strong oversight of high-risk nuclear facilities operating within the United States is a pertinent national security issue. The **Defense Nuclear Facilities Safety Board** (DNFSB), an independent federal agency, is **tasked** with advising the "Secretary [in their capacity] as operator and regulator of the defense nuclear facilities of the Department of Energy, in providing adequate protection of public health and safety at such defense nuclear facilities." In 2018, the Trump-era DOE quietly issued a **directive** that restricted the DNFSB's ability to access relevant information pertaining to oversight of DOE-administered nuclear facilities.

As noted by *ProPublica*, this directive came after **extended requests** from the DNFSB to halt dangerous nuclear operations at unsafe sites and improve transparency regarding how sensitive materials were being held. Following pushback from DNFSB members, then-Secretary of Energy Rick Perry **intensified** agency hostility to DNFSB oversight. Under acting chair Bruce Hamilton, a Trump-appointee, the DNFSB pushed in 2018 to **reduce** the number of personnel on the oversight body by almost 32.5 percent.

To the credit of Secretary of Energy Jennifer Granholm's leadership, the DOE did not reject a **single DNFSB information request** in 2021. Going forward, the Biden Administration must be vigilant in safeguarding America's nuclear arsenal from cybersecurity risks. In December 2020, the DOE's **National Nuclear Security Administration**, which maintains America's nuclear stockpile, was reportedly subject to a **breach** that permeated select agency systems.

Improving Public Nuclear Weapon Transparency

While nuclear-armed states have always erred on the side of secrecy over transparency, there is reason to believe that expanding transparency efforts would be in the interest of national and international security experts. As noted by **Hans Kristensen** of the Federation of American Scientists (FAS), responsible transparency is "not only necessary for a healthy public debate about nuclear policy, it is also necessary to communicate to allies and adversaries what that policy is about – and, equally important, to dispel rumors and misunderstandings about what the policy is not."

In October 2021, the Biden Administration reversed the Trump-era DOE's trend towards further secrecy by once again **declassifying the number of nuclear warheads** possessed by the United States. While a

commendable move, the release of updated stockpile data did not provide needed clarity regarding developments in the U.S. nuclear program. Indeed, **as noted by the FAS**, the number indicated the first increase in the U.S. nuclear stockpile since the culmination of the Cold War, but due to lack of transparency this could be purely the result of retired warheads returning to the stockpile.

There is no question that the uniquely sensitive nature of nuclear weapons programs necessitates that crucial aspects of their operations remain a state secret. However, reducing the size of the U.S. nuclear arsenal has been a **public effort** of past administrations since the end of the Cold War, and an unexplained increase warrants public disclosure. The DOE itself **explicitly acknowledges** the importance of stockpile transparency efforts to the cause of disarmament and international nonproliferation efforts.

Improving the DOE's Administration of Nuclear Technology

The **Office of Nuclear Energy** (NE) within the DOE is intimately involved in conducting research into nuclear technologies and ensuring the continued operation of existing reactors. The role of ensuring public safety in the realm of nuclear energy primarily falls within the **Nuclear Regulatory Commission** (NRC), an independent federal agency. Despite this, the NE and other DOE agencies have a key role to play in ensuring safe and equitable standards for nuclear energy projects in the U.S. For example, in May 2021, the DOE announced that the **Advanced Research Projects Agency-Energy** (ARPA-E) program would receive $40 million to reduce waste produced from advanced reactors.

Indigenous communities, especially in the American West, have disproportionately borne the brunt of **radioactive waste** produced by nuclear energy. In December 2014, the **Nuclear Energy Tribal Working Group** (NETWG) was established as a program initiative within the NE to foster intergovernmental communications between the office and tribal governments. However, the DOE under Biden has continued to alienate many Native American communities in the realm of nuclear energy.

The Biden Administration has **received criticism** from members of the Yakama Nation and the State of Washington for **continuing** a Trump-era policy reinterpretation made regarding the cleanup of the **Hanford Site**. Specifically, advocates have raised concern that the agency's 2019 reinterpretation of how "high-level radioactive waste" (HLW) is defined per the **Nuclear Waste Policy Act of 1982** will inhibit efforts to clean up the decommissioned nuclear facility in Benton County, Washington. The Hanford Site has been described as the "most toxic place in America", and the DOE itself has **acknowledged** the safety risk it poses to workers at Hanford.

According to the **Washington Department of Ecology**, creating a lower standard for "low-level" radioactive waste "could mean that the federal Energy department would propose to leave millions more gallons of waste in the tanks, rather than removing it and incorporating it in glass as currently planned." High-level radioactive waste is legally required to be **vitrified**—a treatment process to stabilize and encapsulate nuclear waste for long-term storage—and this redefinition stands to allow the status quo to remain at the Hanford Site.

IV. GENERAL ASSESSMENT — THE DOE UNDER BIDEN

Under the leadership of Biden and Granholm, new efficiency standards were issued for widely-used household appliances such as light bulbs. The DOE launched a Clean Energy Corps initiative alongside proposed organizational reforms, though ARPA-C unfortunately never materialized. After moving to issue historic guidelines on gas pipes, pressure from industry pressure appears to have deterred the agency from taking action. Notable progressives and climate advocates were chosen for personnel roles, though nominees to lead the FECM and the Office of Electricity hold concerning views on energy policy.

Not dissimilar to other federal agencies, the DOE continues to face a personnel capacity crisis, even though the department submitted a request for nearly 200 additional full-time equivalent employees. Going forward, FERC must ensure full compliance with its historic order on DERs that stands to boost the viability of clean energy. Additionally, FERC must make finalizing proposed rules on transmission lines a priority given the urgency of making sure America's transmission infrastructure has the capacity for proposed clean energy projects. The continued tenure of a fossil fuel industry advocate at the helm of the TVA is unacceptable, and the Biden Administration should nominate an entirely new slate to oversee the TVA's operations.

Given the risks posed by nuclear weapons technology to surrounding environments, it is welcome that the DNFSB did not reject a single oversight request from the DNFSB in 2021. In the interest of both national security and accountable governance, the DOE must improve department disclosure practices on nuclear weapons, in line with the department's stated commitment to nonproliferation. Additionally, the DOE must cease continuing a Trump-era policy reinterpretation regarding nuclear waste at the infamous Hanford Site, which have been criticized by Washington state officials and the Yakama Nation.

Conceiving of a Climate-Centered Foreign Policy

By **Aidan Smith**

I. INTRODUCTION

In 2022, the catastrophic Russian invasion of Ukraine led observers to **warn** that the international order is at risk of collapse. Between nuclear proliferation, the ongoing public health emergency, and democratic backsliding at home and abroad, the need for sensible foreign policy-making is more urgent than ever. With these issues in mind, it must be stated that the current global order is already facing an unprecedented existential threat in the form of climate change. Released in February 2022, the **Intergovernmental Panel on Climate Change**'s (IPCC) latest report paints a sobering picture of the decades to come in a world that is only just beginning to reel from the effects of climate change.

Unfortunately, as **soberly noted** by Victoria University of New Zealand scholar and former Department of Defense advisor Van Jackson:

> "We're not supposed to say this out loud, but most plutocrats do not believe climate change is existential for them. The lack of proper response isn't just partisan; it's that power knows it can live in a climate apartheid dystopia and be ok."

Without drastic action now, billions of lives could be uprooted or lost due to climate chaos, particularly in vulnerable regions in the Global South. Accordingly, the United States must lead with a foreign policy that prioritizes multilateral cooperation to respond to the climate crisis. This means more than just forging cooperation with other nation-states: It also means working to stop powerful multinational corporations from engaging in further environmental devastation.

The Biden Administration has openly **acknowledged** the need to make responding to the climate crisis a "core element of our national security and foreign policy". While it would be beyond the scope of this report to propose a full theory of foreign policy, in this chapter, we explore an array of policy options that the Biden Administration should take to crack down on climate destruction caused by corporate actors, both foreign and domestic. Additionally, this section assesses the record of the Biden Administration in selecting personnel for positions related to the cause of international climate policy.

A fuller accounting of the shifts that must take place in the global order, and in the ideologies of those who lead it, in order to build a sensible diplomacy for a world affected by climate change is a necessary task, but one beyond the scope of our expertise. We instead focus here, and elsewhere in the Climate Corporate Crackdown

report, on the agencies, obligations, and existing legal powers of the U.S. federal executive branch to shift global policy away from fossil fuels and pollution and toward a greener world.

For a deeper analysis of international relations through the lens of climate change, we recommend the works of experts such as **Kate Aronoff**, **Thea Riofrancos**, **Daniel Aldana Cohen**, and **Alyssa Battistoni**, among others.

II. DECLARING A NATIONAL CLIMATE EMERGENCY

By **declaring** a national climate emergency, the Biden Administration would be able to wield a wide array of powers that would empower executive action on climate. A 2022 **Center for Biological Diversity** (CBD) report authored by Jean Su and Maya Golden-Krasner, notes a wide array of policy options that a national climate emergency would provide.

Option: Clamp Down On Financial Support For Fossil Fuel Projects Abroad

Passed in 1977, the **International Emergency Economic Powers Act** (IEEPA) enables the President to institute a variety of regulations concerning commerce and economic transactions in the event of a national emergency. Since its passage, IEEPA has been leveraged to impose commercial restrictions amid a variety of instances of turmoil abroad, including the 2021 Myanmar coup d'état. As of 2022, **37** economic sanctions programs administered by the Office of Foreign Assets Control (OFAC) within the Department of the Treasury remain in place as a result of invoking the IEEPA.

As noted in the CBD report, the IEEPA could be leveraged to clamp down on further investment in the environmentally-devastating fossil fuel industries. According to Su and Golden-Krasner, after formally declaring that the climate crisis is a national emergency, Biden will be enabled to utilize IEEPA provisions to the benefit of the climate. In the report, they suggest using these powers to crack down on private investment in fossil fuels, as the IEEPA allows for the regulation of “financial transfers of any banking institution or other persons subject to U.S. jurisdiction.” While Biden **ordered** a halt to federal aid to new fossil fuel projects overseas in late 2021, by employing IEEPA powers he would be able to rein in federal financing of existing projects and rein as well as any private financing of these projects.

Option: Reinstate The Federal Crude Oil Export Ban

Despite **criticism** from many Democrats in Congress at the time, the United States’ 40-year ban on crude oil exports was lifted under the Obama Administration. As a result of **signing** the 2016 omnibus spending bill into law, the ban on exporting raw, crude oil that had existed since the **Energy Policy and Conservation Act of 1975** was passed became a thing of the past.

The consequential surge in oil production following the lifting of these export controls has proven disastrous for the **planet**. Declaring a national climate emergency would allow the President to unilaterally implement a crude oil export ban. Per the estimations provided in the CBD report, instituting a crude oil ban would reduce annual greenhouse gas (GHG) emissions by some 165 million metric tons of CO2-equivalent, which roughly equates to the impact of "closing 42 coal plants."

III. SELECTED RECORD ON PERSONNEL AND INITIATIVES

Climate-Related Affairs of the U.S. International Development Finance Corporation (DFC)

Formed in 2019 under the Trump Administration, the **U.S. International Development Finance Corporation** (DFC) was created following the **signing** of the bipartisan Better Utilization of Investment Leading to Development (BUILD) Act in 2018. The new international development agency was **conceived** as a conservative project to challenge China's growing international influence. Indeed, according to the **Congressional Research Service** (CRS), the agency "emerged from congressional interest to enhance U.S. development finance tools and respond to China's 'One Belt, One Road' (OBOR) initiative."

Since coming into creation, the DFC has been panned for inefficiency. In February 2022, for example, the Government Accountability Office (GAO) declared that since the DFC was **deputized** to assist with the production of items necessary to combat the pandemic "in June 2020, the program received 178 applications and completed no loans, with the loan review process taking longer than expected." While accounting for the systemic issues plaguing the DFC, the agency's stated intention to participate in climate policy through the "**Build Back Better World**" (B3W) initiative means that its activities must be fully scrutinized.

The confirmation of **Scott Nathan**, a former partner at infamous hedge fund Baupost Group, is concerning given the firm's record. As noted in *The American Prospect*, the Baupost Group is often **deemed** a "vulture fund" and is "perhaps best known by the public for its holdings of nearly $1 billion in Puerto Rican debt" prior to exiting in 2019. The **Puerto Rican bankruptcy crisis** is a long-tail product of U.S. colonial endeavors, and it is concerning that a former partner at a hedge fund that profited off of the suffering of Puerto Ricans was chosen for this role.

In April 2021, the DFC announced a series of climate initiatives to be undertaken in conjunction with the Biden Administration's broader international climate finance strategy. According to reporting by *Devex*, the agency has **committed** to net-zero carbon by 2040, and has already "gone through every asset and project and modeled emissions" in order to achieve this, per a source quoted. While this demonstrates a serious approach to governance, the fact of the matter is that while a "net-zero by 2040" is preferable to the common "net-zero by 2050" goal, it is still insufficient given the scope of the climate crisis. The appointment of **Jake Levine**, who has a breadth of experience in climate-related public policy-making, to serve as the agency's Chief Climate Officer holds promise.

"Plan to Conserve Global Forests: Critical Carbon Sinks"

In November 2021, the Department of State **announced** the United States' "Plan to Conserve Global Forests: Critical Carbon Sinks", a decade-long plan for protecting carbon sinks. According to the Center for American Progress (CAP), the plan serves to **support** efforts "to halt global forest loss and restore at least 200 million hectares by 2030." Announced at COP26, the plan will be supported through utilizing some $9 billion of funding dedicated to international climate efforts by 2030, which will be subject to congressional approval.

Protecting indigenous sovereignty is **crucial** to global conservation efforts, particularly in the Amazon rainforest. While the announcement of the plan states that its implementation will "prioritize inclusion, particularly of Indigenous peoples and local communities, in partner countries," advocacy group Amazon Watch has **expressed concern** that these statements ring hollow. In a **statement**, Amazon Watch insisted that the Biden Administration "revise this strategy to explicitly include protection of environmental defenders as a core objective."

With environmental defenders facing state **persecution** in Latin America for protecting the Amazon rainforest, the United States must do more than signal moral support for these efforts. As Amazon Watch noted, a **coalition** of Congressmembers led by Reps. Veronica Escobar (D-TX) and Norma Torres (D-TX) have urged the Department of State and the Department of the Treasury to utilize existing powers to sanction the actors responsible for persecuting environmental defenders.

"Forest Investor Club"

At COP26, the United States announced the creation of a "**Forest Investor Club**" featuring a number of major private sector actors with the goal of "scal[ing] up investments that support sustainable, climate-aligned outcomes in the land sector." Though appealing as a goal, a number of corporations included on the list have accumulated ghastly records in the realm of climate. Indeed, their participation in the "club" does not lend the organization legitimacy, but instead will likely serve to "greenwash" the credentials of participating corporations.

The participation of Big Tech giant Apple in the Forest Investor Club is of obvious concern given the company's poor record on climate. Apple has lent financial support to lobbying efforts against domestic **climate legislation**, and the "Corporate Climate Responsibility Monitor 2022" report by the New Climate Institute **found** that the company has obfuscated its climate impact through misleading pledges. For instance, Apple's claim to be "already carbon neutral across all of its "corporate emissions" since 2020" obscures the fact that, as the author's note, "corporate emissions" per Apple's definition account for less than two percent of its greenhouse gas footprint.

Investment banking giant Goldman Sachs, also on the list, has also been known to **greenwash** its impact. Per a 2021 report by Jon Skolnik **published** in *Salon*, "Goldman Sachs had the highest loan exposure to oil and gas of any major investment bank" in 2020, "with 11.2 percent of its total loans in the sector." Allowing Goldman Sachs to participate in the Forest Investor Club risks lending the corporation further undeserved legitimacy in the realm of "green financing".

International Climate Financing

In April 2021, the White House released the details of its **U.S. International Climate Finance Plan** proposal. The proposal had been anticipated following the signing of Executive Order 14008 ("Tackling the Climate Crisis at Home and Abroad"), which endorsed the creation of such a plan, in the first week of Biden's tenure. The proposal included a wide array of plans, including plans to end public financing of fossil fuel projects abroad and doubling annual U.S. climate finance support to efforts in developing countries.

The proposal was initially criticized for only proposing $5.7 billion in annual spending by 2024, a figure increased to $11.4 billion which was disgracefully never approved by Congress: The 2022 omnibus spending bill **only allocated** a mere $1 billion. For FY 2023, the White House proposed **$11 billion** in climate financing, a figure that should be seen as a mere floor.

Some climate advocates, including the Revolving Door Project's Dorothy Slater, have expressed concern about the role of **John Morton** as the Department of the Treasury's "Climate Czar." In an April 2021 article, Slater argues that Morton's appointment is "unfortunately a net negative for the desperate and urgent cause of planet preservation," owing to his problematic private sector background, including his most recent included work for the **Pollination Group**.

As Slater notes, the Pollination Group's "natural capital" venture is one that effectively serves to "put a financial value on water, soil, and air" under an environmentalist pretense. The alarming implications of this are rather straightforward: Leaving the future of the Earth to the whims of the market stands to lead to wealthy, disproportionately white communities being deemed more worthy of healthy environmental standards than poor communities—especially communities of color.

It's not difficult to envision that "leaving it to the market" will result in wealthy communities ensuring their preferences are more valuable than the costs inflicted on the poor. Morton's past tenure as a Senior Fellow at the Atlantic Council, an organization whose donors include notorious polluters such as ExxonMobil and Chevron, are also highlighted in the article as cause for concern.

"AIM for Climate"

In April 2021, the United States and the United Arab Emirates (UAE) **launched** a joint "Agriculture Innovation Mission for Climate" (AIM for Climate or AIM4C) with support from six additional countries. At the inauguration of this program, officials announced a goal of investing some $4 billion in "climate-smart agriculture and food systems innovation" through funding from private and public sector sources. At COP27 in November 2021, the initiative's goals were **doubled**, with a goal of $8 billion in investment with the support of a 40-country strong coalition.

Just as climate partnerships with major corporations must be scrutinized so that they don't serve to greenwash the reputation of a polluter, the same principle applies when assessing any partnership with the UAE. As the Department of State itself acknowledges, the UAE is a **notorious human rights abuser** whose economy is reliant on the **systemic abuse** of migrant workers. Given that the UAE is one of the world's top carbon-dioxide emitters per-capita, there is **ample reason** to suspect that its participation and stated climate commitments are nothing more than a facade.

Additionally, as a coalition of advocacy organizations **noted** in a December 2021 letter, the possibility that the provisions of AIM4C could encroach upon indigenous land sovereignty cannot be overlooked. For such an initiative to work in the interest of the climate, the AIM4C must feature mechanisms to account for local food sovereignty so that the initiative doesn't become a *de facto* neo-colonial land-grab project.

Department of Defense (DoD)

By **Hannah Story Brown** and **Toni Aguilar Rosenthal**

I. WHERE WE ARE: MILITARY ACTIVITY IS A DISASTER MULTIPLIER

There are many reasons why one of the worst potential outcomes for climate change, outlined by the IPCC in the third **Shared Socioeconomic Pathway** scenario, involves increasing militarization and regional conflict. Not only is the threat of war easier to understand, and easier to sell, than the threat of climate change — it is also easy to spend all the nation's budget waging war, and then claim there's nothing left for addressing climate change, and that war is the more pressing threat, anyway. It is easy to convince scared people that weapons make them safe. And then, because war causes environmental devastation, accelerating climate change, which in turn creates food scarcity and weather disasters and mass migration, governments can sell people on the military once again as protection against the social instability that military activity helped create.

These are the stakes of armed conflict today; as we teeter on the edge of global climate catastrophe, military activity is a disaster-multiplier. But confronting the possibility of a worst-case climate response does not lock us into that future. The same IPCC report currently being disregarded by nearly every world government, including US leaders, is the one which lays out **what we can do to avoid this future**. There is very little time to change course, but there is still time.

Other chapters of the Climate Corporate Crackdown Project address the ways in which executive branch agencies from Energy to Justice to Agriculture can protect the climate by cracking down on environmentally-destructive corporate lawbreaking. When it comes to the Department of Defense, the task is fundamentally different. While many installations of this project focus on (what should be) common sense regulations and federal oversight capacities, this section focuses instead on how the activities of the Department of Defense (DoD) are inseparable from environmental destruction. In particular, we highlight how nearly half of the DoD's budget goes straight to corporate contractors, who are allowed and even encouraged to commit ecological violences with impunity. The DoD has given seven trillion dollars — that's **$7,000,000,000,000** — to for-profit corporate defense contractors since 2001.

This report attempts a non-comprehensive sketch of the problem and gets into some of the nitty-gritty details of defense contractors' responsibility for both their intentional and incidental ecological destruction. It does not suggest "greening" the military, or that the devastating costs of war can be neutralized by technological fixes or more stringent contractor policies. Ultimately, the only way to limit the destructiveness of the Department of Defense would be to reduce its sprawling footprint.

Not only is the DoD painfully pollutive in its basic functions, but the waste and fraud endemic to its operations mean that much of the military's budget is unproductive except from the perspective of corporate contractors raking in profit, with ecosystem destruction as a devastating casualty. Documenting and examining the rampant waste at every level of the DoD's operations suggests sites where peeling back the military's footprint could be

especially impactful, and offers a compelling justification for why the greenest *and* most fiscally responsible thing the DoD could do to address climate change would be to challenge the necessity of its ever-inflating budget.

Hard as it is in this current political climate to imagine the government accomplishing reforms as basic as strengthening the **independence and authority of DoD inspectors general** or **improving DoD fraud risk management**, the stark facts remain the same: the Department of Defense may be America's most egregious example of the federal government enabling corporate violence and waste at the expense of communities and ecosystems. The Corporate Crackdown Project series would be incomplete without an acknowledgement of the military-industrial complex as the lurid embodiment of what this project critiques.

II. MILITARY EXEMPTIONALISM

The U.S. Military Does Not Have to Measure or Report Its Emissions

The U.S. military is the **biggest** institutional consumer of crude oil, yet its emissions are **hardly reported** due to military exemptions in international climate treaties. To even begin to address the problem of the U.S. military's outsized role in destabilizing the global climate, we must understand the scale of its impact. For decades, however, it has been the U.S. government's official position to oppose collecting, much less disclosing, that information. During the Kyoto Protocol negotiations in the 1990s, the U.S. delegation insisted that a **military exemption** to emissions reporting was necessary to national security. After extensive lobbying from the US, the international treaty excluded militaries from countries' mandated reporting of greenhouse gas emissions.

Back at home, several hawkish national security think tanks and oil and gas industry groups pushed back against the **adoption** of the treaty altogether, viewing the military exemptions granted as insufficient. They lobbied against Senate ratification of the Kyoto Protocol, an effort which bore fruit: ultimately, not a single U.S. Senator voted to ratify the treaty.

At the time, the DoD's draft arguments for a climate change exemption in the agreement **stated**: "Imposing greenhouse gas emission limitations on tactical and strategic military systems would impact a number of these critical elements and therefore adversely impact operations and readiness." The argument pushed for a boundless expansion of the U.S. military and the right to conduct *all* military missions without the imposition of climate concerns. The U.S. delegation negotiating the agreement viewed even a 10 percent reduction of military fuel usage as an unacceptable limitation, downgrading Army readiness and cutting Navy **"steaming"** training. Beyond tactical operations, reducing emissions would upset soldiers' everyday labor and training operations, threatening the military's institutional and cultural status quo.

Over twenty years later, little has changed. The **Paris Climate Accords** of 2015 addressed the lack of military reporting by allowing countries to opt into reporting. Yet the agreement does not require countries to measure, much less cut, military emissions. In keeping with this massive blind spot, though the military's energy consumption accounts for approximately **80 percent** of the U.S. federal government's energy consumption,

Biden recently signed an executive order **excluding** federal projects related to national security and the military from mandatory emission reductions. This perpetuates an immense gap in the U.S. government's climate agenda.

To start understanding the scale of the U.S. military's pollution, the federal government must develop and mandate a standardized method to track carbon emissions. The Department of Defense currently calculates its own figures for its emissions — figures which are largely inaccurate. In 2014, the DoD reported that the Army emitted more than 70 million metric tons of CO2; a massive quantity which still excludes emissions data from U.S. military bases abroad. That is not a small omission. The U.S. controls approximately **750 bases** in eighty countries which all conduct fuel-intensive operations. Accurate documentation of emissions from the military's global operations is needed if we are to know the full scope of its impact.

That includes not only operations at bases in foreign countries, but also the worldwide fossil fuel supply chain that the DoD manages. The DoD's Defense Logistics Agency oversees much of the federal government's military and civilian fossil fuel consumption. In 2017, the agency bought and resold 25.4 billion gallons of jet fuel. This includes over **7 million gallons** distributed to the USDA, among other federal agency customers. **Jet fuel** is the largest contributor to the military's emissions, with 70 out of 100 barrels consumed by aircrafts in 2018. Despite this, the DoD is doing nothing to reduce its dependence on wasteful planes. The newer F-35 plane, which is replacing the F-16, increased the amount of liters of fuel per hour needed by 2,100 liters. This fuel-guzzling technology, which will cost the government over **$1.7 trillion dollars** over its lifespan, is intended to be in use until 2070. The military has no plan to reduce its tactical dependence on jet fuel. Current technological developments for weapons systems remain very carbon-intensive.

It is abundantly clear that climate change and national security are inextricably linked, each exacerbating the instability of the other. Despite this, reducing fossil fuel dependence is absent from the military's goals for upholding national security.

III. THE MILITARY'S CLIMATE CHANGE IMAGINATION

An Existential Threat; A Justification For War

Biden's Department of Defense doesn't deny the reality of climate change. It just refuses to address the fact that its own operations worsen the problem. With John Kerry — who called securing the military exemption in the Kyoto Protocol a **"terrific job"** — as Biden's top climate diplomat, the military's backseat approach to climate change is no surprise. This has in fact been the military's modus operandi since at least George W. Bush's presidency; his Department of Defense **commissioned** a **controversial 2003 report** that tried to "imagine the unthinkable" threats to national security that climate change could cause.

In 2019, Trump's DoD released a report that **forecasted its own potential collapse** within twenty years due to climate change, and "called on the Pentagon to urgently prepare for the possibility that domestic power, water, and food systems might collapse due to the impacts of climate change as we near mid-century." Over the last

two decades, across Democratic and Republican administrations, the military has consistently considered climate change as a threat to its own operations — while ignoring its major role in worsening the impact of climate catastrophe on the global population.

Since Biden took office, the DoD has released a handful of reports addressing the "threat" of climate change — not to human life, but to military activities. It published a **Climate Adaptation Plan** in September 2021, a **Climate Risk Analysis** in October 2021, and an **Army Climate Strategy** in February 2022. These reports view climate change primarily as a security risk and an operational challenge.

"We face all kinds of threats in our line of work, but few of them truly deserve to be called existential. The climate crisis does," said the Secretary of Defense in the Army Climate Strategy report. Two sentences later, the report continues: "The Army's core purpose remains unchanged: to deploy, fight, and win the nation's wars…"

The cognitive dissonance between those two sentences shows a fundamental unwillingness to engage with the fact that fighting wars is one of the most ecologically catastrophic things a country can do. When the army report does entertain the issue of emissions reductions, it treats military activity as if it were some other commercial or industrial activity, and discusses reducing the greenhouse gas emissions of non-tactical vehicles and working towards pollution-free power generation at Army installations. It is laughable to think that this would make more than a dent in the Army's environmental footprint. So long as the U.S. military maintains a worldwide presence and readiness to martial for war at a moment's notice, it will need to store and burn massive amounts of fuel for its sprawling operations, from its hundreds of bases worldwide to its vast fleets of planes and vehicles. This is not meant as a statement in favor of isolationism — merely an acknowledgement of the fact that the basic operations of a global military massively contribute to climate change.

The Army report highlights "land degradation" as a "readiness challenge" for army activities. It does not acknowledge the fact that Army activities *cause* land degradation; **much** of **the** **desertification** in the Middle East, for example, has been caused or worsened by war. As desertification worsens because of climate change, it will fuel further instability and mass-migration; answering future climate migration with military mobilization will only worsen climate change and create more refugees. Adding the military variable into the equation locks us into a cycle of escalating destruction. Land degradation is just one of countless "security risks" created or exacerbated by armed conflict, from water shortages and reduced agricultural production to mass migration and infrastructure damage.

Climate Money for Deadly Wargames

The DoD's **2022 budget** includes $617 million for addressing climate change, which is less than one percent of the DoD's yearly budget. It's worth looking at what this supposed climate funding is intended for: the Climate Risk Analysis states that "the Department intends to prioritize funding DoD Components in support of exercises, wargames, analyses, and studies of climate change impacts on DoD missions, operations, and global stability." Meaning, even the department's climate budget is not actually used to address climate change, let alone to mitigate the harms it has already perpetrated against the global environment. Instead, the DoD has elected to use its climate budget to cause further environmental damage through exercises and wargames, no doubt

practicing how to protect and reinforce American infrastructure **amidst** climate-caused "geopolitical and socioeconomic instability," or rather to stave off future mass migrations of refugees from a climate-destabilized Global South.

And of course, wargames themselves are **a major source of pollution** that regularly **kill *double*** the number of U.S. soldiers that active combat does. From **2006 to 2020**, wargames killed a striking 5,605 U.S. soldiers or an average of 400 soldiers yearly. The Navy regularly **sinks thousands of tons** of metals, plastics, and other highly toxic compounds into the ocean off the coasts of Northern California, Oregon, Washington, **Hawaii** and **Puerto Rico** during its wargames. Such pollution has a profound impact on the unwilling, and often unwitting, people who come into contact with it.

Wargames and their toxic remnants are associated with **higher rates** of congenital anomalies, cancer, cardiovascular disease, and more in impacted populations. These exercises also leave behind large quantities of **complex pollutants** (including decaying uranium) on the ocean floor, which the DoD does nothing to clean up. Such pollution accumulation goes hand in hand **with** "a cluster of worsening environmental phenomena" that includes mass extinctions, ecosystem collapse, and food-web modification that in turn hastens and exacerbates ecological apocalypse.

Addressing the military's own devastating environmental impact is not among its stated priorities; the military readies itself for climate catastrophe in ways that worsen it by simulating future global instabilities that its own activities exacerbate. This vicious spiral is the military industrial complex working as intended; after all, global instability is what makes defense contractors money.

IV. DEFENSE CONTRACTORS, A.K.A. TAXPAYER-FUNDED WAR PROFITEERS

The Department of Defense has created a massive private commercial economy predicated upon its frenzied spending of public dollars. The DoD's notoriously inflated, and continuously increasing, budget offers a lucrative playground for corporate greed, one that is left almost entirely without competent **oversight** from the Pentagon itself, Congress, or the public both allege to serve. This lack of oversight is particularly problematic because the DoD's deep coffers make defense contracts not only incredibly profitable but also easy to **manipulate and abuse**.

Pentagon spending accounted for a tidy **17.4 percent** of the government's overall dollars spent in FY19. In 2021, the department accounted for **nearly two-thirds** ($421 billion in FY21) of the contract dollars awarded across the federal government. These numbers have only continued to increase since; in 2022 Congress awarded a banner **$778 billion** to the Pentagon, which is $25 billion more than the department asked for. A portion of those funds support the Pentagon's **1.7 million open contracts**, many of which amount to little more than blank checks with few legitimate oversight mechanisms. The federal government has also been found to award contracts to companies that pollute at **disproportionately high rates** relative to other firms in their industry, a disparity that is **even more** exaggerated for firms contracted by the DoD.

Given the systemic lack of oversight or enforcement when it comes to defense contractor misconduct, and the built-in incentives for defense contractors to be **wasteful and inefficient**, the "**dual-use**" argument in favor of lavish defense contracts for Research & Development — that the resulting scientific and technological developments have commercial as well as military application — rings hollow. If the goal is spurring competition or technological development through public-private partnerships, directing that funding instead to federal agencies whose mandate is not waging war, which operate with proper oversight mechanisms and adhere to (instead of being exempt from) regulation, avoids many ethical traps.

The Department of Defense is a pollution machine: it **consumes more oil** than any other single institution in the world, and thus emits more greenhouse gasses into the atmosphere than any other single institution in the world. And the vast web of defense contractors is an inextricable part of that apparatus which cannot be ignored. Data from 2018 found that the U.S. military-industrial complex pollutes **more than 171 countries** globally. And these figures do not encompass the full picture of the vast pollution, emissions, ecosystem damage and harm to human health for which the DoD is responsible. The Pentagon must also be held responsible for the vast carbon footprint of the industry contractors which exist only by virtue of the DoD's generous financing.

The Pentagon has created a **system** in which its budget is the playground of war profiteers to the benefit of private executives and to the active harm of the American, and international, public. While these dollars could be oriented towards mitigating climate devastation or protecting people impacted by its consequences, instead the Pentagon continues to usher government funds into the pockets of those with a vested financial interest in continued environmental devastation. The perpetuation of this cycle comes at a grave cost to global stability and to the livability of our world. Yet, contractors are **not** often held to account for these costs, or really for **anything**. This lack of oversight has empowered contractors to engage in environmental crimes, to commit **human trafficking** at bases abroad, and to otherwise prey upon local communities with impunity.

In effect, contractors have crafted for themselves, using the privileges of the Pentagon's eagerly distributed blank checks, a bottom line predicated on exploiting institutional lack of oversight and perpetuating cycles of waste and inefficiencies that are now endemic to the military industrial system. The DoD's contractor system has created a world in which waste is institutionalized and rewarded. This system leads to lower-quality delivery of products, shorter lifespans of manufactured products, increased reliance on (and increased use of) dirty fuels such as oil and gas, and more. The DoD has accepted this waste, and its consequences, as the cost of doing business, and has subsequently left its contractors with de facto free-rein to enact incredible human and environmental harm on a global scale.

Fossil Fuel Contracting

As mentioned previously, the Defense Logistics Agency (DLA) maintains one of the world's most complex global fossil fuel supply chains, purchasing and reselling **4.2 billion gallons of fuel** every year for military and non-military use around the world. Accordingly, it plays a significant role in granting fossil fuel companies federal

contracts. In FY17, for example, DLA **gave** $1 billion to BP Petroleum, $722.2 million to Royal Dutch Shell Plc, $490.8 million to Texan petroleum company Tesoro Corporation (then known as Andeavor), $382.2 million to Valero Energy Corp., and $320 million to Abu Dhabi National Oil Co., to name just a few fuel contractors.

Fuel procured by the DLA is resold not only to the Army, Navy, Air Force, and Marine Corps, but to other federal agencies like the USPS, Department of Transportation, and Department of Labor. This means that the DoD is not the only agency being ripped off by the price-gouging rampant in military contracts, with fuel contracts being no exception. During a period of low oil prices in spring 2020, the DLA signed contracts with warzone logistics company DGCI to purchase oil at a price **three to five times** the global price at the time. Between 2004 and 2008, the International Oil Trading Company made over **$200 million** in profits from oil sales to the DLA to fuel the US's Iraq operations. And it's not only oil and gas companies reaping the benefits of inflating the prices at which they sell fuel; in the past decade, the Pentagon has also **overcharged** the branches of the military and federal agencies to which it resold fuel, prompting allegations that the Pentagon was deliberately creating a "slush fund" from the surplus.

Fossil fuel companies lining their wallets with taxpayer money through federal contracts have a vested interest in the military increasing, not decreasing, its carbon footprint. No wonder that the U.S. military consumes such vast quantities of oil and gas in order to ensure its continued reliance on oil and gas. For example, the U.S. military was **reported** to use an exorbitant 190.8 million liters of oil monthly during its invasion of Iraq, a striking two-thirds of which was consumed transporting additional fuel to vehicles at the front lines. To maintain the DoD's destructive operations, the DLA manages a fuel supply chain with emissions up to **five and a half times** greater than the military's operational emissions — and this number is routinely disincluded from military estimates of its own emissions.

V. WASTE, ALL THE WAY DOWN

Fake Prices, Fraudulent Promises

This broken system of Pentagon procurement, mired in waste and fraud, is perpetually defended in the name of the nation's own defense. The DoD has structured its contracts in such a way that encourages waste as an effective business strategy — something industry has exploited to the full extent. Upfront costs to the taxpayer for fraud from the military-industrial complex include an estimated **$60 billion** in wasted funds in Iraq. The DoD's Special Inspector General for Afghan Reconstruction (SIGAR) couldn't account for **billions of** the **$100 billion** spent in Afghanistan. In Iraq, military contractors like Anham LLC fraudulently **inflated** prices for goods provided by 5,574 percent in some cases and 12,666 percent in others. An internal study from 2015 exposed **$125 billion dollars** in administrative waste, which senior DoD officials promptly tried to bury.

Unfortunately, such absurd markups aren't even the worst violations that the DoD has failed to reign in. For example, in 2011, the DoD Inspector General found that Boeing, for its part, overcharged the Army up to **177,000 percent** on spare parts for its helicopters. Fraud in the DoD's contracting infrastructure is not a new phenomenon, but it is one that continues to have real consequences for the global public. Rampant fraud has

characterized DoD contracting for many decades, **illustrated by** the fact that Harry Truman became President in part because of his work cracking down on the defense contractors war profiteering off of World War II.

Unfortunately, Truman's efforts didn't eliminate the rot at the heart of the defense contracting industry. The 70 years following his investigation have been repeatedly pierced by waste scandals. In the 1980s, the public was outraged to learn that military contractors were **charging** the Defense Department $640 for toilet seats and $7,600 for coffee makers, among other clear abuses of government funds. But while that episode did again spur action amongst legislators to curb this abuse, the institutional apathy that enabled this environment in the 1980s **remains** firmly in place, and has arguably even worsened, with military tech still **functionally** amounting to a collection of "overpriced spare parts flying in formation." In addition to Boeing and Anham, defense contractors like **Raytheon**, **Lockheed Martin**, **AM General**, and **Northrop Grumman** (among so many others) have all made many millions from price-gouging U.S. taxpayers.

To be fair, even in these cases of absurd markups and gross profiteering, at least the contractors actually provided goods and services, which seems to not always be guaranteed by the DoD's contracting infrastructure. In Afghanistan, for example, Anham FZCO, LLC sought to defraud the U.S. government out of an **$8 billion** contract in which they **lied** about the construction of storage warehouses in Afghanistan while using DoD funds to conduct illegal trade activity in and through Iran. In another case, DoD contractor Parsons Corporation raked in millions to construct a police academy that was so **poorly built** there were feces dripping from the ceilings. Of course, the repairs to the building which Parsons promised were never actually completed. Neither was the **Khan Bani Saad Correctional Facility**, a $40 million prison that Parsons was also hired to construct.

Not only do these projects amount to an incredible waste of money on their face, but there are additional costs to the taxpayer, and to the environment, when contractors are empowered to deliver poor-quality materials with impunity. For example, the Army Corps of Engineers distributed millions to contractors to construct various buildings in Afghanistan. Of the 1,002 buildings which were actively **under construction** in 2013, SIGAR found that 704 of them used fire-causing materials that had already resulted in hazardous structure fires. Fires like this, and the poor workmanship which causes them, actively endanger human life while also **emitting** dense, toxic fumes. Such fumes contain **all** of the harmful contaminants of the building that pollute surrounding communities, and also pollute local soil and groundwater resources as a result of fire suppression efforts and fire's other chemical residuals.

Toxic, Carcinogenic, Radioactive and On Fire

Due to the military's seemingly endless generosity for its private partners, contractors continue to have a vested economic interest in overproduction, inefficiency, and other deliberate wastes across the Pentagon's procurement landscape. This has **resulted** in an "excess of usable military equipment relative to any possible need" that leaves American taxpayers footing not just the initial costs of their construction or the equally **massive costs** of their operation, but also the immense financial burden of this equipment's destruction and disposal. The U.S. military, for example, paid $16 billion for ammunition that was subsequently **declared**

"obsolete, unusable, or [was] banned by international treaty while sitting in storage." The disposal of these munitions then cost the American taxpayer an additional **$1 billion**.

War activities, and militaries globally, generate huge quantities of often extremely toxic waste. From explicitly toxic military materials such as TNT and RDX, which are used in various forms of weapons, to plastic packaging and batteries, the military **relies on** huge amounts of products to fuel its everyday activity, with individual soldiers (of which there were **approximately** 1.3 million in 2020) said to **produce** 10 pounds of trash per day. Not only is the material culture of the military defined by products — like explosives — that are deliberately poisonous to humans and their environments, the military's default disposal practices (like burn pits) for even supposedly non-toxic products harms the bodies of everyone, soldier and civilian, who is exposed to them, and damages local ecosystems.

Historically, and particularly in the U.S. wars in Iraq and Afghanistan, waste disposal has been largely outsourced to outside contractors by the DoD, with scarce to no military oversight. In Iraq and Afghanistan, the **most common** waste disposal method was open-air burn pits. While the military (and its contractors) have been **aware** of the potential harms of burn pits for decades, contractors have found that these pits are an easy way to maintain their profit margins, regardless of the cost to local health and regional environmental stability. From 2002 through 2009, the DoD **didn't regulate** burn pits at all, leading contractors to exploit the huge (at times acres-wide) pits to dispose of **everything** from human body parts and other medical wastes, to batteries, oil products, pesticides, and more. During the war in Afghanistan, there were approximately **410 tons** of functional equipment and other solid waste incinerated in burn pits daily.

Such pits regularly release more than **1,000** known toxins and carcinogens into the environment. The EPA has **asserted** that burn pits emit harmful toxins that contribute to respiratory diseases, kidney disease, liver disease, developmental diseases, cancer, and more. Burn pits also release mass amounts of **particulates** into the air, including **dioxin** — a chemical present in Agent Orange which poisoned service members during the Vietnam War. These particulates extend and expand the range of their harm, while further stretching the ecological consequences of such activities. The open burning of small arms and munitions **releases** "CO, NOx, SO2, HC1P POx, HCN, organic fragments, and vapors of H9, Cd & Pb which subsequently condense to liquid or solid." These emissions, in addition to directly endangering human life and health, contribute to and further exacerbate climate chaos, especially through particulates like CO (which reacts to form CO2) and NOx, a **potent** greenhouse gas. Even non-munitions burning is toxic and carbon-intensive; plastics, for example, **emit** 2.9 kg of CO2e (another potent greenhouse gas) for every kg of plastic burned.

These multi-million dollar disposal contracts also facilitate the disposal of decaying military equipment, including active arms and ammunition, in open air burn pits *both* **domestically and overseas**. In Iraq, contractors were found to have wildly overused burn pits throughout the eight-year conflict, with tremendous consequences for the health of soldiers, regional communities, and the surrounding environment. Over three decades ago, Congress banned open-air burn pits for American industries due to their **incredibly high** human and environmental health costs, but the military and its contractors were temporarily exempted from this regulation. This temporary reprieve, however, has since turned into a permanent exception that defense contractors continue to exploit.

The Pentagon, facing outrage from veterans and civilians alike, did tighten regulations relating to burn pits in the 2010s and its reliance on the practice has since **decreased**. However, as of 2019, the date of DoD's most recent **report** to Congress on open burn pit usage, burn pits remained an active part of the military's toolkit; as of 2022 they still have **yet to be fully banned**. After years of the military **denying the vast majority** of veterans' disability claims from burn pit exposure, the House and Senate have just passed the **Honoring Our PACT Act**, which would improve healthcare for veterans sickened and disabled by exposure to burn pits and other toxic sites. (Though Republicans attempted, and failed, to **hold the bill hostage** to express their discontent with the Inflation Reduction Act of 2022.) Without a blanket ban on burn pits domestically and abroad, military and civilian, these harms will continue.

Lucrative, Lawless Waste Disposal Contracts

Though contractors feign attachment to the public interest (using burn pits, for example, often violates defense contractors' own stated policies), private companies entrusted with waste disposal contracts such as Kellog, Brown, & Root (KBR) — a former subsidiary of fracking giant Halliburton — continue to make burn pits a successful business strategy. KBR massively **benefitted** from the use of burn pits in Afghanistan, for example, and they (and the DoD through them) are therefore particularly at fault for the toll on human and non-human health.

ProPublica has previously highlighted how a lack of oversight from the DoD has emboldened its contractors to lie to federal regulators like the EPA about their disposal practices and environmental costs. ProPublica **documented how** BAE Systems, the private servicer of arms ammunitions at the Radford Army Ammunition Plant in Virginia, "has failed to report some of its pollution to federal agencies, as required. And it has misled the public about the chemicals it burns. Yet every day the plant is allowed to ignite as much as 8,000 pounds of hazardous debris." Such practices cause shockingly high air contamination levels, increasing the regional risk of cancer, thyroid disorders, and other health defects by an estimated ***158,000 times***. The Department of Defense effectively funds a commercial economy in which causing cancer for Virginians is an accepted tradeoff for incredibly lucrative production of munitions, a glaring gap in the ambitions of an administration dedicated to its "**Cancer Moonshot**" initiative to "**end cancer as we know it today**." It costs the American taxpayer an additional **$500 million** to clean up a single such site, to say nothing of the fact that contractors like BAE Systems are handsomely rewarded for their pollution. In FY21 alone, for example, BAE was awarded over **$3.8 billion** dollars in DoD contracts.

BAE Systems is not alone in these devastating practices. **Clean Harbors**, another longtime DoD contractor, is "the only commercial facility in the nation allowed to burn explosives and munitions waste with no environmental emissions controls," which it has been doing for decades. Millions of pounds of munitions and old explosives have been "disposed of" at the **700-acre facility** in Louisiana, which Clean Harbors **insists** comes at no cost to the health and well-being of its surroundings. ProPublica discovered that was a lie. Louisiana state inspections **found** that Clean Harbors was in "violation of a number of regulations, including handling hazardous waste in

unpermitted ways, failing to make repairs to its burn pads, and discharging unauthorized pollutants in violation of its state water permit."

All military contracts are lucrative, but waste disposal contracts have proven themselves particularly easy to exploit because of how difficult it is to **measure** project efficiency, completion status, and other objective service standards. Meanwhile, improper disposal and recycling practices — particularly of the toxic, carcinogenic, or other radioactive materials which pervade every aspect of military materials — can devastate local ecosystems, scourge regional environments, poison finite groundwater resources, and exacerbate air pollution. Despite the gravity of improperly executed waste disposal practices, waste disposal and environmental cleanup contracts are regularly fraudulently completed with no real repercussions. A **2015 SIGAR report** documented how multiple contractors were paid *in full* for waste disposal work not completed, not completed satisfactorily, fraudulently completed, or otherwise embellished in Afghanistan.

So not only are the tools of war incredibly devastating, so too are the usual methods of their disposal, as is their slow poisonous decay. The American government regularly leaves billions of dollars worth of equipment **rotting around the world**, as it did mostly recently in Afghanistan. This decaying equipment is laced with extraordinary toxicity that subsequently leaches into the surrounding environment and proceeds to poison local communities whose lives have already been significantly disrupted by the consequences of military presence writ large. Decaying military goods are associated with the **contamination of soil and groundwater** through the release of toxic and radioactive chemicals such as depleted uranium, lead, mercury, chromium, and compounds like nitroglycerin and perchlorate. Many of these chemicals, like depleted uranium, have defined negative impacts on kidney function, brain chemistry and development, and behavior alteration. Others of them, like **chromium**, are devastating for local ecosystems, plant and crop growth, human health, and animal life. Exposure to decaying **uranium**, while deliberately understudied by the U.S. and its allies, has also been tied to massive increases in congenital and renal diseases in Iraq.

VI. REGULATORY EXEMPTIONS WITH PRIVATE BENEFICIARIES

The DoD has a privileged relationship to many of the regulatory standards, environmental and otherwise, that attempt to limit harm in other industries. For example, the DoD — and by proxy, its contractors — is entirely **exempt** from emissions regulation for its vehicles. Consumer vehicles are required to maintain certain fuel consumption standards, often at or above 24 mpg, forcing a certain degree of engine efficiency in vehicle manufacturing. Because the military is exempted from this standard, and because it refuses to implement its own efficiency standards, it fosters an environment in which its contractors regularly use massively gas-guzzling, high-emissions vehicles with impunity. This is part of why the Defense Department has such high fuel consumption levels overall. Private military manufacturers regularly supply the department with Humvees that get roughly **10 miles-per-gallon** and stealth bombers that get a paltry **1/4 mile-per-gallon** in jet fuel. These lax standards entrench the military's hyperconsumption of fuel, padding the profit margins of longtime DoD contractors with little reason to innovate for greater efficiency.

The DoD has also **pursued**, and continuously **been granted**, waivers and other special exemptions from massive sections of environmental law, legislation, and regulations for decades. The Pentagon has, at various times, **successfully** sought **exemption** from provisions of the Clean Air Act, Clean Water Act, the Endangered Species Act, Solid Waste Disposal Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Marine Mammal Protection Act, and more. These crucial environmental laws ensure the basic stability of national ecosystems and the fundamental right to health for animals and humans. When granted, exemptions from crucial environmental legislation offer the entire American military apparatus free license to pollute, destroy, and degrade the global environment. The DoD should not be exempt from environmental responsibility, and the private corporations it funds should certainly not have a free pass to violate federal and state laws, and actively harm millions of people, in defense of nothing but its own bottom line.

VII. THE REVOLVING DOOR BETWEEN THE DEFENSE DEPARTMENT AND FOR-PROFIT MILITARY CONTRACTORS

Perhaps the most tangible example of the Defense Department's mutually beneficial relationship to industry (if parasitic to everyone else) is the **sheer number of industry revolvers** that pervade the institution. The Revolving Door Project continually scrutinizes how, when government bodies are invaded by private actors and industry, those individuals degrade the primacy of the public interest within systems of governance, redirecting government funds and functions to benefit corporations at the public's expense. When it comes to the Pentagon, the violence inherent to such manipulation is even more material, with U.S. taxpayers made to **unwittingly fund** the regular sale of weapons to regimes committing human rights abuses in the interest of corporate profits, to name but one egregious example. The DoD's revolving door is key to perpetuating this system wherein private companies profit from taxpayer dollars while poisoning and killing whole segments of the global population and environment with near-impunity. The following individuals have recently revolved in or out of the Department of Defense, to or from private defense contractors:

- **General Lloyd J. Austin III**: Austin is a retired general, alum of the Obama administration, and Biden's current Secretary of Defense. Austin left his DoD role in the Obama administration to **join** the board of top-contractor United Technologies Corporation, which **merged** with weapons manufacturer Raytheon in 2020. Austin also took his time out of government service to join private equity firm Pine Island Capital Partners as a partner, which the *New York Times* **described** as having been "on something of a buying spree [last] year, purchasing the weapons system parts manufacturer **Precinmac** and a company until recently known as **Meggitt Training Systems** and now known as InVeris, which sells computer-simulated weapons training systems to the Pentagon and law enforcement agencies." As such, Austin has entrenched financial ties to the defense industry, and his **record** itself has proven to be a massive payday for his friends and former employers.
- **Kathleen H. Hicks**: Hicks is Biden's Deputy Secretary of Defense, and an alum of the Center for Strategic and International Studies (**CSIS**). CSIS is a large DC-based think tank that **boasts major funding** from defense contractors like Northrop Grumman, Lockheed Martin, Boeing, and

Raytheon. CSIS also **benefits** from the generous benefaction of fossil fuel giants like Chevron, Exxon Mobil, BP, and Shell. In exchange for these massive contract awards, CSIS rewards these funds with an intensively pro-war docket of articles and events that keeps the global war machine churning and contract dollars flowing to the defense industrial complex. Hicks so regularly requires meetings with defense contractors in her current role that she is **cited** as an impetus behind Raytheon moving their headquarters to Washington D.C.

- **Frank Kendall III**: Kendall, the Obama administration's Under Secretary of Defense for Acquisition and Sustainment (and the department's top acquisitions official) is now Biden's Secretary of the Air Force. Kendall spun quickly through the revolving door after his service during the Obama years. As RDP's Toni Aguilar Rosenthal **previously wrote**: "**within the year** [Kendall] joined, among other organizations, Renaissance Strategic Advisors, Leidos, Inc., and Northrop Grumman. **Renaissance Strategic Advisors** is a consulting firm serving contractors in the government services and defense industries. **Leidos**, a rebranded offshoot of the Science Applications International Corporation (SAIC), is another leading defense contractor that received more than **$3.1 billion** in federal funds in FY20. **Northrop Grumman**, similarly, is a massive global defense conglomerate that received more than **$12 billion** from the federal government during 2020.

  From just these organizations, **Kendall** has raked in over $2 million since 2017 ($113,750 from Renaissance, over $700,000 from Northrop, and approximately $280,000 per year from Leidos). This is not to mention the salaries and consulting fees he draws from the **multiple other organizations** he has since associated himself with. These sums demonstrate just how valuable acquisition officials are to the private sector, specifically because of their ability to help corporations manipulate the federal system for private and personal economic gain. In addition to purchasing these direct lines of influence, generous salaries also work in subtler ways to distort the contracting process. The promise of hefty compensation from those companies that contracting officials are charged with overseeing works to incentivize a soft, or virtually nonexistent, touch."

- **Christine Wormuth**: Biden's Secretary of the Army, Wormuth was the Director of the International Defense and Security Center at the RAND Corporation following her various DoD roles in the Obama administration. RAND is funded by **Chevron** and a top recipient of **funding** from the Defense Department and its contractors to the tune of **$1.029 billion** between 2014 and 2019.

- **Carlos Del Toro:** Del Toro, Biden's **pick** to be Secretary of the Navy, "founded SBG Technology Solutions in 2004, after retiring from military service. The Alexandria, VA-based firm offers program management and engineering services to both federal and private sector clients in the areas of IT modernization, cybersecurity, space systems, and health and training, among others." SBG received **$46.3 million** from the federal government in FY2021 (a marked uptick from the firm's **$36 million** in FY2020).

- **Colin H. Kahl**: Kahl is Biden's Under Secretary of Defense for Policy, coming to the role from **a position as** co-director of the Center for International Security and Cooperation (**CSIS**). As noted above, CSIS is a large DC-based think tank that boasts major funding from defense contractors **like** Northrop Grumman, Lockheed Martin, Boeing, and Raytheon. CSIS also **benefits** from the generous benefaction of fossil fuel giants like Chevron, Exxon Mobil, BP, and Shell. In exchange for these massive contract awards, CSIS rewards these funders with an intensively pro-war docket of articles and events that keeps the global war machine churning and contract dollars flowing to the defense industrial complex.

- **Heidi Shyu**: Shyu is Biden's Under Secretary of Defense for Research and Engineering. Shyu has held various roles in acquisitions work across the federal landscape over the past several years, but came to government work following her role as Vice President of Technology Strategy for Raytheon Company's Space and Airborne Systems. Raytheon received **$4.5 billion** from the federal government in FY2021, and is one of the five major companies left in the hyper-consolidated defense industry. Shyu **also** "advises traditional defense giants, such as Boeing, General Electric, Raytheon, and Northrop Grumman," as reported by the *Intercept* last year.

- **Ronald S. Moultrie**: Moultrie is Biden's Under Secretary of Defense for Intelligence and Security. *The Intercept* **reported that** he "comes from at least a dozen consulting firms and contractors, which he joined after holding positions in the National Security Agency, Central Intelligence Agency, and Navy. He notably was a board member of Altamira Technologies, a defense contractor that recently won an award worth up to $950 million to support the Air Force's Advanced Battle Management System program that's creating a high-speed network for military personnel to share information as they're taking potentially lethal action."

- **Shawn Skelly**: Skelly is Biden's Assistant Secretary for Readiness at the DoD, and **came** to the Pentagon from CACI International, "the sprawling contractor that serves military bases around the world." CACI is a major recipient of DoD funds, with **$1.87 billion** received from the Pentagon alone in FY2021. CACI is also **implicated** in the atrocities conducted at Abu Ghraib.

- **Ely Ratner:** Ratner is Biden's Assistant Secretary of Defense for Indo-Pacific Security Affairs, and an alumnus of the Center for a New American Security (CNAS). CNAS is a DoD and defense industry-funded think tank that recieved over $500,000 from both Northrop Grumman and the Department of Defense from October 2020 to September 2021. CNAS has also received funding from Leidos (a Lockheed Martin subsidiary) and Palantir Technologies, among other surveillance and intelligence giants.

- **Melissa Dalton:** Dalton is Biden's Assistant Secretary of Defense for Homeland Defense and Hemispheric Affairs. Dalton was formerly a Senior Fellow and Deputy Director of the Center for International Security and Cooperation (**CSIS**). As noted above, CSIS is a large DC-based think tank that boasts major funding from defense contractors **like** Northrop Grumman, Lockheed Martin, Boeing, and Raytheon. CSIS also **benefits** from the generous benefaction of fossil fuel

giants like Chevron, Exxon Mobil, BP, and Shell. In exchange for these massive contract awards, CSIS rewards these funds with an intensively pro-war docket of articles and events that keeps the global war machine churning and contract dollars flowing to the defense industrial complex.

- **Alex Wagner:** Wagner is Biden's Air Force Secretary for Manpower and Reserve Affairs and **came straight from** an Executive position at the Aerospace Industries Association, which boasts an impressive **roster** including BAE Systems — one of the predatory corporations named in this report — as well as DoD contracting giants such as the Leidos Corporation, Northrop Grumman, Raytheon, and Boeing.

VIII. THE DEFENSE DEPARTMENT UNDERMINES TRUE NATIONAL SECURITY

Many of our chapters have focused on what federal agencies can do to use the regulatory authorities already at their disposal to curtail corporate destruction and reward environmental compliance, in defense of the public interest and our collective future. We argue that this chapter is — and must be — different. While other chapters argue that federal agencies must be further empowered to defend the public from predatory industry practices, the Defense section demands that the Defense Department be curtailed, as it furthers climate collapse through its operations, contracting infrastructure, and global fossil fuel supply chain. Our rebranded Department of War is fueling our collective demise through maintaining an arcane, expensive, imperialist, wasteful, and intrinsically destructive system that rewards environmental violence and those who perpetrate it. Defense dollars currently fuel a massive commercial industry that profitizes environmental destruction and hastens climate collapse. This is an unacceptable and wholly unnecessary cost to people and the planet.

The DoD can never and will never be "green." Even when not at war, or engaging in active combat — which is **one of the most environmentally devastating things** that humans are capable of — the DoD is a massive, sprawling polluting machine. Even its *games* poison and litter the ocean. Environmental degradation is so endemic to the military's modus operandi that **in 2014** the former head of the Pentagon's environmental program told *Newsweek* that her office "has to contend with 39,000 contaminated areas spread across 19 million acres just in the U.S. alone."

As of 2020 there are **678 military installations** that are known or suspected to be corrupted by the toxic fluorinated chemicals known as PFAS. These chemicals are extremely toxic to humans and other animals and have been **linked** to cancer, liver damage, gynecological issues, and other health defects. They are called "forever chemicals" because they never break down in the environment. Through FOIA requests, the Environmental Working Group has also revealed that **328 military installations** have confirmed or suspected PFAS chemicals in their tap or groundwater resources, something which guarantees harmful exposure levels for generations of local communities. This is to say nothing of other current and former military bases that have polluted local water resources with petroleum, jet fuel, pesticides, and more, poisons which could **take 500 years** to reach safe levels if not aggressively mitigated.

The vision of safety which the military feeds us; the version of “defense” which they provide — these ideas are incompatible with the reality of our planet’s acute geological instability. **By the military’s own estimation**, we are catastrophically close to the collapse of our civilization. No weapon can save us from the ecological horrors of cascading climate tipping points. Our only options are to bravely reconsider what safety, security and defense means for us as Americans — or to keep preparing for wars that, if waged, would destroy us.

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