SHIFTING PRIORITIES: HAS THE BIDEN ADMINISTRATION CONTINUED OBAMA'S CLIMATE CHANGE REFORM?

Climate Change Law, Research & Writing (Spring 2024): Final Paper

Student – Elijah Tait

Associate Professor of Legal Research Skills - Dana Neacşu

TABLE OF CONTENTS

<i>I</i> .	Introduction	3
II.	Brief Overview of the Obama, Trump, and Biden Administrations' International Climate Change	
А		
В		
C		
III.	Brief Overview of the Obama, Trump, and Biden Administrations' Statutory Climate Change	
Agei	nda	6
A	. Obama Administration and the Clean Power Plan	7
В	. The Trump Administration and the Affordable Clean Energy Rule	8
C	. Biden Administration Action	10
	1. The Inflation Reduction Act	11
IV.	Brief Overview of the Obama, Trump, and Biden Administrations Administrative Climate Char	ıge
Agei	nda	14
A	. Coal Industry	14
В	. The Environmental Protection Agency	15
C	. The Obama Administration and Wildlife	16
D	. The Trump Administration and Wildlife	16
E.	The Biden Administration and Nature-Conservation	16
V.	Conclusion: Next Steps for Future Climate Change Reforms	17



I. Introduction

One of the prominent challenges of our time is addressing climate change within a specific legal system. Accordingly, one of the most prominent challenges for the United States is to ensure a continuity of climate change policy and legal framework so the climate change issues are contained, and mitigated and perhaps even reversed and prevented. This essay summarizes and analyses the pattern of reforms and reversals that accompany each new presidential administration.

Executive actions drive immediate changes in policy, but before many of the goals are reached they are far too often subject to reversal by the subsequent administration, which leads to uncertainty and inconsistency in climate policy. Additionally, partisan polarization and vested interests restrict the country from moving forward in the fight against climate change. In order to address these challenges, it is imperative that the United States pursue bipartisan solutions that transcend political cycles so that real progress can be made. Climate change has affected and will continue to affect everyone, regardless of their political beliefs. Enacting legislation that establishes long-term emissions reduction targets and incentivizes clean energy development by fostering collaboration between federal, state, and local governments will be crucial in achieving meaningful process on climate action. As shown in this paper, these changes need to be made as soon as possible.

II. Brief Overview of the Obama, Trump, and Biden Administrations' International Climate Change Agenda

A. The Obama Administration Climate Change International Policy

The Obama administration adopted the Paris Agreement in December 2015 at the 21st Conference of the Parties ("COP21")¹ to the United Nations Framework Convention on Climate Change (UNFCCC).² The Paris Agreement set ambitious goals that would set in place a foundation for countries all over the world to follow in an effort to combat climate change. The primary objective of the agreement was to limit global warming levels that are safer for life on the planet. In particular, the agreement set a goal of lowering the warming to two degrees Celsius (compared to pre-industrial levels).³ To achieve that goal, the agreement required each country to submit a nationally determined contribution ("NDC")⁴. The agreement names the principles of common but differentiated responsibilities and respective capabilities, which means that developed countries are expected to take the lead in reducing emissions and providing financial support to developing



¹ Paris Agreement, Dec. 12, 2015, U.N. Doc. FCCC/CP/2015/L.9/Rev.1.

² United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107.

³ For a more in-depth analysis, see, e.g., Daniel A. Farber & Cinnamon P. Carlarne, *Climate Change Law* 2nd ed. 2023, Foundation Press.

⁴ *Id.*, at 70 et seq.

countries. That financial support is critical for developing countries to be able to adapt to and mitigate climate change.

B. The Trump Administration Climate Change International Policy

Following Obama's presidency, the Trump administration announced that the United States would be withdrawing from the Paris Agreement.⁵ In his announcement that the country would be withdrawing from the Agreement, President Trump stated that the Paris Accord was

nothing more than the latest example of Washington entering into an agreement that the United States, to the exclusive benefit of other countries, leaving American workers, who I love, and taxpayers to absorb the cost in terms of lost jobs, lowered wages, shuttered factories and vastly diminished economic production.⁶

The National Economic Research Associates estimated at the time of the United States' withdrawal that compliance with the Paris Accord could cost America as much as \$2.7 million in lost jobs by 2025 and cut productions for the following sectors: paper down 12 percent; cement down 23 percent; iron and steel down 38 percent; coal down 86 percent; natural gas down 31 percent.⁷

C. Biden has prioritized positioning America as a global leader in climate change reform

Once Biden took office, he quickly acted to reverse the Trump administration's withdrawal from the Paris Agreement.⁸ In rejoining the Agreement, the United States demonstrated a renewed commitment to combating climate change.

In addition to rejoining the Paris Accord, the Biden administration engaged with international partners to enhance global climate ambition by hosting the Leader's Summit on Climate. The Leader's Summit on Climate was a two-day event hosted by President Biden where world leaders from over forty countries came together to discuss how there was urgent need for collective action to address the climate crisis. One primary objective of the summit was to reassert America's position as a leader of climate change reform. Over the two-day summit, world leaders discussed topics such as emissions reduction targets, clean energy deployment, climate finance,

⁸ Antony J. Blinken, *The United States Officially Rejoins the Paris Agreement* (Feb. 19, 2021), https://www.state.gov/the-united-states-officially-rejoins-the-paris-agreement/ (last accessed May 1, 2024).



⁵ Paris Agreement, Dec. 12, 2015, T.I.A.S. No. 16-1104.

⁶ NPR, Fact Check: Trump's Speech On Paris Climate Agreement Withdrawal, Annotated (June 1, 2017), https://www.npr.org/2017/06/01/531090243/trumps-speech-on-paris-climate-agreement-withdrawal-annotated (last accessed May 1, 2024).

⁷ President Donald J. Trump, *Statement by President Trump on the Paris Climate Accord*, (June 1, 2017), https://trumpwhitehouse.archives.gov/briefings-statements/statement-president-trump-paris-climate-accord/ (last accessed May 1, 2024).

and adaptation measures. In addition to government leaders, representatives of business and indigenous communities were also invited in an effort to highlight the importance of inclusivity and collaboration in the climate change reform battle. As a result of the summit, major countries made specific and attainable goals regarding emission reduction. As representative of the United States, Joe Biden pledged to reduce greenhouse gas emissions by 50-52 percent below 2005 levels by 2030, which was a significant increase from the previous commitment made by the United States under the Paris Agreement. The European Union committed to reducing its emissions by at least 55 percent below 1990 levels by 2030 in an effort to contribute to the European Union's broader goal of becoming climate-neutral by 2050. Prime Minister Boris Johnson announced that the United Kingdom would aim to cut emissions by 78 percent below 1990 levels by 2035, which was an increase of 10 percent from its previous target. Japan, represented by Prime Minister Yoshihide Suga, pledged to reduce Japan's emissions by 46 percent below 2013 levels by 2030. Canada also committed to reducing its emissions by 40-45 percent below 2005 levels by 2030.

Moreover, after rejoining the Paris Agreement and hosting the Leader's Summit on Climate, Biden has prioritized engaging with countries all over the world in the fight against climate change reform. Biden has worked to build alliances to advance global action by participating in international forums such as the G7 and G20 summits. The Biden administration has also pledged to increase U.S. contributions to international climate finance (i.e. providing \$2 billion to the Green Climate Fund). The administration also appointed a Special Presidential Envoy for Climate, John Kerry. His responsibilities include being actively engaged in diplomatic efforts to rally international support for climate action. The Special Presidential Envoy for Climate meets with leaders from around the world to discuss emissions reduction targets and cooperation on clean energy technologies at events, representing the United States in international climate negotiations and forums such as the United Nations Framework Convention on Climate Change¹⁰ meetings and the annual Conference of the Parties summits. At those forums, the envoy works to advance United States' climate priorities, negotiate agreements, and build partnerships with other countries to address the global climate crisis collaboratively. While Special Presidential Envoy for Climate under President Biden, John Kerry played a key role in convincing more than 30 countries around the world to bolster their climate targets prior to a United Nations climate summit in 2021. Following years of diplomacy between Kerry and Xie Zhenhua, his Chinese counterpart, in November 2023, the United States and China agreed to jointly tackle global warming by ramping up wind, solar, and other renewable energy in an effort to displace fossil fuels. As President Biden seeks reelection, Kerry announced that he would be stepping down from his position as Special Presidential Envoy for Climate. Along with Kerry's exit, Xie Zhenhua also announced that he is

¹⁰ United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107.



⁹ For more, see, White House, Fact Sheet: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies (Apr. 22, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/">https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/ (last accessed May 1, 2024).

retiring, raising concerns as to what climate diplomacy will look like between the world's two largest polluters after two people so eager for cooperation and progress are gone.¹¹

III. Brief Overview of the Obama, Trump, and Biden Administrations' Statutory Climate Change Agenda

"The Statutory Arena", refers to everything that was established, set, or regulated by the law. Relating specifically to the president, statutory primarily concerns the powers, duties, and limitations imposed by laws and statutes. The powers that are granted to the president are outlined in the Constitution and various statutes that are passed by Congress. Statutory duties are responsibilities assigned to the president by law. Those duties are also outlined in the Constitution and include signing bills into law, delivering the State of the Union address, and serving as chief diplomat in foreign affairs. The president may also issue executive orders which serve to direct the operations of the executive branch of government. The authority to issue those orders are granted by Section 1 of Article II of the Constitution. Despite never directly defining executive orders, Article II has been interpreted throughout the country's history via. Supreme Court decisions to grant presidents the requisite authority to issue executive orders. Executive orders can be issued to clarify existing laws, direct enforcement of statutes, establish agencies, or to set policy priorities. Once issued, executive orders remain in effect until they are revoked or superseded by a subsequent executive order, legislation, or judicial action. The United States of America's unique system of checks and balances comes into play here, especially when presidents attempt to use executive orders to circumvent Congress or enact policy changes unilaterally. The orders can be challenged in court if they seem to exceed the president's authority or violate the Constitution or other existing laws. Finally, Congress can override executive orders through legislation.

Shortly after taking office, on January 27, 2021, newly-elected President Joe Bidenissued an executive order on tackling the climate crisis both in the United States and abroad. In the opening paragraph, Biden stated that:

The United States and the world face a profound climate crisis. We have a narrow moment to pursue action at home and abroad in order to avoid the most catastrophic impacts of that crisis and to seize the opportunity that tackling climate change presents. Domestic action must go hand in hand with United States international leadership, aimed at significantly enhancing global action. Together, we must listen to science and meet the moment.¹²

He continued the executive order by laying out the foundation for his administration's view on climate change. First, Biden made it known that his administration would place climate change at the center of the United States foreign policy and national security. President Biden

¹²Exec. Order No. 14008, 3 C.F.R. (2021), https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/ (last accessed May 1, 2024).



¹¹ Ari Shapiro, William Troop & Kai McNamee, *U.S. Climate Envoy John Kerry is Giving Up the Job Title — But Not the Fight*, NPR (Mar. 7, 2024, 5:00 AM ET), https://www.npr.org/2024/03/07/1236316313/climate-envoy-john-kerry-joe-biden (last accessed May 1, 2024).

reemphasized the urgency with which the United States needed to act due to how grave the danger in the world was. A goal was set to achieve net-zero global emissions by mid-century (2050). The purpose of this order was outlined in section 102,

This order builds on and reaffirms actions my Administration has already taken to place the climate crisis at the forefront of this Nation's foreign policy and national security planning, including submitting the United States instrument of acceptance to rejoin the Paris Agreement. In implementing — and building upon — the Paris Agreement's three overarching objectives (a safe global temperature, increased climate resilience, and financial flows aligned with a pathway toward low greenhouse gas emissions and climate-resilient development), the United States will exercise its leadership to promote a significant increase in global climate ambition to meet the climate challenge.¹³

A. Obama Administration and the Clean Power Plan

In 2015, Obama announced what was considered by many to be the strongest climate action ever taken by the United States of America. ¹⁴ In his press conference announcing the. Clean Power Plan, Obama referred to it as "the single most important step America has ever taken in the fight against climate change." ¹⁵ The Clean Power Plan was designed to cut emissions from power plants. In particular, Clean Power Plan aimed to reduce carbon emissions from power plants that were powered by coal. ¹⁶ At the time the Clean Power Plan was announced, the United States of America was the world's second biggest carbon emitter after China. The Clean Power Plan set state-specific carbon emission reduction targets and aimed to transition the nation's energy sector towards cleaner sources while simultaneously increasing energy efficiency. ¹⁷ The plan proposed a 32 percent cut in carbon emissions from power plants by 2030 on 2005 levels, requiring states to comply by 2022. The establishment of state-specific carbon dioxide emission goals for existing power plants was a key component of the Clean Power Plan. Additionally, the goals were set based on each individual state's unique energy mix and emissions profile. Individualizing the goals allowed for better flexibility based on the state's geographical position. The plan allowed state to develop their own plans to develop their own plans to meet the targets. ¹⁸

The Clean Power Plan garnered much legal opposition from states and utilities who opposed the plans. Opponents looked to the fact that the plan would significantly boost wind and

¹⁸ Adam Vaughan, Obama's clean power plan hailed as US's strongest ever climate action, The Guardian (Aug. 3, 2015).



¹³ *Id*.

¹⁴Remarks by the President in Announcing the Clean Power Plan, The White House (Aug. 3, 2015), available at https://obamawhitehouse.archives.gov/the-press-office/2015/08/03/remarks-president-announcing-clean-power-plan (last visited May 1, 2024).

¹⁵ Id.

¹⁶ Environmental Protection Agency, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60). 17 *Id.*

power generation which would force a switch away from coal power, which has been the staple for many parts of the country for generations. In addition to the potential harmful economic impact of the plan, critics argued that it overstepped the authority of the Environmental Protection Agency, stating that the plan imposed undue burden on both the coal industry and electricity consumers. In addressing these critics, Obama stated

They'll claim we need to slash our investments in clean energy, it's a waste of money -even though they're happy to spend billions of dollars a year in subsidizing oil
companies. They'll claim this plan will kill jobs -- even though our transition to a cleaner
energy economy has the solar industry, to just name one example, creating jobs 10 times
faster than the rest of the economy. They'll claim this plan is a "war on coal," to scare
up votes -- even as they ignore my plan to actually invest in revitalizing coal
country, and supporting health care and retirement for coal miners and their
families, and retraining those workers for better-paying jobs and healthier
jobs. Communities across America have been losing coal jobs for decades. I want
to work with Congress to help them, not to use them as a political football. Partisan
press releases aren't going to help those families. 19

As a result of that opposition, the Supreme Court of the United States issued a stay on the Clean Power Plan's implementation.²⁰ That stay effectively halted enforcement of the plan and left the future implications in limbo with the presidential election soon following.

B. The Trump Administration and the Affordable Clean Energy Rule

Following the Supreme Court of the United States' decision to pause enforcement of the Clean Power Plan, the Trump administration made clear its intention to roll back many of the environmental changes set forth by Obama. Consistent with its intention, the Trump administration began taking steps to disassemble the Clean Power Plan. In March 2017, President Trump signed an executive order directing the Environmental Protection Agency to review and potentially revise or rescind the Clean Power Plan stating in it that ²¹

it is in the national interest to promote clean and safe development of our Nation's vast energy resources, while at the same time avoiding regulatory burdens that unnecessarily encumber energy production, constrain economic growth, and prevent job creation. Moreover, the prudent development of these natural resources is essential to ensuring the Nation's geopolitical security.²²

²¹ Executive Order, Promoting Energy Independence and Economic Growth, 82 Fed. Reg. 16,093 (Mar. 31, 2017). ²² *Id*.



¹⁹Remarks by the President in Announcing the Clean Power Plan, The White House (Aug. 3, 2015), available at https://obamawhitehouse.archives.gov/the-press-office/2015/08/03/remarks-president-announcing-clean-power-plan (last visited May 1, 2024).

²⁰ 82 Fed. Reg. 10 (Jan. 17, 2017) (Notices).

In October 2017, the Environmental Protection Agency proposed to repeal the Clean Power Plan²³ stating that it had concerts regarding that the plan's enactment may have exceeded the Environmental Protection Agency's statutory authority and that it would have significant impacts on the coal industry and electricity consumers.²⁴ On May 31, 2018, the Trump administration issued a proclamation in which it named June 2018 National Ocean Month.²⁵ In the order, the president celebrated the "immense natural resource, and the millions of hardworking Americans employed by [the] ocean industries."²⁶ In an effort to "advance America's economy, security, and environmental interests", President Trump continued in the proclamation, it was necessary to explore, map, and inventory the country's waters. Additionally, President Trump stated in the order,

Through the unique geography of its mainland and the strategic locations of Alaska, Hawaii, and its territories, the United States has the exclusive commercial rights to an oceanic area larger than the combined landmass of the 50 States. This invaluable national asset, called the United States Exclusive Economic Zone (EEZ), is currently underutilized. To harness the vast resources of the EEZ, we will develop and deploy new technologies in partnership with American academic institutions and innovators. We will streamline regulations and administrative practices to promote economic growth, while protecting our marine environment for current and future generations. We will also create new opportunities for American products in the global marketplace, including through continued support of our commercial fisheries and promotion of domestic aquaculture.²⁷

In August of 2018, President Trump announced a proposal for a replacement for the Clean Power Plan, which he called the Affordable Clean Energy Rule.²⁸ The Affordable Clean Energy Rule sought to establish guidelines for states to reduce greenhouse gas emissions from existing coal-fired power plants.²⁹ The Affordable Clean Energy Rule offered a much more industry-friendly alternative to the Clean Power Plan by focusing on the efficiency of power plants rather than transitioning to cleaner energy sources. Similar to how the Clean Power Plan faced criticism from critics arguing that it would cause too much damage to the coal industry and electricity users, the Affordable Clean Energy Rule faced criticism from environmentalists who argued that the Affordable Clean Energy Rule would not adequately address the urgency of the climate crisis. Indeed, environmentalists argued that the Affordable Clean Energy Rule was not an appropriate

²⁸ Environmental Protection Agency, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations, 80 Fed. Reg. 64,662 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt.60)
²⁹ *Id.*



²³ CPP or Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units 80 Fed. Reg. 64662-01 (Oct. 23, 2015) (was supposed to be codified at 40 C.F.R. pt. 60). For more on this issue, see, e.g., Dana Neacsu, Applying Bentham's Theory of Fallacies to Chief Justice Roberts' Reasoning in West Virginia V. EPA, 61 Duq. L. Rev. 95, 97 et seq. (2023).

²⁴ CPP was never applied. See, 82 Fed. Reg. 31,986 (July 6, 2017).

²⁵ Proclamation, President Donald J. Trump Proclaims June 2018 as National Ocean Month, The White House (June 1, 2018).

 $^{^{26}}$ *Id*.

²⁷ Proclamation No. 9762, 83 Fed. Reg. 26199 (May 31, 2018).

replacement for the Clean Power Plan because it would result in much weaker emissions reductions. In 2019, the Trump Administration officially repealed the Clean Power Plan and officially and unambiguously affirmed the United States' priorities, stating in an executive order issued on April 10, 2019,³⁰

The United States is blessed with plentiful energy resources, including abundant supplies of coal, oil, and natural gas. Producers in America have demonstrated a remarkable ability to harness innovation and to cost-effectively unlock new energy supplies, making our country a dominant energy force. In fact, last year the United States surpassed production records set nearly 5 decades ago and is in all likelihood now the largest producer of crude oil in the world. We are also the world's leading producer of natural gas, and we became a net exporter in 2017 for the first time since 1957. The United States will continue to be the undisputed global leader in crude oil and natural gas production for the foreseeable future.³¹

C. Biden Administration Action

President Biden did not re-implement the Clean Power Plan. As the Supreme Court litigation of West Virginia v. EPA³² shows, Obama's CPP had been voluntarily applied by the industry, thus making it redundant, and as some scholars have argued, the very litigation of CPP moot.³³ The Biden administration was proactive in addressing climate change and reducing greenhouse emissions in other ways, as detailed below.

The Biden Administration also announced a \$20 billion program that will see the Environmental Protection Agency awarding eight initial grants under the Greenhouse Gas Reduction Fund, that will range in size from \$400 million to \$7 billion.³⁴ This Environmental Protection Agency finance program is seeking to create a never before seen national network of clean technology financing institutions. Particularly, it is estimated that the program will reduce or avoid around 40 million metric tons of carbon dioxide per year and mobilize \$7 in private

³³ The EPA ultimately projected, for instance, that it would be feasible to have coal provide 27% of national electricity generation by 2030, down from 38% in 2014.

Energy source	Billion kWh	Share of total
Fossil fuels	2,504	60.8%
Natural gas	1,575	38.3%
Coal 899 21.8%	899	21.8%

What is U.S. Electricity Generation by Energy Source? In 2021, about 4,116 billion kilowatt hours (kWh) (or about 4.12 trillion kWh) of electricity were generated at utility-scale electricity generation facilities in the United States. About 61% of this electricity generation was from fossil fuels - coal, natural gas, petroleum, and other gases. Id. ³⁴ Whitehouse.gov, Building a Clean Energy Economy: A Guidebook to the Inflation Reduction Act's Investments in Clean Energy and Climate Action, CleanEnergy.gov (January 2023, Version 2).



³⁰ Executive Order, Promoting Energy Infrastructure and Economic Growth, Exec. Order No. 13868, 84 Fed. Reg. 13,589 (Apr. 15, 2019).

³¹Exec. Order No. 13868, 3 C.F.R. 217 (2019), https://www.govinfo.gov/content/pkg/DCPD-201900217.pdf (last accessed May 1, 2024).

³² West Virginia v. EPA, 142 S. Ct. 2587, 2592 (2022).

investment for every \$1 that is spent of taxpayer money.³⁵ Additionally, a large portion of the program's overall benefits will flow to low-income communities. Those same low-income communities are oftentimes overlooked and passed over by commercial banks and investors. In addition to being overlooked by banks and investors, those low-income communities are being disproportionately affected by climate change. ³⁶

1. The Inflation Reduction Act³⁷

While that investment seems to indicate positive changes for the country as a whole regarding climate change, just like many other political topics, these changes are yet another arena for the two major political parties to disagree. Some Republicans in Congress reportedly opposed the green bank initiative referring to the project as a slash fund. To further combat this bill and other parts of President Biden's climate change reform agenda, House Republicans passed a bill that would combat potential changes such as the Green Bank project. As is typically the case, the bill was supported by one party and challenged by the other. Speaker Kevin McCarthy, R-Calif., stated that the "bill counters President Biden's attack on our domestic energy and includes permitting reforms that will speed construction for major infrastructure projects across the country". Republicans focus on the United States' near-term wealth that is created by jobs that are made possible by domestic fossil energy resources, while democrats place more importance on the long-term dangers that are associated with climate change.

In perhaps its most aggressive move to combat climate change, in August of 2022, the Biden administration signed the Inflation Reduction Act into law.⁴⁰ The Inflation Reduction Act is widely considered to be the most significant action taken by Congress regarding clean energy and climate change in the history of the United States. In the press conference where he signed the Inflation Reduction Act, President Biden stated that

This bill is the biggest step forward on climate ever and it's going to allow us to boldly take additional steps toward meeting all of my climate goals the ones we set out when we ran. It includes ensuring that we create clean energy opportunities in frontline and fence-line communities that have been smothered by the legacy of pollution, and fight environmental injustice that's been going on for so long. And here's another win for the American people: In addition to cutting the deficit by \$350 billion last year, in my first year in office, and cutting it \$1.7 trillion this year, this fiscal year, we're going to cut the deficit by another \$300 billion with the Inflation Reduction Act over the next decade⁴¹

⁴¹Remarks by President Biden at Signing of H.R. 5376, the Inflation Reduction Act of 2022, The White House (Aug. 16, 2022), available at https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/08/16/remarks-by-president-biden-at-signing-of-h-r-5376-the-inflation-reduction-act-of-2022/ (last visited May 1, 2024).



³⁵ *Id*.

³⁶ *Id*.

³⁷ Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1946 (2022).

³⁸ H.R. 1023, the *Cutting Green Corruption and Taxes Act*, led by Rep. Gary Palmer (R-AL)

³⁹ Sweeping GOP Energy Bill Would Sweep Away Biden's Climate Agenda," Roll Call (Mar. 14, 2023), https://rollcall.com/2023/03/14/sweeping-gop-energy-bill-would-sweep-away-bidens-climate-agenda/.

⁴⁰ 117 Pub. L. 169, 136 Stat. 1946 (2022).

The Inflation Reduction Act makes a historic commitment to build a new clean energy economy, powered by American innovators, American workers, and American manufacturers, that will create good-paying union jobs and cut the pollution that is fueling the climate crisis and driving environmental injustice. The act included grants, loans, rebates, incentives, and other investments to support the overall goal of combating climate change.⁴² Specifically, the act provided \$370 billion in investments that planned to lower energy costs while accelerating private investment in clean energy solutions, creating good-paying jobs and new economic opportunities for American workers.⁴³ Following the passage of the Inflation Reduction Act, the Department of Energy estimated that the United States would achieve a 40 percent reduction in greenhouse gas emissions below 2005 levels by 2030.⁴⁴ Additionally, the Department of Energy estimated the provisions of the Inflation Reduction Act would reduce emissions by more than 1,000 million metric tons of carbon dioxide in 2030.⁴⁵

The Inflation Reduction Act was designed to help working families in clean energy and climate programs. The act aimed to create millions of high-quality jobs that would uplift the middle class and create benefits that would help communities that are often overlooked and left behind (i.e. the green bank fund). Disadvantaged communities are often the most impacted by toxic pollution and as a result tend to suffer disproportionately from the impacts of climate change. The act set a goal of delivering 40 percent of the benefits of the climate and clean energy investments to disadvantaged communities. 46 One example of a grant created by the Inflation Reduction Act is the \$3 billion environmental justice grant program for community-based organizations and their partners. Native American communities are a target group for the act.⁴⁷ The Inflation Reduction Act provided up to \$20 billion in loans to support Tribal investment in energy-related projects and \$225 million for community driven relocation for Tribes threatened by the impacts of climate change. 48 The act also provides support for energy communities. Energy communities are areas in which a coal mine or a coal-fires power plant closed or places that relied on the extraction, processing, transport, or storage of coal (or another natural gas) but now face higher than average unemployment due to the closure of the facility. In an effort to aid these energy communities, the Inflation Reduction Act provides production and investment tax credits for clean electricity offer bonus credits for projects located in energy communities.⁴⁹ At the Department of Energy, the act created a new Energy Infrastructure Reinvestment Financing Program which serves to guarantee loans to projects that retool, repower, repurpose, or replace energy infrastructure that ceased operations.⁵⁰ Rural communities will also benefit from the investments in energy communities, but the Inflation Reduction Act also makes targeted investments specifically to improve electricity service, expand access to affordable clean energy, advance climate smart agriculture, and support



⁴² 117 Pub. L. 169 (Aug. 16, 2022)

⁴³ Whitehouse.gov, Building a Clean Energy Economy: A Guidebook to the Inflation Reduction Act's Investments in Clean Energy and Climate Action, CleanEnergy.gov (January 2023, Version 2).

⁴⁴ *Id*.

⁴⁵ *Id*.

⁴⁶ *Id*.

⁴⁷ *Id*.

⁴⁸ *Id*.

⁴⁹ *Id*.

⁵⁰ *Id*.

agriculture based biofuels in Rural communities. In recognizing that farmers are an essential part of the climate change battle, the act also offers financial support to them, including those who were affected by climate-fueled natural disasters (i.e. extreme drought).⁵¹

The Clean Air Act caused levels of harmful air pollution to steadily fall across the country over the last 50 years while simultaneously allowing the United States to grow.⁵² In areas where environmental justice concerns are present, there has been a consistent exposure to unhealthy levels of pollution from legacy sources such as factories or industrial facilities that were operational in the past. Those sources of pollution, even though they may no longer be operational, can persist in the environment and pose health risks to nearby communities. To end that multigenerational cycle, the Inflation Reduction Act created several new programs to help the communities that carry a disproportionate pollution burden. The IRA provided \$3 billion for Environmental and Climate Justice Block Grants. The Environmental Protection Agency's Office of Environmental Justice and External Civil Rights is scheduled to provide grants and technical assistance to community-based organizations, alone or in partnerships, to reduce indoor and outdoor air pollution, including greenhouse gases; monitor for pollution; improve community resilience to the impacts of climate change, including extreme heat and wildfire; and build the capacity of these organizations to engage with state and federal decision-making processes.⁵³ The IRA will also grant more than \$3.2 billion for the Neighborhood Access and Equity Grant Program. ⁵⁴ This Department of Transportation grant program will support projects to improve walkability, safety, and affordable transportation access in communities; to clean up existing and prevent new environmental harms caused by transportation projects in disadvantaged communities; and provide planning and capacity building support to disadvantaged and underserved communities. This program complements the Department of Transportation's Reconnecting Communities Pilot Program, created and funded by the Bipartisan Infrastructure Law to restore community connectivity by removing, retrofitting, or mitigating highways or other transportation facilities that create barriers to community cohesion.

IV. Brief Overview of the Obama, Trump, and Biden Administrations Administrative Climate Change Agenda

This section will focus on the regulatory agenda of the three administrations highlighted in this essay. The regulatory agenda refers to the process of creating and enforcing rules and regulations by government agencies to govern specific industries, such as the natural gas industry, discussed here from the angle of climate change adaptation, mitigation and prevention.

⁵³ Whitehouse.gov, Building a Clean Energy Economy: A Guidebook to the Inflation Reduction Act's Investments in Clean Energy and Climate Action, CleanEnergy.gov (January 2023, Version 2).

⁵⁴ *Id.*



⁵¹ *Id*.

⁵² Clean Air Act, 42 U.S.C. §§ 7401-7671q (1970)

A. Coal Industry

By 2025 and 2028, the last two coal-fired plants in New England are scheduled to close, an event which will end the use of a fossil fuel that supplied electricity to the New England region for over 50 years. After the Merrimack and Schiller stations close, New England will be the second region in the United States, The Pacific Northwest was the first, to stop burning coal. Upon closing, the two coal-fired plants will be converted into solar farms and battery units that can store electricity generated from offshore wind turbines along the Atlantic Coast. Environmentalists waged a five-year legal battle against the two New Hampshire plants, in which it was alleged that the coal-fired plants were discharging warm water from stream turbines into a nearby river without cooling it first to match the natural temperature. That type of thermal pollution can damage the local aquatic ecosystem by resulting in a term known as thermal shock. Thermal shock occurs when large amounts of warm water meet chilly water as is found in the chilly ponds, bays, and rivers that are located in New Hampshire. Thermal shock has the capabilities to kill off insects, fish, and amphibians. Coral reef bleaching can also occur during this process. Coral reef bleaching is the result of coral organisms dying.

Coal use has consistently dropped in the United States as natural gas and renewable sources like wind and solar have become more readily accessible. In 2023, coal produced an estimated 17 percent of American Electricity in 2023 compared to 2000 when coal-based electric power accounted for approximately 51 percent of total electric generation. ⁵⁵ Coal is considered one of , if not the dirtiest fossil fuel, accounting for 59 percent of carbon emissions from electricity in 2021 despite only producing less than 25 percent of the electricity produced in the United States of America that year according to the Environmental Protection Agency. ⁵⁶

The Biden administration also announced that Environmental Protection Agency is finalizing what is considered to be the strongest greenhouse standard for heavy duty vehicles in the history of the United States of America.⁵⁷ The Environmental Protection Agency estimates that the changes brought with this regulation will cut around 1 billion tons of planet-warming pollution by 2055. While heavy-duty trucks represent only about 5 percent of the American vehicle fleet, they contribute around 20 percent of total transportation climate pollution.⁵⁸

B. The Environmental Protection Agency

When considering climate change, pollution and natural gas usage is often the focal point, but the animal and plants all throughout the world are just as important in the topic of climate change. Each species on this planet plays a crucial role in maintaining the balance and functionality of ecosystems. It is imperative to protect the Earth's biodiversity that is being threatened by climate

⁵⁷ Environmental Protection Agency, Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles, 86 Fed. Reg. 45,976 (Aug. 25, 2021), available at https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-greenhouse-gas-emissions-standards-heavy-duty.

⁵⁸ *Id*.



⁵⁵ Environmental Protection Agency, Sources of Greenhouse Gas Emissions, EPA.gov, available at https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions.

⁵⁶ *Id*.

change. Animals and plants provide a myriad of services that make life on this planet possible for humans. Such services include, for example, pollination of crops, regulation of carbon dioxide (this is otherwise known as carbon sequestration), and pest control just to name a few.

There are several phases during the process by which a species goes extinct. Once a species is labeled as threatened or endangered, the Environmental Protection Agency steps in to protect the species by integrating species conservation consideration into its regulatory programs, conducting environmental assessments, and implementing measures to minimize adverse impacts on wildlife and their habitats. The Environmental Protection Agency's goal when taking these actions is to preserve biodiversity and promote the recovery of endangered and threatened species.

In 1973, President Nixon signed the Endangered Species Act ("ESA"),⁵⁹ in an effort to appease activists who urged Congress to pass stricter legislation concerning species protection efforts.⁶⁰ The ESA was stated by President Nixon to "grant the Government both the authority to make early identification of endangered species, and the means to act quickly and thoroughly to save them from extinction."⁶¹ Today, there are over 1,500 animals and plants in the United States of America that have some type of federal protection.

On the 50th anniversary of the Endangered Species Act, President Biden stated that

Fifty years ago, the Congress passed one of the world's most critical conservation laws — the Endangered Species Act. Ever since, the Endangered Species Act has prevented 99 percent of all fish, wildlife, and plants under its protection from going extinct. This law has safeguarded the incredible biodiversity across our Nation, supported the recovery of imperiled species, and conserved the habitats they depend on. As we observe this anniversary, my Administration recommits to conserving America's flora and fauna for generations to come.⁶²

C. The Obama Administration and Wildlife

The Obama Administration oversaw over 99 successful actions regarding the conservation of wildlife under the ESA.⁶³ Successes come in different forms whether it be removing a species from the endangered species entirely or downgrading the seriousness of their endangered status. The overall goal of the ESA is to be able to achieve a "recovered" status for a previously endangered species. The recovery process entails stopping the decline of an endangered or threatened species by removing or reducing threats so that the long-term survival of the species is

https://obamawhitehouse.archives.gov/sites/default/files/wildlifewinsfinal.pdf.



⁵⁹ Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544 (1973).

⁶⁰ *Id*.

⁶¹ *Id*.

⁶² A Proclamation on the 50th Anniversary of the Endangered Species Act, 2023, The White House (Dec. 27, 2023), available at https://www.whitehouse.gov/briefing-room/presidential-actions/2023/12/27/a-proclamation-on-the-50th-anniversary-of-the-endangered-species-act-2023/ (last visited May 1, 2024)

^{63 &}quot;Wildlife Wins," The White House (2016),

no longer threatened. Since the enactment of the ESA, over 30 animals and the American alligator and the Bald Eagle.⁶⁴

D. The Trump Administration and Wildlife

Over the course of Trump's four-year term, his administration progressively relaxed supervision of polluting industries, diminished safeguards for endangered wildlife, and obstructed efforts initiated during the Obama presidency to combat Climate Change. These changes come as no surprise, as during his campaign, Trump vowed to dismantle the Environmental Protection Agency "in almost every form." The Trump Administration rolled back more than 125 environmental safeguards, including opening over 9.3 million acres to logging in Alaska's Tongass National Forest, which is one of the world's largest intact temperate rainforests. The Tongass National Forest's trees absorb more carbon than any other forest in the United States of America. In an effort to combat some of the changes that were proposed by the Obama administration but had not yet gone into effect, the Trump administration temporarily froze regulations. As for rules that were already in effect, the Trump administration would delay compliance deadline dates.

E. The Biden Administration and Nature-Conservation

In April of 2024, with the next presidential election looming, The Biden administration finalized a rule to ban fossil fuel drilling on almost half of the National Petroleum Reserve in Alaska.⁶⁶ Accompanying the finalization of that rule, The Interior Department planned to block oil drilling on over 13 million acres in the Western Arctic.⁶⁷ The area where oil drilling will be banned includes almost 40 percent of the land of the National Petroleum Reserve, a remote area that is home to protected animal species including polar bears and caribou. The National Petroleum Reserve is over 23 million acres of public land, and it includes an underground emergency oil supply for the United States Navy. It was also the site of the Willow Project. The Willow Project was a plan for oil drilling in the National Petroleum Reserve and was spearheaded by ConocoPhillips, a major oil company.⁶⁸ The project was aimed to develop an oil field in the northeastern part of the National Petroleum Reserve specifically. The Willow Project was expected to produce substantial oil reserves, which would contribute to the United States' economic growth and energy security. Additionally, the Willow Project was estimated to potentially produce upwards of one hundred thousand barrels per day. While the project faced opposition from environmentalists and indigenous communities, who were concerned that the drilling would harm the sensitive wildlife of the area, the project gained regulatory approval from the Trump administration, which also prioritized energy development and economic growth and stability. The Biden administration demonstrated a pattern of prioritizing climate change efforts, but approved

⁶⁸ For more, see "Willow Info Center," Power in Cooperation, https://powerincooperation.com/policyissues/willow-info-center/ (accessed May 1, 2024).



⁶⁴ Id

⁶⁵ Coral Davenport, Donald Trump Could Put Climate Change on Course for 'Danger Zone', N.Y. Times (Nov. 10, 2016).

⁶⁶ Ella Nilsen, Biden Administration Bans Drilling in Nearly Half of Alaska Petroleum Reserve in Sweeping Win for Climate Advocates, CNN (Apr. 19, 2024).

the Willow Project in March 2023.69 The recent move to ban drilling in the National Petroleum Reserve is much more consistent with Biden's proactive climate change agenda. One major critique that Republicans have persistently maintained is that climate change control efforts have too often come at the costs of Americans who will have to oftentimes bear the consequences of such conservational efforts. In the case of the Willow Project however, under Biden's tenure the United States has produced more oil than any country in history⁷⁰, and gas prices have decreased over \$1.35 from their all-time high in June of 202271. President Biden's ban also includes a blockade of the Trump administration-approved Amber Road in the Alaskan wilderness.⁷² The Amber Road was a proposed infrastructure project which was aimed at creating a transportation route that would link remote communities and resource rich areas in Alaska's Arctic region. The project would have included the construction of a network of roads, trails, and potentially railways through the Arctic tundra connecting villages and industrial sites. The Amber Road would have significantly improved access to natural resources such as oil, gas, and minerals. While advocates of the Amber Road pointed to job creation and other economic opportunities, environmentalists and indigenous groups raised concerns regarding the potential impacts that the Amber Road would have on the fragile Arctic ecosystems and indigenous lands.

V. Conclusion: Next Steps for Future Climate Change Reforms

The National Aeronautics and Space Administration ("NASA") has hypothesized what changes climate change will have major impact in the United States.⁷³ The sea levels will rise by as much as 6.6 feet by the year 2100. Hurricanes will continue to become stronger and more intense.⁷⁴ Droughts in the Southwest and heat waves will become more frequent and more intense will cold waves will become less intense and less frequent.⁷⁵ Warming temperatures have extended and intensified wildfire season in the West, where long-term drought in the region has heightened



⁶⁹ Willow Master Development Plan Supplemental Environmental Impact Statement, NEPA Number DOI-BLM-AK-0000-2018-0004-EIS (Project Type: Environmental Impact Statement, NEPA Status: Completed, Lead Office: State Office, Last Updated: 09/01/2023), available at https://eplanning.blm.gov/eplanning-ui/project/109410/510.

⁷⁰ Matt Egan, The United States is producing more oil than any country in history, CNN (Dec. 19, 2023), available at https://www.cnn.com/2023/12/19/business/us-production-oil-reserves-crude/index.html.

⁷¹ Matt Egan, Surging gas prices just hit a significant milestone, CNN (Mar. 18, 2024), available at https://www.cnn.com/2024/03/18/business/gas-prices-inflation-russia/index.html.

⁷² Ella Nilsen, Biden Administration Bans Drilling in Nearly Half of Alaska Petroleum Reserve in Sweeping Win for Climate Advocates, CNN (Apr. 19, 2024).

⁷³ IPCC, Climate Change 2021: The Physical Science Basis, the Working Group I contribution to the Sixth Assessment Report (Cambridge University Press, Cambridge, UK, 2021).

IPCC, Summary for Policymakers, in Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, eds. T.F. Stocker et al. (Cambridge University Press, Cambridge, UK and New York, NY, USA, 2013).

National Climate Assessment, 2014, https://nca2014.globalchange.gov (accessed May 1, 2024).

Global Change Research Program, Climate Science Special Report: Fourth National Climate Assessment, Volume I (2017), available at https://science2017.globalchange.gov (last visited May 1, 2024).

[&]quot;Climate Change: How Do We Know?", NASA, https://science.nasa.gov/climate-change/effects/ (last visited May 1, 2024).

⁷⁴ *Id*.

⁷⁵ *Id*.

the risk of fires. Scientists estimate that human-caused climate change has already doubled the area of forest burned in recent decades. By around 2050, the amount of land consumed by wildfires in Western states is projected to further increase by two to six times. Even in traditionally rainy regions like the Southeast, wildfires are projected to increase by about 30 percent. Climate change is having an uneven effect on precipitation (rain and snow) in the United States, with some locations experiencing increased precipitation and flooding, while others suffer from drought. On average, more winter and spring precipitation is projected for the northern United States, and less for the Southwest, over this century. The length of the frost-free season, and the corresponding growing season, has been increasing since the 1980s, with the largest increases occurring in the western United States. Across the United States, the growing season is projected to continue to lengthen, which will affect ecosystems and agriculture. Sea ice cover in the Arctic Ocean is expected to continue decreasing, and the Arctic Ocean will very likely become essentially ice-free in late summer if current projections hold. This change is expected to occur before mid-century.

While humans have already caused major climate changes and have begun to set future changes in motion, if we stopped emitting greenhouse gasses immediately, the rise in global temperature would begin to flatten on only a few years. The temperatures would remain the same for many centuries. Every bit of avoided future temperature increases results in less warming that would otherwise persist for forever. The benefits of reduced greenhouse gas emissions occur on the same timescale as the political decisions that lead to those reductions. Without major action to reduce emissions, global temperature is on track to rise by 2.5°C to 4.5°C (4.5°F to 8°F) by 2100, according to the latest estimates by NASA. Responding to climate change will involve a two-tier approach: mitigation and adaptation. Mitigation is the reduction of the flow of greenhouse gases into the atmosphere while adaptation is the process of learning to live with and adapt to the climate change that is already occurring.

By prioritizing science-based decision-making, promoting public awareness and engagement, and fostering international cooperation, the United States can lead the way in confronting the climate crisis and transitioning to a sustainable, low-carbon future.

⁸³ "Is it too late to prevent climate change?", NASA, https://science.nasa.gov/climate-change/faq/is-it-too-late-to-prevent-climate-change/ (last visited May 1, 2024).



⁷⁶ *Id*.

⁷⁷ *Id*.

⁷⁸ *Id*.

⁷⁹ *Id*.

⁸⁰ "Is it too late to prevent climate change?", NASA, https://science.nasa.gov/climate-change/faq/is-it-too-late-to-prevent-climate-change/ (last visited May 1, 2024).

⁸¹ *Id*.

 $^{^{82}}$ *Id*.