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Biden's Burden: cleaning up Trump's environmental mess Brzemię Bidena: sprzątanie środowiskowego bałaganu po Trumpie

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Abstract: Before the US can make progress on climate policy or environmental policy more generally, the new administration of President Joseph R. Biden must first undo the damage created by his predecessor in office, who dismantled existing US climate policy, pulled the US from the Paris Agreement, and sought to disable the Environmental Protection Agency (EPA) from regulating polluters. The courts blocked some of the Trump Administration's more egregious anti-environmental protection policies for violating the 1946 Administrative Procedures Act and/or the express terms of an environmental protection statute (such as the Clean Air Act or Clean Water Act), but the Biden Administration still has a great deal of work to do. Already, Biden has announced that the US will rejoin the Paris Agreement as part of its plans not just to reinstate but to expand on climate policies adopted during the Obama Administration. This essay explains how the Biden Administration plans to achieve these climate policy goals, using mostly the very same administrative tools that the Trump Administration used to undo Obama era climate policies. Inter alia, advantages and disadvantages of pursuing policy goals administratively, rather than through legislative processes, will be addressed.

Key words: Administrative Procedure, Executive Orders, Climate Change

Abstrakt: Zanim Stany Zjednoczone będą w stanie zrobić postęp w dziedzinie polityki klimatycznej czy, mówiąc ogólniej, polityce środowiskowej, nowa administracja Josepha R. Bidena musi najpierw naprawić zniszczenia dokonane przez jego poprzednika na urzędzie prezydenckim, który rozmontował działającą do tej pory politykę klimatyczną USA, wyprowadził kraj z Porozumienia Paryskiego i rozpoczął proces odbierania Agen-

cji Ochrony Środowiska (EPA) możliwości przeciwdziałania trucicielom. Sądy blokowały niektóre z bardziej jawnych antyśrodowiskowych polityk forsowanych przez Administrację Trumpa z uwagi na naruszenia Ustawy o Procedurach Administracyjnych z roku 1946 i/lub wyraźnych postanowień zawartych w statutach o ochronie środowiska (takich jak Ustawa od Czystym Powietrzu lub Ustawa o Czystej Wodzie), ale Administracja Bidena wciąż ma wiele pracy do wykonania w tej kwestii. Do tej pory Biden już ogłosił, że USA powrócą do Porozumienia Paryskiego, jako część swoich planów nie tylko odbudowania lecz także rozszerzenia polityki klimatycznej przyjętej wcześniej przez Administrację Obamy. Niniejszy esej wyjaśnia jak Administracja Bidena planuje osiągnąć cele polityki klimatycznej, stosując w większości te same narzędzia administracyjne jakie Administracja Trumpa wykorzystała ażeby zdemontować politykę klimatyczną z czasów prezydentury Obamy. Autorzy koncentrują się, między innymi, na zaletach i wadach jakie niesie ze sobą administracyjne realizowanie celów raczej niż omawiają procesy prawne typowe dla tego obszaru.

Słowa kluczowe: procedura administracyjna, dekret prezydencki, zmiana klimatu

1. Introduction

On January 20, 2021, Joseph R. Biden was inaugurated as the 46th president of the United States, replacing Donald J. Trump. As Biden took office: (1) the COVID pandemic was raging in the US, in no small part due to the absence of federal leadership; (2) the economy (not to be confused with the stock markets) was in crisis; (3) America's international reputation was largely in tatters; and (4) the American public seemed more politically polarized than ever before. Climate policy was just one of many items on Biden's agenda for quick action. After Trump's hostility toward and willful neglect of the issue of climate change, Biden was no only intent on resurrecting preexisting climate policies but on positioning the United States, for the first time, to be a global leader.

On the issue of climate change, the transition from Trump to Biden could not be more stark. But this is hardly the first time a change in presidential administrations has led to major changes in climate policy. Since the beginning of this century, US climate policy has swung like a pendulum as Democratic presidents have given way to Republican president, and vice versa. Interestingly, none of the changes in climate policy has taken the form of legislative enactments. Since 1980, Congress has enacted only two major sets of amendments to pollution-control laws: the 1990 Clean Air Act Amendments (amending 42 USC §7401 et seq) and the 2016 Lautenberg Act amendments to the Toxic Substances Control Act (amending 53 USC §2601 et seq), neither of which directly concerned climate change. All of the pendulum swings in policy since the presidency of Bill Clinton in the 1990s have occurred despite a stable statutory equilibrium. One main reason for this is increasing political gridlock in Congress (particularly the Senate) has made the legislative process more

and more difficult to use for creating policy. Instead, presidents have resorted to policy-making by Executive Order (EO) directing federal agencies within the Executive Branch of government, including the Environmental Protection Agency (EPA), to issue, revoke or amend regulations. This shift in the mode of environmental governance must be understood to appreciate the problems Biden confronts, as well as his ability to effectively deal with them.

For that reason, the next part of this essay addresses the changing nature of environmental governance in the US, which has contributed directly to the chronic instability of US climate policy over the past 30 years. It will be followed by a section describing the pendulum swings of climate policy from Clinton to Bush (Jr.), from Bush (Jr.) to Obama, and from Obama to Trump. The final section concludes with a description of the Biden Administration's plans (to the extent they are known at the time this essay is written) not only to resurrect US climate policy after four years of Trump but also to stop the policy pendulum swinging back again by pushing climate legislation through Congress. Policies embedded in legislation will be far more difficult to repeal than any set of regulations Biden's EPA might promulgate.

2. Environmental governance by executive order and regulation v. legislation

President Trump managed to do a great deal of harm to US climate and environmental policy without Congress enacting a single piece of legislation. This was nothing new. Since before the start of the twenty-first century, environmental policy in the US has been made almost exclusively through administrative, rather than legislative, mechanisms (Steele 2020: 305). Specifically, presidents enact policy by Executive Orders (EOs) that are binding on Executive Branch agencies, including the EPA. The agencies are obligated to issue rules and regulations that implement the policies referenced in EOs, unless doing so would violate the constitution, substantive statutory requirements (e.g., under the Clean Air Act, Clean Water Act, or Endangered Species Act).

Since the country's founding, all US presidents have relied to some extent on Executive Orders. George Washington issued eight of them, and up to the middle of the nineteenth century, they were used sparingly. No president before Franklin Pierce (who served from 1853 to 1857) issued as many as twenty EOs. Ulysses S. Grant (president from 1869 to 1877) was the first chief executive to issue more than 100 of them. During his eight years in office he

¹ The Lautenberg Act of 2016 is a singular exception.

issued 217 EOs. Grant's presidency was the "high water mark" for EOs in the nineteenth century. But at the turn of the twentieth century, the use of EOs exploded under Theodore Roosevelt ("TDR," president from 1901 to 1909). TDR signed more than 1,000 of them. President Herbert Hoover (serving from 1929 to 1933) issued 968 EOs, setting a record that still stands for one-term presidents. The record holder for presidents serving more than one term is held by TDR's cousin, Franklin Roosevelt ("FDR," president from 1933 to 1945), who signed a whopping 3,721 EOs.² No president since has come anywhere close to that number. In fact, contrary to the conventional wisdom, the use of EOs has declined sharply since the era of the "New Deal," World War II, and the Korean War. Dwight D. Eisenhower ("Ike," president from 1953 to 1961) issued just 484 of them during his two terms in office. Since Ike, no president has signed as many EOs. Indeed, the only presidents since 1960 who have issued more than 300 EOs are Richard Nixon (president from 1969 to 1974), Jimmy Carter (a one-term president from 1977 to 1981), Ronald Reagan (president from 1981-1989) and Bill Clinton (president from 1993-2001). Barrack Obama issued 276 EOs in his eight years as president. His successor Donald Trump issued 220 in just four years.³

Focusing on the use of EOs in environmental policy since the "environmental decade" of the 1970s, scholars observe a decline in legislative enactments and corresponding increase in substantive EOs since 1990:

Since the passage of the Clean Air Act Amendments of 1990 . . . Congress has had extremely limited success in enacting or amending any nationally significant environmental laws, making the unilateral, administrative action of the president one of the primary means of implementing environmental reform and advancing new policies (Jones 2019: 174, footnotes omitted).

According to William Rodgers (2001: 20), "[t]he full flowering of the executive order as an instrument of environmental policy occurred in . . . the Clinton Administration." Since Rodgers wrote that in 2001, three more presidents (G.W. Bush, B. Obama and D.J. Trump) have held office and there is, as yet, no sign that the flower is wilting. But why? Empirical scholars have offered

² Of course, FDR was president 50 percent longer than any one else, serving for just over 12 years. Still, his record is impressive. He averaged 310 EOs per year in office, which far outstrips any of his predecessors and successors in office. The president with the next highest annual rate of EOs is Wilson at 225 per year. Among one-term presidents, Herbert Hoover signed the most EOs (968), followed by Taft (724), Harding, who signed 522 in only 2.4 years, Jimmy Carter (320) and Donald Trump (220). (Author's calculations based on *The American Presidency Project*, UC Santa Barbara https://www.presidency.ucsb.edu/statistics/data/executive-orders#eotable.

³ EO numbers per president are from The American Presidency Project at UC Santa Barbara, at https://www.presidency.ucsb.edu/statistics/data/executive-orders#eotable.

a plausible explanation that "policy is more likely to be enacted through executive orders when polarization is higher, control of the government is divided between parties, and certain salient policy issues are being debated" (Byers, Carson, and Williamson 2020: 18). In the US, since 1990, divided government has been the rule. One party or the other has held both houses of Congress and the White House for only 10 of the last 30 years (not including the results of the 2020 election, when the Democrats held the House and took back the Senate and the White House at least until 2023) (see, e.g., Ansolabehere, Palmer and Schneer 2017). How much divided government alone has affected the extent of legislative action on environmental protection is questionable, however, because divided government also prevailed for the first seven years of the 1970s, covering the most fruitful period of environmental law-making in American history. However, when issue saliency and political polarization are factored in, along with divided government, the propensity for rule by Executive Order, rather than legislation, increases. In the US, few issues are more salient at the national level than environmental policies, generally, and climate change, in particular. Meanwhile, political polarization in the US has increased dramatically since at least the turn of the twenty-first century, reaching levels in the waning days of the Trump Administration that threaten the stability of constitutional governance (see Cillizza 2020).

Not only does environmental policymaking by EO become more likely in political circumstances of divided government and high political polarization, it becomes more attractive to presidents than messy and lengthy legislative procedures. Creating policy by Executive Order has the virtue of not requiring an Act of Congress, a co-equal branch of American government that has become so dysfunctional that legislative processes have ground nearly to a halt. Even when it does function, Congress's legislative processes are undeniably cumbersome and time-consuming. The overwhelming majority of legislative proposals never become law, although those backed by the president may have a better than average chance. It can take well over a year for a piece of legislation to arrive on the president's desk for signature, and it might look very different from what the president originally proposed. EOs are a simple, though limited, alternative to the legislative process.

That said, creating environmental policy by Executive Order also has important limitations. Among them: (1) Most obviously, they must be in compliance with the US constitution; (2) they are only binding on executive branch agencies; (3) although EOs carry the force of law for those agencies, EOs are not laws, which is to say, they cannot contravene or amend existing statutory rules; (4) they have less permanence than legislative enactments. An EO signed by one president can be countermanded by an EO of the next. Thus, the relative

ease of ruling by EO also becomes its major weakness, while the cumbersome nature of legislative processes provide protection against casual amendment or revocation.

As for regulations promulgated under EOs, they are somewhat more difficult to change because every regulation must be in compliance with (a) the US constitution,⁴ (b) "enabling" legislation (specific grants of rule-making authority from Congress, such as the Clean Air Act (42 USC §7401 et. seq.) provides to the EPA), and (c) the 1946 Administrative Procedures Act (5 USC §500 et. seq.), which requires that federal agency are supported by "substantial evidence" and are not otherwise arbitrary or capricious (see Cole 2016). Each of these requirements provide a handle for aggrieved parties to seek judicial review of regulations, giving federal courts much more authority to overturn regulations than they possess to overturn legislation, which they can only do on constitutional grounds. Even if regulations are more difficult to change than EOs, they remain far easier to change than legislation, which can only be amended or repealed upon approval by both houses of Congress and the president (unless congressional majorities are sufficient to override a presidential veto).

In 1996, Congress enacted the Contract with America Advancement Act (5 USC §§801-808), which included a section that become known separately as the "Congressional Review Act" (CRA) (5 USC §§801-804). Under the CRA, new "major" rules remain ineffective for at least 60 "session days" (i.e., days when Congress is in session) to give Congress a chance to disapprove them by joint resolution, which has the effect of a statute overruling the agency's regulation. As a practical matter, 60 session days can encompass more than three months. According to the US Senate's 2019 calendar, it took until mid-April to get to 60 session days.⁵ A side-effect of delaying the effective date of new regulations under the CRA is that new presidents can simply suspend from becoming effective regulations still within the 60-session-day period at the end of the preceding administration (Shapiro 2015). When Trump took office in January 2017, he was able to suspend 180 rules issued by the Obama Administration dating back as May 2016 (Bellini 2017).

Despite the CRA, because it has become so difficult to enact legislation that, despite the disadvantages, presidents since the start of this century have relied more heavily on EOs and regulations for making environmental policy than statutory enactments.

⁴ Of course, failure to comply with the US constitution is also grounds for judicial invalidation of statutes and executive orders.

⁵ Based on author's own calculations from Senate of the United States, One Hundred Sixteenth Congress, Calendar of Business, Final Issue, First Session, archived at https://www.govinfo.gov/content/pkg/CCAL-116scal-S1/pdf/CCAL-116scal-S1-pt0.pdf.

3. Making, reversing, and remaking US climate policy by executive order and regulation from Bill Clinton through Donald Trump

The history of climate change policy in the US is as idiosyncratic as the country's system of governance. Its overall approach to climate policy has shifted with every change in presidential administration. When Jimmy Carter was president in the second half of the 1970s, the US became the first country in the world to enact a statute requiring the development of an actual climate policy. The 1978 National Climate Program Act (15 U.S.C. §2901 et. seq.) found, as a matter of law, that climate change affects "food production, energy use, land use, water resources and other factors vital to national security and human welfare." The declared purpose of the Act was to "assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications (42 U.S.C. §2902). The statute provided for creation of a National Climate Program, across various governmental agencies, with a central office in the Department of Commerce, to plan, fund and undertake research into climate change and its effects on "agricultural production, water resources, energy needs, and other critical sectors of the economy" (15 U.S.C. 2904(d)(1)). Although the statute added support to ongoing scientific and social-scientific studies of climate change, and some preliminary planning was done, it became a dead letter when Ronald Reagan became president in 1981.

The Reagan Administration's sole action on climate change was to defund ongoing scientific research (Meyer 2018), which had the effect of transferring the center of scientific research from the US to the UK, where Margaret Thatcher (who was genuinely interested in scientific research) continued to fund climate research (Thatcher 1988). In fact, from 1981 to 1989, the US had no climate policy. However, the US did sign and ratify the 1985 Vienna Convention for the Protection of the Ozone Layer (U.N.T.S. vol. 1513, p. 293) and the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer (UN, Treaty Series, vol. 1522: 3), which unintentionally became the first treaty to mitigate climate change because ozone depleting substances (ODSs) also are powerful GHGs. As of 2010, "the decrease of annual ODS emissions under the Montreal Protocol [was] estimated to be about 10 gigatonnes of avoided CO2-equivalent emissions per year, about five times larger than the annual emissions reduction target [which was not met] for the first commitment period (2008-2012) of the Kyoto Protocol" (WMO 2010: ES.2) According to recent assessments, in the Artic region, avoided warming of 1.1°C is attributable to the effects of the Montreal Protocol (Goyal et al., 2019).

When Reagan's Vice President, George H.W. Bush moved into the Oval Office in 1989, hostility to environmental policy generally and climate policy

in particular abated. During his first year in office, Bush created the U.S. Global Change Research Program, restoring some of the funding that the Reagan Administration had cut from scientific study of climate change. In 1990, he signed into law the Global Climate Research Act (15 U.S.C. §2921 et. seq.), which established a new National Climate Assessment to study the impact of climate change on the US. Bush also signed important amendments to the Clean Air Act (Public Law No: 101-549, amending 421 USC \$7401 et. seq.) that had been held up in the Reagan Administration throughout the 1980s. Those amendments added an entirely new section to the Act designed to meet America's obligations under the Ozone Accords, which, as noted above, mitigated climate change as they phased-out ODSs. In fact, if actual reductions in GHG emissions is the litmus test, the 1990 Amendments to the Clean Air Act were perhaps the single most significant occurrence for US climate policy during the 1990s. To this day, it remains the only US statute to actually regulate emissions of GHGs, though only those that are also ODSs. In addition to new legislation, President Bush also signed the United Nation's Framework Convention on Climate Change (UNFCCC, 1771 U.N.T.S., 1771: 107), agreed to in 1992 at the "Earth Summit" in Rio de Janeiro. The US was the fourth country to sign and ratify the convention (Agrawala and Andresen 1999: 461), in part because it did not include mandatory emissions reductions, which was a necessary condition for the US to agree to the treaty - President Bush was not prepared to commit the US to reduce or even stabilize GHG emissions. Early ratification of the UNFCCC also put the US in a strong position to influence, i.e., slow down, the development of future, substantive protocols at annual meetings of parties (COPs).6 The Bush Administration, did however, being the process of scrupulously implementing the UNFCCC's few actual requirements, including creation of a national inventory of greenhouse gases (GHGs) (UNFCCC, Art. 4.1.(a)) When Bill Clinton took office in 1993, his Administration, for the most part, picked up where the Bush administration had left off. During his first year in office, the US created its first national "Climate Change Action Plan," as required under the UNFCCC, which included the goal of reducing GHG emissions to 1990 levels by 2000 via 44 action steps based on voluntary industry participation.⁷ Of course, relying on voluntary industry efforts made a mockery of the action plan. The fact of the matter was that Clinton, despite Vice President Al Gore's influence, was not especially interested in using politi-

⁶ It was not that the US wanted to push hard for GHG reductions; in fact, it was primarily responsible for the failure to agree on binding reduction commitments for five years (Kuyper, Schroeder, and Linner 2018: 345).

 $^{^{7}}$ Climate change action plan : Clinton, Bill, 1946- : Free Download, Borrow, and Streaming : Internet Archive.

cal capital on climate change. That said, Clinton did display some backbone in refusing to bow to pressure from the US Senate not to sign the Kyoto Protocol (KP) (U.N.T.S. 2303: 162) to the UNFCCC in 1997. In July 1997, just months before the Kyoto COP, the Senate voted unanimously (95-0) in favor of a resolution stating that the US should not sign any protocol that imposed emission reduction requirements on developed countries but not developing countries (S.Res.98, 105th Congress, 1st Session 1997).⁸ Everyone knew, at that time, that the document being negotiated for signature in Kyoto later that year would impose binding emission reduction requirements only on developed countries. The Senate's resolution did not stop President Clinton from signing the Kyoto Protocol, though he (and everyone else) knew the Senate would not ratify it. In fact, he did not even bother submitting the protocol for Senate ratification. Consequently, the US did not become a full member of the parties to the Kyoto Protocol (CMP); and President Clinton took no steps to alter US policy in accordance with the Kyoto Protocol.

Clinton was followed into office by George W. Bush (Bush Jr), son of the previous President Bush. Unlike his father, Bush Jr did not claim to be an environmentalist. He had worked in the oil and gas industry, which would strongly influence his administration's environmental policy during his eight years as president. Among his first acts after taking office in January 2001 was to denounce the Kyoto Protocol and renounce America's commitment to it (Borger 2001). Bush Jr's declaration was gratuitous because everyone already knew that the US Senate was not going to ratify the treaty; so the US was not going to be a treaty-member regardless. He need not have said a word about it, yet he so gratuitously, much to the annoyance of American allies in Europe. Was it simply a diplomatic blunder? Perhaps he was hoping that his denunciation would so demoralize the EU, its member states and other countries, that the treaty would simply collapse. Pursuant to the treaty's "entry into force" requirements, without US ratification, the treaty could only take legal effect if the EU, its member states, Russia and Japan all ratified it. As it happened, the US denunciation might have contributed directly to Russia's decision to ratify the KP in order to demonstrate to the EU and other countries that it was a more reliable partner than the US (Henry and McIntosh Sundstrom 2007: 58). If Bush Jr. was trying to prevent the KP from taking legal effect, it appears his effort backfired. "Instead of burying the Kyoto Protocol, the US announcement had

 $^{^{8}}$ A "resolution" passed by one house of Congress has no legal effect; it is a non-binding proclamation.

⁹ Importantly, George W. Bush did not withdraw the US signature from the Kyoto Protocol; nor did he disavow or withdraw the US from the UNFCCC. This allowed the US to continue participating in COPs, where it could influence future developments.

the opposite effect, galvanizing the rest of the world into a much more positive and conciliatory negotiating attitude" (Depledge 2005: 20).

During Bush Jr's term in office, environmental groups petitioned the EPA Administrator to make an "endangerment finding" for carbon dioxide under Title II of the CAA. The Act allows members of the public to petition for a finding that some as-yet unregulated pollutant endangers public health and welfare. When the petition arrives at EPA, the Administrator has a nondiscretionary obligation to find that the alleged pollutant either does or does not endanger public health and welfare. Such endangerment findings are provided for in both Article I of the statute, dealing with stationary sources of pollution, and in Article II, which concerns motor-vehicle emissions. On this occasion, the environmental groups petitioned for an endangerment finding under Title II for complex strategic reasons relating to the differing consequences of endangerment findings under Titles I and II. An endangerment finding under Title I requires the EPA to develop criteria document for setting national ambient air quality standards (NAAQS) for the pollutant at levels that would protect public health with an adequate margin of safety. But with a global diffused pollutant like carbon dioxide, emitted from sources all over the world, setting NAAQS would be extraordinarily difficult, if not impossible. An endangerment finding under Title II would avoid that problem, though initial emission standards would be imposed only upon motor vehicles. But, as we shall see, provisions in Title I of the Act provides for stationary-source regulation of some pollutants under Title II, providing a backdoor into Title I without an endangerment finding under Title I.

When EPA received the petition, Administrator Stephen Johnson refused to make a finding, one way or the other, claiming that carbon dioxide was not contemplated as a possible pollutant when the CAA's legislative drafters enacted the statute (in 1970). He argued that to regulate carbon dioxide as an air pollutant would require a legislative amendment to the Act. The petitioning environmental groups, along with several states, sued the EPA for refusing to make a finding, arguing that nothing in the Act ruled out the possible treatment of carbon dioxide as an air pollutant. The case made it all the way to the US Supreme Court, which ruled 5-4 in favor of the plaintiffs (Massachusetts v. EPA, 549 US 497 (2007)). The Court rule that Administrator Johnson could not avoid his nondiscretionary duty under the CAA by claiming that carbon dioxide was outside of the purview of the statute. The administrator had to make a finding that carbon dioxide (from mobile sources) either endangered or did not endanger public health and welfare. With the science stacked against him, Johnson made the requisite endangerment finding under Title II, which would trigger regulation of carbon dioxide from mobile sources. But the Bush Jr Administration ran out the clock all the way to January 2009, when President

Obama took office, without issuing any such regulations. In fact, the White House petulantly refused even to accept delivery of Administrator Johnson's endangerment finding.

As a candidate for the White House, Barack Obama campaigned on three policy priorities: (1) putting an end to the economic depression that followed the 2008 financial industry crisis; (2) increasing the availability of health care to the working poor and jobless; and (3) climate change. During his first term in office (2009-2014), he successfully accomplished the first two, but failed on the third.

In 2010, the House of Representatives actually passed climate legislation, but it never even came to a vote in the Senate. Some have suggested that Obama lacked "political courage," and might have been able to push the legislation through the Senate had he tried (Pooley 2010; Revkin 2010). They have a point. The bill did not fail solely because Republicans opposed it; some Democrats did so as well, and the question is whether President Obama could have changed their minds. However, Obama doubted prospects for Senate passage, even though his party held enough seats that closing debate and bringing the bill to a final vote was entirely feasible. 10 And chances for passage vanished completely, in his view, after the April 2010 British Petroleum oil spill in the Gulf of Mexico, which left environmentalists in no mood to make the kind of compromises necessary to attract Republican votes (see Osaka 2020). In any case, 2010 was the last time before 2021 when the Democratic Party controlled both houses of Congress as well as the White House. However difficult it might have been to pass climate legislation through the Senate at that time, chances fell to nil after the 2010 midterm elections, in which Republicans gained control of the House.

Obama continued to pressure Congress to enact climate legislation after the disastrous 2010 midterm elections, but that pressure just took the form of an assurance that, if Congress did not act on climate change, he would use his executive authority to regulate greenhouse gases under the CAA (Lehmann and Massey 2013), an approach that almost assuredly would be more cumbersome and expensive for regulated entities. This was not only a threat but an acknowledgement of a legal obligation to act. At the very start of his first term in office, Obama's EPA Administrator Lisa Jackson, dusted off the Bush Jr EPA's belated endangerment finding for carbon dioxide, put her own signature on it, and sent it to the White House, which this time accepted delivery. The endangerment finding took effect on 15 December 2009. It had the legal effect of obligating the Obama EPA to regulate carbon dioxide as an air pollutant under

¹⁰ For an explanation of Senate rules for cutting off debate and calling a vote, see *infra* the section on President Biden's plans for climate legislation.

Title II of the CAA. The only way to avoid that obligation would have been for Congress to enact legislation to remove carbon dioxide from the ambit of the CAA. Even before Congress failed to enact climate legislation before the end of his first term, Obama's EPA was already working to fulfill its obligation under the endangerment finding for carbon dioxide, promulgating several regulations, in a specific order, to make the most of its authority under the CAA.

Even before Congress took up climate legislation in 2010, the Obama Administration was beginning to implement climate policies via regulations. First, the Obama EPA issued a waiver to the State of California, allowing that state to adopt its own emission standards for carbon dioxide. Under the CAA, states must all follow federal auto emission standards, except California, which can apply to EPA for a waiver to set its own, more stringent standards. During the Bush Jr Administration, California had applied for such a waiver from (nonexistent) federal auto-emission standards. The EPA denied the request. But during Obama's his first week in office, he instructed EPA to reconsider California's waiver request. EPA responded quickly, approving the waiver in July 2009. Consequently, the State of California had carbon emission standards for light duty motor vehicles before any national standards were in place.

In October 2009, Obama's EPA acted to fulfill an obligation under the UN-FCCC, establishing a Mandatory Greenhouse Gas Reporting Rule (40 CFR Part 98). Aside from complying with international legal obligations, another express purpose of this rule was to provide a better understanding of the sources of GHG emissions to guide development of policies and programs to reduce emissions. The rule required large emitters of GHGs, defined as those emitting 25 thousand metric tons or more each year of carbon dioxide equivalents, to collect data and report annually on GHG emissions under a new recording system. All told, the rule covered between 85 and 90 percent of total US GHG emissions from approximately ten thousand facilities. The rest of President Obama's climate policies were designed to meet a pledge he made at the 2009 COP in Copenhagen that the US would reduce GHG emissions 17 percent from 2005 levels by 2020 (Broder 2009).

A spate of climate regulations followed, in accordance with the 2009 Endangerment Finding for greenhouse gases. In May 2010, EPA and the National Highway Traffic Safety Administration issued a joint rule regulating GHG emissions from automobiles (measured in grams per mile) and imposing more stringent fuel-economy standards for automakers (measured in miles per gallon). This combined "Tailpipe Rule" applied to new model cars sold between 2012 and 2016 (75 Fed. Reg. 25324).¹¹ In addition to regulating carbon dioxide, the

¹¹ In 2016, the Obama Administration issued more stringent combined emission and fuel-economy standards for the 2017-2025 model years (77 Fed. Reg. 62624). That same year, it imposed

standards included limits on emissions of two other greenhouse gases, nitrous oxide and methane. The following year, EPA created the first GHG regulation for larger vehicles, including trucks and busses (76 Fed. Reg. 57106).

Once the mobile source regulations were in place, the CAA provided a "back-door" for the agency to start regulating stationary-source emissions even in the absence of a separate endangerment finding under Title I.¹² Specifically, under Title I, Part 4 of the Act, any new "major" source of emissions subject to permitting requirements (under Title V of the CAA) under Title I could also be subject to controls for "any air pollutant," including those not otherwise regulated under Title I (42 USC §7479(1)). A "major" source is defined as one that is among 28 classified (heavy industrial) sources with the potential to emit 100 tons per year (tpy) or more of "any air pollutant," or is a non-classified source with the potential to emit 250 tpy of such pollutants. (42 U.S.C. §7479(1)). The purpose of the two regulatory "floors" was to exclude from PSD regulation relatively small-scale emitters from the burdensome PSD rules. But they presented special problems with respect to regulating carbon dioxide, which is emitted in vastly greater quantities than other pollutants and by a vastly larger number of sources. Following the strict limits set in the CAA, EPA foresaw that it might have to regulated tens of thousands of sources under PSD rules, which was both impracticable and undesirable. EPA tried unsuccessfully to created alternative regulatory floors for carbon dioxide, but the US Supreme Court would not allow the agency to deviate from standards expressly imposed in the statute (Utility Air Regulatory Group v. EPA, 134 S .Ct. 2427 (2014)). But the Court upheld the rest of EPA's efforts to subject large, new stationary sources to GHG emission standards under a preexisting EPA regulation defining pollutants to which PSD rules apply to include "any pollutant otherwise ... subject to regulation under the Act" (except for toxic air pollutants regulated under § 112) (40 CFR 52.21(b)(50)(iv)).

Finally, and most controversially, in August 2015 the Obama EPA finalized the "Clean Power Plan" (CPP) (80 Fed. Reg.: 64719), one of the (if not *the*) most mind-bogglingly complex regulatory programs ever created under the CAA. The CPP focused on the single largest source of GHG emissions in the US: fossil fuel-fired power plants. The first part of the CPP focused on new plants, and the second part regulated emissions from existing power plants. The first part was fairly simple. Taking advantage of the fact that no new coal-fired power plants had been built in the US for several years because the price of natural

[&]quot;Phase II" rules for carbon emission standards on heavy-duty vehicles, including trucks and busses (76 Fed. Reg. 57106).

 $^{^{12}}$ Recall the earlier discussion of the problems an endangerment finding under Title I would have created for EPA with respect to carbon dioxide emissions from stationary sources.

gas was significantly lower than the price of coal, the EPA imposed regulations (under 42 USC §7411(b)) that would apply only to new coal-fired plants, not to gas-fired plants, 13 should the price of coal ever again fall below the price of natural gas. Specifically, new coal-fired power plants would be required to install technology for complete capture and storage of all GHG emissions. For existing plants, the EPA would establish standards (under 42 USC §7411(d)) to require existing power plants to engage in fuel-switching (from coal to natural gas and eventually to renewables) or install carbon capture and sequestration technology. Any further description of the CPP would involve the reader in a Byzantine set of rules, guidelines and choices for individual states to make, either alone or in combination. 14 Republicans in the House and Senate tried to use the Congressional Review Act (discussed earlier) to overturn the CPP. Both bodies passed resolutions by majority vote, but President Obama vetoed them (Cama 2015), and Republicans apparently did not votes enough to override the veto. Meanwhile, like all other Obama-era climate change regulations, the CPP was challenged in court by states and power companies on a wide variety of grounds. While it was before the DC Circuit US Court of Appeals on judicial review, the US Supreme took the unprecedented step of halting implementation and enforcement of the CPP until the litigation was resolved (West Virginia v. EPA, S.Ct. No. 15A773, 9 Feb. 2016).15

This was the state of US federal climate policy when Donald Trump took office in January 2017: Obama's "Tailpipe Rule" was in effect and new stationary sources subject to Title V permitting were undergoing New Source Review under the CAA's PSD program, but the Clean Power Plan was in abeyance, pending final judicial review. Ultimately, the Supreme Court's stay on the CPP remained in effect until the Trump EPA formally revoked it and finalized a set of regulations to replace it in 2019 (Shouse, Ramseur, and Tsang 2020: 4, n. 22).

President Trump's policies for climate change can be summarized succinctly: remove the US from the Paris Agreement and repeal or replace nearly every climate change regulation promulgated during the Obama Administration. This was no surprise. Trump campaigned, in part, on protecting the coal industry not just against government policies but from market forces that were closing down mines (Davenport 2016). Overturning Obama's climate policies was part

Some environmentalists considered this limitation short-sighted. After all, methane is four times more powerful a GHG than carbon dioxide. However, EPA considered the CPP as but a first step toward eliminating all GHGs emitted from power plants. Given the relatively huge quantity of carbon emissions compared to methane, the EPA determined that moving in the short-term from coal to natural gas was justified.

To get just a taste of the complexities of CPP rules for existing power plants, see FACT SHEET: Overview of the Clean Power Plan | Clean Power Plan | US EPA.

https://www.supremecourt.gov/orders/courtorders/020916zr_21p3.pdf.

of a larger obsession that Trump appeared to have to completely undo Obama's legacy (Baker 2017). But there was one glaring exception in Trump's climate policies: He did not seek to revoke the Obama Administration's Endangerment Finding for carbon dioxide. Indeed, in litigation before the US Court of Appeals for the DC Circuit, Trump's EPA attorneys "acknowledged its continued adherence to the 2015 endangerment finding" (*American Lung Association v. EPA*, 985 F.3d 914, at 935 (D.C. Cir. 2021)).

On 28 March 2017, President Trump issued EO 13783, "Promoting Energy Independence and Economic Growth," which among other things, expressly revoked Obama's 2013 EO 13653, "Preparing the United States for the Impacts of Climate Change," along with three related presidential memoranda and Obama's 2013 Report on his "Climate Action Plan." Section 4 of Trump's new EO ordered EPA to take "all steps necessary" to review all Obama-era climate regulations, with a view to revising or revoking them, including regulations of new stationary sources under the PSD program and the Clean Power Plan. The EO also abolished Interagency Working Group on Social Cost of Greenhouse Gases that had been established during the Obama Administration.

Three days later, the EPA formally proposed a new rule to replace Obama's "Tailpipe Rule" with its own "SAFE" rule ("Safer Affordable Fuel Efficient Vehicles" rule). The first part of SAFE, known as "The One National Program" rule revoked California's waiver under the CAA to regulated auto emissions of GHGs, was finalized on 19 Sept. 2019 (84 Fed.Reg. 51310). It was the first time any president had even claimed authority to revoke a previously granted California waiver. Part II of SAFE, finalized on 31 March 2020 (85 Fed. Reg. 24174), imposed new federal GHG emission standards and fuel-economy standards for cars built in model years 2021-6 that were far less stringent than under Obama's Tailpipe Rule. Obama's rule required a 5 percent annual reduction in auto emissions of GHGs. Under Trump's SAFE rule, automakers were required to reduce GHG emissions by only 1.5 percent per model year (which was a big improvement on the 0 percent reductions originally proposed for SAFE). The SAFE rule took an unusually long time to finalize, three full years. In part, this was because it lacked political support from many of the automakers that Trump presumed would benefit from the rule. In fact, before the SAFE rule was finalized, four automakers entered into an agreement with the State of California to meet that state's GHG emission standards, regardless of federal rules (Shepardson and Klayman 2019).

Shortly after the SAFE rule was initially proposed in 2017, President Trump announced that he intended to withdraw the US from the Paris Agreement at the earliest opportunity (Shear 2017). The Paris Agreement requires four years' notice for withdrawal. So, the US did not actually leave the Paris Agreement until the day after the Fall 2020 presidential election (Hersher 2020).

Finally, in August 2018, President Trump's EPA proposed to revoke and replace Obama's CPP, which was still in abeyance because of the Supreme Court's 2016 stay, with the "Affordable Clean Energy" (ACE) rule. The rule was finalized a year later (84 Fed. Reg. 32534). While the ACE rule purported to "replace" the CPP, it basically replaced Obama's federal program for controlling emissions from existing stationary sources with no federal program. Rather, the EPA simply instructed states to set emission standards to reduce carbon dioxide emissions from existing power plants, in accordance with minimal federal guidelines for coal-fired plants and virtually no guidelines for other fossil fuel-fired sources (Shouse, Ramseur and Tsang 2020: 5-6). Suffice it to say that estimates for carbon dioxide emission reductions from the ACE rule were minimal, less than 1 percent (Ibid. at 6). Importantly, the ACE rule applied only to existing power plants (under §111(d) of the CAA) and not to new plants (under §111(b)). Standards for new sources were dealt with in a separate rule-making that did not seek to repeal the Obama standards but only to weaken them. In December 2018, a half-year after proposing to repeal the CPP, the Trump EPA proposed a "Review of Standards for Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units." The final version of the rule was not completed until 13 Jan. 2021, little more than a week before Trump left office (86 Fed. Reg. 2542). The rule would have greatly reduced the number of electric power plants subject to GHG emission standards under §111(d) by imposing as a precondition for regulation that emissions from a specified plant exceeded three percent of total US GHG emissions.

All told, these efforts by the Trump Administration to overturn Obama's climate policy legacy have been largely unsuccessful. Each was challenged in court for allegedly violating the CAA and/or the 1946 Administrative Procedures Act. As noted earlier, every federal executive agency rule, including *deregulatory* rules, must comply with the constitution, its "enabling" statute (in this case, the CAA), and the APA. Twelve environmental NGOs along with several states sued to overturn Trump's SAFE rule for auto emissions and fuel efficiency, and California sued to stop Trump's attempted revocation of its waiver to set GHG emissions from automobiles. Both of those cases were still pending when President Trump's term ended. However, Trump's ACE Rule was already overturned and remanded to EPA one day before Biden took office. On 19 January 2021, the DC Circuit US Court of Appeals ruled that the ACE Rule was based on a fundamental misreading of the relevant provision of the CAA (American Lung Association v. Environmental Protection Agency, 985 F.3d 914 (D.C. Cir. 2021)). The court did not, however, reinstate Obama's CPP, leaving the incoming Biden Administration a free hand to construct a new regulatory scheme for regulating GHG emissions from existing fossil fuel-fired power plants.

4. President Biden's climate policy (to date)

As the time of this writing, Joseph Biden has been in the White House for just over two months. In that short period of time, he already has taken several affirmative steps indicating an intention not just to restore the Obama Administration's policies but to go far beyond them. Importantly, those plans include legislative proposals that could put an end to, or at least greatly reduce, the pendulum swings in climate policy, resulting from policy-making by EO and regulation.

On his first day in office, Biden put on hold nearly 50 Trump EPA rules for review (not all of which related to climate change) (Hale and Christian 2021), and announced, in a presidential statement, that the US would rejoining the Paris Agreement (effective one month after the announcement). He asked the courts to stay judicial proceedings reviewing Trump's SAFE regulation, including the part that revoked California's waiver to regulate GHG emissions from mobile sources. At the same time, in EO 13990, Biden instructed the EPA and NHTSA to create a new, joint rule for mobile source emissions and gas mileage. That new rule is certain to more closely resemble Obama's "Tailpipe Rule" than Trump's SAFE rule. Although Biden has not yet formally withdrawn the Trump EPA's rule purporting to revoke California's waiver for GHG emissions limitations on mobile sources, it is a foregone conclusion that California will retain that authority.

Since taking office, President Biden has signed a half-dozen EOs relating to climate change. The most important of those is EO 14008 (Jan. 27, 2021), "Tackling the Climate Crisis at Home and Abroad." That EO:

- Makes climate change an "essential element" of US foreign policy and national security;
- Calls for an "enhanced climate ambition," using the terminology of the Paris Agreement;
- Instructs EPA to begin the process of setting a new Nationally Determined Commitment under the Paris Agreement;
- Announces a new "climate finance plan" to assist developing countries with mitigation and adaptation;
- Establishes a "government-wide approach" to reduce GHG emissions from every sector of the economy;
 - Sets a goal of a "carbon pollution-free electricity sector by 2035;"
- Requires the achievement of zero-emission motor vehicle fleets for all federal, state, and tribal entities.

¹⁶ Paris Climate Agreement | The White House

• Calls for the elimination of *all* federal fossil-fuel subsidies, starting with the 2022 fiscal year federal budget;

- Establishes a new "green infrastructure" program, including creation of a "Civilian Climate Corps;"
- And introduces a "Climate Justice" initiative to ensure that poor and minority communities in the US are not left to bear the brunt of the harm from climate change.

This is by far the most ambitious climate action plan of any US presidential administration to date, though it remains just a plan in the form of an EO. In addition, President Biden hopes to break the cycle of pendulum swings on climate policy between Democratic and Republican administrations by enacting legislation to implement several of the most important components of his plan. In fact, the Democratic leadership in the US House of Representatives already have introduced a bill, H.R. 1512, "The Clean Future Act," which would require attainment of Biden's goal of zero GHG emissions (including methane) from electricity by 2035, with an interim target of a 50 percent reduction by 2030. Beyond the energy sector, Title III of the bill sets goals for improving energy efficiency in buildings, and Title IV seeks to reduce emissions from transportation, which is currently the largest source of GHG emissions in the US by developing cleaner fuels and promoting the deployment of zero-emission vehicle (including electric cars that obtain their power from power plants). Title VI would implement Biden's plan to ensure that environmental justice considerations are taken into account at every stage of planning, implementation and enforcement. It is noteworthy that this new statute is not contemplated as a set of amendments to the CAA but as standalone legislation, although it is not yet clear what effect its enactment might have on regulation of GHGs under the CAA, e.g., whether it would remove GHGs from the ambit of the CAA.

In addition to the "Clean Future Act," more progressive members of the Democratic caucus in Congress have proposed H.R. 794, "The Climate Emergency Act of 2021." This bill would simply require President Biden to declare a national "climate emergency," which would enable him to "redirect military funds to build clean energy systems, marshal private industry for clean technology manufacturing, generate millions of high-quality jobs and finally put an end to dangerous crude oil exports" (Stracqualursi, Diaz, and Grayer 2021).

But can either of these legislative proposals, or any others dealing with climate change, actually succeed, given congressional gridlock and the extreme balkanization in American politics? President Biden has at least a short window of opportunity to enact climate legislation, just as Obama did in the first two

 $^{^{17}\,}$ A draft of the bill can be viewed here: https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/ CFA21_01.XML_.pdf.

years of his administration, when Democrats held the majorities in both the House and the Senate. Now, for the first time since the 2010 midterm elections, Democrats again hold both houses of Congress and the White House. However, so long as Senate rules requiring a supermajority vote of 60 Senators to close off debate and call the vote remain unchanged, the likely result would be that Biden's climate legislation would fail, just as in the Obama Administration.

Through its first century of existence, the US Senate operated pursuant to a system of unlimited debate. Senators would talk as long as any of them had something more to say, then they would vote. This was not a constitutional requirement. In fact, in Federalist Paper 22 (14 Dec. 1787) Alexander Hamilton described a minority veto as "a poison" (Hamilton [1787] 2020). 18 The manual of parliamentary practice Thomas Jefferson wrote for the Senate specified that "No one is to speak impertinently or beside the question, superfluously or tediously" (quoted in Jacobi & VanDam 2012: 273). However, the constitution authorized lawmakers in the House and Senate to make their own respective rules of procedure. Initially, both houses of Congress included among their rules a device to limit debate known as the "previous question" rule (McKeever 2021). However, it was hardly ever invoked in the Senate, where a contrary norm of unlimited debate developed quickly. With only 13 states at the outset, the Senate had just 26 senators, which made unlimited debate feasible, even if it was not always desirable. In 1806, on the recommendation of Vice President Aaron Burr, the Senate removed the previous question rule from its rule book. Though senators sometimes complained about abuse of the unlimited debate norm to forestall legislation (Ibid.), use of unlimited debate to forestall legislation remained rare. By the 1850s, however, the term "filibuster" came into use to describe the practice that was becoming increasingly common, often holding up legislation on civil rights and slavery (Ibid.). For the next 50 years, the Senate vainly attempted to create a "cloture" rule, i.e., a rule to end debate and call the vote, but it was not until 1908 that a "cloture" rule was adopted, which allowed a two-thirds majority of Senators to end debate. That two-thirds supermajority requirement quickly proved such a high bar that cloture votes rarely succeeded. 19

As the twentieth century progressed, use of the filibuster increased dramatically, most often in the service of obstructing civil rights legislation and maintaining white supremacist institutions. Southern senators, overwhelmingly Democratic

The "Federalist Papers," are a collection of 85 essays by Hamilton, James Madison, and John Jay that were published during the constitutional ratification debates in the US. They remain authoritative sources for purposes of constitutional interpretation.

¹⁹ The last time either party held 60 or more seats in the US Senate was in the 95th Congress (1977-79), when the Democrats held 61 seats (Cillizza 2007).

(because of the Republican Party's association with Abraham Lincoln) became a formidable and durable "minority faction" that frequently mounted successful filibusters against bills designed to reduce discrimination on the basis of race, such as poll taxes used in the Southern US to prevent Black Americans from voting. The coalition of Southern Senators managed to delay a vote on the Civil Rights Act of 1964 (42 USC §§2000a *et. seq.*) for 60 "session" days (Ibid.). In the mid-70s, reformers managed to change the super-majority cloture requirement from two-thirds to three-fifths (Ibid.), but that reform made little practical difference.

More productively, in May 1974 Congress enacted (and President Richard Nixon signed into law) the "Congressional Budget and Impoundment Control Act" (a.k.a., the "Budget Act") (2 USC §§601-688), which was designed primarily as a mechanism to improve congressional oversight of government spending. Among other things, the statute authorized "omnibus reconciliation legislation to square Congress's spending targets with its policy proposals" (Jacoby and VanDam 2012: 294). "Reconciliation's main role in the overall operation of the Act was to provide an 'enforcement procedure' for the spending limits established in other parts of the legislation" (Ibid.: 295). Most importantly for present purposes, the reconciliation portion of the Budget Act specified that "[d]ebate in the Senate on any reconciliation bill ... and all amendments thereto and debatable motions and appeals in connection therewith, shall be limited to not more than 20 hours" (2 USC §641(e)(2)). This meant (and still means) that budget reconciliation bills could not be filibustered. And it gave rise to high stakes question: What counts and does not count as budget reconciliation? Needless to say, proponents of legislation in the Senate will use budget reconciliation as often as possible to avoid potential filibusters. It is up to the Senate Parliamentarian to make judgment calls on what is and is not reconciliation, though the Parliamentarian (who is not an elected member of the Senate) can be overruled by the presiding officer of the Senate, otherwise known as the vice president. In any case, the Budget Act limits the number of reconciliation bills to three per year.

Two other, more recent, reforms have also made a significant dent in the ability to use the filibuster. First, in 2013, when the Democrats controlled the Senate, they unilaterally created a rule that federal judicial confirmations, other than to the Supreme Court, could proceed on a simple majority vote to close debate (Everett and Kim 2013). Four years later, Republicans returned the favor, when they added Supreme Court nominees to the list of federal judges that could not be filibustered (Tau and Hughes 2017).

While these filibuster reforms have been significant, it remains the case that the vast majority of legislative proposals remain subject to filibuster in the Senate, where cloture still requires a three-fifths majority vote. So, controversy

remains over the extent of minority party control of the process. Meanwhile, as more people become aware of the filibuster's historical use for racist purposes, defenders of the institution have been put on the defensive. For several years, "progressive" Democrats have advocated to abolish the filibuster. Increasingly, they have been joined by more "moderate" Democrats, though they might prefer additional reform of the institution rather than its outright eradication. President Biden, who served in the Senate for more than three decades, initially dismissed the idea of abolishing the filibuster (Barrón-López 2021). But when Senate Republicans early on gave a clear indication that they will filibuster as much of his legislative agenda as possible, the president very recently came out in support of amending the institution and possibly ending it (Segers 2021).

As Obama's Vice President, Biden surely recalls how Senate Republicans blocked every legislative proposal they could in order to render Obama, in Senator Mitch McConnell's words, a "one-term president" (Barr 2010). However, the Democrats held a decisive majority of 58 seats in the Senate for the first two years of his administration, and the two Independent members of the Senate at the time caucused with the Democrats. Thus, the majority party was capable of invoking cloture to end filibusters, as they did with respect to parts of the 2010 Affordable Care Act ("Obamacare") (42 USC §18001 *et. seq.*). The climate legislation that failed in the Senate in 2010 did not do so because of the filibuster; more than a few Democrats in the Senate did not support the legislation.

Unlike Obama, in his first two years, President Biden does not have enough Democratic senators to overcome the filibuster, which might explain his recently expressed willingness to amend or get rid of the filibuster rule. He knows that his window for enacting legislation of any kind, including climate legislation, may close as early as 2023 (after the 2022 midterm elections). If history is any guide, he is likely to suffer from the "presidential penalty" (Erikson 1988: 1012). Since 1876, the president's party has lost seats in both houses of Congress in all but three midterm elections (Folke and Snyder 2012: 931).²⁰ If Biden loses one (net) seat in the Senate, his party will go back into the minority, and Republicans will control the agenda. He will have lost the ability to establish climate (or any other) policy by legislation. Over in the House, the Democrats currently hold only nine more seats than the Republicans. In the 2020 election, Democrats actually dropped eight House seats on net. Meanwhile, the president's party loses an average of 30 seats in midterm elections (Murse 2020). The only rational basis for moving forward with his legislative agenda is to get as much done as possible before the start of 2023. If Biden fails to move with

²⁰ The exceptions are 1934, 1998, and 2002.

alacrity, he will soon become unable to move at all. All the more reason to change the filibuster rule in the Senate. But, as of this writing, he would still need to convince a couple of Democratic senators who have expressed reservations about changing the filibuster (Manchin of West Virginia and Sinema of Arizona) presumably because they believe doing so would threaten their own political futures.

Indeed, even if Senate Democrats vote to abolish the filibuster (or limit it sufficiently to achieve cloture on Biden's legislative package), Biden might still have a lot of work to do to convince members of his own party in the Senate, especially those who are up for reelection in 2022, to vote in favor his climate legislation. It is not a foregone conclusion that the Democratic caucus in the Senate will hang together on floor votes. Biden will have to work a lot harder than Obama did even to get members of his own party in the Senate to vote in favor of his climate legislation.

The end on a note of relative optimism, it is possible that some legislative proposals relating to climate change might be accomplished under the budget reconciliation exception to the cloture rule. For example, a carbon tax might qualify because it has direct budget implications (on the revenue side). In addition, Biden could likely end most, if not all, subsidies to fossil fuels as a budget reconciliation matter (e.g., as spending reduction). Other elements of his plan that might be accomplished using budget reconciliation include resurrecting the federal Social Cost of Carbon estimate, a new climate finance initiative, and possibly some green infrastructure spending. However, that still leaves very important parts of Biden's climate plan subject to filibuster, including his decarbonization targets.

Even in a best-case scenario, President Biden will not be able to achieve all of his climate goals through legislation. Frankly, for some of his goals, such as reestablishment of the Inter-Agency Working Group on Climate Change, legislation is not only unnecessary but makes little sense. The system of environmental policy-making by EO and regulations is not coming to an end. But we can hope for at least some legislative accomplishments that will be more durable than either EOs or regulations. After all, even if Republicans take back both houses of Congress in the 2022 midterm elections, President Biden will still be in office to veto legislative proposals to undo whatever legislative accomplishments he can muster in the next two years. It is extremely unlikely that Republicans will gain enough seats to have a veto-proof majority. Just like "Obamacare," which has survived dozens of legislative attacks by Republicans, once in place, climate legislation might prove very difficult to dislodge. Even if the current Congress passes a relatively weak climate change package, it would be a step in the right direction. Just as Biden is seeking now to improve and strengthen what survives of Obamacare, even relatively weak climate change

legislation might survive long enough to be improved and strengthen by a subsequent president, who appreciates the domestic, as well as global, dangers of climate change.

Bibliography

- Agrawala, Shardul and Steinar Andresen. 1999. Indispensability and Indefensibility? The United States in the Climate Treaty Negotiations. *Global Governance* 5, no. 4 (Oct.-Dec.): 457-482.
- Ansolabehere, Stephen, Maxwell Palmer, and Benjamin Schneer. 2018. *Divided Government and Significant Legislation*: A History of Congress from 1789 to 2010. *Social Science History* 42, no. 1 (Spring): 81-108.
- Barr, Andy. 2010. The GOP's no-compromise pledge. Politico, 28 Nov. at The GOP's no-compromise pledge POLITICO.
- Barrón-López, Laura. 2021. Biden won't embrace filibuster reforms even as the rest of his party does. *Politico*, 08 March, at Biden won't embrace filibuster reforms even as the rest of his party does POLITICO.
- Black, Ian. 2001. EU dismay as Bush reneges on Kyoto. *The Guardian*, 30 March, available at https://www.theguardian.com/environment/2001/mar/30/usnews.globalwarming.
- Borger, Julian. 2021. Bush Kills Global Warming Treaty. *The Guardian*, 29 March, available at https://www.theguardian.com/environment/2001/mar/29/globalwarming.usnews.
- Broder, John M. 2009. Obama to Go to Copenhagen With Emissions Target, *New York Times*, 25 Nov. 2009, at https://www.nytimes.com/2009/11/26/us/politics/26climate.html.
- Byers, Jason S., Jamie L. Carson, and Ryan D. Williamson. 2020. Policymaking by the Executive: Examining the Fate of Presidential Agenda Items. *Congress & the Presidency* 47 (1): 1-31.
- Cama, Timothy. 2015. Obama vetoes GOP push to kill climate rules. The Hill, 19 Dec.
- Cillizza, Chris. 2020. Yes, things are worse now than ever before. CNN.com, 21 Jan.
- Cillizza, Chris, 2007. Getting to 60 in the Senate. Washington Post, 25 April.
- Cole, Jared. 2016. An Introduction to Judicial Review of Federal Agency Action. *Congressional Research Service* R44699, 7 Dec.
- Davenport, Coral. 2016. Donald Trump, in Pittsburgh, Pledges to Boost Both Coal and Gas. *New York Times* 22 Sept., at https://www.nytimes.com/2016/09/23/us/politics/donald-trump-fracking.html.
- Depledge, Joanna. 2005. Against the Grain: The United States and the Global Climate Change Regime. *Global Change, Peace & Security* 17 (1): 11-27.
- Erikson, Robert S. 1998. Explanations of Midterm Loss. *The Journal of Politics* 50 (4): 1011-1029.
- Everett, Burgess and Seung Min Kim, 2013. Senate goes for 'nuclear option. *Politico* 22 Nov. at https://www.politico.com/story/2013/11/harry-reid-nuclear-option-100199.
- Folke, Olle and James M. Snyder. 2012. Gubernatorial Midterm Slumps. *American Journal of Political Science* 56 (4): 931-948.
- Frazin, Rachel. 2021. Biden administration asks court to halt litigation on California emissions waiver, methane rollback. *The Hill* 2, at https://thehill.com/policy/energy-environment/536854-biden-administration-asks-court-to-halt-litigation-on-california.

- Goyal, Rishav, Matthew H. England, Alex Sen Gupta, and Martin Junker. 2019. Reducation in surface climate change achieved by the 1987 Montreal Protocol. *Environmental Research Letters* 14: 1124041.
- Hale, Zack and Molly Christian, 2021. Biden to order review of Trump EPA rules as part of climate focus. S&P Global Market Intelligence 20 Jan.
- Hamilton, Alexander [in] Alexander Hamilton, James Madison, and John Jay. 2020. *The Federalist Papers* 22 [1787-1788].
- Henry, Laura A. and Lisa McIntosh Sundstrom. 2007. Russia and the Kyoto Protocol: Seeking an Alignment of Interests and Image. *Global Environmental Politics* 7 (4): 47-69.
- Hutchens, Myiah J., Jay D. Hmielowski, and Michael A. Beam. 2019. Reinforcing spirals of political discussion and affective polarization. *Communications Monographs* 86 (3): 357-376.
- Jacobi, Tonja and Jeff VanDam. 2013. The Filibuster and Reconciliation: The Future of Majoritarian Lawmaking in the U.S. Senate. *U.C. Davis Law Review* 47: 261-342.
- Jones, Craig A. 2019. Weaponizing the EPA: Presidential Control and Wicked Problems. *Idaho Law Review* 55 (1): 157-[xxiv].
- Kuyper, Jonathan, Heike Schroeder, and Björn-Ola Linnér. 2018. The Evolution of the UNFCCC. Annual Review of Environment and Resources 43: 343-368.
- Lehmann, Evan and Nathanael Massey, 2013. Obama Warns Congress to Act on Climate Change, or He Will. *Climate Wire* 13 Feb.
- McKeever, Amy. 2021. The origins of the filibuster and how it came to exasperate the U.S. Senate. *National Geographic* 2 Feb. at https://www.nationalgeographic.com/history/article/origins-of-filibuster-united-states-senate.
- Meyer, Robinson. 2018. The Problem With The New York Times' Big Story on Climate Change. *The Atlantic* 1 Aug.
- Murse, Tom. 2020. Why the President's Party Loses Seats in Midterm Elections. *ThoughtCo.* 4 Feb. at https://www.thoughtco.com/historical-midterm-election-results-4087704.
- Nash, Jonathan Remy and Joanna Shepherd. 2020. Filibuster Change and Judicial Appointments. *Journal of Empirical Legal Studies* 17: 646-695.
- Osaka, Shannon. 2020. In Obama's new memoir, a warning for Biden's climate plans. *Grist* 27 Nov.
- Revkin, Andrew. 2010. With No Obama Push, Senate Punts on Climate. *New York Times* 22 July.
- Rodgers Jr., William H. 2001. Executive Orders and Presidential Commands: Presidents Riding to the Rescue of the Environment, *Journal of Land, Resources, & Environmental Law* 21 (1): 13-24.
- Segers, Grace. 2021. Biden signals he's open to eliminating Senate filibuster over GOP 'abuse. CBS News, 26 March.
- Shanley, Robert A. 1983. Presidential Executive Orders and Environmental Policy. *Presidential Studies Quarterly* 13 (3): 405-416.
- Shapiro, Stuart. 2015. The Congressional Review Act, rarely used and (almost always) unsuccessful. *The Hill* 17 April.
- Shear, Michael D. 2017. Trump Will Withdraw U.S. From Paris Climate Agreement. *New York Times* 1 June, at https://www.nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html.

Shepardson, David and Ben Klayman. 2019. California, four automakers defy Trump, agree to tighten emissions rules. *Reuters* 25 July, at https://www.reuters.com/article/us-autos-emissions-idUSKCN1UK1OD.

Shouse, Kate C., Jonathan L. Ramseur, and Linda Tsang. 2020. EPA's Affordable Clean Energy Rule: In Brief. *Congressional Research Service*, R46568, 15 Oct.

Stegner, Wallace. 2002. Where the Bluebird Sings to the Lemonade Springs: Living and Writing in the West. New York: The Modern Library.

Stracqualursi, Veronica, Daniella Diaz, and Annie Grayer. 2021. Sanders, Ocasio-Cortez, and Blumenauer unveil bill pushing Biden to declare national climate emergency: 'We are out of time'. *CNN* 4 Feb. at https://www.cnn.com/2021/02/04/politics/sanders-aoc-climate-change-emergency-bill/index.html.

Tau, Byron and Siobhan Hughes. 2017. Senate Eliminates Filibuster for Supreme Court Nominees. *Wall Street Journal*, 6 April, at https://www.wsj.com/articles/senate-is-expected-to-vote-to-end-supreme-court-filibuster-thursday-1491471004.

Thatcher, Margaret, 1988. Speech to the Royal Society, 27 Sept. at https://www.margaretthat-cher.org/document/107346.

Tzoumis, Kelly, Susan Bennett, and Elizabeth Stoffel. 2015. The executive order in the United States: a policy tool used that has shaped environmental policy and decisions from Presidents Franklin D. Roosevelt to Barack Obama. *Environmental Systems and Decisions* 35: 401-409.

Documents

WMO (World Meteorological Organization). Global Ozone Research and Monitoring Project, Report No. 52, Scientific Assessment of Ozone Depletion: 2010.

1985 Vienna Convention for the Protection of the Ozone Layer, U.N.T.S.,1513: 129.

1987 Montreal Protocol on Substances that Deplete the Ozone Layer, U.N.T.S., 1522: 3.

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

1997 Kyoto Protocol, U.N.T.S. 2303: 162.

Massachusetts v. EPA, 549 U.S. 497 (2007).

Utility Air Regulatory Group v. EPA, 573 U.S. 302 (2014).

West Virginia v. EPA, S.Ct. No. 15A773 (9 Feb. 2016)

American Lung Association v. EPA, 985 F.3d 914 (D.C. Cir. 2021).

Administrative Procedures Act of 1946, 5 U.S.C. §500 et. seq.

Affordable Care Act of 2010, 42 U.S.C. §18001 et. seq.

Civil Rights Act of 1964, 42 U.S.C. §\$2000a et. seq.

Clean Air Act of 1970 (as amended), 42 U.S.C. §7401 et. seq.

Clean Water Act of 1972 (as amended), 33 U.S.C. §§1251-1387.

Congressional Budget and Impoundment Control Act, a.k.a., "The Budget Act" of 1974, 2 U.S.C. §§601-688.

Contract with America Advancement Act (including Congressional Review Act) of 1996, 5 U.S.C. §\$801-808.

Endangered Species Act of 1973 (as amended), 16 U.S.C. §1531 et. seq.

Global Climate Research Act of 1990, 15 U.S.C. §2921 et. seq.

- National Climate Program Act of 1978, 15 U.S.C. §2901 et. seq.
- Toxic Substances Control Act of 1976 (as amended), 53 U.S.C. §2601 et. seq.
- Senate Resolution (S.Res.) 98, 105th Congress, 1st Session, Conditions Regarding U.N. Framework Convention on Climate Change, 21 July 1997.
- 117th Cong., 1st Sess. H.R. 1512. "To build a clean and prosperous future by addressing the climate crisis, protecting the health and welfare of all Americans, and putting the Nation on the path to a net-zero greenhouse gas economy by 2050, and for other purposes," a.k.a., "The Clean Future Act," introduced 2 Mar. 2021.
- 117th Cong., 1st Sess. H.R. 794, "Climate Emergency Act of 2021," introduced 4 Feb. 2021.
- EO 13653 of 1 Nov. 2013. "Preparing the United States for the Impacts of Climate Change," 78 Fed. Reg. 66817.
- EO 13783 of 28 March 2017. "Promoting Energy Independence and Economic Growth," 82 Fed. Reg. 16093.
- EO 13990 of 20 Jan. 2021. "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," 86 Fed. Reg. 7037.
- EO 14008 of 27 Jan. 2021. "Tackling the Climate Crisis at Home and Abroad," 86 Fed. Reg. 7619.
- 2009 Mandatory Greenhouse Gas Reporting Rule, 40 C.F.R. Part 98.
- 2010 Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel-Economy Standards ("Tailpipe Rule"), 75 Fed. Reg. 25324
- 2011 Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles, 76 Fed. Reg. 57106.
- 2015 Clean Power Plan, 80 Fed. Reg. at 64719.
- 2016 Greenhouse Gas Emissions and Fuel Economy Standards for Medium- and Heavy-Duty Engines and Vehicles Phase 2, 81 Fed. Reg. 73478.
- 2018, Affordable Clean Energy, 84 Fed. Reg. 32534.
- 2019 Safer Affordable Fuel Efficient Vehicles, Part I, 84 Fed. Reg. 51310.
- 2020 Safer Affordable Fuel Efficient Vehicles, Part II, 85 Fed. Reg. 24174.
- 2021 Review of Standards for Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, 86 Fed. Reg. 2542.