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**Trumping Climate Change:
National and International Commitments
to Climate Change in the Trump Era**

Olivia Scotti



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List of Abbreviations

The following list includes the abbreviations used in this document, as well as their full name, in order of appearance.

Abbreviation	Full Name
GHG	Greenhouse Gas(es)
NEPA	National Environmental Policy Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
PPA	Pollution Prevention Act
GCRA	Global Change Research Act
CCAP	Climate Change Action Plan
CPP	Clean Power Plan
OECD	Organization for Economic Co-operation and Development
EPA	Environmental Protection Agency
RGGI	Regional Greenhouse Gas Initiative
ETS	Emission Trading System
NESCAUM	Northeast States for Coordinated Air Use Management
RPS	Renewable Portfolio Standard(s)
CSR	Corporate Social Responsibility
CEO	Chief Executive Officer
UN	United Nations
ODS	Ozone-Depleting Substances
CFCs	Chlorofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
UNFCCC	United Nations Framework Convention on Climate Change
NDCs	Nationally Determined Contributions
GFC	Green Climate Fund
LDCs	Least Developed Countries
SIDS	Small Island Developing States
INDC	Intended Nationally Determined Contribution
SDGs	Sustainable Development Goals

NEG/ECP	Northeastern Governors and Eastern Canadian Premiers
WCI	Western Climate Initiative
LNG	Liquefied Natural Gas
CMS	Carbon Monitoring System
NASA	National Aeronautics and Space Administration
PEER	Public Employees for Environmental Responsibility
DoS	Department of State
DoE	Department of Energy
CRA	Congressional Review Act
E.O.	Executive Order
FY	Fiscal Year
EDGI	Environmental Data & Governance Initiative
NGO	Non-Governmental Organization
COP	Conference of the Parties

Introduction

Scope of Work

“Climate change is the defining issue of our time – and we are at a defining moment.”

António Guterres, United Nations Secretary-General, 2018

The phenomenon of global climate change has garnered a great deal of international attention in recent times, perhaps because of its uniqueness as a truly global issue that can only be solved by multilateral efforts. It is not new; scientists have known for decades that the climate is changing.¹ It was less than a decade ago, however, that researchers announced with confidence that humans were responsible for much of the change observed. In 2013, the Intergovernmental Panel on Climate Change (IPCC) released its Fifth Assessment Report, which concluded “with 95 percent certainty” that human action has been the main driver of the climate change recorded since the middle of the 20th century.² Since that time, worldwide climate activism has increased, and many governments have pledged to take part in the fight against global climate change.

When awareness of climate change began to spread in the 1970s, the United States posited itself at the forefront of global environmental efforts – both on a national and international scale.³ Defended by the public choice theory of the *Race to the Bottom*, Washington has tended to favor national environmental regulation to avoid the total prioritization of economic gain over environmental preservation.⁴ Internationally, the United States was fundamental in early climate change efforts, such as the Montreal Protocol and the creation of the IPCC.⁵

Although its environmental track record has fluctuated depending on the administration, the U.S. entered an era of renewed commitment to climate change efforts with the arrival of Barack Obama to the White House.⁶ Eight years later, however, Donald Trump took Washington by storm, promising to undo much of the Obama legacy – especially in the area of environmental policy. Trump’s denial of climate change and preference for nonrenewable forms of energy have guided his climate policy⁷; his nationalist rhetoric and aversion to multilateralism have meant a scaling-back of many of the U.S.’s international environmental compromises.

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- 1 RAMSEUR, J. L. Climate Change: Action by States to Address Greenhouse Gas Emissions [online]. *CRS Report for Congress, Order Code RL33812*. 27 April 2007, p. CRS-1. Retrieved from: <https://digital.library.unt.edu/ark:/67531/metadc822485/>; LE TREUT, H. and SOMERVILLE, R. Historical Overview of Climate Change Science. In SOLOMON, S. *et al.*, ed. *Climate Change 2007: The Physical Science Basis*. New York: Cambridge University Press, 2007, p. 95. ISBN: 978 0521 88009-1.
 - 2 STOCKER, T. E., *et al.* *Climate Change 2013: The Physical Science Basis*. New York: Cambridge University Press, 2013, p. v. ISBN: 978-1-107-05799-1.
 - 3 FALKNER, R. American Hegemony and the Global Environment. *International Studies Review* [online]. December 2005, Vol. 7 (4), p. 585 [Consulted 2 March 2019]. Retrieved from: https://www.jstor.org/stable/3699676?seq=1#page_scan_tab_contents; BUSBY, J. W. A Green Giant? Inconsistency and American Environmental Diplomacy. In: Ikenberry *et al.* (eds.) *America, China, and the Struggle for World Order*. New York: Palgrave Macmillan, 2015, p. 245. ISBN 978-1-349-55327-3
 - 4 KONISKY, D. Public Preferences for Environmental Policy Responsibility. *The Journal of Federalism*, 2010, 41 (1). p. 76 [Consulted May 25, 2019]. DOI: 10.1093/publius/pjp044; LUDWISZEWSKI, R. B. and HAAKE, C. H. Cars, Carbon and Climate Change. *Northwestern University Law Review*. 2008, Vol. 102 (2). p. 668 [Consulted 20 January 2019]. Retrieved from: <http://search.ebscohost.com/login.aspx?direct=true&db=edshol&AN=edshol.hein.journals.illr102.38&lang=es&site=eds-live>
 - 5 AGRAWALA, S. Interim Report IR-97-032: Explaining the Evolution of the IPCC Structure and Process [online]. *Kennedy School of Government, Harvard University*, August 1997, p. 3 [Consulted 23 May 2019]. Retrieved from: <http://pure.iiasa.ac.at/id/eprint/5259/1/IR-97-032.pdf>; VILLAR EZCURRA, M. *Cambio Climático, Fiscalidad y Energía en los Estados Unidos: Una Batería de Ejemplos a Considerar*. 1^a ed. Navarra: Aranzadi, SA, 2012, pp. 15-16 ISBN 978-84-470-4124-4.
 - 6 IER. Obama Subsidizes U.S. Solar Energy and Promises to Do the Same in India [online]. *Institute for Energy Research*, 20 February 2015 [Consulted 23 May 2019]. Retrieved from: <https://www.instituteforenergyresearch.org/renewable/solar/obama-subsidizes-u-s-solar-energy-promises-india/>
 - 7 MATTHEWS, D. Donald Trump Has Tweeted Climate Change Skepticism 115 Times. Here’s All of It [online]. *Vox*, 2017, June 1 [Consulted 21 April 2019]. Retrieved from: <https://www.vox.com/policy-and-politics/2017/6/1/15726472/trump-tweets-global-warming-paris-climate-agreement>; TRUMP, D. J. Economic Report of the President, Together with the Annual Report of the Council of Economic Advisers [online]. *The White House*, 2019, p. 18 [Consulted 23 May 2019]. Retrieved from: <https://www.whitehouse.gov/wp-content/uploads/2019/03/ERP-2019.pdf>

It is impossible to predict the long-term ramifications of Trump's decisions regarding environmental protection, but it is possible to begin to analyze the impact he is having on the United States and its commitment to climate change efforts, at both national and international levels.

Although various authors had made predictions about Trump's impact on the environment at the beginning of his presidency,⁸ more recent analyses have not yet been published – potentially owing to the lengthy nature of the publication process. Furthermore, the limited literature which does consider the impact of Trump's climate policy at national and international levels typically focuses on what has been lost, such as funding or environmental protection, rather than on what has been gained – in other words, new or renewed commitments to environmental defense.

We seek to fill this gap with an analysis of the commitments made to fighting climate change by U.S. national and subnational governments and by the private sector since Trump took office on January 20, 2017. More specifically, considering the international nature of global climate change and the President's push to reduce the country's international engagement, the current study attempts to compare the administration's impact on national and international commitments to climate change efforts. This report, then, intends to address the following question:

What has been the impact of Donald Trump's climate policy on the United States' national and international commitments to fighting global climate change?

In response to this question, we propose four hypotheses:

1. Donald Trump's climate change policy has greatly decreased national and international commitments to climate protection by the federal government, but not by states or by the private sector.
2. In response to the federal government's retreat from climate change action, subnational governments and private companies, organizations, and citizens have increased their commitments, especially with other countries.
3. The President's effect on America's climate commitments has been limited by a public increasingly at odds with his climate beliefs.
4. The rollback of environmental regulations has not produced a *Race to the Bottom*, but rather a *Race to Desirability*.

Methodology

This study will analyze the United States' national and international commitments to climate action made before and after January 20, 2017. Given that the White House has not declared an official policy on climate action, we will analyze official texts to identify key themes of Trump's climate policy. In order to determine the President's effect on the country's commitments, the deductive method will be employed. By analyzing what Trump wanted to achieve – as well as the limitations he encountered – and by comparing the federal, state, and private commitments post-2017 to those before Trump took office, we will be able to deduce where his effect was the greatest.

Sources Used

For this study, it was necessary to analyze a variety of sources, including books, reports, legislation, official texts, academic articles, journalistic articles, and websites. It is important to note that the ongoing nature of the topic of study greatly complicated the search for academic, peer-reviewed sources, especially those describing the most recent climate action taken. For this reason, we were obligated to resort to non-academic sources, such as periodicals and webpages, for information regarding current environmental

8 DECOTIS, P. A. What We Might Expect from Changes in the Nation's Capital. *Natural Gas and Electricity* [online]. February 2017, Vol. 33 (7). pp. 25-27 [Consulted 22 April 2019]. DOI: 10.1002/gas.21963; BOMBERG, E. Environmental Politics in the Trump Era: An Early Assessment. *Environmental Politics* [online]. 2017, Vol. 26 (5). 956-963 [Consulted 17 May 2019]. DOI: 10.1080/09644016.2017.1332543

action and initiatives. Often, the most up-to-date information regarding a new organization or alliance was the group's website; other times, a quote from the administration or from a climate activist was only available from a journalistic source.

The following section presents an overview of the most important resources used, arranged into primary, secondary, and tertiary sources.

Primary Sources

Legislation and executive action were consulted from the current and previous administrations, as well as two court sentences, in order to evaluate the evolution of environmental regulation in the United States. International official documents, such as the Montreal Protocol and the UN Intergovernmental Panel on Climate Change's 2007 and 2013 reports were reviewed for background information about climate change and previous international agreements. Official documents from past and current presidencies, such as budget proposals and reports from federal agencies, along with official remarks by the President were analyzed to extract themes of climate change policies. A number of websites for environmental non-government organizations, alliances, organizations, and initiatives – pages about America's Pledge, The Sierra Club, and the Western Climate Initiative, to name a few – were consulted in order to obtain information about current action against climate change. Finally, various press releases are included in the bibliography, as they were occasionally the only resource available that spoke of recent climate action.

Secondary Sources

A variety of books and academic articles were used to gain historical context regarding the issue of climate change in the United States and the action that had been taken before the Trump presidency. Although most articles and books are in English, several are in Spanish, in an attempt to gain a broader analytical perspective, including works by Fernández Liesa, Rodríguez Vindel, Vallejo and Villar Ezcurra, who analyze international and U.S.-based climate change efforts. Authors such as Adler, Brunell, McKinstry, Konisky and Woods provide context to the issue of environmental federalism, the division of regulatory responsibilities between the federal and state governments. Articles by Bergeson, Bomberg, Crews, DeCotis, García Encina and Krupp, among others, comment on the Trump presidency and the potential consequences for environmental regulation.

We were obligated to consult various journalistic articles, as these news outlets were sometimes the only source that spoke of current events and climate initiatives. Reputable online periodicals such as *Time*, *The Atlantic*, *The New York Times*, *NPR*, and *The Washington Post* were prioritized.

Tertiary

Few tertiary sources were consulted in this investigation. The majority were indexes of regulatory rollbacks attempted by the Trump administration – for example, the Regulatory Rollback Tracker by the Harvard Law and Energy Program and the Roundup by the Institute for Policy Integrity – used to identify legislation and other official documents to be analyzed. The Federal Register's list of Executive Orders facilitated the localization of orders related to climate change in order to better understand Trump's climate policy.

Structure

The present study seeks to analyze the impact of the Trump administration's climate change policy on American national and international climate commitments. To do this, it will begin Chapter I with an overview of the energy tax policy and public choice theory related to environmental regulation, followed by the history of the United States' national and international action addressing climate change. Each type of action will be broken down into the actor behind it: the federal government, state governments, or the private sector.

Chapter II contains an analysis of the various themes identified in Trump's climate policy: his nomination choices; the administration's support of fossil fuels; a retreat from global leadership; the restructuring of the Environmental Protection Agency; censoring of federal websites; deregulation; climate change denial; his preference for executive action; and other action by the executive branch. The chapter will be concluded with an analysis of the limitations the President has faced in his policy implementation process.

The third chapter will identify the national and international commitments that have been made since Trump took office. In an attempt for symmetry, this chapter will also be divided into action taken by the federal government, subnational governments, and the private sector.

Finally, conclusions will be drawn regarding the effect of the Trump administration's climate policy by comparing action taken prior to and since his inauguration. The impact of the limitations the President encountered will be considered, as will the application of public choice theory to state climate action.

Chapter I. Before Trump: History of Action Against Climate Change

The success of environmental advocacy, as with any other social movement, is greatly dependent on the public support it garners.⁹ Widespread support for environmental protection began in the mid-1960s in the United States,¹⁰ although climate change did not become a concern at the international level until the 1970s-1980s, as research increasingly suggested that humans could be having an impact on the earth's climate.¹¹

While environmental efforts were initially the focus of state and local governments, in response to growing concern over the inefficiency of this federalist model, Washington assumed greater responsibility beginning in 1969 with the establishment of a National Environmental Policy.¹² Since then, U.S. environmental policy has been “a tug-of-war between federal, state and sometimes local authorities.”¹³ Those who push for greater state control of environmental policy believe that nation-wide regulations do not take into consideration the differences that exist between states, claiming federal regulations are inflexible and ineffective.¹⁴ Others argue that national standards are necessary to address the externalities of pollution that cross state lines¹⁵ and to avoid what is known as the *Race to the Bottom*.

Various public choice theories have been proposed explaining public response to environmental regulation. Although these theories are usually applied at a national level, they are equally as valid to understand international public response. The *Race to the Bottom* theory proposes that states¹⁶ will be inclined to “lower environmental standards in order to attract economic growth while passing off the costs of those lower environmental standards onto other jurisdictions”.¹⁷ States will not, in other words, raise environmental regulations of their own accord, fearing the economic repercussions, such as businesses moving to states with fewer restrictions.¹⁸ This theory has historically been the justification for federal environmental regulation in the U.S., as the government has claimed it is avoiding a regulatory downward spiral.¹⁹

In recent years, researchers have proposed a contradictory theory known as the *Race to Desirability*. They claim that, while a certain degree of environmental regulation may be necessary, too much can hamper the competition between states which promotes an “optimal mix of environmental benefits and

9 DUNLAP, R. E. Trends in Public Opinion towards Environmental Issues: 1965-1990. *Society and Natural Resources*. July 1991, 4 (3). p. 285 [Consulted 15 January 2019]. ISSN 0894-1920/91. DOI 10.1080/08941929109380761

10 *Ibid.*, p. 287.; FOWLER, L. Tracking State Trends in Environmental Public Opinion. *The Social Science Journal* [online]. March 2017, 54. P. 287 [Consulted 20 December 2019]. ISSN 0362-3319. DOI 10.1016/j.soscij.2017.02.003

11 MCKINSTRY JR., R. B. Laboratories for Local Solutions for Global Problems: State, Local, and Private Leadership in Developing Strategies to Mitigate the Causes and Effects of Climate Change. *Penn State Environmental Law Review*. 2004, 12 (1). p. 17 [Consulted 19 December 2019].

12 KONISKY, D., loc. cit., footnote 4.; HUQUE, A. S. and WATTON, N. Federalism and the Implementation of Environmental Policy: Changing Trends in Canada and the United States. *Public Organization Review*. 2010, Vol. 10. p. 76 [Consulted 25 May 2019]. DOI: 10.1007/s11115-009-0089-4

13 MCKINSTRY JR., R. B., loc. cit., footnote 11.

14 KONISKY, D. M. and WOODS, N. D. Environmental Federalism and the Trump Presidency: A Preliminary Assessment. *The Journal of Federalism*. 2018, Vol. 48 (3). p. 348 [Consulted 25 May 2019]. DOI: 10.1093/publius /pjy009

15 KONISKY, D. M. and WOODS, N. D. Exporting Air Pollution? Regulatory Enforcement and Environmental Free Riding in the United States. *Political Research Quarterly*. 2010, December, Vol. 63 (4). p. 771 [Consulted 25 May 2019]. Retrieved from: <https://www.jstor.org/stable/25749248>

16 Although in this case, “states” refers to the 50 states that make up the federal system of the United States, this theory also be used to refer to international public response, in which case “states” would mean “countries”.

17 LUDWISZEWSKI, R. B. and HAAKE, C. H., loc. cit., footnote 4.

18 KONISKY, D. M. and WOODS, N. D., “Environmental Federalism...”, *op. cit.*, footnote 14, p. 347; BRUNELL, T. L. and CEASE, B. How Do State-Level Environmental Policies Impact the Voting Behavior of National Legislators? *Social Science Quarterly*. 2019, February, Vol. 100 (1). p. 289 [Consulted 25 May 2019]. DOI: 10.1111/ssqu.12559

19 LUDWISZEWSKI, R. B. and HAAKE, C. H., *op. cit.*, footnote 4, p. 665.

economic cost”; such competition results not in a race to the bottom, but rather in a race to find the balance between regulation and economic gain.²⁰

A third theory, called *Race to Stringency*, posits a race to the top. Also known as the “California Effect”, this theory explains that when there is a large market for consumers within a greater interstate or international market, elevated environmental standards act as a competitive advantage.²¹

The fourth and final public choice theory is *Jurisdictional Mismatch*, which claims that the federal government enforces environmental regulation in areas that would be better controlled by states and lacks regulation in areas for which it should be responsible, leading states to try to fill the void. Jonathan Adler, author of the theory, proposes that regulation should follow the principle of subsidiarity: environmental issues should be regulated at the lowest level feasible.²²

1. Evolution of the Energy Tax Policy

In order to understand the current administration’s policy on climate change, it is important to first understand the evolution of positions the federal government has adopted over the course of the years. Since scientists discovered the link between emissions from fossil fuels and global climate change in the mid-1900s,²³ energy policy has necessarily been connected to climate policy. Although the energy policy, manipulated through taxation, was developed as a means for protecting domestic oil production, it has evolved into a mechanism often used for environmental protection.²⁴ The energy tax policy can be defined as “the use of the government’s main fiscal instruments – taxes (financial disincentives) and tax subsidies (or incentives) – to alter the allocation or configuration of energy resources”.²⁵ Salvatore Lazzari proposed a division of the U.S. federal energy tax policy into four phases:

1. The Oil and Gas Phase, lasting from 1916-1970. During this phase, the focus was on domestic oil and gas production, and energy conservation and alternatives were not a concern.
2. The Energy Crisis Phase of the 1970s. A greater understanding of issues surrounding the environment, as well as the oil embargo (1973) and the Iranian Revolution (1978-1979), redirected the focus of the government towards energy conservation and the development of alternative energies.
3. The Free-Market (Reagan) Phase of the 1980s. Under the presidency of Ronald Reagan, the government adopted a “free-market” approach through which control of the energy sector was greatly reduced according to the logic that this would improve efficiency within the sector and benefit the economy as a whole.
4. The Post-Reagan Era (from 1988-2008). The administrations following Reagan re-introduced greater energy taxes and incentives, mostly promoting conservation and alternative fuels. The primary objectives were lowering reliance on oil imports and improving energy security.²⁶

Marta Villar Ezcurra proposes a further division of the federal energy policy, separating the 1990s from the administration of George W. Bush. She explains that during the 1990s, energy tax incentives became linked to climate change policy, promoting a decreased dependence on fossil fuels.²⁷ The impulse behind Bush’s energy tax policy, however, was more closely linked to energy security than to climate change. Following Bush, the Obama administration returned to an energy tax policy motivated by climate change and by the economy.

20 *Ibid.*, p. 670.

21 *Ibid.*, p. 672.

22 ADLER, J. H. Jurisdictional Mismatch in Environmental Federalism. *Case Western Reserve University, Faculty Publications*. 2005, Vol. 185. pp. 134-135[Consulted 30 January 2019]. Retrieved from: https://scholarlycommons.law.case.edu/faculty_publications/185

23 LE TREUT, H. and SOMERVILLE, R., *op. cit.*, footnote 1, pp. 105-106.

24 LAZZARI, S. Energy Tax Policy: History and Current Issues [online]. *CRS Report for Congress, Order Code RL33578*. 10 June 2008, p. CRS-1. Retrieved from: <https://fas.org/sgp/crs/misc/RL33578.pdf>

25 *Ibid.*, p. CRS-1.

26 *Ibid.*, p. CRS-1.

27 VILLAR EZCURRA, *op. cit.*, footnote 5, p. 34.

Notably, the shift in energy policy during the Reagan Era would have profound implications on future climate policy. The budget cuts he imposed as part of his “free market” approach, resulting in less grant aid for states, have been continued by successive administrations; due to a lack of funding, states have often needed to abandon environmental programs, most notably during the 1990s, when almost two-thirds of states were forced to cut back on their environmental initiatives.²⁸ The end result of these budget cuts has been a neo-liberalist trend of increasing eco-regulation by the private sector, marked by its voluntary, capitalist nature.²⁹

2. History of National Commitments to Combat Climate Change

2.1. National Commitments by the Federal Government

In the United States, the “Race to the Bottom” theory has been used to defend environmental regulation since it began in the 1960s.³⁰ According to classic economic theory, the socially-ideal level of pollution control is found by subtracting the costs of regulation from the benefits obtained from lower levels of pollution.³¹ This optimum level can only be the result of external regulation which obligates polluters to account for their action.³² States with more restrictive regulation would present higher costs to polluting companies. In an effort to minimize costs and maximize profits, companies that pollute the most would move out of states with strict environmental protection and into states with lower environmental regulation.³³

According to John P. Dwyer, Congress has adopted this theory as the basis for its “green” legislation, claiming that states would not, on their own, establish sufficient environmental regulation because of the restrictions it would impose on economic growth.³⁴ Dwyer quotes Senator Prouty of Vermont, speaking about emissions standards, as saying: “To be sure, minimum Federal standards are a must, as they free the 50 States from the necessity of competing for business by lowering their standards.”³⁵ In fact, Congress used the “Race to the Bottom” theory to justify the establishment of federal “prevention of significant deterioration” programs which monitor state or federal implementation plans for air pollution regulation.³⁶

What follows is a list of key federal legislation related to climate change from 1963 until the end of the Obama administration in 2016.

- Clean Air Act, 1963 (P.L. 88-206)

The Clean Air Act was designed to control air pollution by encouraging interstate cooperation and establishing a national research and development program in order to better monitor air pollution.³⁷

28 HUQUE, A. S. and WATTON, N., *op. cit.*, footnote 12, pp. 83-84.

29 *Ibid.*, p. 84.

30 LUDWISZEWSKI, R. B. and HAAKE, C. H., *op. cit.*, footnote 4, p. 665.

31 REVESZ, R. L. Rehabilitating Interstate Competition: Rethinking the “Race to the Bottom” Rationale for Federal Environmental Regulation. *New York University Law Review*. 1992, Vol. 67 (1210), p. 1214 [Consulted 25 March 2019]. Retrieved from: https://www.researchgate.net/profile/Richard_Revesz/publication/272180508_Rehabilitating_Interstate_Competition_Rethinking_the_Race-to-the-Bottom_Rationale_for_Federal_Environmental_Regulation/links/54de688a0cf2510fcee3b637/Rehabilitating-Interstate-Competition-Rethinking-the-Race-to-the-Bottom-Rationale-for-Federal-Environmental-Regulation.pdf

32 *Ibid.*, p. 1214.

33 LUDWISZEWSKI, R. B. and HAAKE, C. H., *op. cit.*, footnote 4, p. 669.

34 DWYER, J. P. The Practice of Federalism Under the Clean Air Act. *Maryland Law Review*. 1995, Vol. 54 (4). p. 1195 [Consulted 25 March 2019]. Retrieved from: <https://core.ac.uk/download/pdf/56357666.pdf>

35 *Ibid.*, p. 1195.

36 *Ibid.*, p. 1195.

37 Public Law 88-206: Clean Air Act. 77 STAT 392-401. 17 December 1963.

- National Environmental Policy Act (NEPA), 1969 (P.L. 91-190)

NEPA created a national policy to ensure environmental protection according to which all federal agencies are required to evaluate the environmental impact of any proposed major project.³⁸

- National Climate Program Act, 1978 (P.L. 95-367)

The National Climate Program Act established “a comprehensive and coordinated national climate policy and program” to assess the potential effects and implications of “climate processes” and to make recommendations.³⁹

- Energy Tax Act, 1978 (P.L. 95-618)

The Energy Tax Act provided tax incentives for the conservation of energy, as well as for alternative energy sources.⁴⁰

- Global Climate Protection Act, 1987 (P.L. 100-204)

The Global Climate Protection Act required the creation of a Task Force on the Global Climate to research and assess threats of global climate change and to then develop a “coordinated national strategy” on climate change.⁴¹

- Global Change Research Act (GCRA), 1990 (P.L. 101-606)

This Act authorized the creation of a federal research program (the Global Change Research Program) to “assist the Nation and the world to understand, assess, predict and respond to human-induced and natural processes of global change”.⁴²

- Energy Policy Act, 1992 (P.L. 102-486)

The Energy Policy Act of 1992 involves the promotion of energy efficiency, the reduction of energy dependency and the development of alternative fuels. It includes specific sections dedicated to addressing global climate change and to the relationship between energy and the environment.⁴³

- Climate Change Action Plan (CCAP), 1993

Although it was not legislation, the Climate Change Action Plan represented the first comprehensive national initiative to combat climate change. The Plan had the objective of returning to 1990 levels of GHG emissions by the year 2000.⁴⁴

- Energy Policy Act, 2005 (P.L. 109-58)

George W. Bush signed into law \$15 billion⁴⁵ in tax incentives for energy conservation and alternative fuels, but also for fossil fuels. The Act includes provisions regarding energy efficiency, renewable energy, oil and gas, coal, fuel consumption by vehicles, research and development, electricity, climate change and innovative technology research, among others.⁴⁶

- Strengthening Federal Environmental, Energy, and Transportation Management, 2007 (Executive Order 13423)

38 Public Law 91-190: National Environmental Policy Act of 1969. 83 STAT 852-856. 1 January 1970.

39 Public Law 95-367: National Climate Program Act. 92 STAT 601-605.17 September 1978.

40 Public Law 95-618: Energy Tax Act of 1978. 92 STAT 3174-3205. 9 November 1979.

41 Public Law 100-204: Global Climate Protection Act of 1987. 101 Stat. 1407-1409. 22 December 1987.

42 Public Law 101-606: Global Change Research Act of 1990. 104 Stat. 3096-3104. 16 November 1990.

43 Public Law 102-486: Energy Policy Act of 1992. 106 Stat. 2276-2899. 24 October 1992.

44 CLINTON, W. J. and GORE JR., A. G. The Climate Change Action Plan [online]. 1993 [Consulted 10 February 2019]. Retrieved from: <http://www.gcrio.org/overview.html>

45 All monetary amounts are listed in \$USD.

46 Public Law 109-58: Energy Policy Act of 2005. 119 Stat. 605-650. 8 August 2005.

Signed by President Bush in January of 2007, Executive Order 13423 instructs federal agencies to take action to protect the climate, including promoting energy efficiency and reducing GHG emissions and water and energy use.⁴⁷

- Energy Independence and Security Act, 2007 (P.L. 110-140)

The Energy Independence and Security Act promotes energy security and conservation and research and development of alternative fuels, as well as greater involvement in international energy programs, among other measures.⁴⁸

- Federal Leadership in Environmental, Energy, and Economic Performance, 2009 (Executive Order 13514)

This Order had two main objectives: creating a comprehensive federal sustainability strategy and establishing the reduction of GHG emissions as a “priority for Federal agencies”.⁴⁹

- Preparing the United States for the Impacts of Climate Change, 2013 (Executive Order 13653)

This mandate establishes the interagency Council on Climate Preparedness and Resilience, whose purpose is to work with all levels of government and with private institutions in climate adaptation and mitigation efforts.⁵⁰

- Planning for Federal Sustainability in the Next Decade, 2013 (Executive Order 13693)

President Obama ordered each federal agency to propose reduction targets for GHG emissions, suggesting no less than 40%, to be achieved over the course of a decade.⁵¹ He also required the creation of sustainability goals for each federal agency to promote energy efficiency and conservation. The Order sets the minimum for renewable electric energy at 30% of total use by 2025.⁵²

- Clean Power Plan (CPP), 2015

The Clean Power Plan established the first national regulations for carbon pollution produced by power plants. President Obama, in conjunction with the EPA, created the plan to reduce GHG emissions from the power sector – setting the 2030 emissions reduction target at 32% below 2005 levels – while simultaneously promoting clean energy development.⁵³

- Methane and Waste Prevention Rule, 2016

The Bureau of Land Management,⁵⁴ under the Mineral Leasing Act of 1920, approved a standard which regulates all oil and gas operations in order to avoid the leakage of methane, “a potent climate-warming gas”.⁵⁵

47 BUSH, G. W. Executive Order 13423: Strengthening Federal Environmental, Energy, and Transportation Management. *Federal Register* [online]. 26 January 2007, Vol. 72 (17). 3919-3923 [Consulted 20 December 2019]. Retrieved from: <https://www.energy.gov/sites/prod/files/2014/03/f11/eo13423.pdf>

48 Public Law 110-140: Energy Independence and Security Act of 2007. 121 Stat. 1492-1801. 19 December 2007.

49 OBAMA, B. H. Executive Order 13514: Federal Leadership in Environmental, Energy, and Economic Performance. *Federal Register* [online]. 8 October 2009, Vol. 74 (194). p. 52117 [Consulted 27 December 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2009-10-08/pdf/E9-24518.pdf>

50 OBAMA, B. H. Executive Order 13653: Preparing the United States for the Impacts of Climate Change. *Federal Register* [online]. 1 November, 2013, Vol. 78 (215). 66819-66824 [Consulted 2 January 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2013-11-06/pdf/2013-26785.pdf>

51 OBAMA, B. H. Executive Order 13693: Planning for Federal Sustainability in the Next Decade. *Federal Register* [online]. 25 March 2015, Vol. 80 (57). 15871-15884 [Consulted 4 January 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2015-03-25/pdf/2015-07016.pdf>

52 *Ibid.*, pp. 15871-15884.

53 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. 40 CFR Part 60: Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Final Rule. *Federal Register* [online]. 23 October 2015, Vol. 80 (205). 64662-64663 [Consulted 10 January 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2015-10-23/pdf/2015-22842.pdf>

54 The Bureau of Land Management is a Federal agency within the U.S. Department of the Interior. More information at <https://www.blm.gov/about>

55 BUREAU OF LAND MANAGEMENT. *Methane and Waste Prevention Rule* [online]. 2017 [Consulted 10 January 2019]. Retrieved from: https://www.nrdc.org/sites/default/files/media-uploads/blm_methane-hill_factsheet-final_2017_01_13.pdf

– Consolidated Appropriations Act, 2016 (P.L. 114-113)

The Consolidated Appropriations Act of 2016 includes, among other appropriations, tax incentives for wind and solar energy production, along with a phase-out plan for these credits, thereby ensuring a certain degree of security for the renewable energy market.⁵⁶ Between 2010 and 2015, the federal government granted nearly \$39 billion per year in subsidies for renewable energies.⁵⁷

This legislation, according to Richard L. Revesz, would be superfluous if states were able to reach an agreement to establish environmental protection at a socially-optima level.⁵⁸ The non-cooperative quality of inter-state relations is at the root of the *Race to the Bottom*; the benevolence of federal regulation, which intercedes to increase protection for citizens, stands in stark contrast to the common perception of federal regulation as an infringement on state autonomy.⁵⁹

Revesz also reflects on another public choice theory justification for federal regulation, which claims that state-level politics do not give environmental protection the importance it deserves, and so pro-environment lobbies and organizations are more impactful in the federal arena.⁶⁰ A review of state action to protect the environment, however, challenges this argument.

2.2. National Commitments by States

Reflecting upon several decades of climate-related legislation, various authors have underlined the complexity and inefficiency of the national system of environmental regulation in the United States.⁶¹ Clifford S. Russell compares the U.S. with other countries of the Organization for Economic Cooperation and Development (OECD), concluding that “U.S. processes are more detailed, intrusive, complex, punitive, unpredictable and costly to comply with”.⁶² Lack of action at a federal level often stems from difficulty obtaining congressional support in order to pass legislation, which has led to the increased importance of organizations such as the Environmental Protection Agency (EPA) in the development of environmental laws and other regulations.⁶³ Such convolution in federal regulation often leads to the *Jurisdictional Mismatch* previously described. Similarly, one author claimed that state environmental protection happens “on a piecemeal basis” in response to a lack of a “comprehensive federal congressional initiative” targeting global climate change.⁶⁴ Evan J. Ringquist aptly describes the disconnect between state and federal levels of environmental governance:

In thinking about environmental policy, professionals and laypersons alike seem fixated upon the role played by the federal government. We look to Washington for action and solutions to environmental problems, and blame the government there when environmental goals are not met. This federal focus obscures the fact that a significant amount of policy variation and activity takes place at the state level.⁶⁵

As Ringquist notes, while some of the action against climate change has been driven by the federal government, the majority has come from state and local levels,⁶⁶ more in line with the *Race to Desirability* or *Race to Stringency* theories.

56 Public Law 114-113: Consolidated Appropriations Act, 2016. 129 Stat. 3036-3072. 18 December 2015.

57 IER, loc. cit., footnote 6.

58 REVESZ, R. L., *op. cit.*, footnote 31, p. 1216.

59 *Ibid.*, p. 1216.

60 *Ibid.*, p. 1223.

61 VILLAR EZCURRA, M., *op. cit.*, footnote 5, p. 17.; RUSSELL, C. S. *Applying Economics to the Environment*. New York: Oxford University Press, Inc., 2001, p. 29. ISBN 0-19-512684-X.

62 RUSSELL, C. S., loc. cit., footnote 61.

63 Laws and Regulations [online]. *United States Environmental Protection Agency*, 2 April 2019 [Consulted 10 April 2019]. Retrieved from: <https://www.epa.gov/laws-regulations>

64 CARLEY, S. The Era of State Energy Policy Innovation: A Review of Policy Instruments. *Review of Policy Research* [online]. 2011, Vol. 28 (3), p. 265 [Consulted 25 May 2019]. DOI 10.1111/j.1541-1338.2011.00495.x

65 RINGQUIST, E. J. *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution*. New York: Routledge, p. 3. ISBN 1-56324-203-6.

66 VILLAR EZCURRA, M., *op. cit.*, footnote 5, p. 17.

Revesz, critical of the *Race to the Bottom* theory, believes that interstate competition will not lead to a loosening of environmental protections, but rather will encourage states to find a balance between social benefits and economic costs – the so-called *Race to Desirability*.⁶⁷ The level of environmental regulation is determined by the value each state's inhabitants accord to environmental protection; any regulation past this level of protection would be detrimental to the state, as its residents are only willing to sacrifice a certain amount of economic growth for a healthier environment.⁶⁸ In Revesz's opinion, then, environmental legislation should be set by states, rather than by the federal government.

David Vogel similarly challenges the *Race to the Bottom* model, explaining that interstate competition does not lead to weaker environmental protection but to stronger regulation – a *Race to Stringency*.⁶⁹ Instead of a race to find an ideal balance between costs and benefits, as proposed by Revesz, however, Vogel believes that competition will only make regulation stricter; depending on the importance that residents place on environmental protection, therefore, increased regulation may not be considered “ideal”, as in the *Race to Desirability*. This theory, which he also calls the *California effect*,⁷⁰ can be explained by “the existence of a large consumer market within a larger interstate or international market”.⁷¹ When this market increases regulation, it not only defends domestic or regional products against foreign ones, but it also “pass[es] off the costs of [regulation] to producers in foreign jurisdictions while reaping locally the benefits of such regulation.”⁷² In this way, statewide regulation acts as a competitive advantage for local businesses and encourages other states to increase environmental protections, as well.⁷³

The statistics regarding the widespread action of states, when analyzed collectively, are impressive: by 2007, 42 states had elaborated GHG inventories,⁷⁴ 30 states were developing or had finalized climate change action plans,⁷⁵ and 12 states had mandatory GHG reduction targets.⁷⁶ The technique of carbon pricing,⁷⁷ used to achieve emissions reduction targets, also demonstrates state incentive – and the failings of the federal government. Although the federal government has not been capable of instating a nationwide carbon pricing policy, in 2005, nine northeastern states⁷⁸ formed the Regional Greenhouse Gas Initiative (RGGI), the first legally-mandated Emission Trading System (ETS), or cap-and-trade, for carbon dioxide emissions from the power sector in the United States.⁷⁹ Experts estimate that by 2020, the power sector will be producing carbon emissions at a rate 45% lower than in 2005.⁸⁰ The RGGI's objective is to continue to reduce emissions another 30% before 2030.⁸¹ In 2013, California established its own cap-and-trade

67 REVESZ, R. L., *op. cit.*, footnote 31, p. 1240-1241.

68 LUDWISZEWSKI, R. B. and HAAKE, C. H., *op. cit.*, footnote 4, pp. 670-671.

69 *Ibid.*, p. 672.

70 The name makes reference to the influence the state of California has had in encouraging more stringent environmental regulations.

71 LUDWISZEWSKI, R. B. and HAAKE, C. H., *op. cit.*, footnote 4, p. 672.

72 *Ibid.*, p. 672.

73 *Ibid.*, p. 672.

74 RAMSEUR, J. L., *op. cit.*, footnote 1, p. CRS-10.

75 *Ibid.*, p. CRS-4.

76 *Ibid.*, p. CRS-15.

77 The term “carbon pricing” refers to action that works to curb carbon emissions, either by charging a fee for the right to emit carbon, or by rewarding for lower emissions. There are three types of carbon pricing. Emission Trading Systems (also known as “Cap-and-Trade” systems) are systems in which an absolute limit is placed on total emissions. A certain number of permits to produce carbon emissions are created, and emitters can buy or sell permits within the market. Emission Reduction Funds (ERF) are government programs which give credits to businesses that lower emissions. The only ERF currently in practice is in Australia. A Carbon Tax is an economy-wide fee imposed on all carbon emissions. While Emission Trading Systems can ensure a fixed limit on carbon emissions, a carbon tax cannot guarantee any fixed level of reductions. About Carbon Pricing [online]. *United Nations Framework Convention on Climate Change*, 2019 [Consulted 20 February 2019]. Retrieved from: <https://unfccc.int/about-us/regional-collaboration-centres/the-ci-aca-initiative/about-carbon-pricing#eq-4>

78 Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.

79 Regional Greenhouse Gas Initiative (RGGI) [online]. *Center for Climate and Energy Solutions* [Consulted 20 February 2019]. Retrieved from: <http://www.c2es.org/content/regional-greenhouse-gas-initiative-rggi/>

80 *Ibid.*

81 *Ibid.*

program, the first multi-sector ETS in the United States, and the fourth-largest in the world.⁸² The program, while expected to reduce GHG emissions by 16% by 2020 and by another 40% by 2030, is a key part of the state's larger, broader initiative to return to 1990 levels of GHG emissions by 2020, and to reduce emissions an additional 40% by 2030.⁸³

Another example of state-driven regulation is NESCAUM, the Northeast States for Coordinated Air Use Management – an association comprised of the air quality agencies from eight states⁸⁴ which works to make improvements in areas ranging from climate change adaptation and regulation to energy efficiency.⁸⁵ The goal of NESCAUM is to “provide scientific, technical, analytical and policy support to the air quality programs of the eight Northeast states”, principally with the implementation of national programs such as those created by the Clean Air Act.⁸⁶

Paradoxically, the federal structure of the United States might simultaneously be the greatest deterrent to comprehensive federal regulation and the key to states' success. As Justice Brandeis observed in the case of *New State Ice Co. vs. Liebmann*, “It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country”.⁸⁷ Robert B. McKinstry, Jr. builds on the idea of states as laboratories, creating and fine-tuning prototypes for legislation that is often later adopted at a federal level.⁸⁸ He gives various examples of this “copycat” effect: air regulation in California was the model for the revisions to the Clean Air Act in 2003; the Delaware River Basin Commission's regulation of water served as the basis for the Clean Water Act of 1972; surface mining regulation in the state of Pennsylvania led to the Surface Mining Control and Reclamation Act; and aspects of the New Jersey Spill Compensation and Control Act were nearly identical to the Comprehensive Environmental Response Compensation and Liability Act.⁸⁹

As various authors have noted, widespread discontent with the federal registry of greenhouse gas emissions has spurred states to develop their own registries.⁹⁰ This has been true especially in the state of California, which has gained a reputation as one of the most innovative states in terms of climate policy. The California Climate Action Registry, established in 2001, quickly gained national and international recognition as an accurate, transparent GHG emissions registry.⁹¹ In 2002, California developed a Renewable Portfolio Standard (RPS)⁹² Program requiring 20% of retail electricity to be supplied from renewable sources by 2017. The state gradually increased requirements through 2015, raising the minimum to 50% by 2030.⁹³ In 2015, California was one of 29 states to have Renewable Portfolio Standards, and an additional eight states had renewable energy goals.⁹⁴

82 California Cap and Trade [online]. *Center for Climate and Energy Solutions* [Consulted 20 February 2019]. Retrieved from: <http://www.c2es.org/content/california-cap-and-trade/>

83 *Ibid.*

84 Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont), New Jersey, and New York.

85 History [online]. *NESCAUM*, 2019 [Consulted 20 February 2019]. Retrieved from: <https://www.nescaum.org/about-us/history>

86 Overview [online]. *NESCAUM*, 2019 [Consulted 20 February 2019]. Retrieved from: <https://www.nescaum.org/about-us/overview>

87 *New State Ice Co. v. Liebmann*, 285 U.S. 262 (1932). BRANDEIS, dissenting opinion.

88 MCKINSTRY JR., R. B., *op. cit.*, footnote 11, p. 15.

89 *Ibid.*, p. 15.

90 MCKINSTRY JR., R. B., *op. cit.*, footnote 11, p. 23.; VILLAR EZCURRA, M., *op. cit.*, footnote 5, p. 23.

91 California Climate Action Registry [online]. *Climate Action Reserve* [Consulted 15 February 2019]. Retrieved from: <http://www.climateactionreserve.org/about-us/california-climate-action-registry/>

92 A Renewable Portfolio Standard sets a minimum percentage of total electricity sold that must be from a renewable source. See State Renewable Portfolio Standards and Goals [online]. *National Conference of State Legislatures*, 1 February 2019. [Consulted 15 February 2019]. Retrieved from: <http://www.ncsl.org/research/energy/renewable-portfolio-standards.aspx>

93 California Renewables Portfolio Standard (RPS) [online]. *California Public Utilities Commission*, 2019 [Consulted 16 February 2019]. Retrieved from: http://www.cpuc.ca.gov/rps_homepage/

94 *Ibid.*

According to 42 U.S. Code § 7543 (State standards),⁹⁵ states are not allowed to set their own vehicle emissions standards to replace those established by the Environmental Protection Agency.⁹⁶ California, however, can be granted an exemption from this law in order to set its own vehicle emissions standards via what is known as the “California waiver”: the state must establish that its standards “will be, in the aggregate, at least as protective of public health and welfare as applicable Federal standards” and must prove that the standards are necessary “to meet compelling and extraordinary conditions”.⁹⁷ Since 1994, eleven other states⁹⁸ have solicited the “California waiver” in order to apply California’s emissions standards.⁹⁹

Although often considered a leader in climate policy, California has not been alone in taking initiative. In 2001, Massachusetts was the first state in the country to place legal limits on carbon emissions from power plants.¹⁰⁰ Rhode Island was the first state to develop a comprehensive climate action plan when it released its Greenhouse Gas Action Plan in 2002.¹⁰¹ Following California’s decision to limit vehicle GHG emissions in 2002, the majority of Northeastern states¹⁰² espoused the “Clean Cars Program”, which dictated a 30% reduction in GHG emissions from vehicles by 2016.¹⁰³ In 2007, New Jersey approved the Global Warming Response Act requiring emissions reductions to 1990 levels by 2020 and to 80% below 2006 levels by 2050.¹⁰⁴ New Hampshire published its Climate Action Plan in 2009 with recommendations to reduce GHG emissions, increase environmental protection, and provide measures for climate change adaptation, among others.¹⁰⁵ In September of 2016, Massachusetts Governor Charlie Baker signed Executive Order 569, “Establishing an Integrated Climate Change Strategy for the Commonwealth”, which ordered the creation of a Climate Adaptation Plan within two years and mandated stricter controls of GHG emissions.¹⁰⁶

There exist various explanations for states’ initiative in the fight against climate change. The first is that, as previously mentioned, overall federal climate inaction has left a vacuum, providing states a great deal of room to act.¹⁰⁷ The flexibility often granted by federal and EPA legislation has allowed states the liberty to develop their own, more stringent regulation.¹⁰⁸ Another reason is that most “oversight, implementation, and enforcement of environmental regulation” is the responsibility of states, even if originated at the federal level;¹⁰⁹ in other words, since states will almost necessarily be in charge of implementation, it stands to reason that they should be writing the regulation. Additionally, states have found that taking climate action can be advantageous: from a marketing standpoint, they can posit themselves as a national leader in climate policy; from an economic standpoint, reducing GHG emissions can be considered a fiscally-responsible decision; and from a standpoint considering all-around well-being, climate policies can improve the quality of natural resources such as water and air, reduce traffic, and improve energy

95 42 U.S. Code § 7543: State Standards (2011).

96 Vehicle emissions regulations can be found here: <https://www.epa.gov/regulations-emissions-vehicles-and-engines>

97 42 U.S. Code § 7543, *op. cit.*

98 Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington.

99 LUDWISZEWSKI, R. B. and HAAKE, C. H., *op. cit.*, footnote 4, p. 666.

100 KERTH, R. and SARGENT, R. *A Record of Leadership: How Northeastern States are Cutting Global Warming Pollution and Building a Clean Economy* [online]. Environment Massachusetts Research & Policy Center. April 2012, p. 1 [Consulted 15 January 2019]. Retrieved from: https://environmentrhodeislandcenter.org/sites/environment/files/reports/RGGI_EnvironmentRI.pdf

101 *Ibid.*, p. 1.

102 With the exception of New Hampshire and Delaware.

103 KERTH, *op. cit.*, footnote 100, p. 10.

104 Public Law 2007, Chapter 112: Global Warming Response Act. State of New Jersey, 6 July 2007.

105 NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES. The New Hampshire Climate Action Plan: A Plan for New Hampshire’s Energy, Environmental and Economic Development Future [online]. March 2009, 1-68 [Consulted 10 February 2019]. Retrieved from: https://www.des.nh.gov/organization/divisions/air/tsb/tps/climate/action_plan/documents/nhcap_final.pdf

106 BAKER, C. Executive Order 569: Establishing an Integrated Climate Change Strategy for the Commonwealth. *Mass.gov* [online]. 16 September 2016 [Consulted 11 February 2019]. Retrieved from: <https://www.mass.gov/executive-orders/no-569-establishing-an-integrated-climate-change-strategy-for-the-commonwealth>

107 RABE, B. G. States on Steroids: The Intergovernmental Odyssey of American Climate Policy. *Review of Policy Research* [online]. 2008, Vol. 25 (2), p. 106. DOI 10.1111/j.1541-1338.2007.00314.x 106; MCKINSTRY JR., R. B., *op. cit.*, footnote 11, p. 15.

108 *Ibid.*, p. 15.

109 RABE, B. G., *op. cit.*, footnote 107, p. 107.

security.¹¹⁰ Finally, states, rather than the federal government, are the ones who feel the effects of climate change – many have already had to deal with consequences such as “violent storms, forest fires, species migration, prolonged droughts, or changing vectors of disease transmission”.¹¹¹ It is logical, therefore, that they should be the first ones to act.

2.3. National Commitments by the Private Sector

Over the past few decades, there has been a growing trend of climate action not only at the state level, but also in the private sector. Many companies are motivated to protect the environment by a desire to be sustainability leaders in their industry, hoping for gains in marketing, public relations and recruitment.¹¹² Others are called to action on moral grounds.¹¹³ Part of this sense of obligation may come from a need to compensate for past abuses, as the private sector has been one of the largest contributors to the problem of global climate change.¹¹⁴ A 2017 study showed that 90 of the companies that emit the highest levels of carbon have been responsible for over 55% of the rise in atmospheric carbon dioxide since 1880 and for 40-50% of the rise in global temperatures in the same time period.¹¹⁵ One of these top 90, ExxonMobil, made headlines in 2015 when news surfaced that the company had known about the role of humans in global climate change since 1981 but spent 27 years – and over \$30 million – sponsoring anti-climate change research.¹¹⁶

A large degree of action at the private level stems from Corporate Social Responsibility (CSR) efforts. The United Nations Industrial Development Organization provides the following definition of CSR:

Corporate Social Responsibility is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. CSR is generally understood as being the way through which a company achieves a balance of economic, environmental and social imperatives, while at the same time addressing the expectations of shareholders and stakeholders.¹¹⁷

The ethical obligations imposed by society determine a company's CSR policies. As mentioned, action against global climate change is increasingly posited as a matter of morality.¹¹⁸ Similarly, the concept of sustainability, which includes climate protection, is becoming more attractive to businesses based on the principle that “environmental, social, and financial performance” can be positively correlated (see Figure 1).¹¹⁹ M. W. Allen and C.A. Craig stress that CSR is an important part of a company's approach to combating climate change, but that corporate social responsibility action alone is not enough – it should be part of a broader, coordinated effort between companies and sectors to protect the climate.¹²⁰

One of the first such efforts mobilizing support for climate change action in the private sector was the Pew Center on Global Climate Change.¹²¹ It was founded in 1998 as an environmental policy think tank in conjunction with the Business Environmental Leadership Council, which works alongside some of

110 *Ibid.*, p. 107; RAMSEUR, J. L., *op. cit.*, footnote 1, p. CRS-2.

111 RABE, B. G., *op. cit.*, footnote 107, p. 107.

112 MCKINSTRY JR., R. B., *op. cit.*, footnote 11, p. 59.

113 *Ibid.*, p. 59.

114 ALLEN, M. W. and CRAIG, C. A. Rethinking Corporate Social Responsibility in the Age of Climate Change: A Communication Perspective. *International Journal of Corporate Social Responsibility* [online]. 2016, Vol. 1 (1), p. 3 [Consulted 20 February 2019]. DOI 10.1186/s40991-016-0002-8

115 EKWURZEL *et al.* The Rise in Global Atmospheric CO₂, Surface Temperature, and Sea Level from Emissions Traced to Major Carbon Producers. *Climate Change* [online]. 2017, Vol. 144, 579-590 [Consulted 25 February 2019]. DOI 10.1007/s10584-017-1978-0

116 GOLDENBERG, S. Exxon Knew of Climate Change in 1981, Email Says – But it Funded Deniers for 27 More Years. *The Guardian* [online]. 8 July 2015 [Consulted 1 March 2019]. Retrieved from: <https://www.theguardian.com/environment/2015/jul/08/exxon-climate-change-1981-climate-denier-funding>

117 What is CSR? [online]. *United Nations Industrial Development Organization*, 2019 [Consulted 25 February 2019]. Retrieved from: <https://www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr>

118 ALLEN, M. W. and CRAIG, C. A., *op. cit.*, footnote 114, p. 4.

119 *Ibid.*, p. 4.

120 *Ibid.*, p. 3.

121 In 2011, the Pew Center on Global Climate Change became the Center for Climate and Energy Solutions (C2ES).

the largest companies to garner private support for climate policies. Today, it ranks as one of the best environmental policy think tanks in the world, and the Council, which originally was comprised of 13 companies, now has 33, making it the “largest U.S.-based group of companies devoted solely to addressing climate change”.¹²²

In 2002, the EPA created Climate Leaders, an emissions-reduction program joining businesses and the government which offers advice to companies taking steps to develop climate action plans.¹²³ In 2010, the program was phased out, and in 2011, the EPA replaced it with the Center for Corporate Climate Leadership, which brings together climate-oriented companies and encourages emissions-reduction plans and other climate-related innovation.¹²⁴

Business Roundtable, an association of Chief Executive Officers (CEOs) of major American businesses, created the Climate RESOLVE program in 2003 in order to encourage its members to combat climate change, offering workshops, one-on-one counseling, and learning sessions for members.¹²⁵ By 2004, 70% of Business Roundtable members had taken climate-oriented action.¹²⁶

3. History of International Commitments to Combat Climate Change

3.1. International Commitments by the Federal Government

As it developed environmental regulations for Americans and American companies, the United States also played an important role in the promotion of global cooperation on environmental issues.¹²⁷ The U.S. established a “reputation for global environmental leadership” in the 1970s as it worked to garner international commitment to its own national environmental policies, in areas such as ozone protection.¹²⁸ A key example of initial U.S. leadership in global environmental cooperation is the United Nations (UN) Conference on the Human Environment of 1972, the first significant congress regarding international efforts to protect the environment.¹²⁹ The United States pledged up to \$40 million over five years to a voluntary Environment Fund to support environmental protection programs, a contribution which greatly exceeded that of any other nation.¹³⁰

The country showed similar initiative in the creation of the Montreal Protocol. Signed in 1987 by 27 countries and ratified by the U.S. in 1988, the Protocol is an international commitment to the protection of the stratospheric ozone layer by means of the elimination of ozone-depleting substances (ODS).¹³¹ The United States, notably, “has been a leader within the Protocol throughout its existence and has taken

122 About C2ES [online]. *Center for Climate and Energy Solutions* [Consulted 1 March 2019]. Retrieved from: <https://www.c2es.org/about/>

123 EPA Climate Leaders [online]. *Carbon Offset Research & Education*, January 2011 [Consulted 1 March 2019]. Retrieved from: <http://co2offsetresearch.org/policy/ClimateLeaders.html>

124 About the Center for Corporate Climate Leadership [online]. *United States Environmental Protection Agency*, 26 August 2016 [Consulted 1 March 2019]. Retrieved from: <https://www.epa.gov/climateleadership/about-center-corporate-climate-leadership>

125 Climate RESOLVE: Coming Together for the Environment [online]. *Business Roundtable* [Consulted 1 March 2019]. Retrieved from: <https://www.businessroundtable.org/archive/resources/climate-resolve-coming-together-for-the-environment>

126 GREENBIZ EDITORS. 70% of Business Roundtable Members Take Voluntary Action on Climate Change [online]. *GreenBiz*, 21 September 2004 [Consulted 3 March 2019]. Retrieved from: <https://www.greenbiz.com/news/2004/09/21/70-business-roundtable-members-take-voluntary-action-climate-change>

127 FALKNER, R., loc. cit., footnote 3.

128 BUSBY, J. W., loc. cit., footnote 3.

129 United Nations Conference on the Human Environment (Stockholm Conference) [online]. *Sustainable Development Goals Knowledge Platform* [Consulted 10 March 2019]. Retrieved from: <https://sustainabledevelopment.un.org/milestones/humanenvironment>

130 The offer made was conditioned “on a matching basis”. *Report of the United Nations Conference on the Human Environment* [online]. New York: United Nations, 1973, p. 62 [Consulted 10 March 2019]. Retrieved from: https://www.un.org/ga/search/view_doc.asp?symbol=A/CONF.48/14/REV.1

131 The Montreal Protocol on Substances that Deplete the Ozone Layer [online]. *U.S. Department of State*, 11 February 2019 [Consulted 4 March 2019]. Retrieved from: <https://www.state.gov/e/oes/eqt/chemicalpollution/83007.htm>; A Montreal Protocol on Substances that Deplete the Ozone Layer [online]. *United Nations Treaty Collection*, 16 September 1987 [Consulted 4 March 2019]. Retrieved from: https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-2-a&chapter=27&clang=en

strong domestic action to phase out the production and consumption of ODS such as chlorofluorocarbons (CFCs) and halons”.¹³²

In 1988, growing global environmental concerns led to the formation of the Intergovernmental Panel on Climate Change by the United Nations Environment Program and the World Meteorological Organization.¹³³ Founded by UN General Assembly Resolution 43/53, its objective is to “provide internationally coordinated scientific assessments of the magnitude, timing and potential environmental and socio-economic impact of climate change and realistic response strategies”.¹³⁴ Since its creation, it has released five Assessment Reports, considered “the most comprehensive scientific reports about climate change produced worldwide”, which have been incorporated into international policies regarding climate change.¹³⁵ The United States’ support, specifically in terms of the research and scientific knowledge it contributed, was fundamental to the creation of the IPCC.¹³⁶

Four years later, in 1992, the United Nations Conference on Environment and Development (informally called the “Earth Summit”) was held in Rio de Janeiro. In what would be the first international policy on climate change, the United Nations Framework Convention on Climate Change (UNFCCC) was signed by 158 countries,¹³⁷ including the United States. The Framework Convention has since been ratified by 197 nations,¹³⁸ entering into force in 1994.¹³⁹ Although the United States initially seemed willing to be a leader in the process, it quickly proved reticent to taking concrete action:¹⁴⁰ after ratifying the UNFCCC, the White House¹⁴¹ expressed opposition to various proposals discussed at the Summit, such as targets for carbon emission reduction, a wildlife protection treaty, and increased financial support from the United States.¹⁴²

The Convention establishes as its primary objective the “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system” but emphasizes this must be done “within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner”.¹⁴³ It also establishes various principles which should guide the actions of the signatories, including the idea that “developed countries”¹⁴⁴ should be at the forefront of the fight against climate change, adopting national climate change policies in order to return to 1990 levels of emissions of greenhouse gases.¹⁴⁵ There is debate regarding the binding nature of the Convention, specifically for the United States:¹⁴⁶ “Although many take the position that the Framework

132 “The Montreal Protocol...”, loc. cit., footnote 131.

133 VILLAR EZCURRA, M., loc. cit., footnote 5.

134 UN General Assembly Resolution 43/53, Protection of Global Climate for Present and Future Generations of Mankind. A/RES/43/53 (6 December 1988), p. 134.

135 *Ibid.*, p. 134.

136 AGRAWALA, S., loc. cit., footnote 5.

137 United Nations Framework Convention on Climate Change [online]. *United Nations Treaty Collection*, 9 May 1992 [Consulted 20 December 2019]. Retrieved from: https://treaties.un.org/pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XXVII-7&chapter=27&Temp=mtdsg3&clang=_en

138 In the United States, Congress ratified the Convention in October 1992, just four months after it was signed.

139 “United Nations Framework Convention...”, loc. cit., footnote 131.

140 MCKINSTRY JR., R. B., *op. cit.*, footnote 11, p. 17.

141 Under George H.W. Bush.

142 LEWIS, P. U.S. at the Earth Summit: Isolated and Challenged [online]. *The New York Times*, 10 June 1992 [Consulted 12 March 2019]. Retrieved from: <https://www.nytimes.com/1992/06/10/world/us-at-the-earth-summit-isolated-and-challenged.html>; WINES, M. The Earth Summit, Bush and Rio; President Has an Uncomfortable New Role in Taking Hard Line at the Earth Summit [online]. *The New York Times*, 11 June 1992 [Consulted 12 March 2019]. Retrieved from: <https://www.nytimes.com/1992/06/11/world/earth-summitbush-rio-president-has-uncomfortable-new-role-taking-hard-line-earth.html>

143 UNITED NATIONS. *United Nations Framework Convention on Climate Change* [online]. 1992, Art. 2 [Consulted 15 March 2019]. Retrieved from: <https://unfccc.int/resource/docs/convkp/conveng.pdf>

144 The terms “developed countries” and “developing countries”, while used in the UNFCCC, will henceforth be referred to as “Northern countries” or “the Global North” and “Southern countries” or “the Global South”, respectively, in keeping with currently-accepted terminology.

145 UNITED NATIONS, “United Nations Framework Convention...”, *op. cit.*, footnote 143, Art. 3.1.

146 VILLAR EZCURRA, M., loc. cit., footnote 5.

Convention is largely aspirational, it includes many provisions which can be read to create binding obligations, particularly if read in conjunction with other requirements of United States law”.¹⁴⁷

This lack of obligation was amended in 1997 with the creation of the Kyoto Protocol, a legally-binding document created by the parties to the Framework Convention which outlined, in specific terms, the reductions needed to be made by Northern countries and the steps that should be taken to make those reductions.¹⁴⁸ The Protocol required, for example, that Northern countries reduced GHG emissions “by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012”¹⁴⁹ and that they had made “demonstrable progress” by 2005.¹⁵⁰ U.S. reticence to climate action once again prevailed: although President Clinton signed the Protocol in 1998, it was never ratified by the Senate¹⁵¹ and, therefore, has never been a legal obligation for the United States.¹⁵² It is important to note that the requirements in the U.S. for ratifying international treaties are deliberately stringent and that there is an important minority who believe that international treaty commitments should be rejected on “philosophical grounds”.¹⁵³

Congress’ concern about the potential negative economic consequences of such climate action – the primary obstacle to the ratification of the Kyoto Protocol ¹⁵⁴ – has also impeded the United States from engaging in other commitments to combat climate change, such as the UNFCCC 2001 negotiations in Bonn, Germany, and from fulfilling certain targets set by the Framework Convention.¹⁵⁵

The third of the treaties agreed upon by the Parties to the United Nations Framework Convention on Climate Change, the Paris Agreement, was signed on December 12, 2015. The Agreement focuses on a limit for global temperature increases: less than 2 degrees Celsius higher than pre-industrial temperatures, which works towards the goal of keeping global warming below 1.5 degrees Celsius.¹⁵⁶ It also underlines the need for all countries to work together – with special emphasis on support for the Global South and for the most vulnerable countries¹⁵⁷ – through the concept of “nationally determined contributions” (NDCs):

Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.

Each Party’s successive nationally determined contribution will represent a progression beyond the Party’s then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.¹⁵⁸

An important part of the Paris Agreement is a financing tool known as the Green Climate Fund (GFC). Established in 2010 by the parties to the UNFCCC, the GFC was designed to economically assist with the

147 MCKINSTRY JR., R. B., *op. cit.*, footnote 11, p. 17.

148 *Ibid.*, p. 17.

149 The United States, according to the Protocol, should have reduced GHG emissions to 7% below 1990 levels by 2012.

150 UNITED NATIONS. *Kyoto Protocol to the United Nations Framework Convention on Climate Change* [online]. 1998, Art. 3.2 [Consulted 20 December 2018]. Retrieved from: <https://unfccc.int/resource/docs/convkp/kpeng.pdf>

151 In fact, the Senate was so strongly opposed to ratifying the Kyoto Protocol that it unanimously approved Resolution 98, which prohibits the United States from signing any protocol related to the UNFCCC based on its inequity – in imposing obligations for Northern countries but not for the South – and on the idea that it would “result in serious harm to the U.S. economy”. S. Res. 98: A resolution expressing the sense of the Senate regarding the conditions for the United States becoming a signatory to any international agreement on greenhouse gas emissions under the United Nations Framework Convention on Climate Change. 12 June 1997.

152 VILLAR EZCURRA, M., *op. cit.*, footnote 5, p. 23; LUDWISZEWSKI, R. B. and HAAKE, C. H., *op. cit.*, footnote 4, p. 684.; MCKINSTRY JR., R. B., *op. cit.*, footnote 11, p. 17.

153 BUSBY, J. W., *op. cit.*, footnote 3, p. 248.

154 S. Res. 98, loc. cit., footnote 151.

155 *Ibid.*

156 UNITED NATIONS. *Paris Agreement* [online]. 2015, Art. 2.1.a [Consulted 15 March 2019]. Retrieved from: https://unfccc.int/sites/default/files/english_paris_agreement.pdf

157 The term “most vulnerable countries” refers to those countries which are “particularly vulnerable to the adverse effects of climate change”, as noted in the Paris Agreement.

158 UNITED NATIONS, “*Paris Agreement*”, *op. cit.*, footnote 156, Art. 4.2 and 4.3.

Global South's efforts to address climate change, both through "mitigation and adaptation".¹⁵⁹ The Fund is vital for the financing of the Paris Agreement, specifically for Least Developed Countries (LDCs), Small Island Developing States (SIDS), and African States.¹⁶⁰ The United States pledged USD \$3 billion to the GFC, double the amount pledged by Japan, the second-highest contributor.¹⁶¹ To date, the U.S. has only given one third of the contribution it promised.¹⁶²

In 2015, the United States, under President Barack Obama, was one of the first Parties to the UNFCCC to submit an Intended Nationally Determined Contribution (INDC) for greenhouse gas emissions reductions, setting a target of 26-28% below 2005 emissions no later than 2025.¹⁶³ On April 22, 2016, President Obama signed the Paris Agreement, and it was ratified by Congress on September 3, 2016.¹⁶⁴

As the Parties to the UNFCCC were negotiating the Paris Agreement, members of the United Nations were simultaneously developing a global sustainability agenda. The agenda builds on the poverty-reduction work of the Millennium Development Goals, established in 2000, and broadens efforts to include a focus on sustainability and a more wholistic idea of development.¹⁶⁵ Beginning in 2013, a United Nations Open Working Group designed a proposed list of Sustainable Development Goals (SDGs), which were adopted as part of the 2030 Agenda for Sustainable Development in September of 2015.¹⁶⁶ Of the 17 Sustainable Development Goals established, five concern the environment: Goal 7, Affordable and Clean Energy; Goal 12, Responsible Consumption and Production; Goal 13, Climate Action; Goal 14, Life Below Water; and Goal 15, Life on Land.¹⁶⁷ President Obama, on behalf of the United States, quickly expressed his support for the SDGs: "We commit ourselves to new Sustainable Development Goals...we recognize that our most basic bond – our common humanity – compels us to act" (27 September 2015).¹⁶⁸

Of all U.S. presidents, Obama's commitment to climate efforts was the most notable. Nationally, his executive orders, incentives for renewables, and legislation – specifically, the Clean Power Plan – represented a movement towards greater national engagement with the issue of climate change. Internationally, his commitment on behalf of the United States to the Paris Agreement and to the SDGs demonstrated America's commitment to climate efforts.

Joshua W. Busby, however, argues that the United States has been, in general, "an inconsistent leader in global environmental diplomacy," suggesting that the country has been distancing itself from global leadership in climate action since the 1990s.¹⁶⁹ The author attributes this decline in leadership to a series of factors. The first is the evolution of national power dynamics: as environmental groups lost power, business groups gained support and political backing due to Americans' "regulatory fatigue" and to a rise in complacency from those who felt sufficient environmental protection had been instated.¹⁷⁰ The second factor is the increasing polarization of environmental issues: over time, protection of the environment has become associated with the Democratic party, and skepticism of global climate change

159 Who We Are: About the Fund [online]. *Green Climate Fund* [Consulted 19 April 2019]. Retrieved from: <https://www.greenclimate.fund/who-we-are/about-the-fund>

160 *Ibid.*

161 Status of Pledges and Contributions made to the Green Climate Fund [online]. *Green Climate Fund*, 24 January 2019 [Consulted 15 March 2019]. Retrieved from: https://www.greenclimate.fund/documents/20182/24868/Status_of_Pledges.pdf/cef538d3-2987-4659-8c7c-5566ed6afd19

162 *Ibid.*

163 INDCs as Communicated by Parties [online]. *INDC* [Consulted 15 March 2019]. Retrieved from: <https://www4.unfccc.int/sites/submissions/indc/Submission%20Pages/submissions.aspx>

164 Paris Agreement [online]. *United Nations Treaty Collection*, 12 December 2015 [Consulted 12 March 2019]. Retrieved from: https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=_en

165 Sustainable Development Goals [online]. *Sustainable Development Goals Knowledge Platform* [Consulted 20 March 2019]. Retrieved from: <https://sustainabledevelopment.un.org/?menu=1300>

166 *Ibid.*

167 *Ibid.*

168 Taking a Holistic View of the Sustainable Development Goals [online]. *USAID*, 20 September 2016 [Consulted 20 March 2019]. Retrieved from: <https://www.usaid.gov/GlobalGoals>

169 BUSBY, J. W., *op. cit.*, footnote 3, p. 245.

170 *Ibid.*, p. 251.

with the Republicans.¹⁷¹ As Busby notes, however, “Democrats are rarely politically powerful enough or united enough to push through ambitious environmental goals.”¹⁷² The final reason for the U.S.’s retreat from a position of environmental leadership is the great diversity in environmental policy between states, complicating the formation of a cohesive national policy and, consequently, the adoption of a stance in the international arena.¹⁷³ On the other hand, the flexibility of a federal system which allows for variation between states has permitted individual states to take initiative in combatting climate change at an international level.

3.2. International Commitments by States

The Coalition of Northeastern Governors and the Eastern Canadian Premiers (NEG/ECP)¹⁷⁴ have worked together since 1973 in order to “address their shared interests across the border”.¹⁷⁵ In July, 2000, at the NEG/ECP Annual Conference, members approved Resolution 25-9, the “Resolution Concerning Global Warming and its Impacts on the Environment”, recognizing the threats of global climate change and acknowledging human responsibility.¹⁷⁶ In 2001, the NEG/ECP released their Climate Change Action Plan, which is designed to reduce the concentration of greenhouse gases via state and local commitments as well as to implement adaptation measures in response to the effects of climate change.¹⁷⁷

In 2007, the Western Climate Initiative (WCI) was formed by Arizona, California, New Mexico, Oregon, and Washington with the purpose of establishing a standardized, region-wide emissions-reduction target: 15% below 2005 CO₂ levels by 2020.¹⁷⁸ Between 2007 and 2008, the WCI became an international partnership, including 4 Canadian provinces,¹⁷⁹ as well as Montana and Utah.¹⁸⁰ In 2010, the partners announced their intention to create a regional cap and trade program, along with other measures, to meet their emissions reduction target.¹⁸¹ In 2011, they created a non-profit organization by the same name, designed to aid with the “implementation of state and provincial greenhouse gas emissions trading programs”.¹⁸² As of August, 2018, however, only California and Quebec remained in the partnership.¹⁸³

Similar to the WCI, the Midwestern Greenhouse Gas Reduction Accord was established in 2007 by six Midwestern states and one Canadian province.¹⁸⁴ Its aim is also to establish standardized, regional emissions reduction targets, as well as to develop a cap and trade program for the region.¹⁸⁵ A plan was

171 DANIELS, D. P. et al. Public Opinion on Environmental Policy in the United States. In: KRAFT, M. and KAMIENIECKI, S. (Eds.), *Handbook of U.S. Environmental Policy* [online]. New York: Oxford University Press [2012]. p. 472.

172 BUSBY, J. W., *op. cit.*, footnote 3, p. 252.

173 *Ibid.*, p. 252.

174 The six New England states are Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; the five Eastern Canadian provinces are New Brunswick, Newfoundland and Labrador, Nova Scotia, Prince Edward Island, and Québec.

175 NEG/ECP: About the New England Governors and Eastern Canadian Premiers [online]. *Coalition of Northeastern Governors*, 2019 [Consulted 20 March 2019]. Retrieved from: <https://www.coneg.org/neg-ecp/>

176 NEG/ECP. Resolution 25-9: Resolution Concerning Global Warming and its Impacts on the Environment [online]. 18 July 2000 [Consulted 20 March 2019]. Retrieved from: <https://www.releases.gov.nl.ca/releases/2000/exec/0718n08.htm>

177 NEW ENGLAND GOVERNORS/EASTERN CANADIAN PREMIERS. *Climate Change Action Plan* [online]. August 2001 [Consulted 20 March 2019]. Retrieved from: http://www.gov.pe.ca/photos/original/eef_climate2001.pdf

178 History [online]. *Western Climate Initiative* [Consulted 20 March 2019]. Retrieved from: <http://www.westernclimateinitiative.org/history>; *Carbon Offset Research & Education* [Consulted 20 March 2019]. Retrieved from: <http://www.co2offsetresearch.org/policy/WCI.html>

179 The four Canadian provinces are British Columbia, Manitoba, Ontario, and Quebec.

180 “History”, *Western Climate Initiative*, loc. cit., footnote 178.

181 “Western Climate Initiative”, loc. cit., footnote 171.

182 “History”, *Western Climate Initiative*, loc. cit., footnote 171.

183 ROEDNER SUTTER, K. Western Climate Initiative: Stability reigns after Ontario exit as all current and future allowances sell [online]. *Environmental Defense Fund*, 21 August 2018 [Consulted 20 March 2019]. Retrieved from: <http://blogs.edf.org/climate411/2018/08/21/western-climate-initiative-stability-reigns-after-ontario-exit-as-all-current-and-future-allowances-sell/>

184 Iowa, Illinois, Kansas, Michigan, Minnesota, Wisconsin, and Manitoba. Midwestern Greenhouse Gas Reduction Accord [online]. *Land Trust Alliance*, 2019 [Consulted 22 March 2019]. Retrieved from: <https://climatechange.lta.org/midwestern-accord/>

185 *Ibid.*

presented in 2010 for the implementation of the cap and trade program by 2012, but there has been no further progress.¹⁸⁶

3.3. International Commitments by the Private Sector

While states' international involvement in environmental protection has primarily centered on regional cooperation and has had limited success, this is not true of international action by the private sector. The UN Global Compact is one such example of private companies' efforts to establish transcontinental environmental protection. Branded as "the world's largest corporate sustainability initiative", the Global Compact is a worldwide initiative rooted in the commitment of business leaders to sustainability.¹⁸⁷ Created in 1999, it now includes over 13,000 businesses from more than 160 countries; 540 of these companies are American.¹⁸⁸

The UN Global Compact supports businesses in their efforts to abide by the Compact's Ten Principles and, as of 2015, to meet the UN's Sustainable Development Goals.¹⁸⁹ Three of the Principles are related to environmental protections, and the Global Compact encourages companies to "actively address environmental risks and opportunities" and has "major efforts underway with business in the areas of climate, water and food".¹⁹⁰ The U.S. has proven to be a leader in the global initiative through its creation of the Foundation for the Global Compact, a non-profit based in the United States which is dedicated exclusively to assisting the work of the Global Compact.¹⁹¹

It is important to note the importance of private business in the implementation of the Sustainable Development Goals: for the first time, the United Nations has highlighted the role of the private sector as a development actor.¹⁹² Businesses are considered essential collaborators which are fundamental to the success of the SDGs, and the UN has encouraged governments to work with private companies as they elaborate their development strategies.¹⁹³

186 *Ibid.*

187 Who we are [online]. *United Nations Global Compact* [Consulted 22 March 2019]. Retrieved from: <https://www.unglobalcompact.org/what-is-gc>

188 FERNÁNDEZ LIESA, C. R. Transformaciones del Derecho Internacional por los Objetivos de Desarrollo Sostenible. In: C. R. FERNÁNDEZ LIESA and A. MANERO SALVADOR, Directors. *Análisis y Comentarios de los Objetivos de Desarrollo Sostenible de las Naciones Unidas*. Pamplona, Spain: Editorial Aranzadi, 2017, p. 58. ISBN 9788491772897; *Participation* [online] [Consulted 22 March 2019]. Retrieved from: <https://www.unglobalcompact.org/participation>

189 The Ten Principles of the UN Global Compact establish operational guidelines for businesses in human rights, labor, environment, and anti-corruption. For more information, see <https://www.unglobalcompact.org/what-is-gc/mission/principles>

190 Environment [online]. *United Nations Global Compact* [Consulted 22 March 2019]. Retrieved from: <https://www.unglobalcompact.org/what-is-gc/our-work/environment>

191 The Foundation for the Global Compact [online]. *United Nations Global Compact* [Consulted 22 March 2019]. Retrieved from: <https://www.unglobalcompact.org/about/foundation>

192 RODRÍGUEZ VINDEL, V. Los Objetivos de Desarrollo Sostenible de Naciones Unidas. In: C.R. FERNÁNDEZ LIESA and A. MANERO SALVADOR, Directors. *Análisis y Comentarios de los Objetivos de Desarrollo Sostenible de las Naciones Unidas*. Pamplona, Spain: Editorial Aranzadi, 2017, p. 77. ISBN 9788491772897.

193 *Ibid.*, p. 77.

Chapter 2. Donald Trump's Climate Policy

Donald Trump's promises to roll back environmental regulation played an important role in his presidential campaign. Climate change has been, ideologically, a matter of great concern for Trump's political base, and, therefore, for his administration,¹⁹⁴ although it has never articulated an official climate change policy. Since his investiture, many analysts have claimed that the President lacks cohesive policies in almost all areas of his governance, with the exception of the environment, for which his policy has been, "organized, strategic, and in many respects quite effective".¹⁹⁵ According to one author, "Trump's position on environmental protection has been consistent: he wants far less of it".¹⁹⁶ In line with a campaign centered around the idea of "America first", Trump has taken measures to bolster the economy while showing little regard for the environment, seemingly based on the notion of mankind's entitlement to nature's resources.¹⁹⁷ The "economic nationalism" he promotes is inherently incompatible with multilateral agreements, such as those regarding climate change, which result in international commitments for the United States – in Trump's view, these commitments are an infringement of national sovereignty.¹⁹⁸

Whereas former president Obama had prioritized the fight against climate change and the promotion of renewable energies, Trump has focused on energy security, another component of his return to the isolationism and nationalism that have speckled U.S. history.¹⁹⁹ This focus is apparent in the headline of the *Energy & Environment* page on the White House website:

Americans have long been told that our country is running out of energy, but we now know that is wrong. America's energy revolution has produced affordable, reliable energy for consumers along with stable, high-paying jobs for small businesses – all while dropping carbon emissions to their lowest level in 25 years. American energy policy must balance environmental protection with economic growth in order to encourage innovation, discovery, and prosperity.²⁰⁰

As of June 2019, Trump is only halfway into his first term, but his environmental record over the past two years is lengthy. Most of his action concerning global climate change can be classified into nine different themes: nomination choices; fossil fuel infatuation; backing away from global leadership; EPA restructuring; internet censoring; deregulation; climate change denial; preference for executive action; and environmental legislation.

1. Policy Themes

1.1. Nomination Choices

Although it is every president's prerogative to choose cabinet members as they see fit, Trump has received a great deal of backlash for many of his choices. The backlash has been especially notable surrounding the nominations he has made for positions related to energy and the environment. Trump has surrounded himself with advisors who not only lack any background in climate or health advocacy but are also connected to the fossil fuel sector.²⁰¹ Many of those not directly related to environmental oversight are also

194 JOTZO, E., DEPLEDGE, J., and WINKLER, H. US and International Climate Policy under President Trump. *Climate Policy* [online]. 2018, Vol. 18 (7). p. 813 [Consulted 25 May 2019]. DOI: 10.1080/14693062.2018.1490051

195 KONISKY, D. M. and WOODS, N. D., "Environmental federalism...", *op. cit.*, footnote 14, p. 363.

196 KRUPP, F. Trump and the Environment: What His Plans Would Do. *Foreign Affairs* [online]. 2017, July-August, Vol. 96 (4). p. 73 [Consulted 20 May 2019]. Retrieved from: <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip&db=bth&AN=123456354&lang=es&site=ehost-live>

197 JOTZO, E., DEPLEDGE, J., and WINKLER, H., *loc. cit.*, footnote 194.

198 *Ibid.*, p. 813.

199 *Ibid.*, p. 813.

200 Energy & Environment [online]. *The White House* [Consulted 20 May 2019]. Retrieved from: <https://www.whitehouse.gov/issues/energy-environment/>

201 KRUPP, F., *op. cit.*, footnote 196, p. 74.

notorious “deniers” of global climate change, and the few who seemed to be potential climate “allies” have since been relieved of their duties. Laura Martín, Director of Fundación Renovables,²⁰² noted the apparent overrepresentation of climate change denial in the Trump administration, given its relatively small base in the broader American public.²⁰³ What follows is a list of Trump’s most prominent anti-environment nominations, in chronological order.

– **Steve Bannon, Chief Strategist (January – August 2017)**

Prior to his nomination, Bannon had been Executive Chairman of *Breitbart News*, a far-right online news and commentary source which has promoted theories that climate change is a hoax and has received substantial financial support from individuals who deny climate change.²⁰⁴ Bannon himself has called alternative energy “madness” and has cited a fake *TIME* magazine cover about research showing the earth was cooling as evidence against global climate change.²⁰⁵

– **Mick Mulvaney, Office of Management and Budget Director (February 2017 – December 2018)**

Mulvaney, who has been serving as Acting White House Chief of Staff since January of 2019, defended Trump’s climate-related budget cuts during his time in the Office of Management and Budget, saying that the President would not be dedicating any more funding to the fight against climate change, given that the administration “consider[s] that to be a waste of [taxpayer] money”.²⁰⁶

– **Scott Pruitt, EPA Administrator (February 2017 – July 2018)**

Pruitt is one of Trump’s most controversial nominations. In his time as Oklahoma Attorney General before entering the EPA, Pruitt developed close ties with the fossil fuel industry, receiving donations, signing letters to the EPA drafted for him by industry lobbyists, and even suing the Agency on the industry’s behalf – 14 times.²⁰⁷ He was a leader of the Republican Attorneys General Association’s “strikeforce” movement – also supported by fossil fuel companies – to oppose Obama-era initiatives designed to protect the environment.²⁰⁸ During his tenure in the EPA, the agency approved 24 regulatory rollbacks, and Pruitt attempted to undo a series of environmental protection measures created by Obama, including the Clean Power Plan and 2022-2025 fuel emissions standards.²⁰⁹ What may be most notable, though is the influence he is purported to have had on Trump’s decision to withdraw the United States from the Paris Agreement.²¹⁰

– **Ryan Zinke, Interior Secretary (March 2017 – present)**

Under Zinke’s management, the term “climate change” was deleted from the Department of the Interior’s five-year Strategic Plan and appears only sparsely on their website.²¹¹ In the summer of 2018, Zinke alleged that it was environmentalists who were, albeit indirectly, responsible for the devastating

202 A renewable-energy-focused think tank based in Spain.

203 VALLEJO, C. Donald Trump y el Medio Ambiente. *Política Exterior* [online]. Summer 2017, Vol. 81. [Consulted 21 April 2019]. Retrieved from: <https://www.politicaexterior.com/articulos/economia-exterior/donald-trump-y-el-medio-ambiente/>

204 LAVELLE, M. Steve Bannon’s Trip from Climate Conspiracy Theorist to Trump’s White House [online]. *Inside Climate News*, 16 November 2016 [Consulted 16 April 2019]. Retrieved from: <https://insideclimatenews.org/news/16112016/steve-bannon-trump-white-house-climate-conspiracy>

205 *Ibid.*

206 MERICA, D. and MARSH, R. Trump Budget Chief on Climate Change: ‘We Consider That to be a Waste of Your Money’ [online]. *CNN*, 16 March 2017 [Consulted 19 April 2019]. Retrieved from: <https://edition.cnn.com/2017/03/16/politics/donald-trump-budget-cut-epa/index.html>

207 KRUPP, E., *op. cit.*, footnote 196, p. 74.

208 KONISKY, D. M. and WOODS, N. D., “Environmental Federalism...”, *op. cit.*, footnote 14, p. 350.; BERGESON, L. The Trump Administration and Likely Impacts on Environmental Law and Policy. *Environmental Quality Management* [online]. Summer 2017, Vol. 26 (4). p. 99 [Consulted 20 April 2019]. DOI: 10.1002/tqem.21499

209 MENDOLIA, J. and BUSH, D. All of the ways Scott Pruitt changed energy policy [online]. *PBS*, 5 July 2018 [Consulted 12 April 2019]. Retrieved from: <https://www.pbs.org/newshour/nation/all-of-the-ways-embattled-epa-chief-scott-pruitt-has-changed-energy-policy>

210 *Ibid.*

211 PRENTICE-DUNN, J. Faced with dire climate change warnings from his own agency, Interior Secretary Zinke steps on the gas [online]. *Westwise*, 30 November 2018 [Consulted 18 April, 2019]. Retrieved from: <https://medium.com/westwise/faced-with-dire-warnings-on-climate-change-from-his-own-agency-secretary-zinke-steps-on-the-gas-3656554b8aa>

California wildfires, which he claimed had “nothing to do with climate change”.²¹² After the release of the National Climate Assessment, in which his own department participated, Zinke tried to undermine its validity by questioning the competence of the U.S. Geological Survey, whose researchers contributed to the report.²¹³

– **Rick Perry, Secretary of Energy (March 2017 – December 2018)**

During his 2012 presidential campaign, long before being nominated to lead the Department of Energy, Perry had vowed to get rid of the department – a promise he claimed to regret during his confirmation hearing in 2017.²¹⁴ Perry, like Pruitt before him, expressed doubts regarding the role of carbon dioxide in global climate change and even encouraged climate skepticism, alleging that skepticism is a characteristic of a “wise, intellectually engaged person.”²¹⁵

– **Andrew Wheeler, EPA Administrator (July 2018 – present)**

While Wheeler deviates from most of Trump’s picks in his refusal to call climate change a “hoax”, even going so far as to recognize it as a “huge issue that needs to be addressed globally”,²¹⁶ many believe that his political experience and former career as a coal lobbyist will make him “a more effective bureaucratic operator than Pruitt [...] in dismantling regulations.” In his confirmation hearing, Wheeler expressed his intent to continue implementing Trump’s “regulatory reform agenda”; so far, he has primarily worked to weaken carbon standards and mitigation rules.²¹⁷

– **Mike Pompeo, Secretary of State (March 2018 – present)**

During Pompeo’s congressional campaign, he was one of the candidates who received the greatest donations from the oil-rich Koch brothers; later, he positioned himself firmly against environmental measures such as the Paris Agreement, federal support for renewable energy, and the control of greenhouse gas emissions.²¹⁸ In his confirmation hearing, he did concede the veracity of global climate change and admitted the possibility that human action is at least partially responsible.²¹⁹ In May 2019, however, he reversed course, announcing that he does not consider climate change to be among the top five national security priorities for the U.S.²²⁰ Days later, while refusing to include the term “climate change” in the Joint Statement of the Arctic Council, he simultaneously congratulated the Arctic region for the economic opportunities presented by its melting ice, completely ignoring the risks scientists warn are associated with this consequence of climate change.²²¹

212 CHOW, L. Ryan Zinke: Climate Change Has ‘Nothing to Do’ With California Wildfires [online]. *EcoWatch*, 13 August 2018 [Consulted 19 April 2019]. Retrieved from: <https://www.ecowatch.com/zinke-climate-change-wildfires-2595539458.html>

213 PRENTICE-DUNN, loc. cit., footnote 204.

214 ASSOCIATED PRESS. Rick Perry ‘Regrets’ Pledge to Abolish Department he is Now Tapped to Lead [online]. *The Guardian*, 20 January 2017 [Consulted 19 April 2019]. Retrieved from: <https://www.theguardian.com/us-news/2017/jan/19/rick-perry-department-of-energy-abolish-regret>

215 DALY, M. Energy Secretary Rick Perry says carbon emissions not main driver for climate change [online]. *PBS*, 19 June 2017 [Consulted 19 April 2019]. Retrieved from: <https://www.pbs.org/newshour/politics/energy-secretary-rick-perry-says-carbon-emissions-not-main-driver-climate-change>

216 HOLDEN, E. Andrew Wheeler: Trump’s EPA Pick Says Climate Change ‘Not the Greatest Crisis’ [online]. *The Guardian*, 16 January 2019 [Consulted 19 April 2019]. Retrieved from: <https://www.theguardian.com/environment/2019/jan/16/andrew-wheeler-climate-change-trump-epa-hearings>

217 *Ibid.*

218 BEELER, C. Pompeo Nomination Consolidates Climate Skepticism in Trump Administration [online]. *PRI*, 17 April 2018 [Consulted 19 April 2019]. Retrieved from: <https://www.pri.org/stories/2018-04-17/pompeo-nomination-consolidates-climate-skepticism-trump-administration>

219 *Ibid.*

220 ANAPOL, A. Pompeo ‘Can’t Rank’ Climate Change on List of National Security Threats [online]. *The Hill*, 5 May 2019 [Consulted 10 May 2019]. Retrieved from: <https://thehill.com/homenews/administration/442173-pompeo-cant-rank-climate-change-on-list-of-national-security-threats>

221 HANSLER, J. Pompeo: Melting Sea Ice Presents ‘New Opportunities for Trade’ [online]. *CNN*, 7 May 2019, [Consulted 10 May 2019]. Retrieved from <https://edition.cnn.com/2019/05/06/politics/pompeo-sea-ice-arctic-council/index.html>

– **William Happer, Senior Director of National Security Council Office for Emerging Technologies (September 2018 – present)**

Happer's reputation was once built around an esteemed career as a physicist at Princeton, but he has recently garnered a great deal of attention for his denial of climate change: not only does he reject the notion that human action is harming the environment, but he proselytizes about the benefits of carbon dioxide. In one of his most incendiary remarks, he claimed that the "demonization of carbon dioxide is just like the demonization of the poor Jews under Hitler".²²² In May of 2019, Trump picked Harper to lead a new Climate Review Panel, tasked with challenging conclusions from climate research reports.²²³

Two exceptions to Trump's anti-environment picks are James Mattis, former Secretary of Defense, and Rex Tillerson, former Secretary of State. Paradoxically, in his prior role as CEO of ExxonMobil, Tillerson had established himself as a fairly consistent (though limited) ally in the fight against climate change: he had acknowledged human responsibility for global warming, backed a carbon tax, and said that the Paris Agreement represented "an important step forward."²²⁴ He advocated for the U.S. to remain in the Agreement, even signing the Fairbanks Declaration during a meeting of the Arctic Council in 2017, which underscores the Paris Agreement's key role in the fight against climate change.²²⁵ Following Trump's withdrawal announcement, Tillerson was responsible for maintaining U.S. engagement in the UNFCCC climate change negotiations, sending a delegation to participate in the talks in 2017.

In his confirmation hearing in January of 2017, Mattis made known his belief that not only is climate change real, but it poses a threat to the foreign interests and assets of the U.S.²²⁶ Upon Mattis' resignation, the Center for Climate and Security issued a statement praising the Secretary of State for "his leadership on climate change", including "acknowledging and taking actions to address the very real risks climate change poses to the security of the United States, including to its armed forces, its allies and its interests abroad."²²⁷

It is significant that neither of these men remains in the White House. While their climate beliefs were not identified as a factor in their departures, the choice of Pompeo as a replacement for Tillerson meant a shift in Trump's cabinet even farther towards anti-environmentalism. Mattis' replacement, Patrick Shanahan, has not yet been confirmed, nor has he established a clear position on climate change, although one could predict – with a great deal of certainty – that his position will ultimately be similar to those of other current Trump advisors: the less environmental regulation, the better.

1.2. Fossil Fuel Infatuation

One characteristic shared by most of Trump's advisors is their infatuation with the fossil fuel industry. Recently, the Department of Energy released a statement referring to natural gas as "molecules of U.S. freedom".²²⁸ The President's insistence on securing "energy independence" is present in most of his policy on the environment. An article on the White House's *Energy & Environment* web page entitled "President

222 DAVENPORT, C. and LANDLER, M. Trump Administration Hardens Its Attack on Climate Science [online]. *The New York Times*, 27 May 2019 [Consulted 30 May 2019]. Retrieved from: <https://www.nytimes.com/2019/05/27/us/politics/trump-climate-science.html?smid=tw-nyclimate&smtype=cur>

223 *Ibid.*

224 STAVINS, R. Column: Why Tillerson's Departure is Bad for U.S. Climate Change Policy [online]. *PBS*, 16 March 2018 [Consulted 19 April 2019]. Retrieved from: <https://www.pbs.org/newshour/economy/making-sense/column-why-tillersons-departure-is-bad-for-u-s-climate-change-policy>

225 KORAN, L. Tillerson Signs Declaration Stressing Climate Change Threat [online]. *CNN*, 12 May 2018, [Consulted 19 April 2019]. Retrieved from: <https://edition.cnn.com/2017/05/12/politics/tillerson-climate-change-fairbanks-declaration/index.html>

226 REVKIN, A. Trump's Defense Secretary Cites Climate Change as National Security Challenge [online]. *ProPublica*, 14 March 2017 [Consulted 19 April 2019]. Retrieved from: <https://www.propublica.org/article/trumps-defense-secretary-cites-climate-change-national-security-challenge>

227 WERRELL, C. and FEMIA, F. A Statement About Secretary Mattis' Departure and Climate Change [online]. *The Center for Climate and Security*, 21 December 2018 [Consulted 19 April 2019]. Retrieved from: <https://climateandsecurity.org/2018/12/21/a-statement-about-secretary-mattis-departure-and-climate-change/>

228 DEPARTMENT OF ENERGY. Department of Energy Authorizes Additional LNG Exports from Freeport LNG [online]. *Energy.gov*, 28 May 2019 [Consulted 1 June 2019]. Retrieved from: <https://www.energy.gov/articles/department-energy-authorizes-additional-lng-exports-freeport-lng>

Donald J. Trump Is Unleashing American Energy Dominance” does not once speak of renewable or alternative energy.²²⁹ Instead, it focuses on the President’s accomplishments in promoting traditional energy forms: the end to the “war on coal”; the elimination of “red tape that was holding back the construction of new energy infrastructure, like pipelines”; records in “oil and gas lease sales”; and the streamlining of “permitting for Liquefied Natural Gas (LNG) terminals.”²³⁰

Of the fifteen executive orders he had signed related to climate change at the time of this writing, eight of them promote the use of fossil fuels, whether by reducing regulation, streamlining infrastructure projects – specifically the construction of pipelines carrying gas and oil – or encouraging energy production.²³¹ The President’s 2019 Economic Report makes special mention of the fossil fuel “production records” set since Trump’s inauguration,²³² claiming that “leveraging American energy abundance” – referring specifically to coal, oil, and gas – “is a central tenant of the President’s economic vision.”²³³ Promoting fossil fuels, therefore, is key to Trump’s prioritization of economic growth above all else.

1.3. Backing Away from Global Leadership

In stark contrast to his predecessor’s efforts to assume a leadership role in the global effort to fight climate change, Trump has chosen to steer the United States in the opposite direction – away from global compromises and commitments. Notably, this aversion to multilateralism is not limited to climate change policy; his campaign was based on nationalist sentiment and permeates all of his policy areas. In fact, a search of “America First”, his foreign policy slogan, on the White House website yields 1,648 results – by comparison, the word “environment” produces 252.²³⁴ A majority of the President’s statements and policies express his intention to prioritize American interests and to back away from multilateral efforts. In Trump’s 2017 speech to the United Nations General Assembly, he mentioned the concept of sovereignty over 20 times: he explained that his administration was “renewing [the] founding principle of sovereignty”, demonstrating his belief that participation in international organizations is an infringement on America’s independence and dominance.²³⁵ At the same event one year later, he claimed that “America will always choose independence and cooperation over global governance, control, and domination.”²³⁶

Trump’s resistance to multilateral efforts has been true for climate change action, as well. Perhaps the most notable example is the U.S.’s withdrawal from the Paris Agreement, thereby fulfilling one of the President’s campaign promises. On June 1, 2017, Trump announced that the United States would withdraw from the Agreement, leaving open the possibility of a renegotiation or the negotiation of a new agreement.²³⁷ He justified this decision with the claim that “the Paris Climate Accord [was] simply the latest example of Washington entering into an agreement that disadvantages the United States to the exclusive benefit of other countries, leaving American workers [...] and taxpayers to absorb the cost [...]”²³⁸ Included in this announcement was the end of any U.S. efforts to meet its nationally determined contribution – the

229 President Donald J. Trump Is Unleashing American Energy Dominance [online]. *The White House*, 14 May 2019 [Consulted 20 May 2019]. Retrieved from: <https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-unleashing-american-energy-dominance/>

230 *Ibid.*

231 Executive Orders [online]. *Federal Register*, 2019 [Consulted 23 May 2019]. Retrieved from: <https://www.federalregister.gov/presidential-documents/executive-orders>

232 TRUMP, D. J. “Economic Report...”, loc. cit., footnote 7.

233 *Ibid.*, p. 248.

234 Search conducted June 15, 2019.

235 TRUMP, D. J. Remarks by President Trump to the 72nd Session of the United Nations General Assembly [online]. *The White House*, 19 September 2017 [Consulted 23 May 2019]. Retrieved from: <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-72nd-session-united-nations-general-assembly/>

236 TRUMP, D. J. Remarks by President Trump to the 73rd Session of the United Nations General Assembly [online]. *The White House*, 25 September 2018 [Consulted 23 May 2019]. Retrieved from: <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-73rd-session-united-nations-general-assembly-new-york-ny/>

237 TRUMP, D. J. Statement by President Trump on the Paris Climate Accord [online]. *The White House*, 2017, June 1 [Consulted 20 May 2019]. Retrieved from: <https://www.whitehouse.gov/briefings-statements/statement-president-trump-paris-climate-accord/>

238 *Ibid.*

quantified commitment the Parties to the Paris Agreement had made to reduce their environmental impact – and of any contribution to the Green Climate Fund.²³⁹

Paradoxically, in the same speech, Trump alleged that, under his leadership, the U.S. “will continue to be the cleanest and most environmentally friendly country on Earth” and avowed his dedication to ensuring the U.S. “remains the world’s leader on environmental issues”.²⁴⁰ He emphasized, however, that it would not be at the cost of American jobs, claiming that the Agreement, as it stood, greatly disadvantaged American workers and the economy, to the benefit of every other nation.²⁴¹ His nationalist rhetoric is very apparent in this announcement, appearing in statements such as, “This Agreement is less about the climate and more about other countries gaining a financial advantage over the United States.”²⁴²

The United States is also backing away from its position as global leader in climate change research, albeit less publicly. Without any fanfare, Trump effectively eliminated the U.S.’s Carbon Monitoring System (CMS) with his signature on the omnibus spending bill signed in March of 2018, as the bill included no provisions for the system’s funding.²⁴³ The CMS, operated by the National Aeronautics and Space Administration (NASA), tracks global carbon levels; it was to be fundamental in the substantiation of countries’ progress in carbon emission reductions as they fulfilled commitments established in the Paris Agreement.²⁴⁴ The \$10-million-a-year system was presumably cut because of “budget constraints” – as cited by NASA²⁴⁵ – but it is also in line with Trump’s overarching policy of climate disengagement. P. Duffy, president of the Woods Hole Research Center, claims that Trump’s decision to cut the program will simply pass the baton of research leadership to Europe, while depriving the United States of opportunities for technology development.²⁴⁶

A more recent example of the United States backing away from its role as an environmental leader came from the recent Arctic Council talks in May of 2019. The Council is comprised of eight Arctic countries – including the United States²⁴⁷ – as well as members of indigenous tribes in the area, created for the purpose of encouraging international cooperation to address problems in the region, specifically those related to the environment.²⁴⁸ Following the talks, for the first time in over twenty years of existence, the Council was unable to produce a joint statement elaborating its objectives.²⁴⁹ The Council’s statements are produced by consensus, meaning that any single country holds veto power. Although Chairman Timo Soini refused to point fingers, other participants in the talks identified the United States as the obstacle to consensus.²⁵⁰ Secretary of State Pompeo made clear his country’s opposition to including any mention of climate change or the Paris Agreement in the joint statement, although he was outnumbered by a “majority” who “regarded climate change as a fundamental challenge facing the Arctic and acknowledged the urgent need to take mitigation and adaptation actions and to strengthen resilience”, according to the

239 *Ibid.*

240 *Ibid.*

241 *Ibid.*

242 *Ibid.*

243 VOOSSEN, P. Trump White House Quietly Cancels NASA Research Verifying Greenhouse Gas Cuts [online]. *Science*, 9 May 2018 [Consulted 21 April 2019]. Retrieved from: <https://www.sciencemag.org/news/2018/05/trump-white-house-quietly-cancels-nasa-research-verifying-greenhouse-gas-cuts>

244 *Ibid.*

245 *Ibid.*

246 *Ibid.*

247 The eight countries are Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States.

248 SENGUPTA, S. U.S. Pressure Blocks Declaration on Climate Change at Arctic Talks [online]. *The New York Times*, 7 May 2019 [Consulted 16 May 2019]. Retrieved from: <https://www.nytimes.com/2019/05/07/climate/us-arctic-climate-change.html?module=inline>

249 No Final Declaration After Arctic Council Meeting as U.S. Refuses Mention of Climate Change [online]. *RadioFreeEurope/RadioLiberty*, 2019, May 7 [Consulted 16 May 2019]. Retrieved from: <https://www.rferl.org/a/no-final-declaration-after-arctic-council-meeting-as-u-s-refuses-mention-of-climate-change/29926232.html>

250 *Ibid.*

Chairman.²⁵¹ The United States' solitude in its position was especially striking given that it was surrounded by traditionally strong allies such as Canada and Denmark.²⁵²

The U.S. has abandoned its leadership of efforts to meet the Sustainable Development Goals, as well: the 2018 Sustainable Development Goals Report declared that the United States was tailing the other G20 countries in its “political leadership and institutionalization of the SDGs, characterized notably by the absence of public statements made by the head of state on how the country plans to implement the SDGs” (See Figure 8).²⁵³ On the White House Website, there is no mention of the Sustainable Development Goals.

In the same report, the United States showed little to no change in its progress towards Goal 13, “Climate Action”, compared to 2015; however, a breakdown of the five specific objectives of the goal show that the United States was making poor progress towards three out of the five.²⁵⁴ In November of 2018, Courtney Nemroff, the Deputy U.S. Representative to the Economic and Social Council of the United Nations, made the following statement in her explanation of the U.S. position regarding an agenda item for action:

The U.S. supports the spirit of the 2030 Agenda for Sustainable Development as a framework for development and will continue to be a global leader in sustainable development [...]. We applaud the call for shared responsibility, including national responsibility, in the 2030 Agenda and emphasize that all countries have a role to play in achieving its vision. However, the 2030 Agenda recognizes that each country must work toward implementation in accordance with its own national policies and priorities.²⁵⁵

This statement reflects the administration's rejection of multilateralism, indicating that the United States has moved towards unilateral implementation of the SDGs, rather than embracing the collaborative spirit of the 2030 Agenda which had been promoted by the Obama administration.

1.4. Restructuring of the Environmental Protection Agency

It is no surprise that the Environmental Protection Agency has undergone significant changes since Trump came into office, given that the President campaigned on the promise that he would “get rid” of the agency.²⁵⁶ Although the EPA's annual budget is already lower today than it was in 2010,²⁵⁷ Trump has proposed a 31% budget cut for fiscal year 2020, similar to the 31% cut proposed in 2018 and the 23% cut from 2019 – neither of which were approved by Congress.²⁵⁸ The reduction in funds for the EPA would be over ten percent greater than cuts to any other agency (see Figure 2). He has also requested cuts in funding to important science and climate federal programs, most notably a 90% reduction in the budget of the EPA's Atmospheric Protection Program, which is tasked with analyzing greenhouse gas levels; outside the EPA, he has proposed a 70% budget cut for the Department of Energy's Office of Energy Efficiency and Renewable Energy.²⁵⁹ Additionally, he proposed an elimination of the entire Global Change Research office, which falls under the direction of the EPA.²⁶⁰

251 SENGUPTA, S., loc. cit., footnote 248.

252 *Ibid.*

253 SACHS, J. *et al.* SDG Index and Dashboards Report 2018 [online]. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN), 2018, p. 3. Retrieved from: <https://www.sdindex.org/assets/files/2018/01%20SDGS%20GLOBAL%20EDITION%20WEB%20V9%20180718.pdf#page=22>

254 *Ibid.*, p. 446-447.

255 NEMROFF, C. General Explanation of Position on Second Committee Agenda Items for Action [online]. *United States Mission to the United Nations*, 8 November 2018 [Consulted 23 May 2019]. Retrieved from: <https://usun.state.gov/remarks/8748>

256 BARRON, L. Here's What the EPA's Website Looks Like After a Year of Climate Change Censorship [online]. *Time*, 1 March 2018 [Consulted 19 April 2019]. Retrieved from: <http://time.com/5075265/epa-website-climate-change-censorship/>

257 EPA's Budget and Spending [online]. *United States Environmental Protection Agency*, 1 April 2019 [Consulted 15 April 2019]. Retrieved from: <https://www.epa.gov/planandbudget/budget>

258 FORAN, C. House Democrats Reject Trump's Proposed 31% EPA Budget Cut [online]. *CNN*, 2019, May 14 [Consulted 15 May 2019]. Retrieved from: <https://edition.cnn.com/2019/05/14/politics/house-democrats-epa-budget-trump/index.html>; ROSANE, O. Trump's 2020 Budget Would Cut EPA Funding by 31% [online]. *EcoWatch*, 2019, March 12 [Consulted 16 May 2019]. Retrieved from: <https://www.ecowatch.com/one-plastic-free-day-2638666855.html>

259 ROSANE, O., loc. cit., footnote 258.

260 MOONEY, C. The Energy 202: Trump's budget seeks cuts to climate research and renewable energy programs [online]. *The Washington Post*, 12 March 2019 [Consulted 16 May 2019]. Retrieved from: <https://www.washingtonpost.com/news/powerpost/>

Trump's intention to diminish the role of the EPA is in line with a vision of reformation he has for environmental policy in which states play a more important role than the federal government. This vision was articulated by former EPA Administrator Scott Pruitt in his "Back-to-Basics" Agenda, which describes a federalist system that gives states greater regulatory power. In a press conference regarding the agenda upon its release, Pruitt explained, "Rather than regulating an entire industry out of business, I'm committed to working in coordination with states to create a healthy environment where jobs and businesses can grow."²⁶¹ He also articulated his effort to return to the EPA's "core mission" of developing regulation that stimulates the economy;²⁶² however, promoting economic growth is not part of the Agency's stated primary mission of "protect[ing] human health and the environment".²⁶³

Less than a year later, still with Pruitt at the helm, the EPA released its 2018-2022 Strategic Plan, in which it outlined its three main goals for the four-year period, the second of which is termed "cooperative federalism" and is designed to "rebalance the power between Washington and the states".²⁶⁴ The federalism of which Pruitt speaks is intended to redistribute accountability, shifting the balance away from the federal government and towards state and local governments.²⁶⁵ Interestingly, one author notes that Trump's wide-reaching budget cuts are incompatible with his agenda of increasing state accountability in environmental regulation:²⁶⁶ the cuts to state environmental grants and initiatives he has suggested run counter to the idea of greater state autonomy which he has promoted.

Related to the restructuring of the EPA is the apparent absence of its criminal enforcement program, according to research by PEER, Public Employees for Environmental Responsibility. Their data shows that the number of anti-pollution cases referred by the EPA to the Department of Justice in 2018 was the lowest it has been since 1988 (see Figure 3); the 166 referrals represented a 72% decrease from 1992, when anti-pollution reporting was at its highest.²⁶⁷ Out of the 166 cases, only 62 resulted in convictions—the fewest since 1992.²⁶⁸ In 2019, the EPA's referral rate seems to be decreasing further, with an average of 12 cases a month,²⁶⁹ compared to the 13.8 monthly average in 2018. This decline could be the result of a simultaneous reduction in staffing: the last reported count of special agents in the Criminal Investigation Division of the EPA was 130, in spite of the 200-agent legal requirement established by the U.S. Pollution Prosecution Act of 1990.²⁷⁰

It must be noted that, under the 2007 Supreme Court ruling in the case of *Massachusetts v. EPA* (No. 05-1120), the EPA is not only authorized, but also obligated to regulate greenhouse gases based on §202(a) (1) of the Clean Air Act, which says that the EPA "shall by regulation prescribe [...] standards applicable to the emission of any air pollutant from any class ... of new motor vehicles [...] which in [the EPA Administrator's] judgment cause[s], or contribute[s] to, air pollution [...] reasonably [...] anticipated to

paloma/the-energy-202/2019/03/12/the-energy-202-trump-s-budget-seeks-cuts-to-climate-research-and-renewable-energy-programs/5c869eca1b326b2d177d604d/?utm_term=.caa932f778b4

261 PRUITT, S. EPA Administrator Brings Back-to-Basics Agenda to Missouri Power Plant [online]. *United States Environmental Protection Agency*, 20 April 2017 [Consulted 30 April 2019]. Retrieved from: <https://www.epa.gov/newsreleases/epa-administrator-brings-back-basics-agenda-missouri-power-plant>

262 PRUITT, S. EPA Launches Back-To-Basics Agenda at Pennsylvania Coal Mine [online]. *United States Environmental Protection Agency*, 13 April 2017 [Consulted 30 April 2019]. Retrieved from: <https://www.epa.gov/newsreleases/epa-launches-back-basics-agenda-pennsylvania-coal-mine>

263 Our Mission and What We Do [online]. *United States Environmental Protection Agency*, 7 February 2018 [Consulted 30 April 2019]. Retrieved from: <https://www.epa.gov/aboutepa/our-mission-and-what-we-do>

264 ENVIRONMENTAL PROTECTION AGENCY. *Working Together: FY 2018-2022 U.S. EPA Strategic Plan* [online]. February 2018, p. 4 [Consulted 20 April 2019]. Retrieved from: <https://www.epa.gov/sites/production/files/2018-02/documents/fy-2018-2022-epa-strategic-plan.pdf>

265 KONISKY, D. M. and WOODS, N. D., "Environmental Federalism...", *op. cit.*, footnote 14, p. 355.

266 *Ibid.*, p. 355-356; MOONEY, C., *loc cit.*, footnote 260.

267 Criminal Enforcement Collapse At EPA: Lowest Number of New Anti-Pollution Cases in 30 Years [online]. *PEER*, 15 January 2019 [Consulted 21 April 2019]. Retrieved from: <https://www.peer.org/news/press-releases/criminal-enforcement-collapse-at-epa.html?eType=EmailBlastContent&eId=3e20d597-88d0-42c1-8f3e-1f14d3ada58a>

268 *Ibid.*

269 *Ibid.*

270 *Ibid.*

endanger public health or welfare”.²⁷¹ The ruling also noted that “policy judgments have nothing to do with whether greenhouse gas emissions contribute to climate change and do not amount to a reasoned justification for declining to form a scientific judgment” – in other words, an administration cannot use its climate policy as justification for failure to regulate greenhouse gas emissions.²⁷²

1.5. Censoring of Federal Webpages

While “scientific censorship” by federal agencies has never been officially confirmed, analysts have noticed a pattern in the Trump era.²⁷³ On January 20, 2017, immediately following the inauguration, the Trump White House updated its website, clearing any reference to “climate change”, “renewable energy”, or “emissions goals”.²⁷⁴ Three months later, the administration directed the EPA to remove its webpage dedicated to climate science, substituting it with a page that read, “We are currently updating our website to reflect EPA’s priorities under the leadership of President Trump and Administrator Pruitt.”²⁷⁵ The same month, the EPA released a statement saying that its website would be “undergoing changes that reflect the agency’s new direction”, explaining that the changes would entail “updating language to reflect the approach of the new leadership”.²⁷⁶ The statement specified reviews of language “associated with the Clean Power Plan”, which was “out of date”, and “content related to climate and regulation”.²⁷⁷ Currently, the term “climate change” is missing from the EPA’s webpage,²⁷⁸ as are “fossil fuels”, “greenhouse gases”, and global warming”.²⁷⁹ Other federal agencies have been affected by Trump’s restrictions, as well: many have taken down mentions of climate change and its causes and repercussions.²⁸⁰

The Environmental Data & Governance Initiative (EDGI), a “watchdog group” comprised of academic and non-profit institutions tasked with the analysis of government data, websites, and policies on the environment, was founded in November of 2016 to address concerns about the incoming administration’s potential effect on environmental information.²⁸¹ In January of 2018, they released a report in which they detailed their findings about modifications made to online federal resources regarding climate change. Although they did not find that climate change *data* had been removed, they did uncover “overhauls and removals of documents, webpages, and entire websites, as well as significant language shifts”.²⁸²

Their report highlighted several key findings: the White House’s removal of climate change as a key issue; the elimination of information regarding the U.S.’s international commitments related to climate change on the Department of State (DoS), Department of Energy (DoE), and EPA websites; a shift in the focus of federal agencies from renewable energy development to economic development, including the eradication from the DoE website of talk of “clean energy” or descriptions of the damaging environmental effects of fossil fuels; an elimination or considerable reduction in information related to climate change on various agencies’ websites, including a systematic replacement of language related to climate change (see

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

272 *Ibid.*

273 BARRON, L., loc. cit., footnote 256.

274 GEILING, N. California Isn’t Backing Down from the Most Ambitious Climate Goal in the Country [online]. *ThinkProgress*, 23 January 2017 [Consulted 22 May 2019]. Retrieved from: <https://thinkprogress.org/california-moves-forward-with-climate-action-despite-president-trump-4c874b7565c1/>

275 *Ibid.*

276 EPA Kicks Off Website Updates [online]. *United States Environmental Protection Agency*, 28 April 2017 [Consulted 15 May 2019]. Retrieved from: <https://www.epa.gov/newsreleases/epa-kicks-website-updates>

277 *Ibid.*

278 CUTTER, S. L. Forbidden Words, Environment: Science and Policy for Sustainable Development. *Environment: Science and Policy for Sustainable Development*. 2018, March/April, Vol. 60 (2). p. 3 [Consulted 20 April 2019]. ISSN: 0013-9157.

279 BARRON, L., loc. cit., footnote 245.

280 CUTTER, S. L., loc. cit., footnote 278.

281 About [online]. *Environmental Data & Governance Initiative* [Consulted 20 April 2019]. Retrieved from: <https://envirodatagov.org/about/>

282 RINBERG, T. *et al.* Changing the Digital Climate: How Climate Change Web Content is Being Censored Under the Trump Administration [online]. *The Environmental Data and Governance Initiative. January 2018* [Consulted 20 April 2019]. Retrieved from: <https://100days.envirodatagov.org/changing-digital-climate/>

Figure 4); and, as previously mentioned, the removal of the EPA website dedicated to climate change.²⁸³ Contrary to Pruitt's claims of promoting federalism, the report notes that the EPA eliminated more than 200 websites with information related to climate and energy for state, local, and tribal governments.²⁸⁴ They conclude that the modifications "[signal] a change in approach to federal environmental, climate, and energy research, practice, and policy, deemphasizing the importance of renewable energy, the harms of continued use of non-renewable energy sources, and the potential detrimental effects of climate change overall", and that the obfuscation of climate change information represents a threat to democracy.²⁸⁵

The most recent example of government censorship came from James Reilly, Trump's appointment as Director of the United States Geological Survey. In the spring of 2019, Reilly reportedly mandated that his agency use only data produced from climate models predicting the effects of climate change until 2040, as opposed to previous models, which have traditionally included predictions through 2100.²⁸⁶ Whereas critics of the National Climate Assessment claimed it had placed too much emphasis on the worst-case scenarios, Reilly is taking the opposite approach by ignoring scientists' warnings that the bulk of the consequences of emissions won't be felt until at least 2050.²⁸⁷

1.6. Deregulation

On January 30, 2017, exactly 10 days after entering the Oval Office, Trump signed an executive order entitled "Reducing Regulation and Controlling Regulatory Costs." Also known as the "one in, two out" rule,²⁸⁸ this executive order mandated that "for every one new regulation issued, at least two prior regulations be identified for elimination".²⁸⁹ Less than a month later, the President released a new executive order mandating the creation of a "Regulatory Reform Task Force" in each federal agency, whose purpose would be to suggest regulations for revocation or modification.²⁹⁰ Although this policy of deregulation has been an overarching theme of Trump's presidency, it seems to have been designed specifically with environmental regulation in mind. At the time of this writing, the administration has issued 62 regulatory rollbacks pertaining to environmental protection²⁹¹ – a number so great that two prominent law schools have created webpages to track all of the environmental deregulation.²⁹²

To assist with its deregulatory efforts, the administration has taken advantage of a little-known legislative tool called the Congressional Review Act (CRA) through which any regulation created by a federal agency can be repealed with a majority vote in the House and the Senate and the President's signature.²⁹³ Given that this revocation must occur no more than sixty legislative days after the regulation is first announced to Congress, the only logical situation in which the CRA would be invoked is immediately following the inauguration of a new president who wishes to undo regulations recently approved by his predecessor – which was the situation in 2017. By way of the Act, Trump was able to move to overturn

283 *Ibid.*

284 *Ibid.*

285 *Ibid.*

286 DAVENPORT, C. and LANDLER, M, loc. cit., footnote 222.

287 *Ibid.*

288 BERGESON, L., *op. cit.*, footnote 208, p. 98.

289 TRUMP, D. J. Executive Order 13771, Reducing Regulation and Controlling Regulatory Costs. *Federal Register* [online]. 30 January 2017, Vol. 82 (22), 9339-9341 [Consulted 20 April 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2017-02-03/pdf/2017-02451.pdf>

290 TRUMP, D. J. Executive Order 13777, Enforcing the Regulatory Reform Agenda. *Federal Register* [online]. 1 March 2017, Vol. 82 (39), 12285-12287 [Consulted 20 April 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2017-03-01/pdf/2017-04107.pdf>

291 Regulatory Rollback Tracker [online]. *Harvard Environmental and Energy Law Program*. [Consulted 20 April 2019]. Retrieved from: <https://eelp.law.harvard.edu/regulatory-rollback-tracker/>

292 The Harvard Environmental and Energy Law Program created a "Regulatory Rollback Tracker", available at <https://eelp.law.harvard.edu/regulatory-rollback-tracker/>. The Sabin Center for Climate Change of Columbia Law School developed a "Climate Deregulation Tracker", available at <http://columbiaclimatelaw.com/resources/climate-deregulation-tracker/>. There are other deregulation trackers, such as the one by Brookings, which include all types of deregulation and are not specific to the environment.

293 KONISKY, D. M. and WOODS, N. D., "Environmental Federalism...", *op. cit.*, footnote 14, p. 351.

a total of fourteen Obama-era regulations, thirteen of which were related to the environment.²⁹⁴ Of concern to environmentalists is a provision included in the CRA that “prevents any executive branch agency from promulgating a ‘substantively similar’ rule in the future” – in other words, Trump’s streak of repeals could have a lasting effect on the environmental protection which can be enacted by succeeding administrations.²⁹⁵

After campaigning to eliminate the environmental legacy left by Obama, the President has made good on his word: in less than a year’s time, the administration had nullified all of Obama’s executive orders relating to climate change action.²⁹⁶ In March of 2017, just three months after taking office, Trump signed an executive order charging the EPA with the deconstruction of the Clean Power Plan, one of Obama’s “hallmark” environmental initiatives.²⁹⁷ In August of 2018, the EPA announced it would be replacing the CPP with the Affordable Clean Energy Rule, which imposes no binding restrictions on carbon emissions, but rather cedes regulatory power to states, allowing them to decide what limits – if any – they would like to place on pollution.²⁹⁸

An important component of Trump’s deregulation agenda is his unwillingness to introduce new environmental regulation – or, in fact, regulation of any kind. According to an analysis from the Competitive Enterprise Institute, Trump created a total of 3,367 new rules in 2018, the second-lowest figure since data began to be collected in 1976; he had already set the record in his first year as president, creating only 3,281 new rules.²⁹⁹ According to a 2017 report by the same institute, Trump went above and beyond his “one in, two out” goal with a ratio of twenty-two regulations abolished for every one new regulation introduced, creating only three significant rules in his first year.³⁰⁰ Of these three, none made any substantial gains in environmental protection, nor has the administration demonstrated any intention to develop pro-environmental regulation in the future.³⁰¹

1.7. Climate Change Denial

Although Trump’s climate change skepticism was apparent on the campaign trail – referring to global climate change in one speech as “a hoax, [...] a money-making industry”³⁰² – his denial is perhaps best documented by his Twitter posts. He has used the social media platform to make a series of inflammatory statements, such as, “The concept of global warming was created by and for the Chinese in order to make U.S. manufacturing non-competitive”,³⁰³ or, “In the 1920’s people were worried about global cooling--it never happened. Now it’s global warming. Give me a break!”³⁰⁴ One reporter compiled a total of 115 of Trump’s Tweets that question – or simply deny – the phenomenon of global climate change.³⁰⁵ Following the release of the Fourth National Climate Assessment, Trump told reporters he “[didn’t] believe” the report’s findings regarding the potential hazardous consequences of global climate change on the American

294 Rolling Back Obama’s Regulations Using the Congressional Review Act [online]. *Congressional Western Caucus*. [Consulted 20 April 2019]. Retrieved from: <https://westerncaucus.house.gov/cra/>

295 KONISKY, D. M. and WOODS, N. D., “Environmental Federalism...”, *op. cit.*, footnote 14, p. 351.

296 CUTTER, S. L., *loc. cit.*, footnote 278.

297 KONISKY, D. M. and WOODS, N. D., “Environmental Federalism...”, *op. cit.*, footnote 14, p. 356.

298 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. Proposed Affordable Clean Energy Rule – Overview [online]. *United States Environmental Protection Agency*, 21 August 2018 [Consulted 20 May 2019]. Retrieved from: https://www.epa.gov/sites/production/files/2018-08/documents/ace_overview_0.pdf

299 CREWS, C. W. Trump’s 2018 Deregulatory Effort: 3,367 Rules, 68,082 Pages [online]. *Competitive Enterprise Institute*, 31 December 2018 [Consulted 21 April 2019]. Retrieved from: <https://cei.org/blog/trumps-2018-deregulatory-effort-3367-rules-68082-pages>

300 CREWS JR., C. W. Ten Thousand Commandments: An Annual Snapshot of the Federal Regulatory State [online]. *Competitive Enterprise Institute*, 2018, p. 8 [Consulted 21 April 2019]. Retrieved from: https://cei.org/sites/default/files/Ten_Thousand_Commandments_2018.pdf

301 KONISKY, D. M. and WOODS, N. D., “Environmental Federalism...”, *op. cit.*, footnote 14, p. 353.

302 FEDERAL NEWS SERVICE. Transcript of Donald Trump’s Dec. 30 speech in Hilton Head, S.C. [online]. *The Kansas City Star*, 20 January 2016 [Consulted 21 April 2019]. Retrieved from: <https://www.kansascity.com/news/local/news-columns-blogs/the-buzz/article55604115.html>

303 TRUMP, D. J. *Twitter*, 6 November 2012. Retrieved from: <https://twitter.com/realdonaldtrump/status/265895292191248385?lang=en>

304 TRUMP, D. J. *Twitter*, 4 May 2012. Retrieved from: <https://twitter.com/realdonaldtrump/status/198505724689649664?lang=en>

305 MATTHEWS, D., *loc. cit.*, footnote 7.

economy.³⁰⁶ In an interview with Fox News in 2018, Trump denounced climate scientists as motivated by a “political agenda” and expressed uncertainty regarding the human origin of global warming.³⁰⁷

The pinnacle of his climate change denial was the announcement that the United States would no longer consider climate change to be a national security threat,³⁰⁸ and the accompanying release of his first National Security Strategy – more specifically, by the omission of any mention of climate change in the document.³⁰⁹ The only time the word “climate” was used, in fact, was in his presentation of the National Security Strategy, when he recounted his decision to withdraw the United States from “job-killing deals” like “the very expensive and unfair Paris Climate Accord”.³¹⁰

The use of language such as “job-killing” is reflective of Trump’s clear prioritization of the economy over environmental protection, closely intertwined with his denial of climate change. His National Security Strategy, in speaking of the need to “[counter] an anti-growth energy agenda” by taking advantage of “abundant energy resources – coal, natural gas, petroleum, renewables, and nuclear”,³¹¹ makes it clear that Trump refuses to compromise economic growth in the name of the environment. Ağaçayak *et al.* argue that this economy-centered mentality “presents everything that is developed to mitigate climate change as an *un-necessary* [sic] *burden* to the national interest, market economy, and domestic energy production”; they claim that Trump has used “climate change denialism as a driver for public policy making”.³¹²

The President’s decree in March of 2017 to begin construction on the Keystone Pipeline was one of the first products of his pro-growth, anti-environment policy. Responding to “major concerns from environmental groups and indigenous and other local communities”, Trump justified his decision with the promise that the pipeline would “help put Americans back to work, grow our economy, and rebuild our nation.”³¹³ Trump’s words – and actions – have made it increasingly clear that environmental protection is simply not compatible with what he believes should be the primary U.S. objective: economic growth.³¹⁴

1.8. Preference for Executive Action

When President Trump signed the aforementioned “one in, two out” Executive Order (E.O.) a mere ten days into his presidency, he had already signed six other orders, the first produced on the day of his inauguration. His penchant for executive action is reflected in an analysis by The American Presidency Project: halfway into his first term, he was creating executive actions at a rate of 46 per year, the highest since Bill Clinton.³¹⁵ It is significant that this is his preferred method of changing legislation, given that presidential directives – such as executive orders, memoranda, and proclamations – do not depend on

306 Trump on Climate Change Report: ‘I Don’t Believe It’ [online]. *BBC*, 2018, November 26 [Consulted 21 April 2019]. Retrieved from: <https://www.bbc.com/news/world-us-canada-46351940#>

307 *Ibid.*

308 GRESHKO, M. et al. A Running List of How President Trump is Changing Environmental Policy [online]. *National Geographic*, 3 May 2019 [Consulted 4 May 2019]. Retrieved from: <https://news.nationalgeographic.com/2017/03/how-trump-is-changing-science-environment/>

309 TRUMP, D. J. National Security Strategy of the United States of America [online]. *The White House*, December 2017, 1-55 [Consulted 21 April 2019]. Retrieved from: <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf>

310 TRUMP, D. J. Remarks by President Trump on the Administration’s National Security Strategy [online]. *The White House*, 18 December 2017 [Consulted 21 April 2019]. Retrieved from: <https://www.whitehouse.gov/briefings-statements/remarks-president-trump-administrations-national-security-strategy/>

311 TRUMP, “National Security Strategy...”, *op. cit.*, footnote 309, p. 22.

312 AĞAÇAYAK, T., NASH, S. L., and SAHIN, Ü. *The Trump Effect on Climate Policy: Hard Times for Global Climate Action*. 1st Ed. Istanbul: Istanbul Policy Center, 2017. ISBN 978-605-9178-87-7.

313 TRUMP, D. J. Remarks by the President in TransCanada Keystone XL Pipeline Announcement [online]. *The White House*, 24 March 2017 [Consulted 21 April 2019]. Retrieved from: <https://www.whitehouse.gov/briefings-statements/remarks-president-transcanada-keystone-xl-pipeline-announcement/>

314 GARCÍA ENCINA, C. Working Paper 14/2018: The Trump Administration’s National Security Strategy [online]. *Real Instituto Elcano*, 13 July 2018, p. 15 [Consulted 21 April 2019]. Retrieved from: <http://www.realinstitutoelcano.org/wps/wcm/connect/25d788de-9e45-4c6d-acb6-d4e98f89845c/WP14-2018-GarciaEncina-Trump-Administration-National-Security-Strategy.pdf?MOD=AJPERES&CACHEID=25d788de-9e45-4c6d-acb6-d4e98f89845c>

315 PETERS, G. and WOOLLEY, J. T. Executive Orders [online]. *The American Presidency Project*, 21 May 2019 [Consulted 30 May 2019]. Retrieved from: <https://www.presidency.ucsb.edu/statistics/data/executive-orders>

Congressional approval.³¹⁶ As such, “the scope of [a President’s] authority to issue executive orders and other directives is especially broad”, and “Congress has little ability to regulate or limit that authority”; executive orders can, however, be challenged by the judicial branch, a fact which has proven troublesome for the current administration.³¹⁷

Of Trump’s executive actions to date – including executive orders, memoranda, and proclamations – 15 are related to climate change; of these 15, however, only one extends environmental protections by continuing several scientific federal advisory committees.³¹⁸

Three of Trump’s earlier executive actions,³¹⁹ as well as three of his most recent,³²⁰ were intended to “streamline” the process of conducting environmental reviews and obtaining approval for major infrastructure projects, specifically those that he considers “a high priority for the Nation”.³²¹ The motivation behind these mandates was to the desire to start construction on both the Dakota Access Pipeline and the Keystone XL Pipeline, two major infrastructure projects which would greatly facilitate access to oil.³²² Several of his directives highlight the “tremendous economic opportunities” presented by the exploitation of fossil fuels, once again reinforcing the connection between environmental degradation and economic growth.

Four of his executive orders were concerned with rolling back earlier regulations. Although Orders 13771 and 13777 did not specifically target environmental regulation, they were heavily employed in processes of environmental deregulation, especially related to efforts to combat climate change.³²³ Order 13783, similarly, did not mention environmental regulation by name, but did mandate a review of current regulations that “potentially burden the development or use of domestically produced energy resources”, calling for the elimination or revision of those deemed to unnecessarily burden energy production.³²⁴ This order seems to have been created with the purpose of undoing much of the action taken by Obama to fight climate change. It specifically directs the EPA to begin the repeal of the Obama-era Clean Power Plan, while also calling for the disbanding of the Interagency Working Group on Social Cost of Greenhouse Gases.³²⁵ The most recent, E. O. 13792, required Secretary of the Interior Zinke to review roughly 40 presidential designations of protected land made since 1996 out of a concern that the protections were unnecessarily prohibiting economic growth.³²⁶ The President’s suspicion that “barriers to achieving energy independence” had been produced indicates a desire to exploit protected lands for their (nonrenewable) energy resources.³²⁷

316 Heritage Explains Executive Orders [online]. *The Heritage Foundation*, 2019 [Consulted 21 April 2019]. Retrieved from: <https://www.heritage.org/political-process/heritage-explains/executive-orders>

317 *Ibid.*

318 TRUMP, D. J. Executive Order 13811, Continuance of Certain Federal Advisory Committees. *Federal Register* [online]. 4 October 2017, Vol. 82 (191). p. 46363-46364 [Consulted 19 April 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2017-01-30/pdf/2017-02029.pdf>

319 E.O. 13766, Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects, Presidential Memorandum Regarding Construction of the Keystone XL Pipeline, and E.O. 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects

320 Presidential Permit: TransCanada Keystone Pipeline, E.O. 13867, Issuance of Permits with Respect to Facilities and Land Transportation Crossings at the International Boundaries of the United States, and E.O. 13868, Promoting Energy Infrastructure and Economic Growth

321 Executive Order 13766, Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects. *Federal Register* [online]. 24 January 2017, Vol. 82 (18). p. 8657 [Consulted 19 April 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2017-01-30/pdf/2017-02029.pdf>

322 GRESHKO, M. et al., loc. cit., footnote 308.

323 TRUMP, “Executive Order 13771...”, loc. cit., footnote 280; TRUMP, “Executive Order 13777...”, loc. cit., footnote 281.

324 TRUMP, D. J. Executive Order 13783, Promoting Energy Independence and Economic Growth. *Federal Register* [online]. 28 March 2017, Vol. 82 (61). p. 16093 [Consulted 19 April 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2017-03-31/pdf/2017-06576.pdf>

325 *Ibid.*, p. 16093.

326 TRUMP, D. J. Executive Order 13792, Review of Designations Under the Antiquities Act. *Federal Register* [online]. 26 April 2017, Vol. 82 (82). p. 20429 [Consulted 20 April 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2017-05-01/pdf/2017-08908.pdf>

327 *Ibid.*, p. 20429.

Finally, one of his executive orders explicitly promotes the sourcing of fossil fuels on the Outer Continental Shelf in an effort to secure the United States' role as "a global energy leader".³²⁸ Although Trump insists in this order that he will ensure that "any such activity is safe and environmentally responsible," Obama had already deemed drilling in this region environmentally *irresponsible* and had prohibited it.³²⁹

1.9. Other Action by the Executive Branch

Included within the Executive Branch of the Government is the Presidential Cabinet, comprised of the Vice President, Executive Department heads, and other officials, including the EPA Administrator. Action taken by the Cabinet is enforced by the administrators that the President selects to advance his agenda. As demonstrated in Figure 5, from 2017-2018, Trump relied primarily on his Cabinet to reduce environmental protection, as well as on the Congressional Review Act already mentioned. Notably, just in his first year in office, Trump attempted to undo more regulation related to environmental policy than to any other policy area.³³⁰

Unlike executive orders, regulations by Executive Departments and Federal Agencies must be accompanied by "a compelling explanation for why new laws are necessary" and must include first "a 'notice' and 'comment' period during which millions of comments can [...] be made and must be answered", followed by a "judicial review" period in which litigative challenges are often presented.³³¹ As will be discussed, this judicial review has represented a significant obstacle to Trump's executive efforts.

The regulatory rollbacks produced by the Trump administration related to climate change thus far have primarily come from the EPA, although other State Departments have contributed, as well. Many rollbacks have been related to the review and/or relaxation of previously established emissions standards for vehicles³³² or for production and manufacturing facilities.³³³ Others have attempted to reform existing programs, such as the Clean Power Plan³³⁴ and the Regional Haze Program³³⁵ in order to decrease regulation. Several approved rules have been focused on the promotion of fossil fuels, either by subsidizing

328 TRUMP, D. J. Executive Order 13795, Implementing an America-First Offshore Energy Strategy. *Federal Register* [online]. 28 April 2017, Vol. 82 (84). p. 20815 [Consulted 20 April 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2017-05-03/pdf/2017-09087.pdf>

329 OBAMA, B. H. Presidential Memorandum – Withdrawal of Certain Areas off the Atlantic Coast on the Outer Continental Shelf from Mineral Leasing [online]. *The White House, President Barack Obama*, 20 December 2016 [Consulted 20 May 2019]. Retrieved from: <https://obamawhitehouse.archives.gov/the-press-office/2016/12/20/presidential-memorandum-withdrawal-certain-areas-atlantic-coast-outer>

330 EILPERIN, J. and CAMERON, D. How Trump is Rolling Back Obama's Legacy [online]. *The Washington Post*, 20 January 2018 [Consulted 15 May 2019]. Retrieved from: https://www.washingtonpost.com/graphics/politics/trump-rolling-back-obama-rules/?utm_term=.f771a7555a79

331 BOMBERG, E., *op. cit.*, footnote 8, p. 959.

332 See, for example the following regulations. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. 40 CFR Parts 1037 and 1068: Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits; UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. 40 CFR Parts 85 and 86: The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks.

333 For instance, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. 40 CFR Part 60: Review of the Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Generating Units; UNITED STATES ENVIRONMENTAL PROTECTION AGENCY. 40 CFR Parts 60 and 63: National Emission Standards for Hazardous Air Pollutants and New Source Performance Standards: Petroleum Refinery Sector Amendments.

334 EPA Takes Another Step to Advance President Trump's America First Strategy, Proposes Repeal of "Clean Power Plan" [online]. *United States Environmental Protection Agency*, 10 October 2017 [Consulted 20 May 2019]. Retrieved from: <https://www.epa.gov/newsreleases/epa-takes-another-step-advance-president-trumps-america-first-strategy-proposes-repeal>

335 EPA Announces Regional Haze Reform Roadmap to Continue Improving Visibility and Reduce Regulatory Burdens [online]. *United States Environmental Protection Agency*, 10 September 2018 [Consulted 20 May 2019]. Retrieved from: <https://www.epa.gov/newsreleases/epa-announces-regional-haze-reform-roadmap-continue-improving-visibility-and-reduce>

production,³³⁶ opening land for exploration and exploitation,³³⁷ or granting construction permission for infrastructure, as in the case of the Dakota Access Pipeline.³³⁸

In spite of Trump's efforts to significantly reform the environmental landscape in the United States, his capacity to effect lasting change has been limited by the "checks and balances" which were built into the American political system specifically for this purpose.³³⁹ The consequences of his anti-environmental policy have similarly been mitigated by shifting trends and by the action of those organizations, states, and individuals who have chosen to move forward with their commitment to fighting climate change.

2. Limitations

Although the sensationalizing role of the media during the Trump presidency has often exaggerated the power that the President holds,³⁴⁰ the reality is that Trump's effect on the environment has been limited. A series of factors have contributed to the difficulties he has encountered while implementing his environmental policy.

The President is battling a generally pro-environmental American public whose commitment to fighting climate change has only increased under his leadership. In March of 2017, a mere three months into Trump's term, a Gallup poll found that 59% of Americans prioritized environmental protection over the development of traditional energy sources – only 34% did not.³⁴¹ The same poll determined that 71% of Americans believed that the U.S. should be pursuing alternative energy solutions, while a mere 23% supported increased production of coal, gas, and oil.³⁴² In other words, the current presidency's push for the exploitation of traditional forms of energy has not been backed by the majority of Americans.

One year later, in March of 2018, another survey found that most in the United States (60%) believed Trump was doing a "poor job" of protecting the environment.³⁴³ On the President's "report card", created by a survey conducted by POLITICO and the Morning Consult, more voters "failed" Trump in the "subject" of climate change than in any other policy area – 49% gave him a D or an F.³⁴⁴ What's more, in direct contradiction to Trump's "economy over environment" agenda, over 55% of Americans believed that environmental protection should take priority over economic growth.³⁴⁵ In 2019, the majority is even greater: 65%, only 6 percentage points away from the largest majority on record, in 1990-1991 (see Figure 6).³⁴⁶ Regarding climate change specifically, in spite of Trump's efforts to deemphasize the importance of the phenomenon, over half of Americans (54%) continue to believe that climate change is a "critical threat" to the "vital interests of the United States in the next 10 years", a belief more in line with the

336 See DEPARTMENT OF ENERGY. 18 CFR Part 35: Grid Resiliency Pricing Rule. *Federal Register* [online], 10 October 2017, Vol. 82 (194). 46940-46941 [Consulted 20 May 2019]. Retrieved from: <https://www.govinfo.gov/content/pkg/FR-2017-10-10/pdf/2017-21396.pdf>

337 For example, BUREAU OF LAND MANAGEMENT. Notice of Intent to Prepare an Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, Alaska; BUREAU OF OCEAN ENERGY MANAGEMENT. Request for Information and Comments on the Preparation of the 2019–2024 National Outer Continental Shelf Oil and Gas Leasing Program MAA104000.

338 Corps Grants Easement to Dakota Access, LLC [online]. *US Army Corps of Engineers*, 8 February 2017 [Consulted 20 May 2019]. Retrieved from: <https://www.nwo.usace.army.mil/Media/News-Releases/Article/1077134/corps-grants-easement-to-dakota-access-llc/>

339 BOMBERG, E., *op. cit.*, footnote 8, p. 958.

340 *Ibid.*, p. 958.

341 NEWPORT, F. Americans Tilt Toward Protecting Environment, Alternative Fuels [online]. *Gallup*, 15 March 2017 [Consulted 21 April 2019]. Retrieved from: https://news.gallup.com/poll/206159/americans-tilt-toward-protecting-environment-alternative-fuels.aspx?g_source=link_NEWSV9&g_medium=TOPIC&g_campaign=item_&g_content=Americans%2520Tilt%2520Toward%2520Protecting%2520Environment%2c%2520Alternative%2520Fuels

342 *Ibid.*

343 Environment [online]. *Gallup*, 2019 [Consulted 22 April 2019]. Retrieved from: <https://news.gallup.com/poll/1615/environment.aspx>

344 SHEPARD, S. Trump's First-Year Report Card: Voters Say He's No Genius [online]. *Politico*, 16 January 2018 [Consulted 18 April 2019]. Retrieved from: <https://www.politico.com/story/2018/01/16/donald-trump-report-card-340624>

345 NEWPORT, F. Americans Want Government to Do More on Environment [online]. *Gallup*, 29 March 2018 [Consulted 22 April 2019]. Retrieved from: https://news.gallup.com/poll/232007/americans-want-government-more-environment.aspx?g_source=link_NEWSV9&g_medium=TOPIC&g_campaign=item_&g_content=Americans%2520Want%2520Government%2520to%2520Do%2520More%2520on%2520Environment

346 "Environment", *Gallup*, loc. cit., footnote 343.

previous administration than with the current one.³⁴⁷ Research by the Yale Program on Climate Change Communication showed that Americans have only become more sure – and more concerned – about climate change in the past five years.³⁴⁸ In 2018, over half of Americans thought it was real, were worried about it, believed it was caused by humans, and thought it would harm Americans; all trends showed growth compared to 2013, in spite of an administration comprised primarily of climate change deniers (see Figure 7).³⁴⁹

The disconnect between voters and the Trump administration is not only ideological, either – many Americans do not agree with specific policy decisions the President has made, including a significant number within his own political base. His decision to withdraw the U.S. from the Paris Agreement, for example, was opposed by the majority of Americans: in 2017, prior to Trump’s withdrawal announcement, 69% believed the U.S. should remain a signatory – including over half of voters in every state – as opposed to only 13% who were against U.S. participation in the deal.³⁵⁰ Remarkably, support for the deal was strong even among Trump voters: only 28% believed the U.S. should withdrawal from the Paris Agreement, while almost half (47%) were in favor of the continued participation of the United States.³⁵¹

Another limitation Trump has faced in his attempts to enact his climate policy is, ironically, the law. According to Bomberg, “[...] an executive order cannot simply overturn a regulation; the President can only ask for review, possible revision or replacement.”³⁵² Trump’s executive directives, therefore, serve only to *instruct* his federal departments and agencies to create – or eliminate – regulations. As previously mentioned, the judicial review period which follows rules proposed by the President’s administration often results in litigative action attempting to block the rule from taking effect. This has been especially true during the first two and a half years of the Trump presidency: according to an analysis by the Institute for Policy Integrity, only 7% of all the White House’s “deregulatory efforts” have been successful, which translates into a mere 3 cases.³⁵³ Of the 41 lawsuits against the Trump administration considered in the analysis, 14 were related to climate change action, all of which resulted in reversals of Trump’s deregulatory efforts.³⁵⁴

International law has limited Trump, too, most notably in his attempt to withdraw from the Paris Agreement. Unfortunately for the administration, Article 28 of the Agreement includes a stipulation for countries wishing to withdraw, which states that the process can only begin “three years from the date on which this Agreement has entered into force for a Party”, and will commence upon receipt by the UN Secretary-General of a written statement expressing the country’s desire to exit the Agreement; it is not until one year after the receipt of this statement that the withdrawal becomes effective.³⁵⁵ From start to finish, therefore, the withdrawal process lasts four years. Given that the Agreement entered into force on November 4, 2016, the United States cannot formally notify the UN of its intention to exit before November of 2019, and its withdraw would not take effect until November 4, 2020 at the earliest – which, coincidentally, will be the day after the next presidential election.

Experts have also noted that, until the withdrawal enters into effect in 2020, the United States will remain a Party to the Agreement in legal terms, which means that it “is bound under international law to

347 *Ibid.*

348 GUSTAFSON, A., et al. A Growing Majority of Americans Think Global Warming is Happening and are Worried [online]. *Yale Program on Climate Change*, 21 February 2019 [Consulted 22 April 2019]. Retrieved from: <https://climatecommunication.yale.edu/publications/a-growing-majority-of-americans-think-global-warming-is-happening-and-are-worried/>

349 *Ibid.*

350 MARLON, J., FINE, E., and LEISEROWITZ, A. Majorities of Americans in Every State Support Participation in the Paris Agreement [online]. *Yale Program on Climate Change Communication*, 8 May 2017, [Consulted 30 April 2019]. Retrieved from: https://climatecommunication.yale.edu/publications/paris_agreement_by_state/

351 *Ibid.*

352 BOMBERG, E., *op. cit.*, footnote 8, p. 958-959.

353 Roundup: Trump-Era Deregulation in the Courts [online]. *Institute for Policy Integrity*, 8 May 2019 [Consulted 15 May 2019]. Retrieved from: <https://policyintegrity.org/deregulation-roundup#fn-2-a>

354 *Ibid.*

355 UNITED NATIONS, “Paris Agreement”, *op. cit.*, footnote 156, Art. 28.

comply with the Paris Agreement's obligations."³⁵⁶ That being said, only certain procedural terms of the Agreement are binding, such as the biannual submission of a greenhouse gas emissions report and of "information necessary to track progress made" towards its nationally determined contribution³⁵⁷ and the communication every five years of an updated NDC.³⁵⁸ The U.S.'s membership in the UNFCCC imposes the obligation of submitting annual greenhouse gas inventories, meaning it would need to continue to comply with the first binding term of the Paris Agreement even following its formal withdrawal.³⁵⁹ Additionally, the next NDC is not required until December of 2020, so it will be a year before citizens see whether the United States decides to fulfill its contractual obligation.³⁶⁰ Notably, the United States was one of three Annex I (industrialized) countries that did not submit their Third Biennial Report on the national status of climate change to the UNFCCC.³⁶¹ This missed deadline represents a failure to comply with the second part of Article 13.7 regarding the submission of a progress report; however, as the Paris Agreement's implementation "mechanism" was designed to be "non-adversarial and non-punitive",³⁶² it is unlikely that the United States will face any retribution for its lack of compliance.

Market forces have also been a hindrance to Trump's environmental deregulation efforts. In spite of Trump's insistence on reviving the coal industry and promoting oil and gas, market trends indicate that demand is moving away from traditional forms of energy and towards alternative energies – specifically renewables. The Department of Energy's 2017 U.S. Energy and Employment report revealed that employment in the solar industry alone more than tripled that of the oil, natural gas, and coal industries, combined.³⁶³ Unfortunately, the DoE "elected to not undertake a similar report for 2018 or 2019", so more recent data regarding jobs in renewable energy production and energy efficiency is unavailable.³⁶⁴

The President's fight to protect the coal sector, specifically, seems to be an uphill battle, as the industry is quickly declining in the United States: in the last few decades, hundreds of coal power plants have been shut down, and employment in the industry has seen a 75% decrease.³⁶⁵ Despite Trump's insistence on ending "the war on coal" through deregulation, it is not environmental protection that has most damaged the sector, but rather economics, as decreasing prices for natural gas and renewable energy have made coal "non-competitive."³⁶⁶ Demand for coal has declined since 2010, and it is only expected to decrease further; demand for natural gas and renewables, on the other hand, is expected to continue to grow through 2050.³⁶⁷ Many highlight the increasing economic competitiveness of renewable energy and citizens' willingness to move towards cleaner energy.³⁶⁸ According to one author, "[...] Trump cannot stop this trend towards clean energy, neither in the US nor globally."³⁶⁹

356 Fact Check: Trump's Paris Agreement Withdrawal Announcement [online]. *Climate Analytics* [Consulted 23 May 2019]. Retrieved from: <https://climateanalytics.org/briefings/fact-check-trumps-paris-agreement-withdrawal-announcement/>

357 UNITED NATIONS, "Paris Agreement", *op. cit.*, footnote 156, Art. 13.7.

358 *Ibid.*, Art. 4.

359 "Fact Check...", *loc. cit.*, footnote 356.

360 *Ibid.*

361 Along with Belarus and Ukraine. Third Biennial Reports – Annex I [online]. *United Nations Framework Convention on Climate Change*, 2019 [Consulted 23 May 2019]. Retrieved from: <https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/national-communications-and-biennial-reports-annex-i-parties/third-biennial-reports-annex-i>

362 UNITED NATIONS, "Paris Agreement", *op. cit.*, footnote 156, Art. 15.2.

363 DEPARTMENT OF ENERGY. *U.S. Energy and Employment Report* [online]. January 2017, p. 30 [Consulted 20 May 2019]. Retrieved from: https://www.energy.gov/sites/prod/files/2017/01/f34/2017%20US%20Energy%20and%20Jobs%20Report_0.pdf

364 NASEO and EFI. *The 2019 U.S. Energy and Employment Report* [online]. 2019, p. xv [Consulted 20 May 2019]. Retrieved from: <https://static1.squarespace.com/static/5a98cf80ec4eb7c5cd928c61/t/5c7f3708fa0d6036d7120d8f/1551849054549/USEER+2019+US+E-energy+Employment+Report.pdf>

365 BOMBERG, E., *op. cit.*, footnote 8, pp. 958-959.

366 *Ibid.*, p. 958-959.

367 U.S. ENERGY INFORMATION ADMINISTRATION. *Annual Energy Outlook 2019* [online]. 24 January 2019 [Consulted 20 April 2019]. <https://www.eia.gov/outlooks/aeo/pdf/aeo2019.pdf>

368 JOTZO, F., DEPLEDGE, J., and WINKLER, H., *op. cit.*, footnote 194, p. 815; BOMBERG, E., *op. cit.*, footnote 8, p. 958-959.; DECOTIS, P. A., "What We Might Expect...", *loc. cit.*, footnote 8.

369 BOMBERG, E., *op. cit.*, footnote 8, p. 958-959.

The renewable energy trend is reflective of a greater movement towards environmentalism which started before Trump and which he and his administration are powerless to halt. In fact, in response to the President's efforts to back away from the fight against climate change, environmental engagement has increased. This is true specifically of national and international commitments by subnational governments and by the private sector.

Chapter 3. The Trump Era: The Fight Against Climate Change

1. Current National Commitments to Fight Climate Change National

1.1. Commitments by the Federal Government

Even though they are led by an administration who doubts climate change, not all of those on Capitol Hill share the White House skepticism. Since Trump's electoral victory, the Climate Solutions Caucus, a bipartisan organization within the House of Representatives dedicated to "[exploring] policy options that address the impacts, causes, and challenges of our changing climate", has grown – almost exponentially – in membership: in January of 2017, it had only 6 Republicans and 9 Democrats but today boasts 90 members, 45 from each party.³⁷⁰ Following the release of Trump's first National Security Strategy in 2018, 106 House Representatives sent a letter to the President expressing "concern" over his "[failure] to recognize climate change as a threat to the United States" and encouraging him to "reconsider this omission."³⁷¹

Since Congress ultimately depends on the approval of the President to legislate – given that the two-thirds majority in both houses necessary to override a Presidential veto is exceedingly difficult to obtain – their capacity to take legislative action at the national level without Trump's support is understandably limited. In the 115th Congress which met from January 2017 – January 2019, no significant environmental protections were enacted.³⁷² This does not mean, however, that the 116th Congress will produce the same results.

One of the more recent examples of Congressional efforts to combat climate change is the Green New Deal designed by Representative Alexandria Ocasio-Cortez and Senator Edward Markey. Entitled "Recognizing the duty of the Federal Government to create a Green New Deal", the resolution was introduced to the House of Representatives by Ocasio-Cortez on February 7, 2019. The authors make mention of the United States' historical responsibility "for a disproportionate amount of greenhouse gas emissions" and its "high technological capacity" as justification for the claim that the nation "must take a leading role in reducing emissions through economic transformation".³⁷³ The Deal is based on the idea of a 10-year transition to net-zero emissions which simultaneously promotes economic growth and reduces inequality. It establishes a series of steps which would be necessary to achieve this drastic reduction in greenhouse gas emissions, including, but not limited to, getting rid of pollution and emissions from the infrastructure, transportation, manufacturing, and agricultural industries, sourcing 100% of America's power from "clean, renewable, and zero-emission energy sources", and taking action to mitigate and build resiliency against the effects of climate change and the disasters it produces.³⁷⁴

Although very ambitious, this resolution is nonbinding,³⁷⁵ which means that even if it passed, it could not obligate the government to take any specific action; rather, it would serve as an expression of support for a similar policy to be created. Although the resolution has yet to be put to vote in the House, Republicans in the Senate forced a vote in March of 2019 "as part of an ongoing effort to turn the provocative climate change resolution into a wedge issue in the 2020 elections"; the resolution did not pass.³⁷⁶

370 Climate Solutions Caucus [online]. *Citizens' Climate Lobby*, 2019 [Consulted 21 May 2019]. Retrieved from: <https://citizensclimatelobby.org/climate-solutions-caucus/>

371 LANGEVIN, J. R., *et al.* Letter to President Trump [online]. *Congress of the United States*, 11 January 2018. Retrieved from: https://langevin.house.gov/sites/langevin.house.gov/files/documents/01-11-18_Langevin_Stefanik_Letter_to_POTUS_Climate_Change_National_Security_Strategy.pdf

372 GOVTRACK.US. The 115th Congress in Review [online]. *GovTrack Insider*, 28 December 2018 [Consulted 23 May 2019]. Retrieved from: <https://govtrackinsider.com/the-115th-congress-in-review-76efbaadf03d>

373 H. RES. 109: Recognizing the Duty of the Federal Government to Create a Green New Deal. 7 February 2019, p. 3.

374 *Ibid.*, pp. 7-9.

375 *Ibid.*, p. 5.

376 DAVIS, S. Senate Blocks Green New Deal, But Climate Change Emerges as Key 2020 Issue [online]. *NPR*, 26 March 2019 [Consulted 20 May 2019]. Retrieved from: <https://www.npr.org/2019/03/26/705897344/green-new-deal-vote-sets-up-climate-change-as-key-2020-issue>

Perhaps the greatest power Congress holds regarding climate change efforts is the control of the budget: any proposal for the annual budget made by the President must be approved by Congress. In May of 2017, Congress passed a spending bill which ignored Trump's requests for cuts to federal agencies, including the EPA.³⁷⁷ Later that month, Trump released his budget proposal for Fiscal Year (FY) 2018, which included major cuts in funding for climate research, including a 39% cut to the EPA's budget for programs focusing on climate and environmental research, along with a broader reduction in the EPA's overall budget of \$2.5 billion.³⁷⁸ Congress rejected this budget, and after months of debating, passed an omnibus spending bill in March of 2018 that maintained the EPA's 2017 levels of funding.

Trump's FY 2019 proposed budget had, once again, included large cuts to the EPA, as well as to state and local grants designed to combat climate change. One year later, and after the longest government shutdown in history, Congress approved a spending bill which maintained 2018 funding levels for EPA and state and local air grants, while increasing a series of other grants to reduce air pollution.³⁷⁹

In March of 2019, Trump released his FY 2020 budget proposal, which includes a \$2.8 billion cut to EPA funding,³⁸⁰ as well as the elimination of its Global Climate Change Research Office, a 46% budget reduction in the Department of the Interior's Climate Adaptation Science Center, and an 86% funding cut to the Department of Energy's Office of Energy Efficiency and Renewable Energy, among other cuts.³⁸¹ As of June 2019, this budget has not been approved by Congress, and if the past few years are any indication, it is unlikely that it will be. Notably, on May 14, 2019, House Democrats released their own funding bill for fiscal year 2020 in which they not only rejected the President's suggested rollback of the EPA but proposed a budget increase for the agency.³⁸²

Significantly, one researcher notes the possibility that Congress could "exercise its authority over the budget" to allocate funding to programs targeting climate change, quoting a statement by Senator Markey on Congress's options for climate action: "We could pass an infrastructure bill that would be a green infrastructure bill. We can take the appropriations process, and in each individual area insert funding for green programs."³⁸³ The author suggests that Congress may be considering the allocation of funds to "green" infrastructure development – in other words, infrastructure which is "more resilient to climate change and supports the transition to cleaner forms of energy" – to achieve climate goals.³⁸⁴ While this has not yet happened, it is a possibility for the future.

1.2. National Commitments by States

The federalism Pruitt championed in his "Back-to-Basics" EPA Agenda means that under the Trump administration, states are playing an important role in environmental regulation, while the federal government is increasingly taking a back seat. After attending a series of conferences on the topic of energy and seeing minimal federal representation, one author concluded that "energy policy leadership has now nearly fully transitioned to the states."³⁸⁵ Since Trump took office, the importance of states in the fight against climate change has grown, as has their resolve to take action.

377 Public Law 115:31: Consolidated Appropriations Act, 2017. 131 Stat. 468-476. 5 May 2017.

378 EPA's FY18 Budget Cut by Trump Administration [online]. *Sabin Center for Climate Change Law*, 22 March 2018 [Consulted 19 May 2019]. Retrieved from: <http://columbiaclimatelaw.com/silencing-science-tracker/epa-budget-cuts-proposed-by-trump-administration/>

379 Public Law 116-6: Consolidated Appropriations Act, 2019. 15 February 2019.

380 TRUMP, D. J. A Budget for a Better America [online]. *Washington: U.S. Government Publishing Office*, 2019. ISBN: d

381 President Trump's 2020 Budget: A Dangerous Exercise in Ignoring the Reality and Threat of Climate Change [online]. *House Committee on the Budget*, 22 March 2019 [Consulted 20 May 2019]. Retrieved from: <https://budget.house.gov/publications/report/president-trump-s-2020-budget-dangerous-exercise-ignoring-reality-and-threat>

382 FORAN, C., loc. cit., footnote 258.

383 SILLIMAN, B. How Congressional Appropriations Can Be Leveraged as First Step Toward the Green New Deal [online]. *Council on Foreign Relations*, 7 March 2019 [Consulted 22 May 2019]. Retrieved from: <https://www.cfr.org/blog/how-congressional-appropriations-can-be-leveraged-first-step-toward-green-new-deal>

384 *Ibid.*

385 DECOTIS, P. A. States Assuming Momentum in Energy Policy Formerly Led by Feds. *Natural Gas & Electricity* [online]. October 2017, Vol. 34 (3). p. 24 [Consulted 21 May 2019]. DOI: 10.1002/gas.22012

In the absence of stricter federal regulation on the environment, states have developed their own initiatives to protect the climate. Many have been very vocal in their opposition to the administration's climate policy. Perhaps most vocal has been the state of California, who, since Trump's inauguration, has taken on the role of "chief antagonist", suing the administration 49 times, 24 of which were cases related to environmental protection.³⁸⁶ Of these two dozen, fifteen have resulted in wins for California, and nine are still pending at the time of this writing.³⁸⁷

While fighting the administration's attempts at deregulation, California has continued its tradition of leading the country in imposing tighter environmental regulations: less than 30 minutes after Trump's inauguration, California released its Scoping Plan for the implementation of SB 32, a bill passed in September of 2016 to reduce carbon emissions to 40% below 1990 levels by 2030, which is currently the most ambitious target in North America.³⁸⁸ In September of 2018, SB 100 was approved by the Governor of California, requiring 100% of retail energy sales and 100% of energy sold to state agencies to be supplied by "eligible renewable energy resources and zero-carbon resources".³⁸⁹ Along with the state of New York, California has pledged to source at least 50% of all its electricity from renewable sources by 2030.³⁹⁰

Notably, it is not only the historically "eco-friendly" states like California and New York that are moving towards renewables; in fact, much of the growth in the renewable energy industry has come from Midwestern and Southern states like Kansas, Iowa, Texas, and Oklahoma.³⁹¹ For example, Data from ERCOT, Texas's state grid operator, indicated that energy from "clean" sources represented 30% of the total consumption in 2018 and represents 30,9% of the state's 2019 generation capacity.³⁹² Although these are historically Republican-led states – and environmental protection has become associated with the Democratic platform – the benefits they have reaped from the development of renewables, such as employment growth and lower energy bills, have turned their politicians into "unexpected champions of low-carbon economies".³⁹³

Illinois, part of this Midwestern demographic, recently proposed the Future Energy Jobs Act which, if passed, will require 45% of the state's energy to be supplied by renewable sources by 2030, and 100% by 2050.³⁹⁴ In March of 2019, New Mexico passed a similar bill – the Energy Transition Act – which mandates that 50% of the state's energy come from renewables by 2030, and 100% by 2045.³⁹⁵ New Jersey followed suit in May, as Governor Phil Murphy signed Executive Order 28, directing the creation of an updated Energy Master Plan that will guide the state towards 100% renewable energy by 2050, as well as the Renewable Energy Bill, which reforms the state's renewable energy programs.³⁹⁶ These state-led efforts confirm one researcher's prediction, made at the beginning of the Trump presidency: "Regardless of the policy changes we might see germinating in Washington, the states' interest in supporting technology innovations, energy efficiency, [...] and renewable energy development, and in curbing greenhouse gas emissions, will continue."³⁹⁷

386 PHILLIPS, A. M. In California vs. Trump, the State is Winning Nearly All its Environmental Cases [online]. *Los Angeles Times*, 7 May 2019 [Consulted 22 May 2019]. Retrieved from: <https://www.latimes.com/politics/la-na-pol-california-trump-environmental-lawsuits-20190507-story.html>

387 *Ibid.*

388 GEILING, N., loc. cit., footnote 274.

389 SB-100: California Renewables Portfolio Standard Program: Emissions of Greenhouse Gases. 10 September 2018.

390 BOMBERG, E., *op. cit.*, footnote 8, pp. 959-960.

391 *Ibid.*, p. 960.

392 ST. JOHN, J. Texas Grid Operator Reports Fuel Mix Is Now 30% Carbon-Free [online]. *Green Tech Media*, 23 January 2019 [Consulted 22 May 2019]. Retrieved from: <https://www.greentechmedia.com/articles/read/a-snapshot-of-texas-growing-appetite-for-wind-and-solar-power#gs.hcqpss>

393 BOMBERG, E., *op. cit.*, footnote 8, pp. 959-960.

394 LYDERSEN, K. Aggressive Clean Energy Bill Would Push Illinois to 100% Renewables by 2050 [online]. *Energy News Network*, 28 February 2019 [Consulted 22 May 2019]. Retrieved from: <https://energynews.us/2019/02/28/midwest/aggressive-clean-energy-bill-would-push-illinois-to-100-renewables-by-2050/>

395 SB-489: Energy Transition Act, p. 52. 12 March 2019.

396 Governor Murphy Signs Measures to Advance New Jersey's Clean Energy Economy [online]. *State of New Jersey*, 23 May 2018 [Consulted 22 May 2019]. Retrieved from: https://nj.gov/governor/news/news/562018/approved/20180523a_cleanEnergy.shtml

397 DECOTIS, P.A., "What We Might Expect...", *op. cit.*, footnote 8, p. 27.

1.3. National Commitments by the Private Sector

As evidenced by the opinion polls previously mentioned, the majority of the American public does not share the Trump administration's skepticism regarding climate change, nor does it agree with the climate policy he is trying to enforce. This disagreement represents a growing chasm between the government and society³⁹⁸ and is reflected by the volume of action that has been taken by private citizens and the private sector to advance environmental protection, while simultaneously opposing the President.

Private efforts to combat the expected environmental effects of the incoming administration began before Trump even took office. On December 10, 2016, one month before Trump's inauguration, meteorologist and journalist Erik Holthaus posted the following message on Twitter: "Scientists: Do you have a US .gov climate database that you don't want to see disappear?"³⁹⁹ In the post, he included a link to a GoogleDoc spreadsheet where fellow scientists could upload information related to climate change.⁴⁰⁰ This Tweet started a movement to safeguard information from important climate databases, leading to the creation of organizations such as Data Refuge and Climate Mirror, as well as the previously-mentioned Environmental Data & Governance Initiative. The EDGI's website states that it was founded "out of concerns about the possibility that vital environmental data and other information from government websites might be erased or altered, as well as a general concern about the future of the Environmental Protection Agency [...] and other environment-related agencies".⁴⁰¹

Trump's election also had a profound effect on the mobilization of Americans concerned about climate change: not only did environmental non-governmental organizations (NGOs) see their membership rates increase, but massive, organized protests began to be a popular option for civic engagement.⁴⁰² Some were broad, general protests – such as the "March for Science", the largest rally supporting science in history, and the "People's Climate March" – while others were more specific, expressing opposition to a certain policy or White House decision, like the protests following Trump's granting of permits for the Keystone XL and Dakota Access Pipelines.⁴⁰³

Private organizations, like states, have played a large role in litigative efforts to combat climate change. The EPA recognizes its vulnerability to lawsuits on its web page: "Many of the environmental statutes that govern EPA actions contain provisions that allow citizens to sue EPA when EPA fails to perform an act or duty required by the statute".⁴⁰⁴ The Environmental Law Program of the Sierra Club, an environmental non-governmental organization, has taken advantage of this vulnerability. In 2018, they instigated over 200 litigative actions "to advance renewable energy and energy efficiency".⁴⁰⁵ Although their focus is not limited to the administration, many of their efforts have been against the Environmental Protection Agency: from Trump's inauguration through June 2019, they participated, they participated in 26 lawsuits against the EPA, many of which were related to climate change action.⁴⁰⁶

Perhaps most surprising is the initiative taken by the private sector in efforts to combat climate change – especially since they are the stakeholders who, in theory, have the most to lose from increased environmental regulation. Research, however, has noted a recent trend away from governmental environmental regulation and towards greater self-regulation by the private sector.⁴⁰⁷ This shift has its origins in the Reagan-era cuts

398 VALLEJO, C., loc. cit., footnote 203.

399 HOLTHAUS, E. *Twitter*, 10 December 2016. Retrieved from: <https://twitter.com/ericholthaus/status/807802102416228352?lang=en>

400 The GoogleDoc spreadsheet is still accessible here: https://docs.google.com/spreadsheets/d/12-__RqTqQxuxHN0ln3H5ciVztsDMJcZ2SVs1BrfqYCC/edit#gid=0

401 "About", *Environmental Data & Governance Initiative*, loc. cit., footnote 281.

402 BOMBERG, E., *op. cit.*, footnote 8, p. 961.; KRUPP, E., *op. cit.*, footnote 196, p. 82.

403 *Ibid.*, "BOMBERG", p. 961.

404 Notices of Intent to Sue the U.S. Environmental Protection Agency (EPA) [online]. *United States Environmental Protection Agency*, 6 June 2019 [Consulted 8 June 2019]. Retrieved from: <https://www.epa.gov/ogc/notices-intent-sue-us-environmental-protection-agency-epa>

405 About Our Program [online]. *The Sierra Club*, 2019 [Consulted 23 May 2019]. Retrieved from: <https://www.sierraclub.org/environmental-law/about-our-program>

406 "Notices of Intent...", loc. cit., footnote 404.

407 HUQUE, A. S. and WATTON, N., *op. cit.*, footnote 12, p. 83.

to state grant aid which have been continued by successive administrations, compelling many states to end their environmental initiatives due to lack of funding, and gradually transferring the responsibility of environmental regulation to the private sector.⁴⁰⁸ Increasingly, climate regulation in the United States is “dominated by the principles of voluntarization [sic], corporatization and marketization.”⁴⁰⁹

These principles are reflected in the establishment of various climate action organizations and groups within the private sector since January 2017. The CEO Climate Dialogue is one example. Comprised of 13 major companies based in the United States and four environmental nonprofit organizations, its goal is to “[advance] climate action and durable federal climate policy in the U.S. Congress” by encouraging “the President and Congress to enact a market-based approach to climate change”.⁴¹⁰ A similar advocacy organization is Americans for Carbon Dividends, who work to promote the Baker-Shultz Carbon Dividends Plan, an emissions regulation proposal “based on the conservative principles of free markets and limited government”.⁴¹¹

2. Current International Commitments to Combat Climate Change

Part of what makes the issue of climate change unique is its inherently global nature. Perhaps owing to this characteristic, many of the climate protection efforts undertaken by American society have been international in dimension. In the end, many actors have found that it is easier to go around Trump than to work with him – including his own government.

2.1. International Commitments by the Federal Government

Congress has been successful in maintaining certain international commitments to climate action at the federal level, in spite of an administration comprised primarily of climate change deniers and a government that was Republican-led until the 2018 mid-term elections. As they did to protect national climate initiatives, climate-conscious legislators have utilized their control of the national budget to ensure the continuing engagement of the United States in international action to combat climate change. Perhaps most notable is the bill passed by the Senate Appropriations Committee in September of 2017 – just three months after Trump announced the U.S.’s withdrawal from the Paris Agreement – in which \$10 million was allocated to the “Intergovernmental Panel on Climate Change/UN Framework Convention on Climate Change”.⁴¹² This pledge directly opposed Trump’s proposed spending bill, which had “[fulfilled] the President’s pledge to cease payments to the United Nations’ [...] climate change programs”, as well as to any “international climate change programs”.⁴¹³

The Consolidated Appropriations Act of 2018, approving the final FY 2018 budget, also ignored the President’s proposal by maintaining a contribution to the Global Environment Facility,⁴¹⁴ an international organization that assists with environmentally-friendly and climate-friendly development.⁴¹⁵ The 2018 budget also allocated funds to the United Nations Environment Program Participation Act of 1973⁴¹⁶ – a quantity equal to the 2017 contribution – and to the Montreal Protocol Multilateral Fund; although the

408 *Ibid.*, p. 83.

409 *Ibid.*, p. 83.

410 About: The CEO Climate Dialogue [online]. *CEO Climate Dialogue* [Consulted 23 May 2019]. Retrieved from: <https://www.ceoclimatedialogue.org/about>

411 Welcome [online]. *Americans for Carbon Dividends* [Consulted 23 May 2019]. Retrieved from: <https://www.afcd.org/>

412 S. 1780 Report: Department of State, Foreign Operations, and Related Programs Appropriations Bill, 2018 [online]. *Congress.gov*, 7 September 2017 [Consulted 23 May 2019]. Retrieved from: <https://www.congress.gov/115/crpt/srpt152/CRPT-115srpt152.pdf>

413 TRUMP, D. J. *America First: A Budget Blueprint to Make America Great Again*. Washington: U.S. Government Publishing Office, 2017. ISBN: 978-0-16-093762-0.

414 Public Law 115-66: The Consolidated Appropriations Act, 2018. 21 March 2018, p. 1262.

415 GREENLER, S. Congress Writes a Check to Balance Trump’s Anti-Environment Agenda [online]. *Friends Committee on National Legislation*, 28 March 2018 [Consulted 23 May 2019]. Retrieved from: <https://www.fcnl.org/updates/congress-writes-a-check-to-balance-trump-s-anti-environment-agenda-1319>

416 Public Law 115-66, loc. cit., footnote 414.

allotment for the latter was slightly less than in 2017, it was more than the amount the President had proposed.⁴¹⁷

The Consolidated Appropriations Act of 2019, passed in February of 2019 following the extended government shutdown, makes no mention of the United Nations Environment Program.⁴¹⁸ It does, however, renew U.S. commitment to the Global Environment Facility, in spite of Trump's 2018 promise to halve America's contribution to the fund.⁴¹⁹ Interestingly, the Trump administration had proposed a continuation in funding for the Montreal Protocol Multilateral Fund at its 2018 level, but the House of Representatives cut this budget by \$3 million.⁴²⁰ As the 2020 budget has not yet been approved as of June 2019, it is impossible to know how climate action will factor into the final calculations. Based on Congress' performance the past two years, though, one could predict they will fight to maintain strong international commitments.

Although their ability to improve international environmental cooperation through legislation has been understandably limited under the Trump administration – especially with its nationalist rhetoric – the Democrats' sweeping win of the House in the midterm elections has left many environmentalists optimistic. The day after the defeat of the Green New Deal legislation in the Senate, House Democrats introduced the Climate Action Now Act, which “direct[s] the President to develop a plan for the United States to meet its nationally determined contribution under the Paris Agreement”⁴²¹ – in other words, it is a call to Trump to keep the United States in the Paris Agreement. On May 2, 2019, the act was passed by a large majority in the House, and on May 6, it was received by the Senate, where it is still awaiting a vote at the time of this writing.⁴²² Unlike the Green New Deal, the Climate Action Now Act is a *bill* – the first climate bill, in fact, passed by the House in ten years – which means that, if passed, it would represent a legal obligation for the President.⁴²³ While it is likely the Act will not obtain the necessary votes in the Republican-led Senate, the newly-fortified Democratic Party in the House might feel empowered to push for further environmental action in the future.

2.2. International Commitments by States/Local Governments

The increasingly federalist system of environmental governance in the United States has granted states greater power, while also emboldening them to participate in international environmental agreements, often in an effort to compensate for a lack of climate action by their country's administration. Nowhere was this compensation clearer than in states' response to the announcement of the President's withdrawal of the United States from the Paris Agreement.

On June 1, 2017, the day of Trump's declaration of intent to leave the treaty, the governors of Washington, New York, and California created the U.S. Climate Alliance “to convene U.S. states committed to achieving the U.S. goal of reducing emissions 26-28 percent from 2005 levels” – the goal set by the U.S. in its 2015 nationally determined contribution for the Paris Agreement – “and meeting or exceeding the targets of the federal Clean Power Plan”.⁴²⁴ At the time of this writing, the coalition has grown to 24 governors representing 55% of the country's population, all of whom have committed their states to three actions:

417 *Ibid.*, p. 1262.

418 Public Law 116-6, loc. cit., footnote 379.

419 THWAITES, J. US Climate Finance Improves with 2019 Budget, But There's Still a Long Way to Go [online]. *World Resources Institute*, 20 February 2019 [Consulted 23 May 2019]. Retrieved from: <https://www.wri.org/blog/2019/02/us-climate-finance-improves-2019-budget-theres-still-long-way-go>

420 *Ibid.*

421 H. R. 9: Climate Action Now Act. 27 March 2019, p.1.

422 *Ibid.*, p. 1.

423 VALCOVICI, V. House Backs Paris Agreement in First Climate Bill in a Decade [online]. *Reuters*, 2 May 2019 [Consulted 19 May 2019]. Retrieved from: <https://www.reuters.com/article/us-usa-climate/house-backs-paris-agreement-in-first-climate-bill-in-a-decade-idUSKCN1S81OI>

424 United States Climate Alliance Adds 10 New Members to Coalition Committed to Upholding the Paris Accord [online]. *United States Climate Alliance*, 5 June 2017 [Consulted 23 May 2019]. Retrieved from: <https://www.usclimatealliance.org/publications/2018/1/4/united-states-climate-alliance-adds-10-new-members-to-coalition-committed-to-upholding-the-paris-accord?rq=17>

- Instate policies which promote the goals set by the Paris Agreement, specifically aiming for the reduction mentioned in the U.S.’s NDC.
- Monitor progress in climate action and report data at meetings of the Parties to the Agreement.
- Promote new and existing initiatives to cut back carbon emissions and advance alternative energy development at both the state and federal levels.⁴²⁵

Along with a series of initiatives to encourage facets of climate protection such as climate resilience, clean energy, and transportation, the Alliance also prioritizes “international engagement”, including information sharing between countries and the development of regional initiatives such as the North American Climate Leadership Dialogue.⁴²⁶ The Dialogue was founded in September of 2018 at the 23rd Session of the Conference of the Parties (COP) to the UNFCCC, setting an ambitious goal for power generation: 50% zero-carbon by 2025 throughout North America.⁴²⁷

This resolve to remain committed to the Paris Agreement has not ended at the state level but has spread to more than 400 cities in the United States. Climate Mayors, founded in 2014, is a “bipartisan, peer-to-peer network of U.S. mayors working together to demonstrate leadership on climate change [...] and to express and build political will for effective federal and global policy action”.⁴²⁸ Following Trump’s 2017 withdrawal announcement, 61 Mayors released a statement expressing their determination to “adopt, honor, and uphold the commitments to the goals enshrined in the Paris Agreement”.⁴²⁹ As of June 1, 2018, 407 Mayors, representing 70 million Americans, had signed the declaration.⁴³⁰ Pittsburgh, Pennsylvania, a city that received a special mention in Trump’s speech – “I was elected to represent the citizens of Pittsburgh, not Paris”⁴³¹ – made sure to clarify its position in the fight against climate change. Mayor Bill Peduto, in addition to signing the Climate Mayors statement, responded to Trump’s speech on Twitter, saying, “As the Mayor of Pittsburgh, I can assure you that we will follow the guidelines of the Paris Agreement for our people, our economy & future”.⁴³²

In December of 2017, just a few months after Trump’s statement of intent to withdrawal, Chicago hosted the North American Climate Summit in conjunction with the Global Convent of Mayors for Climate and Energy, an event that called together mayors from the United States, Mexico, and Canada to discuss local commitments to the Paris Climate Agreement, “regardless of action taken by their respective federal governments”.⁴³³ To date, 72 mayors from around the world have signed the Chicago Climate Charter, product of the Summit, committing their cities to reducing greenhouse gases according to their respective countries’ NDCs and to taking further action to protect the climate.⁴³⁴

In addition to prompting subnational governments to develop new climate initiatives, Trump’s environmental policy has encouraged governors and mayors to support previously existing efforts, many of which are international. One such effort is the Powering Past Coal Alliance, developed at the UNFCCC

425 2019 Fact Sheet [online]. *United States Climate Alliance*, 2019 [Consulted 23 May 2019]. Retrieved from: https://static1.squarespace.com/static/5a4cfbfe18b27d4da21c9361/t/5ccb5aa56e9a7f542fe4233c/1556830885910/USCA+Factsheet_April+2019.pdf

426 *Ibid.*

427 Joint Statement on North American Climate Leadership [online]. *United States Climate Alliance*, 2019 [Consulted 23 May 2019]. Retrieved from: <https://www.usclimatealliance.org/publications/2018/9/26/joint-statement-on-north-american-climate-leadership>

428 We are Climate Mayors [online]. *Climate Mayors*, 2017 [Consulted 23 May 2019]. Retrieved from: <http://climatemayors.org/>

429 407 US Climate Mayors Commit to Adopt, Honor and Uphold Paris Climate Agreement Goals [online]. *Climate Mayors*, 1 June 2018 [Consulted 23 May 2019]. Retrieved from: <http://climatemayors.org/actions/paris-climate-agreement/>

430 *Ibid.*

431 TRUMP, D. J., “Statement by President Trump...”, loc. cit., footnote 237.

432 PEDUTO, B. *Twitter*, 1 June 2017 [Consulted 12 April 2019]. Retrieved from: <https://twitter.com/billpeduto/status/870370288344674304?lang=en>

433 North American Climate Summit [online]. *North American Climate Summit* [Consulted 19 April 2019]. Retrieved from: <https://northamericanclimatesummit.splashthat.com/>

434 *Chicago Climate Charter* [online]. *Chicago.gov*, 2017 [Consulted 19 April 2019]. Retrieved from: https://www.chicago.gov/content/dam/city/depts/mayor/Press%20Room/Press%20Releases/2018/September/2018_ChicagoClimateCharter.pdf

COP23 by the United Kingdom and Canada, which advocates the “phase-out of unabated coal power”.⁴³⁵ By December of 2018, 80 members had entered the Alliance, including 7 U.S. states and 2 cities.⁴³⁶

At the UNFCCC COP24 in 2018, Arnold Schwarzenegger, former Governor of California, remarked on the importance of state and local commitments in the work being done to protect the climate:

Everytime [sic] you talk about America, you're right when you say that our leadership in Washington is a little bit backwards. But you're wrong when you say that America dropped out of the Paris Agreement. Because if you look a little bit beyond Washington you will see that it is the states and the cities, it's local governments, that can draw 70% of our emissions. And you will see all the extraordinary work that is going on [at] a state and city level in America.⁴³⁷

2.3. International Commitments by the Private Sector

In the fight against climate change, there has been a great deal of collaboration between subnational actors – such as governors or mayors – and the private sector – including private businesses, but also nongovernmental organizations, academic institutions, and other private entities. The majority of this collaboration has been in response to the intended withdrawal of the United States from the Paris Agreement. The largest mobilization has been the We Are Still In movement, which began as a declaration in June of 2017, signed by state and local governments and private companies “as a promise to world leaders that Americans would not retreat from the global pact to reduce emissions and stem the causes of climate change”.⁴³⁸ As of June 2019, the movement has grown to include over 3,750 CEOs, state, local, and tribal government representatives, university presidents, and others from the private sector, together forming the “largest and most diverse coalition of actors ever established in pursuit of climate action”.⁴³⁹

A sister initiative to the We Are Still In movement, America's Pledge was created in July of 2017 by Jerry Brown, Governor of California, and Michael Bloomberg, Mayor of New York City, to measure and record the efforts of subnational and private American stakeholders to reduce greenhouse gas emissions, according to the goals established by the Paris Agreement.⁴⁴⁰ The Pledge was designed to serve as a quantification of emissions reduction efforts by subnational and private actors in the U.S. which could then be submitted in “parallel” to a submission by the federal government, thereby preparing for decreased federal engagement in the Agreement.⁴⁴¹ In his role as the United Nations Secretary-General's Special Envoy for Cities and Climate Change, Mayor Bloomberg wrote a letter to the UN Secretary-General and the Executive Secretary of the UNFCCC, explaining the purpose and necessity of the Pledge:

The bulk of the decisions which drive U.S. climate action in the aggregate are made by cities, states, businesses, and civil society. The federal role, ideally, is to coordinate and support those efforts. In the absence of a supportive federal coordinating role, these actors will more closely coordinate their own decarbonization actions. Collectively, they will redouble their efforts to ensure that the U.S. achieves the carbon emissions reductions it pledged under the Paris Agreement.⁴⁴²

He stressed that the Trump administration's lack of support for environmental initiatives will not undermine subnational commitments to addressing climate change, as most of this action does not originate at the federal level, but rather in states, cities, or the private sector.

435 Our History [online]. *Powering Past Coal Alliance* [Consulted 23 May 2019]. Retrieved from: https://poweringpastcoal.org/about/Powering_Past_Coal_Alliance_History

436 The states of California, Connecticut, Hawaii, Minnesota, New York, Oregon, and Washington and the cities of Honolulu and Los Angeles have joined the Alliance. Members [online]. *Powering Past Coal Alliance* [Consulted 23 May 2019]. Retrieved from: https://poweringpastcoal.org/about/Powering_Past_Coal_Alliance_Members

437 Arnold Schwarzenegger: “Our leadership in Washington is a little bit backwards” [online]. *CNN*, 17 December 2018 [Consulted 23 May 2019]. Retrieved from: https://edition.cnn.com/europe/live-news/cop24-katowice-updates-12-3-18/h_9509b619dfada1b7b1e621456b0047a7

438 About [online]. *We Are Still In* [Consulted 23 May 2019]. Retrieved from: <https://www.wearestillin.com/about>

439 *Ibid.*

440 About America's Pledge [online]. *America's Pledge*, 2019 [Consulted 23 May 2019]. Retrieved from: <https://www.americaspledgeonclimate.com/about/>

441 *Ibid.*

442 *Ibid.*

Some international climate initiatives have emanated solely from the private sector, without governmental collaboration. The Climate Leadership Council, for example, is an international policy institute launched in 2017, formed by business, environmental, and academic experts who work to “promote a carbon dividends framework as the most cost-effective, equitable and politically-viable climate solution”.⁴⁴³ Additionally, some private companies have chosen to launch their own, independent climate initiatives. In 2017, Google set – and met – a goal to “match” all of the electricity they consumed by purchasing the equivalent amount in renewable energy in an effort to reduce their carbon impact.⁴⁴⁴ In 2018, McDonald’s was the first restaurant company worldwide to set science-based targets to achieve a significant reduction in greenhouse gas emissions.⁴⁴⁵

Other, previously-existing initiatives have been strengthened since Trump took office. Of the 563 American companies currently participating in the United Nations Global Compact, more than 200 joined after the President’s inauguration.⁴⁴⁶ Science Based Targets, an initiative created in 2015 by several nonprofits working alongside the UN Global Compact, encourages businesses all over the world to develop science-based targets as a way to increase their competitive advantage in the global shift to a low-carbon economy.⁴⁴⁷ Out of a total of 563 companies from around the world who have set science-based targets at the time of this writing, 109 are headquartered in the United States; of these, 90 joined after Trump’s inauguration.⁴⁴⁸

The private sector has the advantage of freedom from the bureaucracy that restricts the public sector; the notorious sluggishness with which changes occur in the government is not an impediment in civil society, meaning that change can – and does – happen quickly. This is true of climate activism, as well: movements are quickly developing, facilitated by social media. The student “climate strike” movement that has been taking the world by storm over the past several months, in which students protest government inaction by “striking” during school hours, has made its way to the United States under the name “Youth Climate Strike”. The movement has its origins in the “Fridays for Future” solo protests of Swedish teen Greta Thunberg⁴⁴⁹ – a testament to the truly international nature of climate activism.

443 Mission [online]. *Climate Leadership Council* [Consulted 22 May 2019]. Retrieved from: <https://www.clcouncil.org/mission/>

444 HÖLZLE, U. Meeting Our Match: Buying 100 Percent Renewable Energy [online]. *Google*, 4 April 2018 [Consulted 23 May 2019]. Retrieved from: <https://www.blog.google/outreach-initiatives/environment/meeting-our-match-buying-100-percent-renewable-energy/>

445 What We’re Doing to Take Climate Action [online]. *McDonald’s*, 2019 [Consulted 23 May 2019]. Retrieved from: <https://corporate.mcdonalds.com/content/corpmcd/scale-for-good/climate-action.html>

446 Our Participants [online]. *United Nations Global Compact*, 2019 [Consulted 23 May 2019]. Retrieved from: <https://www.unglobalcompact.org/what-is-gc/participants>

447 About the Science Based Targets Initiative [online]. *Science Based Targets* [Consulted 23 May 2019]. Retrieved from: <https://sciencebasedtargets.org/about-the-science-based-targets-initiative/>

448 *Ibid.*

449 Climate Activist Greta Thunberg Given Amnesty International Human Rights Award [online]. *BBC*, 7 June 2019 [Consulted 8 June 2019]. Retrieved from: <https://www.bbc.co.uk/newsround/48555297>

Conclusions

A little over two years into his presidency, Trump has made it quite clear that combating climate change is not one of his priorities. Although the White House has no official climate policy – nor mentions climate change in any of its “Issues” pages on its website – an analysis of Trump’s speeches, executive actions, and official administration webpages reveals key themes in his approach to the climate crisis, such as deregulation and a weakened EPA. His “America First” slogan, which encourages nationalism and rejects multilateral efforts, has been central to Trump’s policy and has influenced his willingness to maintain American participation in global climate change efforts. The importance he gives to economic growth and his preference for fossil fuels as part of his “energy independence” initiative affect nearly all of his policies, but they are specifically relevant to the decisions he makes regarding the environment.

In general, Trump views climate action as an encroachment upon America’s economic and political strength; as such, his primary policy objective has been to systematically eliminate as many environmental protections as possible. In his efforts to rollback regulations, however, he has been limited by a series of factors, including market conditions, an American public that has increasingly opposed his climate positions, and both national and international legal considerations. Additionally, even as the administration has tried to reduce the United States’ commitment to fighting global climate change, federal, state, and private actors have worked to ensure Americans’ continued engagement.

With this in mind, we have formulated a series of conclusions with respect to our original hypotheses about Trump’s effect on national and international commitments to climate change efforts.

Our findings partially confirmed our first hypothesis, which predicted that the President’s climate change policy had significantly lowered the federal government’s national and international commitments to climate protection but had not significantly affected commitments by states or the private sector:

1. By comparing the national climate commitments made by the federal government before and after Trump’s inauguration, we discovered that the current president’s actions have, in fact, reduced the role of the federal government in establishing national climate protections. The heightened environmental regulation produced by the government during the Obama administration stands in stark contrast to Trump’s deregulatory efforts. The 115th Congress produced no significant environmental regulation, and all executive action thus far has served to decrease environmental protection. However, most of the administration’s deregulatory actions have been challenged in court, which has greatly reduced Trump’s impact on the federal government’s commitment to fight climate change. While national commitments have been affected, therefore, they have not been *significantly* lowered.

It is important to note that, although Republicans controlled both the House of Representatives and the Senate in the 115th Congress, Democrats have a majority in the House as of January 2019. Although the party has a tendency to favor environmental regulation, it will be difficult for Democrats to work against both a Senate and a President who oppose climate action.

2. The federal government’s international climate commitments in the Trump era have not been affected to the same degree as its national commitments. In spite of the President’s efforts to reduce America’s financial contribution to international organizations addressing climate change, Congress’ control of the budget has ensured that the federal government’s commitments have been mostly maintained from 2016 levels. The United States remains a Party to the UNFCCC and, although Trump announced his intention to withdraw the country from the Paris Agreement, the legalities of the accord do not allow the U.S. to leave until 2020. On the other hand, the Trump administration has demonstrated far less willingness to work multilaterally towards the achievement of the Sustainable Development Goals than the previous administration.

Our second hypothesis stated that subnational governments and the private sector have increased their climate commitments, especially those of an international nature, in response to the federal government’s lack of involvement in environmental efforts. Our analysis confirmed this hypothesis.

3. Subnational governments have assumed a greater role in climate regulation since Donald Trump took office, owing, in great part, to the federalist agenda proposed by the EPA. Although it is true that, prior to 2017, many had established environmental regulation stricter than the federal standards and various regional initiatives already existed, the mobilization of states to counteract the deregulation proposed by the Trump administration has been remarkable. This is true of state and local governments' international commitments, as well: earlier international efforts were limited and focused on regional alliances and initiatives, whereas current action is extensive and much farther-reaching – presumably designed to help states take the place formerly held by the federal government in global environmental governance.
4. As previously noted, the trend in environmental regulation during the Trump administration has been away from legislation and towards voluntarism, thus making the role of the private sector more important, both in terms of national and international commitments to climate action. Where few initiatives existed before, the private sector has developed a series of actions specifically designed to compensate for lack of climate protection by the White House, and the litigative action against the government has greatly increased. Similarly, since Trump's inauguration, the private sector has created a collection of movements, initiatives, and pledges for international collaboration against climate change, while strengthening its preexisting commitment to the UN Global Compact with the addition of more American companies.

Our third hypothesis, that the President's impact on America's environmental engagement has been mitigated by a society who increasingly disagrees with his approach to climate change efforts, was also confirmed:

5. Trump's climate action has been based on a policy of denialism and prioritization of fossil fuels and economic progress over environmental protections. Opinion polls have confirmed that a majority of Americans believe that human action contributes to climate change, favor climate protection – even at the expense of economic growth – and disagree with Trump's environmental action. These individuals have worked to block his budget proposals, develop stricter state environmental legislation, advance private sector initiatives, and renew the United States' international commitment to climate change efforts.

Finally, our fourth hypothesis drew on public choice theory to propose that Trump's environmental deregulation has resulted in a *Race to Desirability*, rather than a *Race to the Bottom*. This prediction was partially confirmed by our research:

6. The *Race to the Bottom* theory proposes a successive reduction in state environmental regulation in the absence of federal standards. As most of the rollbacks proposed by the President have been held up in court – or already rejected – it is impossible to know what states would do if the federal government eliminated regulation addressing climate change. For this reason, we are unable to confirm nor reject our hypothesis.
7. That being said, we are able to confirm that Trump's intended deregulation has produced a *Race to Desirability*. Faced with the prospect of fewer national standards to protect the climate, many states have continued to advance their own regulations and initiatives. They have been supported by market trends, as renewable energy has gradually become more affordable and traditional fuels less profitable. States are escalating their efforts to combat climate change while trying to balance these efforts with economic gains, increasingly discovering that the two are, in fact, compatible.

It is impossible to predict the long-term consequences that Donald Trump's presidency may have on opinions regarding environmental protection or on the environment itself. For now, though, it is safe to say that the President's efforts to dismantle climate protections. Nevertheless, the President's efforts to dismantle climate protections have generated renewed commitment to combating climate change, sending a clear message to Trump, to future administrations, and to the rest of the world: America will not let its President unilaterally determine the nation's response to a global crisis. Climate change is far too important to allow one person to decide the future of the rest of the world.

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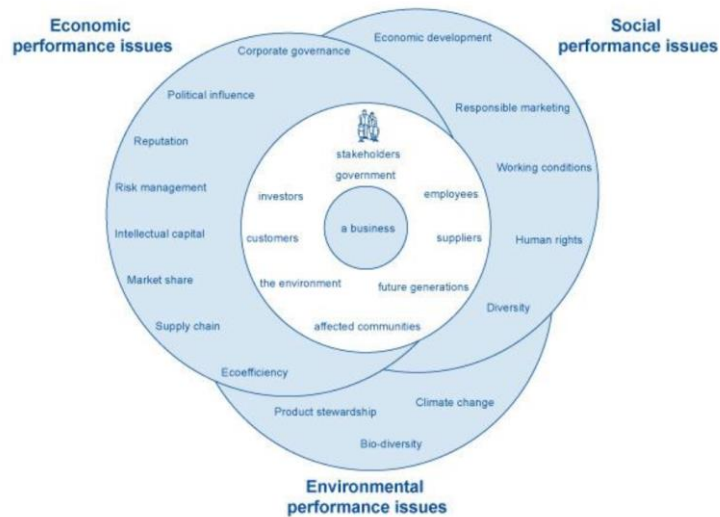
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Appendix: Figures

Figure 1: The Relationship between Economic, Social, and Environmental Performance

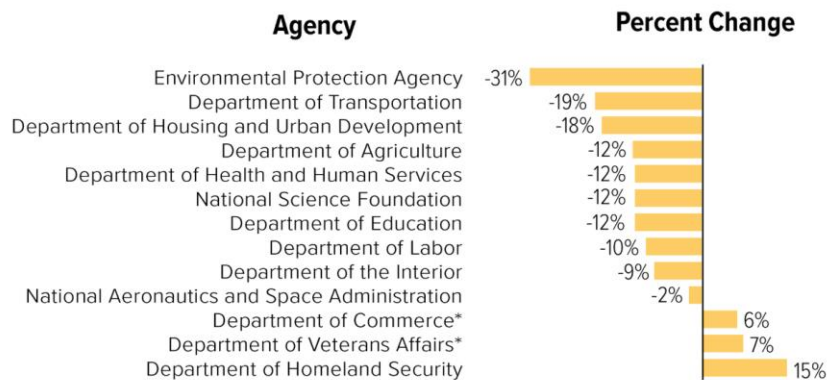


Source: “What is CSR?”, loc. cit., footnote 112.

Figure 2: President’s 2020 Budget Would Cut Broad Set of Public Services

President’s 2020 Budget Would Cut Broad Set of Public Services

Proposed Discretionary Funding for Various Domestic Agencies Relative to FY 2019 Level (no inflation adjustment)



Note: In 2019 and 2020, funding levels include disasters, wildfire suppression, and HUD receipts.

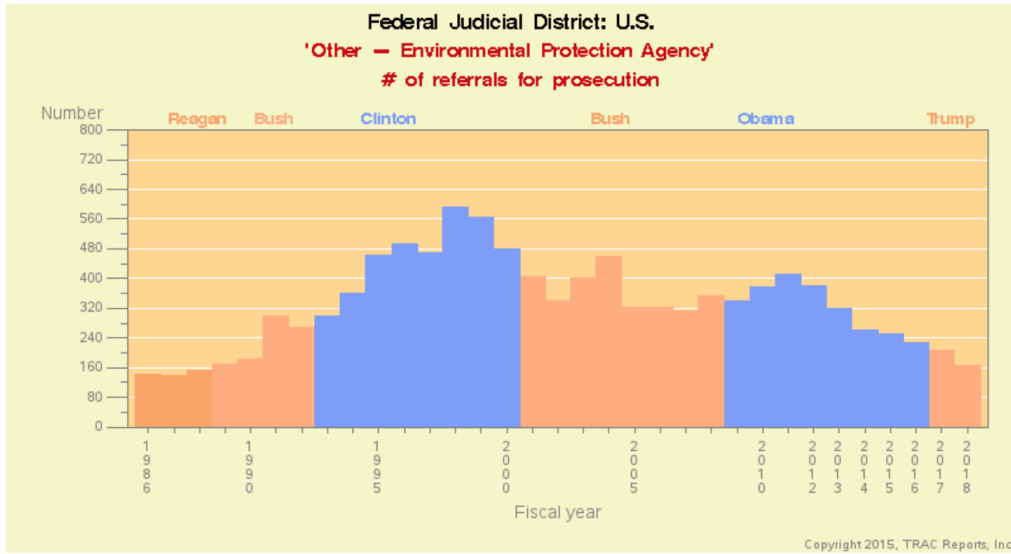
*The increase for the Department of Commerce is due to funding for the 2020 decennial census. The Veterans Affairs funding increase is due in large part to rising health care costs and the implementation of the 2018 MISSION Act, which increases veterans’ access to health care outside of VA facilities.

Source: CBO for 2019 funding, OMB for 2020 request

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

Source: Center on Budget and Policy Priorities. Retrieved from:
<https://www.cbpp.org/presidents-2020-budget-would-cut-broad-set-of-public-services>

Figure 3: Number of EPA Referrals for Prosecution by Administration



Source: "Criminal Enforcement Collapse At EPA...", loc. cit., footnote 258.

Figure 4: Change of Language on EPA Website

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Most companies focus on reporting **carbon emissions from** activities that are under their direct control, (e.g., their manufacturing operations) and from direct energy production or purchases.

While direct emissions may contribute to a large part of a company's **carbon footprint**, indirect **carbon emissions** from sources upstream and downstream in the supply chain often represent a very significant, possibly greater, part of a company's total footprint.

These indirect emissions consist of a broad range of activities, including freight transportation activities.

Companies often find it difficult to acquire the data needed to report their emissions from freight transportation.

However, SmartWay Partners have direct access to high-quality freight-related carbon emissions data that non-SmartWay Partners don't.

SmartWay:

- Generates **carbon emissions** data (CO₂, NO_x, and PM) with scientifically-based methods using EPA emission factors, and provides consistent and comparable metrics for freight emissions across all industry sectors;
- Encourages shippers to collaborate with their freight carriers and establish shared efficiency goals; and
- Actively works with several large, global **carbon sustainability** reporting protocol organizations to integrate SmartWay **carbon emissions** data directly into their guidelines and standards.

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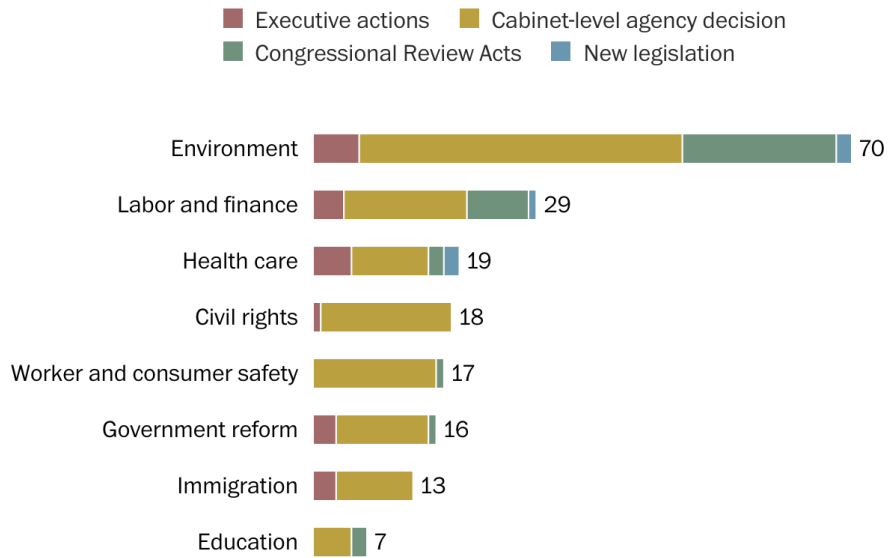
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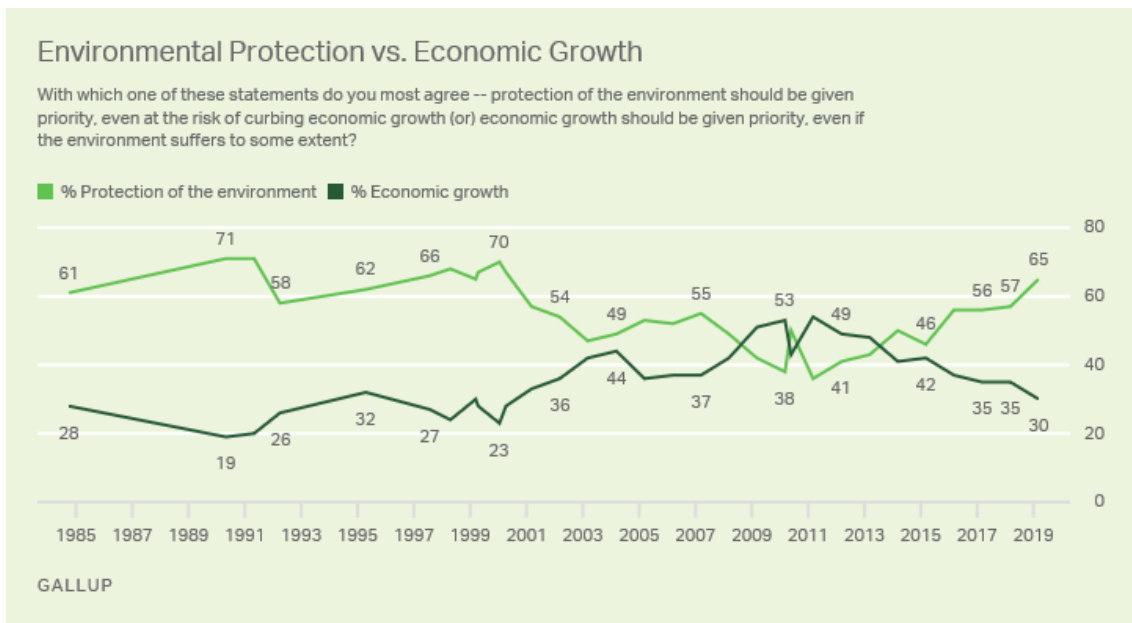
Source: RINBERG, T. et al., loc. cit., footnote 273.

Figure 5: Rules and Laws Trump Tried to Overturn in First Year



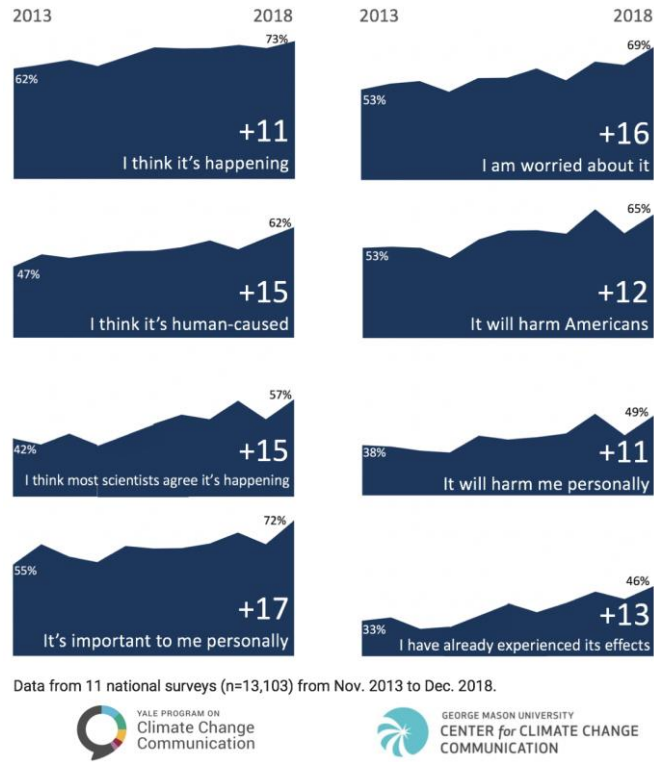
Source: EILPERIN, J. and CAMERON, D., loc. cit., footnote 321.

Figure 6: Do Americans favor economic growth or environmental protection?



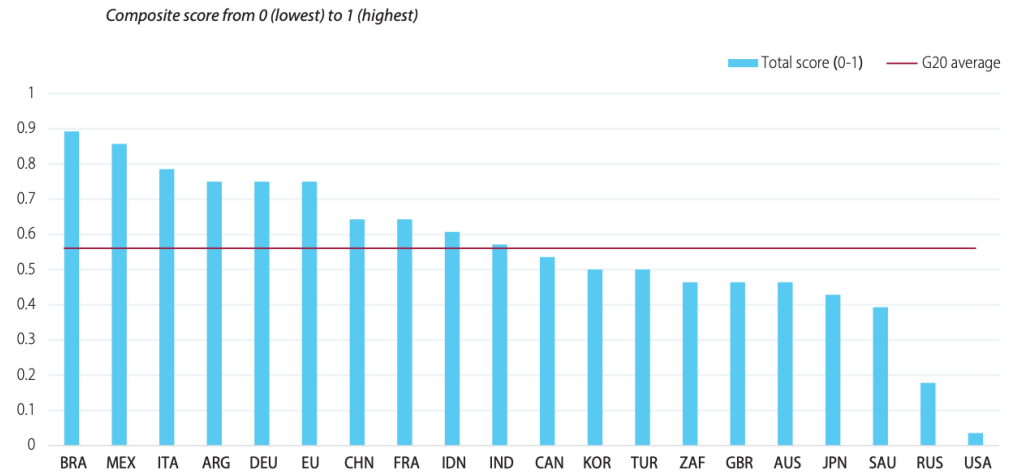
Source: "Environment", Gallup, loc. cit., footnote 334.

Figure 7: How Americans View Climate Change – 5-Year Trend



Source: GUSTAFSON, A., et al., loc. cit., footnote 339

Figure 11: National Coordination and Implementation Mechanisms for the SDGs in G20 Countries, 2018



Note: Based on the sum of answers to q1, q2, q3, q4, q5, q6, q6.a, q7, q8, q9, q10, q11, q12, q14. Best response option was allocated 1 point, intermediate response 0.5 points, and worst response 0 points. Responses computed on a scale from 0-14 were rescaled on a 0-1 scale. Data reported correspond to the situation as of May 2018.

Source: Authors' analysis

Source: SACHS, J. et al., loc. cit., footnote 245.

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Resumen: A lo largo de la década pasada, el cambio climático se ha convertido en un tema de interés global. Aunque tradicionalmente había oscilado en su compromiso con el medio ambiente, Estados Unidos se mostró dispuesto a asumir el rol de líder en sus esfuerzos climáticos tanto nacionales como internacionales bajo la administración de Obama. La llegada de Donald Trump a la Casa Blanca en 2017, sin embargo, ha supuesto una transformación del país. Con su discurso de rechazo del cambio climático, su aversión al multilateralismo y su priorización de la economía por encima de todo, Trump ha intentado alterar profundamente la respuesta de Estados Unidos a la cuestión medioambiental. Este trabajo aspira a determinar el impacto que ha tenido el presidente actual en los compromisos climáticos nacionales e internacionales del gobierno nacional, los subnacionales, y el sector privado. A través de un análisis de las acciones de Trump relacionadas con el cambio climático, hemos identificado temas generales de su política climática. Consideramos también las limitaciones que se presentaron a la hora de implementar su política. Finalmente, se realiza una comparación entre los compromisos nacionales e internacionales de acción climática hechos antes y después de su inauguración. Concluimos que el efecto de la política climática de Trump ha sido mayor en los compromisos nacionales del gobierno federal. No obstante, entre las limitaciones con las que se encontró el presidente y la movilización del público, los compromisos climáticos nacionales e internacionales de Estados Unidos no se han reducido de forma significativa – de hecho, en muchos sentidos, se han reforzado.

Abstract: Global climate change has become a topic of great interest worldwide in the past decade. Although historically wavering in its commitment to climate action, the United States had shown a desire to assume a leadership role, both in its national and international efforts, under the Obama administration. Since President Trump took office in 2017, however, the country has undergone a transformation. With his rhetoric of climate change denial, his aversion to multilateralism, and his prioritization of the economy over all else, he has attempted to profoundly alter the way the United States responds to climate change. This study aims to determine the impact that Trump has had on the national and international commitments to climate action made by the federal government, subnational governments, and the private sector. Through an analysis of Trump's actions related to climate change, we identify general themes of his climate policy. We then consider the limitations he faced in his policy implementation and compare national and international climate commitments before and after his inauguration. We conclude that the effect of Trump's climate policy has been greatest on national commitments made by the federal government. Nonetheless, between the limitations he has encountered and the mobilization of the public, America's national and international commitments to climate change have not been significantly reduced – in fact, in many ways, they have been strengthened.

Palabras clave: Cambio climático, Donald Trump, Obama, multilateralismo, gobierno federal, Estados Unidos.

Keywords: Climate change, Donald Trump, Obama, multilateralism, federal government, United States.

