

# CLEAN POWER PLAN

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## I. INTRODUCTION

In 2014, carbon dioxide accounted for 80.9% of all United States' greenhouse gas emissions relating to human activities.<sup>1</sup> The primary human activity that releases carbon dioxide is the burning of fossil fuels for energy, as done primarily in the transportation sector.<sup>2</sup> In 2011, the largest carbon dioxide emitters were China, the United States, the European Union, India, Russia, Japan, and Canada.<sup>3</sup> When people use land through deforestation, agriculture, or fertilizers, those activities increase the emission of greenhouse gases that include: carbon dioxide, nitrous oxide, and methane.<sup>4</sup> The increase and accumulation in greenhouse gas emissions has led this to be a global issue that gained wide political debate.

On April 22, 2016, popularly known as Earth Day, 175 nations - including the United States - gathered in New York to sign the Paris Agreement.<sup>5</sup> The Paris Agreement is a non-binding treaty, set out to respond against the threat of climate change by holding the increase in the global temperature to below 2°C, lower greenhouse gas emissions development, and each committed party or nation is expected to prepare mitigation measures to reach these objectives.<sup>6</sup> The objective of the

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<sup>1</sup> U.S. Environmental Protection Agency, *Overview of Greenhouse Gases*, available at <https://www3.epa.gov/climatechange/ghgemissions/gases/co2.html>.

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> U.S. Environmental Protection Agency, *Overview of Greenhouse Gases*, available at <https://www3.epa.gov/climatechange/ghgemissions/global.html>.

<sup>5</sup> Doyle Rice, *175 Nations Sign Historic Paris Climate Deal on Earth Day*, USA TODAY (Apr. 22, 2016, 4:02 PM), <http://www.usatoday.com/story/news/world/2016/04/22/paris-climate-agreement-signing-united-nations-new-york/83381218/>.

<sup>6</sup> Paris Agreement to the United Nations Framework Convention on Climate Change, art 2 cl 1 and art 4 cl 2 (Apr. 22, 2016),

Paris Agreement is to move towards a more sustainable future while addressing climate change by reducing the emissions of greenhouse gases.<sup>7</sup>

Under the Paris Agreement, also known as the Conference of the Parties of the 21<sup>st</sup> Century (COP21), pledged nations must submit their own nationally determined climate actions.<sup>8</sup> Pledged nations are to then implement those plans “in light of different national circumstances” and promote a transparent framework for flexibility.<sup>9</sup> The Paris Agreement allows national governments to create their own emissions reduction plans to be reviewed, every five years, by other pledged members to review their progress.<sup>10</sup>

The Paris Agreement also aims “to incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities.”<sup>11</sup> In fact, many private corporations showed public support in favor of the Paris Agreement and towards a cleaner and energy efficient solution.<sup>12</sup> For example, so far, 110 private companies have expressed their support in favor of the Paris Agreement and the Environmental Protection Agency’s Clean Power Plan, which are both designed to considerably eliminate carbon pollution.<sup>13</sup> Steve Howard, Chief Sustainability Officer of IKEA, stated that the Paris Agreement is the “beginning of a long-term framework needed for businesses to transform their operation and invest in low carbon products and

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[http://unfccc.int/files/meetings/paris\\_nov\\_2015/application/pdf/paris\\_agreement\\_english\\_.pdf](http://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english_.pdf).

<sup>7</sup> United Nations, Sustainable Development Goals: 17 Goals to Transform Our World (2016), <http://www.un.org/sustainabledevelopment/climatechange/>.

<sup>8</sup> Paris Agreement, *supra* note 6, at art 4 cl 2.

<sup>9</sup> Paris Agreement, *supra* note 6, at art 2 cl 2 and art 13 cl 1.

<sup>10</sup> Patrick Bayer and Johannes Urpelainen, *The Paris Climate Agreement Calls for Big Investments in Renewable Energy. Here’s Why Governments Love it.*, WASHINGTON POST (Mar. 14, 2016), <https://www.washingtonpost.com/news/monkey-cage/wp/2016/03/14/the-paris-climate-agreement-calls-for-massive-investments-in-renewable-energy-heres-why-governments-love-it/>.

<sup>11</sup> Paris Agreement, *supra* note 6, at art 6 cl 4.

<sup>12</sup> Hiroko Tabuchi, *U.S. Companies to Trump: Don’t Abandon Global Climate Deal*, The New York Times (Nov. 16, 2016), [https://www.nytimes.com/2016/11/17/business/energy-environment/us-companies-to-trump-dont-abandon-global-climate-deal.html?\\_r=0](https://www.nytimes.com/2016/11/17/business/energy-environment/us-companies-to-trump-dont-abandon-global-climate-deal.html?_r=0).

<sup>13</sup> Sara Sciammacco, *100+ Companies Salute The Signing Of The Paris Agreement And Call For Swift Action On Clean Power Plan*, (Apr. 20, 2016), <http://www.ceres.org/press/press-releases/companies-salute-paris-agreement>.

services.”<sup>14</sup> Barry Parkin, Chief Sustainability Officer at Mars, Inc., also joined the platform by declaring their own “de-carbonization commitment to eliminate the use of fossil fuel energy and greenhouse gas emission by 2040.”<sup>15</sup>

Earlier, on June 2, 2014, in an effort to reduce greenhouse gas emissions, the Environmental Protection Agency (EPA) proposed the Clean Power Plan that set guidelines for states to develop state-tailored strategies to address the greenhouse gas emissions from their existing fossil fuel-fired generators.<sup>16</sup> One year later, the final Clean Power Plan was signed on August 3, 2015, which requires each state to meet the emissions goal from 2022 to 2029.<sup>17</sup> The Clean Power Plan requires current power plants to reduce carbon emissions by 32% from 2005 levels by 2030.<sup>18</sup> Furthermore, the EPA created the Clean Power Plan and promulgated it under the Clean Air Act Section 111(d) to limit carbon dioxide emissions to monitor states’ progress in reducing fossil fueled emissions.<sup>19</sup>

To further the nation’s efforts and commitment to respond to climate change after signing the Paris Agreement, President Barack Obama’s administration had been pushing forward the Clean Power Plan. Unfortunately for the Democratic Party, on February 9, 2016, the Supreme Court granted an unprecedented stay on the Clean Power Plan before any lower court ruled on the regulation.<sup>20</sup> The D.C. Circuit Court of Appeals would have heard oral arguments on June 2, 2016 but it was rescheduled to be heard en banc later this year in September. (*State of West Virginia, et al. v. EPA*, 15-1363).<sup>21</sup> Therefore, this paper will focus on the impact of the stay and analyze the effects of the Clean Power Plan, assuming the Clean Power Plan proceeds forward.

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<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> Federal Energy Regulatory Commission, *EPA-DOE-FERC Coordination on Implementation of the Clean Power Plan* 1 (Aug. 3, 2015), <https://www.ferc.gov/media/headlines/2015/CPP-EPA-DOE-FERC.pdf>.

<sup>17</sup> *Id.*

<sup>18</sup> Keith Goldberg, *Global Climate Deal Would Boost CPP’s Survival Chances*, LAW360, (Apr. 18, 2016), <http://www.law360.com/articles/731383/global-climate-deal-would-boost-cpp-s-survival-chances>.

<sup>19</sup> Federal Energy Regulatory Commission, *supra* note 16, at 2.

<sup>20</sup> Jasmin Melvin, *Unprecedented Supreme Court Action Draws Mixed Bag of Perspectives on Rule’s Future*, *Platts Inside F.E.R.C.*, Feb. 2016, at 1.

<sup>21</sup> *Id.*

This paper will investigate the issue of whether the recent stay ordered by the Supreme Court Justices on the EPA regulation will inhibit the United States' pledge in the global Paris Agreement in limiting greenhouse gas emissions and efforts in reducing climate change and how it will affect the public health and welfare. First, this paper will compare the carbon pricing process and the cap and trade system to the Clean Power Plan strategy and how the Clean Power Plan has a more efficient tactic and incentive in reducing greenhouse gas emissions. Second, this paper will discuss the constitutional context of the Clean Air Act as a source of authority for the Clean Power Plan as well as barriers to the Clean Power Plan during the implementation process. Third, this paper will find that the Clean Power Plan supports the United States' commitment and pledge, by signing the Paris Agreement among 174 other nations. This paper will take the position of assuming that the Clean Power Plan passes and proceeds with implementation despite the stay. In doing so, this paper will investigate how the Clean Power Plan would affect public health and welfare policies within the United States. Finally, it will conclude that the Clean Power Plan is imperative for implementation in the nation to further a sustainable future regarding public health and the economy.

## II. CARBON PRICING COMPARISON

### *A. Carbon Pricing versus Cap and Trade System*

Carbon pricing, also known as a carbon tax, is a tax policy that internalizes externalities from pollution in relation to anthropogenic climate change, or pollution produced by human activity.<sup>22</sup> The purpose behind such tax is based on the economic rationale that, the higher the price caused by a tax, the less consumption of fossil fuels, which produce less greenhouse gas emissions.<sup>23</sup> In an ideal situation, this is an efficient policy to reduce fossil fuel burning activities but as Mark Jaccard, an energy economist at Simon Fraser University says, "It is

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<sup>22</sup> Gilbert E. Metcalf & David Weisbach, *The Design of a Carbon Tax*, 33 HARV. ENVTL. L. REV. 499, 499 (2009).

<sup>23</sup> John Dernbach, *Moving the Climate Change Debate From Models to Proposed Legislation: Lessons From State Experience*, 30 ELR 10933, 10933 (2000).

politically difficult to get carbon prices to levels that have an effect.”<sup>24</sup> To further elaborate, carbon pricing is the process of placing a price on carbon pollution in an effort to bring down emissions and encourage cleaner energy sources.<sup>25</sup> That price captures external costs of carbon emissions that the public pays for through damages to health care costs, crops, heat waves, droughts, and even flooding.<sup>26</sup> There are two methods of carbon pricing: emissions trading system (ETS) and carbon taxes.<sup>27</sup>

Emissions trading system is also known as the cap and trade system.<sup>28</sup> In the cap and trade system, the government creates the tax by placing a limit on total annual greenhouse gas emissions, and then issues tradable “credits” for those emissions for prearranged sectors.<sup>29</sup> However, this system proves difficult. For example, under the Kyoto Protocol, the European Union pledged to reduce emissions to 8% below 1990 levels by 2012.<sup>30</sup> As a result, the European Union’s Emissions Trading System had a small impact in their carbon emissions and found no evidence that carbon pricing was influencing any investments for newer energy efficient equipment.<sup>31</sup>

Presently these, two methods of carbon pricing are determined by national and economic circumstances.<sup>32</sup> Some greenhouse gas emissions are paid through emission reduction, whereas other private entities offset their own emissions to mitigate damages.<sup>33</sup>

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<sup>24</sup> Peter Fairley, *If Carbon Pricing Is So Great, Why Isn't It Working?* ENSIA, (Jul. 12, 2016), <http://ensia.com/features/if-carbon-pricing-is-so-great-why-isnt-it-working/>.

<sup>25</sup> World Bank Group, <http://www.worldbank.org/en/programs/pricing-carbon> (last visited Jul. 23, 2016).

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*

<sup>28</sup> *Id.*

<sup>29</sup> Fairley, *supra* note 24.

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

<sup>32</sup> World Bank Group, <http://www.worldbank.org/en/programs/pricing-carbon> (last visited Jul. 23, 2016).

<sup>33</sup> *Id.*

### B. Clean Power Plan

The Clean Power Plan addresses climate change from a different perspective in that it addresses energy-related activities.<sup>34</sup> In June 2013, President Obama engaged the EPA to work along states, power plant operators, and investors to establish a carbon standard for existing power plants under the Clean Air Act by June 2015.<sup>35</sup> As a result, the EPA released their proposal in June 2015 and the final rule in August 2015.<sup>36</sup>

The proposal will be an affordable energy system that will help the nation cut pollution and protect public health and the environment.<sup>37</sup> It is more affordable because the plan is flexible to the states, which reflects the different mix of sources and opportunities to cut carbon pollution, while also being reliable.<sup>38</sup>

Since the power sector is the largest source of carbon emission in the United States, the Clean Power Plan targets this area.<sup>39</sup> In comparison to the carbon tax, under the Clean Power Plan, the EPA plans to set up and administer a program to track trading programs for states.<sup>40</sup> The EPA, under the Clean Energy Incentive Program, allows states to act early in cutting carbon pollution by incentivizing emission reduction credits which can be used to sell to emitters.<sup>41</sup>

Under the Paris Agreement, there are several market-based approaches through four particular provisions embedded in the Agreement.<sup>42</sup> The first provision includes a method to facilitate transfers

<sup>34</sup> U.S. Environmental Protection Agency: Fact Sheet: Overview of the Clean Power Plan, *available at* <https://www.epa.gov/cleanpowerplan/fact-sheet-overview-clean-power-plan>.

<sup>35</sup> Center for Climate And Energy Solutions, *Q&A: EPA Regulation of Greenhouse Gas Emissions from Existing Power Plants*, (Aug. 15, 2016), <http://www.c2es.org/print/federal/executive/epa/q-a-regulation-greenhouse-gases-existing-power>.

<sup>36</sup> *Id.*

<sup>37</sup> U.S. Environmental Protection Agency: Fact Sheet: Clean Power Benefits, *Why we Need a Cleaner, More Efficient Power Sector*, *available at* <https://www.epa.gov/cleanpowerplan/fact-sheet-clean-power-plan-benefits>.

<sup>38</sup> *Id.*

<sup>39</sup> Center for Climate and Energy Solutions, *supra* note 35.

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> Derek Walker & Jeff Swartz, *Carbon Pricing The Paris Agreement's Key Ingredient*, ENVIRONMENTAL DEFENSE FUND (Apr. 2016), *available at*

of emission reduction units internationally across borders, which can help countries that already have a carbon price.<sup>43</sup> This allows countries to increase their participation in a larger economic market that will enable them to lower emissions costs than they otherwise could on a national scale.<sup>44</sup> The second method is incorporated in article 6, paragraphs 2 and 5, that ensure that countries account for emissions reductions in a transparent methods to avoid double-counting reductions.<sup>45</sup> The third provision is found in article 6, paragraph 4, which give nations an option to mitigate and reduce their emissions while promoting a sustainable development.<sup>46</sup> The final provision is found in article 13, which requires an enhanced transparent framework in reporting and reviewing all the nations' climate efforts to build a confident foundation for each member country.<sup>47</sup>

The Clean Power Plan offers states the ability to implement an emission trading program or the option to join a multi-state market.<sup>48</sup> To further illustrate the economic cooperation among nations, in January of 2015, California and Québec held twelve joint carbon auctions.<sup>49</sup> Furthermore, Ontario, Manitoba, Washington, and Oregon are exploring the feasibility of joining.<sup>50</sup>

### III. CONSTITUTIONAL SOURCE OF AUTHORITY

#### *A. Nondelegation Doctrine*

Under Article I, Section 1 of the United States Constitution, “All legislative powers herein granted shall be vested in a Congress of the United States.”<sup>51</sup> Therefore, the nondelegation doctrine maintains that Congress may not delegate legislative powers to agencies because Article I, Section 1 solely vests the legislative power in Congress and

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[http://www.ieta.org/resources/Resources/Reports/Carbon\\_Pricing\\_The\\_Paris\\_Agreements\\_Key\\_Ingredient.pdf](http://www.ieta.org/resources/Resources/Reports/Carbon_Pricing_The_Paris_Agreements_Key_Ingredient.pdf).

<sup>43</sup> *Id.* at 3.

<sup>44</sup> *Id.*

<sup>45</sup> *Id.*

<sup>46</sup> *Id.*

<sup>47</sup> *Id.*

<sup>48</sup> *Id.* at 4.

<sup>49</sup> Thaddeus Huetteman, *California and Quebec Complete Second Joint Carbon Dioxide Emissions Allowance Auction*, TODAY IN ENERGY (Mar. 11, 2015), <https://www.eia.gov/todayinenergy/detail.php?id=20312>.

<sup>50</sup> *Id.*

<sup>51</sup> U.S. CONST. art. I, § 1.

not elsewhere.<sup>52</sup> However, if Congress were to set forth a guiding principle to agencies, it is constitutionally permissible as an executive function.<sup>53</sup>

In 2001, the Court considered the delegation of legislative power to the EPA for establishing air pollution standards.<sup>54</sup> In a delegation challenge, the constitutional issue that arises is whether the statute delegates legislative power to an agency.<sup>55</sup> In *Whitman v. American Trucking Association*, the Clean Air Act required the EPA to promulgate air quality standards and the Supreme Court held that Congress has legislative powers but the Constitution does not permit the “delegation” of those powers.<sup>56</sup> However, when Congress defers decision-making authority to agencies, Congress must lay intelligible principles.<sup>57</sup> In this instance, the Court held that the statute that required the EPA to set standards for air pollution at a “requisite” level, which is stated in the Clean Air Act, was to be interpreted as “sufficient, but not more than necessary” to protect public health.<sup>58</sup> Thus, it provided a clear guidance on the level of acceptable pollution to protect public health and therefore, was upheld.<sup>59</sup>

### B. Clean Air Act of 1970

In 1970, the Clean Air Act was enacted “to protect and enhance the quality of the nation’s air to promote the public health and welfare.”<sup>60</sup> Under the Clean Air Act, the EPA is required to set National Ambient Air Quality Standards (NAAQS) for pollutants that are considered to be harmful to public health and the environment.<sup>61</sup>

On October 23, 2015, the EPA published regulations regarding carbon dioxide emissions for new, modified, and reconstructed power

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<sup>52</sup> Kathryn A. Watts, *Rulemaking as Legislating*, 103 GEO. L.J. 1003, 1006 (2015).

<sup>53</sup> *Id.*

<sup>54</sup> Thomas W. Merrill, *Rethinking Article I, Section 1: From Nondelegation To Exclusive Delegation*, 104 COLUM. L. REV. 2097, 2106 (2004).

<sup>55</sup> *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 472 (2001).

<sup>56</sup> *Id.*

<sup>57</sup> *Id.* at 462.

<sup>58</sup> *Id.* at 473.

<sup>59</sup> *Id.*

<sup>60</sup> CAA §101(b)(1), 42 U.S.C. §7401(b)(1) (2015).

<sup>61</sup> *Id.*



plants under section 111(b) and existing power plants under section 111(d).<sup>62</sup> Pursuant to section 111(d) of the Clean Air Act, the EPA has authority to regulate air pollutants from existing power plants by requiring states to adopt emissions “standards of performance” and has the authority to require states to adopt state implementation plans.<sup>63</sup> The state implementation plans must be submitted to the Administrator to establish “standards of performance” for existing and new sources of air pollutants pursuant to section 111(b) and section 111(d).<sup>64</sup> The Clean Air Act defines “standard of performance” as “a standard for emissions of air pollutants, which reflects the degree of emission limitation achievable through the application of the best system of emission reduction in which the Administrator determines what has been adequately demonstrated.”<sup>65</sup>

Regulating the emission process under section 111(d) involves the following three steps: 1) the EPA releases “guideline documents” that identify systems of emission reduction and the best system of emission reduction, 2) each state creates a plan to establish a standard of performance for implementing and enforcing that standard also known as state implementation plans, and 3) each state submits their state implementation plan to the EPA for approval based on the EPA’s required guidelines.<sup>66</sup> Failure to submit a plan or if the plan is unsatisfactory, the EPA may develop a plan for the state instead.<sup>67</sup>

In 2007, the Supreme Court held that the EPA has authority to regulate automobile greenhouse gas emissions, subject to the Clean Air Act.<sup>68</sup> The Court held that an “air pollutant” is a science-based determination under section 202 to determine whether the greenhouse gas can “cause, or contribute, to air pollution which may reasonably be anticipated to endanger public health and welfare.”<sup>69</sup> As a result, the

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<sup>62</sup> *Id.*

<sup>63</sup> 42 U.S.C. § 7411(d) (2015).

<sup>64</sup> Samuel H. Helton, *The Destiny Of Clean Energy: Legality Of The EPA’s Clean Power Plan With Respect To Emissions Trading*, 17 N.C. J.L. & TECH. 43, 48-49 (2016).

<sup>65</sup> 42 U.S.C. § 7411(a)(1) (2015).

<sup>66</sup> Jeremy M. Tarr, Jonas Monast & Tim Profeta, *Regulating Carbon Dioxide under Section 111(d) of the Clean Air Act: Options, Limits, and Impacts*, Nicholas Institute for Environmental Policy Solutions, Duke University, NI R 13-01 1, 6-7 (Jan. 2013), <http://nicholasinstitute.duke.edu/climate/policydesign/regulating-carbon-dioxide-under-section-111d>.

<sup>67</sup> *Id.* at 7.

<sup>68</sup> *Massachusetts v. EPA*, 549 U.S. 497, 528 (2007).

<sup>69</sup> *Id.* at 533.

EPA was required to regulate greenhouse gases from stationary sources and set new source performance standards for carbon dioxide emission from fossil fuel power plants.<sup>70</sup> Further, under *American Electric Power Co v. Connecticut*, the Supreme Court held that the EPA, under the Clean Air Act, has exclusive authority and is responsible for the regulation of all greenhouse gas emissions.<sup>71</sup>

Thus, under the Clean Air Act, the EPA has authority to regulate the transportation, energy, and industry sectors that emit 80% of greenhouse gases in the United States.<sup>72</sup> Moreover, under Title II, the EPA has authority to regulate motor vehicles and stationary sources of fossil fuel emitters, such as the large industrial facilities.<sup>73</sup>

### C. Clean Power Plan

On August 3, 2015, President Obama and the EPA announced the Clean Power Plan.<sup>74</sup> This makes it the first national limitation and regulation on carbon pollution from power plants.<sup>75</sup> Under the Clean Air Act, the EPA promulgated a final rule, the Clean Power Plan, to further regulate greenhouse gas emissions with the objective to reduce carbon dioxide emissions to 68% of 2005 levels by the year 2030.<sup>76</sup> Under Clean Power Plan, states must submit their state implementation plans to the EPA by September 6, 2016.<sup>77</sup>

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<sup>70</sup> Tarr et. al, *supra* note 66, at 5.

<sup>71</sup> *Am. Elec. Power Co. v. Connecticut*, 131 S. Ct. 2527, 2539 (2010).

<sup>72</sup> Eric Anthony DeBellis, *In Defense of the Clean Power Plan: Why Greenhouse Gas Regulation Under Clean Air Act Section 111(d) Need Not, and Should Not, Stop at the Fenceline*, 42 *ECOLOGY L.Q.* 235, 239 (2015).

<sup>73</sup> *Id.*

<sup>74</sup> U.S. Environmental Protection Agency, *Clean Power Plan for Existing Power Plants*, <https://www.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants> (last updated Feb. 11, 2016).

<sup>75</sup> Environmental Defense Fund, *A New National Clean Power Plan*, <https://www.edf.org/climate/a-new-federal-clean-power-plan> (last visited May 30, 2016).

<sup>76</sup> Hannah J. Wiseman & Hari M. Osofsky, *Regional Energy Governance and U.S. Carbon Emissions*, 43 *ECOLOGY L.Q.* 143, 145 (2016).

<sup>77</sup> Jonathan L. Ramseur & James E. McCarthy, *EPA's Clean Power Plan: Highlights of the Final Rule*, Congressional Research Service, R44145 CRS Report 1, 2 (Aug. 14, 2015).

The EPA also issued carbon pollution standards for new, modified, and reconstructed power plants.<sup>78</sup> Since 2009, the EPA determined that greenhouse gas pollution poses a threat to public health and welfare where carbon dioxide is the most prevalent greenhouse gas pollutant, which accounts for 82% of the United States' greenhouse gas emissions.<sup>79</sup> The Clean Power Plan allows a flexible framework to the states by not requiring the states to adopt new technology nor a policy to limit emissions but rather the ability to create a state-tailored policy solution for that state.<sup>80</sup> Therefore, with the Clean Power Plan, it is estimated that renewable energy will make up 28% of energy production by the year 2030.<sup>81</sup>

One of the obstacles that the Clean Power Plan addresses is climate change, an environmental and public health challenge.<sup>82</sup> Climate change is associated with the initial warming temperatures around the world where higher temperatures can provide benefits such as the growing season for agriculture, reduced stress on transportation infrastructure from freezing, and longer tourism seasons to increase local income.<sup>83</sup> On the contrary, the negative effects of higher temperatures are the melting ice caps, shoreline losses, and agricultural crop losses.<sup>84</sup> Climate change is happening now and impacts the environment through severe droughts, wildfires, and rising sea levels.<sup>85</sup> The EPA focuses on climate change

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<sup>78</sup> U.S. Environmental Protection Agency, *Fact Sheet: Overview of the Clean Power Plan*, available at <https://www.epa.gov/cleanpowerplan/fact-sheet-overview-clean-power-plan>.

<sup>79</sup> *Id.*

<sup>80</sup> Tomas Carbonell, *EPA's Proposed Clean Power Plan: Protecting Climate and Public Health by Reducing Carbon Pollution From the U.S. Power Sector*, 33 YALE L. & POL'Y REV. 403, 409 (2015).

<sup>81</sup> Rick Waltman, *Assessing the EPA's authority to Regulate Greenhouse Gas Emissions Under Clean Air Act Section 111(d) and the Clean Power Plan*, 27 VILL. ENVTL. L.J. 35, 56 (2016).

<sup>82</sup> U.S. Environmental Protection Agency: *Fact Sheet: Overview of the Clean Power Plan*, available at <https://www.epa.gov/cleanpowerplan/fact-sheet-overview-clean-power-plan>.

<sup>83</sup> J.B. Ruhl, *The Political Economy of Climate Change Winners*, 97 MINN. L. REV. 206, 221 (2012).

<sup>84</sup> David B. Lobell et al., *Prioritizing Climate Change Adaptation Needs for Food Security in 2030*, 319 SCIENCE 607, 607-10 (2008) (nothing agricultural losses in Southern Africa and South Asia).

<sup>85</sup> Todd Stern, *Trump is Wrong on the Paris Climate Agreement. I Know Because I Negotiated it.*, WASHINGTON POST (May 31, 2016), <https://www.washingtonpost.com/opinions/trump-is-wrong-on-the-paris-climate->

regulations by addressing energy-related activities because it makes up a large majority of anthropogenic greenhouse gas emissions.<sup>86</sup> Therefore, the Clean Power Plan sets out to reduce national greenhouse gas emissions 30% percent below 2005 levels by the year 2030.<sup>87</sup>

#### *D. Supreme Court Orders Stay*

On February 9, 2016, the Supreme Court ordered a stay on the implementation of the Clean Power Plan, pending judicial review.<sup>88</sup> As a result, the White House publicly expressed disagreement with Court's decision to implement a stay and has confidence that the Clean Power Plan will succeed in the long run.<sup>89</sup> Supreme Court Justices whom voted to delay the Clean Power Plan or in affirmation of the stay included: Justice John Roberts, Justice Samuel Alito, Justice Anthony Kennedy, Justice Clarence Thomas, and the late Justice Antonin Scalia.<sup>90</sup> The four dissenting Justices include: Justice Sonia Sotomayor, Justice Stephen Breyer, Justice Elena Kagan and Justice Ruth Ginsburg.<sup>91</sup> It is historically unusual for the Supreme Court to block federal regulation where the D.C. Circuits denied a similar request.<sup>92</sup>

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agreement-i-know-because-i-negotiated-it/2016/05/31/ce3a680a-2667-11e6-ae4a-3cdd5fe74204\_story.html?utm\_term=.b801fb249bd3.

<sup>86</sup> Todd S. Aagaard, *Energy-Environment Policy Alignments*, 90 WASH L. REV.1517, 1567 (2015).

<sup>87</sup> Carbon Pollution Emission Guideline for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830, 34,832 (proposed June 18, 2014).

<sup>88</sup> U.S. Environmental Protection Agency, *Clean Power Plan for Existing Power Plants*, <https://www.epa.gov/cleanpowerplan/clean-power-plan-existing-power-plants> (2016).

<sup>89</sup> *Id.*

<sup>90</sup> Lyle Denniston, *Carbon Pollution Controls Put On Hold*, SCOTUS BLOG (Feb. 9, 2016, 6:45 PM), <http://www.scotusblog.com/2016/02/carbon-pollution-controls-put-on-hold/>.

<sup>91</sup> Jasmin Melvin, *Unprecedented Supreme Court Action Draws Mixed Bag of Perspectives on Rule's Future*, Platts Inside F.E.R.C., February 15, 2016, at 1.

<sup>92</sup> Jonathan H. Adler, *Supreme Court Puts the Brakes on the EPA's Clean Power Plan*, The Washington Post, (Feb. 9, 2016), available at <https://www.washingtonpost.com/news/volokh-conspiracy/wp/2016/02/09/supreme-court-puts-the-brakes-on-the-epas-clean-power-plan/>.

Justice Scalia had been a strong critic of the EPA and in less than a week after his vote, he passed away at the age of 79.<sup>93</sup> With his absence, there now lacks a majority vote favoring the stay and a strong opportunity for the EPA to carry out plans to further climate change mandates regarding carbon emissions.<sup>94</sup> For example, in 2007, Scalia dissented in a 5-4 decision in which the EPA was authorized to regulate greenhouse gases under the Clean Air Act.<sup>95</sup> With Justice Scalia's absence, this issue could possibly face a 4-4 deadlock and without the majority, it will be difficult to mandate carbon-emitting regulations on a national scale.<sup>96</sup> Therefore, it has now become a political issue regarding a new Supreme Court Justice appointment.

The Clean Power Plan has become so controversial that it has now become a partisanship issue, possibly due to the fact that it is the cornerstone of The Obama Administration's climate agenda.<sup>97</sup> To further illustrate how political the issue has become, "Senator Inhofe tossed a large snowball on the Senate floor: 'You know what this is? It's a snowball ... just from outside here so it's very, very cold out. Very unseasonal. So, Mr. President, catch this.'"<sup>98</sup> With those words and actions, it illustrates how this has become a political platform between the Republican and Democratic parties, especially with the presidential campaigns as the backdrop. Therefore, whether the topic is the Paris Agreement or the greenhouse gas emission from power plants, much of the policy debate regarding energy and climate change has been deeply rooted in partisan.<sup>99</sup>

In court, the legal issue at hand is whether the EPA has legal authority to establish a regulation of carbon emissions under the Clean

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<sup>93</sup> Amanda Reilly, *Clean Power Plan: CPAC Panels Call for 'Another Justice Scalia' to Kill Rule*, Environment And Energy Daily, (March 4, 2016), available at <http://www.eenews.net/stories/1060033446>.

<sup>94</sup> Keith Goldberg, *Scalia's Death Deals Blow to Clean Power Plan Foes*, LAW360, (Feb. 16, 2016), available at <https://www.crowell.com/files/20160216-Scalias-Death-Deals-Blow-To-Clean-Power-Plan-Foes-Lorenzen.pdf>.

<sup>95</sup> *Massachusetts*, 549 U.S. at 555-56.

<sup>96</sup> Keith Goldberg, *Scalia's Death Deals Blow to Clean Power Plan Foes*, LAW360 (Feb. 16, 2016, 8:18 PM), <https://www.law360.com/articles/759342/scalia-s-death-deals-blow-to-clean-power-plan-foes>.

<sup>97</sup> Jasmin Melvin, *Clock Starts For States, Industry, Lawmakers To Dispute Landmark Carbon Rule For Power Plants*, Platts, Oct. 26, 2015, at 1.

<sup>98</sup> Hari M. Osofsky & Jacqueline Peel, *Energy Partisanship*, 65 EMORY L.J. 695, 697 (2016).

<sup>99</sup> *Id.*

Power Plan, through section 111(d).<sup>100</sup> West Virginia attorney, General Patrick Morrissey, argues that the EPA is “well beyond its authority to regulate at the source in order to manage states’ energy portfolios.”<sup>101</sup> Therefore, West Virginia, along with twenty-four other states, will argue that the EPA cannot regulate carbon emissions from existing power plants under Section 111(d) of the Clean Air Act because they are regulated under Section 112.<sup>102</sup>

This is the legal question that will be heard and challenged in September because in 1990, when Congress revised section 111(d) of the Clean Air Act, Congress enacted two separate revisions in the amendments.<sup>103</sup> Therefore, the language in the United States Code is that the EPA cannot use section 111(d) to regulate air pollutants that are “emitted from a source category” regulated under section 112, which further interprets that the power plants are subject to regulation under section 112.<sup>104</sup> The EPA will argue that either, 1) the language is wrong in the United States Code, 2) the 1990 revision allow such regulation, or 3) the conflicting statutory language creates ambiguity.<sup>105</sup>

The D.C. Court of Appeals reviewed the stay on June 2, 2016 then ordered oral arguments to be rescheduled before en banc on September 27, 2016.<sup>106</sup> This meant that instead of the three-judge panel review that was to take place on June 2, 2016, the Clean Power Plan was heard by the full en banc D.C. Circuit Court of Appeals by all active judges.<sup>107</sup> Since there is “a question of exceptional importance” the Clean Power Plan had a hearing before the full appeals court where six of the ten judges were appointed by Democratic presidents.<sup>108</sup>

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<sup>100</sup> Melvin, *supra* note 91, at 1.

<sup>101</sup> *Id.*

<sup>102</sup> *Id.*

<sup>103</sup> Jonathan H. Adler, *Placing the Clean Power Plan in Context*, WASHINGTON POST (Feb. 10, 2016), [https://www.washingtonpost.com/news/volokh-conspiracy/wp/2016/02/10/placing-the-clean-power-plan-in-context/?utm\\_term=.8a34d49aebe](https://www.washingtonpost.com/news/volokh-conspiracy/wp/2016/02/10/placing-the-clean-power-plan-in-context/?utm_term=.8a34d49aebe).

<sup>104</sup> *Id.*

<sup>105</sup> *Id.*

<sup>106</sup> Order for En Banc Oral Argument, *West Virginia v. EPA*, No. 15-1363, Doc. No. 1613489 (D.C. Cir. May 16, 2016).

<sup>107</sup> Ellen M. Gilmer, *Both Sides Claim Upper Hand After ‘Complete Surprise’ From Court*, Environment And Energy Daily, (May 17, 2016), available at <http://www.eenews.net/stories/1060037362>.

<sup>108</sup> Michael Biesecker, *US Appeals Court Hears Arguments in Clean Power Plan Case*, U.S. News (Sept. 27, 2016, 1:46 PM),

*E. 2016 Presidential Campaign*

President Barack Obama, during his two-term tenure, created twenty-four national monuments to lay his environmental legacy.<sup>109</sup> During his presidency, there were investments made toward the clean energy sector and a reduction in carbon emissions, where carbon pollution from energy is at a 25-year low.<sup>110</sup> During his presidency, The Obama Administration carried out several government programs that focused on the environmental sectors, such as imposing higher standards for gas mileage in cars, fuel cleanliness, and energy efficiency in appliances and new power plants.<sup>111</sup> With the environmentally conscious framework set under The Obama administration, the question turns to the recent presidential campaign. This section addresses how the partisan issue is divided between the major political parties and the likelihood of the United States to continue on a clean energy path.

As of July 22, 2016, the leading Democratic nominee was Hillary Clinton, the former Secretary of State.<sup>112</sup> The leading Republican nominee was Donald Trump, after the Republican Party began with 17 candidates.<sup>113</sup> With the introduction of Donald Trump (Trump), who lacks political experience, versus Hillary Clinton (Clinton), notoriously known for her private email server scandals, the campaign was controversial.<sup>114</sup>

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<https://www.usnews.com/news/politics/articles/2016-09-27/dc-appeals-court-set-to-hear-clean-power-plan-case>.

<sup>109</sup> Susan Jones, *Obama: 'One of the Most Urgent Challenges of Our time is Climate Change'*, CNS News (Aug. 15, 2016, 6:02 AM), <http://www.cnsnews.com/news/article/susan-jones/obama-devotes-his-saturday-radio-address-one-most-urgent-challenges-our>.

<sup>110</sup> *Id.*

<sup>111</sup> Jonathan Chait, *Obama Might Actually be the Environmental President*, NEW YORK MEDIA (May 5, 2013), <http://nymag.com/news/features/obama-climate-change-2013-5/index1.html#print>.

<sup>112</sup> The New York Times, <http://www.nytimes.com/interactive/2016/us/elections/2016-presidential-candidates.html> (last visited Jul. 23, 2016).

<sup>113</sup> *Id.*

<sup>114</sup> Alicia Parlapiano, *What We Know About Hillary Clinton's Private Email Server*, N.Y. TIMES (Jul. 13, 2016), <http://www.nytimes.com/interactive/2016/05/27/us/politics/what-we-know-about-hillary-clintons-private-email-server.html>.

Republican presidential candidate, Donald Trump stated in January of 2016, if elected as president, he plans to eliminate the EPA.<sup>115</sup> Trump would make a “tremendous cutting” of the federal government, which includes the EPA, and attacked its administration’s environmental policies by calling the EPA “the laughingstock of the world.”<sup>116</sup> In regard to the Paris Agreement, presidential candidate Trump vowed that once he is in office he is “going to cancel the Paris climate agreement” and give “foreign bureaucrats control over how much energy we use right here in America.”<sup>117</sup> Todd Stern, the United States’ special envoy for climate change from 2009 until April 2016, led the United States’ negotiating team in Paris up to the agreement.<sup>118</sup> He states that under the Paris Agreement, no foreigner can gain control over the United States’ decision regarding neither how much energy we can use nor the overall energy policy.<sup>119</sup> This is because as described above, the Paris Agreement is a “nationally determined” structure.<sup>120</sup> However, Trump may be able to pull the United States out of the Paris Agreement but doing so would cause severe diplomatic damage.<sup>121</sup>

Democratic presidential candidate, Hillary Clinton released a statement on her official campaign website in support of the Paris Climate Change Agreement who appears to be in support of the clean energy growth and cutting carbon pollution.<sup>122</sup> In fact she stated, “I will make combating climate change a top priority from day one and secure America’s future as the clean energy superpower of the 21<sup>st</sup> century.”<sup>123</sup> Her plans were to generate renewable energy power from a billion solar panels, to be installed by the end of her first term, cut energy waste by one third, and reduce oil consumption by one third through cleaner fuels

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<sup>115</sup> Heather Haddon, *Donald Trump Vows to Slash Funding for Education, EPA*, WALL ST. J. (Jan. 11, 2015, 5:25 PM), <http://www.wsj.com/articles/donald-trump-vows-to-slash-funding-for-education-epa-1452551107>.

<sup>116</sup> *Id.*

<sup>117</sup> Stern, *supra* note 85.

<sup>118</sup> *Id.*

<sup>119</sup> *Id.*

<sup>120</sup> *Id.*

<sup>121</sup> *Id.*

<sup>122</sup> Hillary Clinton, *Hillary Clinton Statement on the Paris Climate Change Agreement*, <https://www.hillaryclinton.com/briefing/statements/2015/12/12/paris-climate-change-agreement/>.

<sup>123</sup> Amanda D. Rodewald, *Paris Agreement is the Catalyst for a Clean Global Economy*, THE HILL (Oct. 27, 2016, 11:15 AM), <http://thehill.com/blogs/pundits-blog/energy-environment/303008-paris-agreement-is-the-catalyst-for-a-clean-global>.



and efficient transportation methods.<sup>124</sup> Clinton's proposed plans were intended to continue the pledge that President Obama made at COP21.<sup>125</sup>

Here, the major concern is moving a step backwards with how far the United States has come in the environmental sector. Therefore, Trump's remarks regarding the United States' removal from the Paris Agreement, now that he has been elected into office, raises executive power concerns. The issue is that the Paris Agreement is a treaty and when there is a treaty, it must be signed by the President and becomes effective when ratified by the Senate.<sup>126</sup> The State Department's internal guidelines, known as the "Circular 175," indicate that the Paris Agreement is a treaty and not an executive agreement because it is formal and complex in nature, as it requires the United States to deliver money to a "Green Climate Fund" for global redistribution for "green projects."<sup>127</sup> Although this is a treaty, which needs congressional approval, President Obama bypassed the Senate and signed the Paris Agreement, making this an unratified treaty.<sup>128</sup> Therefore, it is in the realm of possibility that President Trump could withdraw the United States out of the Paris Agreement.

In June of 2015, Donald Trump announced his bid for president and on January 20, 2017, he took the oath to become the forty-fifth president of the United States.<sup>129</sup> The Trump Administration has asked the EPA to pause all contracts and agreements pending review; he may withdraw from the Paris Agreement.<sup>130</sup> President Trump may withdraw the United

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<sup>124</sup> See Clinton, *supra* note 122.

<sup>125</sup> *Id.*

<sup>126</sup> U.S. CONST. art. II, § 2 ("He shall have power, by and with the advice and consent of the Senate, to make treaties, provided two thirds of the Senators present concur").

<sup>127</sup> Jim DeMint, *How Obama Will Celebrate 'Earth Day'*, WASHINGTON TIMES (Apr. 21, 2016), <http://www.washingtontimes.com/news/2016/apr/21/jim-demint-obama-bypasses-senate-approval-of-paris/>.

<sup>128</sup> Joel Stonedale, *President Obama's Signing of the Paris Agreement is Only Good for Nine Months*, HILL (Apr. 18, 2016, 12:11 PM), <http://thehill.com/blogs/congress-blog/energy-environment/276668-president-obamas-signing-of-the-paris-agreement-is>.

<sup>129</sup> *Donald Trump's Inauguration*, U.S. NEWS (Jan. 20, 2017, 5:45 AM), <https://www.usnews.com/news/articles/2017-01-20/donald-trump-inauguration-january-20-2017>.

<sup>130</sup> *Id.*

States from the Paris Agreement by an executive order; any withdrawal from the Paris Agreement after ratification is a four years process.<sup>131</sup>

President Trump signed an executive order at the EPA easing federal enforcement of environmental regulations.<sup>132</sup> This order does not remove the United States from the Paris Agreement.<sup>133</sup> The executive order instructs EPA Administrator, Scott Pruitt, to relax carbon emissions standards for new power plants.<sup>134</sup>

#### IV. PRECEDENCE REGARDING GREENHOUSE GASES AND CLIMATE CHANGE POLICY

##### A. Greenhouse Gases

The United States is one of 160 nations that comprise of the United Nations Framework Convention on Climate Change (UNFCCC), which strives to reduce greenhouse gas emissions.<sup>135</sup> Greenhouse gases include carbon dioxide and trap solar energy in the atmosphere.<sup>136</sup> As the carbon concentration increases, the more it affects the earth's climate.<sup>137</sup> This trapping effect, also known as the greenhouse effect, is caused by the increase of human activities that produce carbon emissions, which results in the increased concentrations in the atmosphere, and causes the average global temperature and sea levels to steadily rise.<sup>138</sup>

Historically, the largest carbon dioxide emissions came from volcanic activity but with the increase of fossil-fuel burning activities, that ratio is increasing.<sup>139</sup> What is important to note here is that the

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<sup>131</sup> *Id.*

<sup>132</sup> Gabrielle Levy, *Executive Order Undoes Obama-Era Climate Policies*, U.S. NEWS (Mar. 28, 2017, 12:36 PM), <https://www.usnews.com/news/politics/articles/2017-03-28/trump-to-sign-executive-order-rolling-back-clean-power-plan-climate-change-policies>.

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

<sup>135</sup> Monica S. Matthews, *The Kyoto Protocol To The United Nations Framework Convention On Climate Change: Survey Of Its Deficiencies And Why The United States Should Not Ratify This Treaty*, 9 DICK. J. ENV. L. POL. 193, 193 (2000).

<sup>136</sup> John Dernbach, *Moving the Climate Change Debate From Models to Proposed Legislation: Lessons From State Experience*, 30 ELR 10933, 10933 (2000).

<sup>137</sup> *Id.*

<sup>138</sup> Matthews, *supra* note 135, at 193.

<sup>139</sup> Richard Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 94 CORNELL L. REV. 1153, 1162 (2009).

greenhouse effect is a global phenomenon that affects all parts of the world, not just a distinct part of the globe.<sup>140</sup> Although greenhouse gases affect the globe uniformly, it does not impact the geographical locations of the environment similarly.<sup>141</sup> Therefore, the changes in the climate are highly dependent on location, which can cause more damaging weather patterns in one area than in other areas of the world.<sup>142</sup>

In 2007, the Supreme Court ruled that under the Clean Air Act, the EPA has the authority to regulate greenhouse gases if the air pollution endangers public health and welfare.<sup>143</sup> Two years later, President Obama was newly appointed and in the same year, it was found that under the Clean Air Act Section 202, “atmospheric concentrations of six well-mixed greenhouse gases threaten both the public health and welfare.”<sup>144</sup> Despite these findings, the EPA has failed to formally regulate existing coal-fired power plants, which are the largest source of greenhouse gas pollutions in the United States.<sup>145</sup> The EPA, however, made “endangerment” findings that the greenhouse gases required regulations regarding motor vehicles and stationary sources.<sup>146</sup> These regulations were promptly challenged and under *Utility Air Regulatory Group v. Environmental Protection Agency*, the Court held that the EPA reasonably interpreted the Clean Air Act to require sources that would need permits based on their emission of pollutants to comply with “best available control technology” for greenhouse gases.<sup>147</sup>

Further, political partisanship has recently placed burdens on policy efforts to achieve cleaner energy regulations.<sup>148</sup> The Clean Air Act of 1970 was the first federal effort in respect to an environmental regulation and is still the federal environmental law that controls air

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<sup>140</sup> *Id.* at 1163.

<sup>141</sup> *Id.* at 1168.

<sup>142</sup> *Id.* at 1170.

<sup>143</sup> *Massachusetts*, 549 U.S. at 497.

<sup>144</sup> U.S. Environmental Protection Agency, *EPA’s Endangerment Finding: Frequently Asked Questions*, [https://www3.epa.gov/climatechange/Downloads/endangerment/EndangermentFinding\\_FAQs.pdf](https://www3.epa.gov/climatechange/Downloads/endangerment/EndangermentFinding_FAQs.pdf).

<sup>145</sup> Howard A. Latin, *Climate Change Regulation and EPA Disincentives*, 45 ENVTL. L. 19, 22 (2015).

<sup>146</sup> Adler, *supra* note 103.

<sup>147</sup> *Utility Air Regulatory Group v. Environmental Protection Agency*, SCOTUS BLOG (Jul. 25, 2014), <http://www.scotusblog.com/case-files/cases/utility-air-regulatory-group-v-environmental-protection-agency/>.

<sup>148</sup> Hari M. Osofsky & Jacqueline Peel, *Energy Partisanship*, 65 EMORY L.J. 695, 710 (2016).

pollution from mobile and stationary sources such as cars and power plants.<sup>149</sup> The combination of partisanship, separation of powers, and checks and balances, which are the core foundational principals of the United States, has resulted in a congressional gridlock when it comes to climate change issues.<sup>150</sup>

### *B. Challenges of Environmental Lawmaking*

The political process in the United States comprise of elections of legislative and executive members that are dominated by short-term cycles which are heavily influenced by donations and contributions for election campaigns.<sup>151</sup> Although the United States is a democratic nation that maintains a checks and balance system, it is difficult to enact laws and regulations because there is fragmented authority between the different branches of government.<sup>152</sup> For example, the efforts needed to secure a new law include congressional committee approvals, majority votes in congress, the president's signature, agency implementation, and defeating legal challenges in court to ensure its validity.<sup>153</sup>

With these challenges, the government naturally is unable to execute laws quickly as it is sometimes necessary. This is especially true when it comes to environmental issues because environmental laws are inherently a redistributive thrust; there are members who continually resist the policy change because they have resources they are not willing to lose out on.<sup>154</sup> Therefore, there are separate obstacles that come with enacting a law within the legislative and executive branches, respectfully.

The legislative branch hosts committees and appropriations committees that are primarily concerned with budgetary limitations;

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<sup>149</sup> Uma Outka, *The International Legal Practice Of The Obama Administration: Regulating And Treaty-Making: Addressing Climate Change Under The Obama Presidency: The Obama Administration's Clean Air Act Legacy And The UNFCCC*, 48 CASE W. RES. J. INT'L L. 109, 110 (2016).

<sup>150</sup> Hari M. Osofsky & Jacqueline Peel, *The Grass Is Not Always Greener: Congressional Dysfunction, Executive Action, And Climate Change In Comparative Perspective*, 91 CHI.-KENT L. REV. 139, 141-42 (2016).

<sup>151</sup> *Id.* at 1179-80.

<sup>152</sup> *Id.* at 1180.

<sup>153</sup> *Id.*

<sup>154</sup> *Id.*

their decisions influence whether they may maintain their positions.<sup>155</sup> Therefore, they are sensitive to costly decisions and are concerned with the more immediate and known economic costs of environmental controls than the long-term and uncertain legislations.<sup>156</sup>

The executive branch also faces similar division of interests.<sup>157</sup> Separate agencies within the executive branch, such as the EPA, have differing missions that make them prone to be sensitive to environmental protection concerns.<sup>158</sup> For example, the Departments of Interior, Agriculture, and Commerce enforce restrictions and own resource management activities but are subject to other departments or agencies.<sup>159</sup> Therefore, a single agency can have contrasting policies amongst each other, which creates difficulty when environmental regulations arise.<sup>160</sup>

This also raises the underlying issue of transition to cleaner energy or renewable resources. Renewable energy technology most commonly includes wind turbines, solar panels, and biomass.<sup>161</sup> However, since the investments are large, in comparison to polluting fossil fuels, which are cheaper than renewable energy, and since clean energy requires subsidies, it is difficult to convince private companies and government agencies to make such investments.<sup>162</sup> For an illustration, in 2014, the global investment was approximately \$270 billion, where China was the largest investor of \$83 billion in wind turbines and solar panels.<sup>163</sup> The United States was the second largest investor, investing \$38 billion in wind turbines.<sup>164</sup> The major challenge is keeping the cost of renewable energy policies down and innovating cleaner technologies, while also simultaneously gaining political support.<sup>165</sup>

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<sup>155</sup> *Id.* at 1181.

<sup>156</sup> *Id.*

<sup>157</sup> *Id.* at 1182.

<sup>158</sup> *Id.*

<sup>159</sup> *Id.*

<sup>160</sup> *Id.*

<sup>161</sup> Bayer & Urpelainen, *supra* note 10.

<sup>162</sup> *Id.*

<sup>163</sup> *Id.*

<sup>164</sup> *Id.*

<sup>165</sup> *Id.*

*C. Climate Change and the Risk of Public Health*

i. Zika

Climate change is one of the largest environmental and public health challenges.<sup>166</sup> The EPA determined that greenhouse gas emissions from automobiles contribute to air pollution that “is reasonably anticipated to endanger public health and welfare.”<sup>167</sup> Moreover, climate change affects weather patterns, which influence rains and droughts, which in turn affect the growth of crops, food prices, and allergies that the public face—not just in the United States—but globally.<sup>168</sup> According to the EPA, those most affected and vulnerable to climate changes are children, elderly, people with heart or lung diseases, and those who live in poverty.<sup>169</sup>

Recently, with the heavy rain and warm temperatures, it is the optimal environment for mosquito population growth.<sup>170</sup> Many climatologists believe that the increase in the emissions of carbon dioxide in combination with the increase in other anthropogenic greenhouse gases, contributed to the global warming trend.<sup>171</sup> Native mosquitos must evolve and adapt to survive colder weathers and the mosquitos with certain pathogens are left to survive.<sup>172</sup> However, because this is due to the high concentrations of anthropogenic greenhouse gases, climatologists believe that it may be reversible.<sup>173</sup>

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<sup>166</sup> U.S. Environmental Protection Agency, *Fact Sheet: Overview of the Clean Power Plan*, available at <https://www.epa.gov/cleanpowerplan/fact-sheet-overview-clean-power-plan>.

<sup>167</sup> EPA Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496, 66,499 (Dec. 15, 2009), <https://www3.epa.gov/climatechange/endangerment/petitions/decision.html>.

<sup>168</sup> U.S. Environmental Protection Agency, *Fact Sheet: Overview of the Clean Power Plan*, available at <https://www.epa.gov/cleanpowerplan/fact-sheet-overview-clean-power-plan>.

<sup>169</sup> *Id.*

<sup>170</sup> Brian Kahn, *What You Need To Know About Zika And Climate Change*, CLIMATE CENTRAL (Jan. 28, 2016), available at <http://www.climatecentral.org/news/zika-virus-climate-change-19970>.

<sup>171</sup> Paul Reiter, *Climate Change and Mosquito-Borne Disease*, 109 Environmental Health Perspectives 141,142 (2001).

<sup>172</sup> *Id.*

<sup>173</sup> *Id.*

According to the World Health Organization (WHO), with the rise of the mosquito population, there has been an outbreak of the Zika virus, which started in Latin America.<sup>174</sup> This has become and still constitutes as a public health crisis.<sup>175</sup> According to the Centers for Disease Control and Prevention, as of August 10, 2016, there has been a total of 1,962 cases of Zika in the United States.<sup>176</sup> Additionally, there has been a total of 6,618 cases including U.S. territories.<sup>177</sup> The Zika virus is typically transmitted from an infected mosquito's bite, but can also be sexually transmitted from an infected person, which can then spread from a pregnant woman to her fetus.<sup>178</sup> This virus accompanies the rise of cases of microcephaly and the Guillain-Barré syndrome.<sup>179</sup> This is a birth defect that causes a baby's head to be smaller than expected and the immune system attacks the nerve cells causing paralysis.<sup>180</sup>

The troubling reality, according to Andrew Monaghan, from the National Center for Atmospheric Research, is that the warmer the weather is, the faster the mosquitos can develop from an egg to an adult, which quickly incubates viruses.<sup>181</sup> The climate change is suspect to have been a factor in spreading the disease outbreaks affecting both people and livestock, such as malaria and Lyme disease.<sup>182</sup> If climate change is a factor that contributes to diseases that affect livestock, which humans ingest, this is another line of weakness to public health.

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<sup>174</sup> *Id.*

<sup>175</sup> Helen Branswell, *Is Zika Still a Public Health Emergency?*, FOX NEWS (Nov. 17, 2016), <http://www.foxnews.com/health/2016/11/17/is-zika-still-public-health-emergency.html>.

<sup>176</sup> Case Counts in the US, Centers for Disease Control and Prevention, <http://www.cdc.gov/zika/geo/united-states.html>.

<sup>177</sup> *Id.*

<sup>178</sup> T.H. Lyda & Daivy P. Dambreville, *Zika Virus: Challenges of Fighting a Recognized Hazard*, THE LEGAL INTELLIGENCER (Jul. 15, 2016), <http://www.thelegalintelligencer.com/id=1202763357513/Zika-Virus-Challenges-of-Fighting-a-Recognized-Hazard?slreturn=20160716201103>.

<sup>179</sup> *Id.*

<sup>180</sup> *Id.*

<sup>181</sup> Justin Gillis, *In Zika Epidemic, a Warning on Climate Change*, N.Y. TIMES (Feb. 20, 2016), [http://www.nytimes.com/2016/02/21/world/americas/in-zika-epidemic-a-warning-on-climate-change.html?\\_r=0](http://www.nytimes.com/2016/02/21/world/americas/in-zika-epidemic-a-warning-on-climate-change.html?_r=0).

<sup>182</sup> *Id.*

## V. CONCLUSION

The EPA proposed the Clean Power Plan, which is a set of regulations that control greenhouse gas emissions from existing power plants under the Clean Air Act. Currently, there is a stay blocking the Clean Power Plan from being implemented, which was recently ordered by the Supreme Court. Therefore, the Clean Power Plan cannot be implemented nor enforced until the legal challenges are heard before the United States Court of Appeals for the D.C. Circuit later this year in September, which was again later rescheduled.

The Clean Power Plan intends to move forward in regulating greenhouse gas emissions by transitioning to cleaner energy sources. This Plan will reduce power plant emission by 32% by the year 2030. However, there are a couple susceptibilities regarding the Clean Power Plan. The first susceptibility of the Clean Power Plan concerns the standards for new power plants under section 111(b). This is because the EPA must first regulate standards for existing sources before imposing those standards on existing sources under section 111(d). The second susceptibility to the Clean Power Plan is that there had been so many changes between the original proposal the final rule that it is possible that the EPA would have to reopen the rulemaking process. Recently, President Trump signed an executive order to roll back on federal enforcement of environmental regulations, which included the Clean Power Plan. However, that executive order did not remove the United States from the Paris Agreement. Moreover, there is concern regarding what other substitutions are out there, readily available, for renewable coal generation because the EPA must set the standard for emission reductions for the current coal-fired power plants.

Therefore, the stay is currently an obstacle because of the delay in the EPA's ability to implement and enforce the Clean Power Plan. However, if the D.C. Circuit Court of Appeals denies the EPA's meritorious arguments, the EPA must start over with the Trump Administration to overcome the legal challenges it faces now. However, the Clean Power Plan is essential to transition to a cleaner energy source while reducing the emission of greenhouse gases, in light of the recent pushes toward a more environmentally conscious society. If the EPA's legal arguments are not successful, this will inhibit the recent pledge that the United States made to limit and reduce factors that contribute to climate change in the Paris Agreement.



Assuming that the EPA succeeds and is able to implement and enforce the Clean Power Plan, this will make low-carbon cheaper and accessible to the public which will in turn reduce the greenhouse gas concentration in the atmosphere that contribute to the radical climate changes the world is facing. Therefore, the Clean Power Plan must be passed to facilitate the United States' pledge in the Paris Agreement to keep the global warming below 2 degrees Celsius.

The Paris Agreement aligns the interests of 175 nations across the world to finance a cleaner future to fight climate changes through monitoring and revising plans every five years. More than 7 million deaths, worldwide, are attributed to pollution every year, so with the improvements to the environment from the Paris Agreement, it will improve public health. The Paris Agreement makes it possible to safeguard the environmental and social conditions on which public health and welfare depend on, such as clean air, energy, and water.

With the rise of temperatures, it breeds a host of diseases especially among the mosquito community such as malaria, Zika, West Nile virus, and more. Particularly with Zika, it raises a global concern because there is a connection between the Zika infection and microcephaly, which causes the infants' heads to grow much smaller than the average infant in similar age and sex. Not only does it affect a newborns head size, but it also affects the brain growth and causes neurological damage, which will impact future generations if the climatic changes are not reversed from anthropogenic activities. Therefore, the Clean Power Plan is imperative for the implementation to further a sustainable future. This is to ensure the facilitation of the United State's pledge to the Paris Agreement.