

# Energy Policy: Regional Differences and Regulatory Choices

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## *Abstract*

Government regulation in the realm of energy policy is difficult due to the scope and diversity of regional energy differences, as well as the political context through which the issue is framed. There is largely a focus on the negative economic impacts of regulation, and a lack of emphasis on the possibility of economic success through transition to cleaner sources of energy. Ultimately, there is a general neglect in policy decision making of the connection between policy output on the national level and policy outcomes on the state and local level. By assessing the merits of different regulatory approaches and exploring the behavioral economic bases of effective past regulations, policymakers may overcome these challenges.

This paper will address the tensions between federal, state, and local governments in the design and implementation of energy regulatory policy. A literature review will provide an explanation of the leading theories of regulatory policy design to serve as a framework through which to critique the national approach to energy policy. An exploration of relevant cases in energy and environmental policy, as well as telling analogues in education policy, will attempt to provide insight into the general failures of one-size-fits-all federal measures, as well as the difficulty associated with state-by-state variations in policy outcomes. Finally, a look into the proposed Clean Power Plan will assess the extent to which the federal government is taking note of these difficulties and transitioning to more wide-ranging flexible regulatory approaches in order to promote more effective outcomes and address pressing environmental issues.

## *Introduction*

United States environmental policy is an issue that has come to the forefront of the modern political sphere, as global warming is gaining greater acceptance as a grave scientific phenomenon, and as technological innovation has spurred new growth in the alternative energy industry. The energy sector in the United States is inherently complex due in part to the United States' great size and distinct regions, each with its own set of natural resources, labor populations, and political climate. Thus, the federal government has struggled to find the most appropriate regulatory mechanism for the vast energy arena. Naturally, state, local, and federal policy and industry leaders have clashed regarding their views of the most effective policies and of the best interests of Americans.

## *Background*

Energy policy in the U.S. is not characterized by one uniform set of measures or a comprehensive long-term approach to the energy landscape, but is rather comprised of a diverse set of federal, state, and local entities addressing issues of energy production and consumption. While state and local actors certainly play an important

role in energy policy decision-making, national policies are arguably more important in bringing these issues to the forefront of political discourse. As there exists a renewed sense of urgency about global environmental conditions, national solutions to carbon emissions and renewable energy have become important in national debates.

In the midst of the first environmental revolution of the 1970s, the Environmental Protection Agency was created and tasked with balancing the ecological, public health, and pragmatic energy needs of the United States. The EPA serves as the national environmental police, wielding the force of law and the threat of fines and sanctions to promote environmental protection. Additionally, the EPA creates proactive programs that are handed to the states for administration to encourage positive environmental outcomes. The EPA fills the national roll of enticing the states through carrots and sticks.

Since the 1973 energy crisis, policy measures by governing entities have been criticized as reactionary and characterized by short-term solutions leading to expensive and inconsistent rules.<sup>1</sup> Political pressures have surely colored energy decisions, and little attention has been paid to the effectiveness of the results of these policies, leaving inadequate information as to how U.S. energy output affects the environmental landscape.

Federalism plays a key role in policymaking in the United States, as broad national policies are first created in Washington, DC, and then handed over to states for implementation. Important tensions in federal and state decision-making have come to characterize policies in a number of arenas. State-by-state outcomes of environmental regulation differ greatly, a phenomenon that deserves special attention when crafting effective policy.

Policymakers at the state level often have interests that are very different from national goals, and they have historically been gaining greater freedom in their implementation strategies; in the 1980s, environmental programs delegated to the states doubled from 33 percent to 66 percent of all eligible programs.<sup>2</sup> The history of pollution control regulation is arguably “a history of shifting levels of policy responsibility between the federal and state governments.”<sup>3</sup> With a different set of natural resources and political atmospheres, it is clear that states take widely varying stances in environmental protection. These cross-state differences in environmental policies create a public goods problem, resulting in an uneven distribution of costs and benefits of protection.

The EPA’s recently released Clean Power Plan is a federal agency rule that will soon be put to the test as the newest and possibly most progressive addition to the energy policy archives. Its goal is to reduce greenhouse gas emissions while promoting greater diversification in the energy sector to clean and renewable energy. With the new rule, the EPA is simultaneously attempting to regulate the energy sector while working with state needs. As the most recent embodiment of federalism in energy policy, the Clean Power Plan is pertinent to deciphering the most appropriate solutions for controlling national pollution.

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1 Light, Alfred R, “Federalism and the Energy Crisis: A View from the States,” *Publius* 6 no.1 (1976): 81–96, Accessed November 4, 2015, <http://www.jstor.org/stable/3329606>.

2 Evan Ringquist, *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution* (Armonk, NY: Sharpe, 1993), 61.

3 *Ibid.*, 43.

### *Methodology*

This paper will address the tensions between federal, state, and local governments in the design and implementation of energy regulatory policy. A literature review will provide an explanation of the leading theories of regulatory policy design to serve as a framework through which to critique the national approach to energy policy. An exploration of relevant cases in energy and environmental policy, as well as a consideration of federal approaches to education policy as analogues to environmental regulatory decision-making, will attempt to provide insight into the general failures of one-size-fits-all federal measures, as well as the difficulty associated with state-by-state variations in policy outcomes. Finally, a look into the proposed Clean Power Plan will assess the extent to which the federal government is taking note of these difficulties and transitioning to more wide-ranging flexible regulatory approaches in order to promote more effective outcomes and address pressing environmental issues.

### *Research Question*

This paper attempts to answer the question of how federal regulation of the energy sector can effectively navigate the complex relationship between federal and state entities. Ultimately, existing research points to the notion that a flexible regulatory approach is generally effective in addressing the numerous independent actors affecting the implementation of regulatory policy.

### *Literature Review: Regulatory Policy Design*

Scholars often debate the reach and effectiveness of National regulatory policy. Although this issue can divide on party lines, regulatory decision-making is explored by bipartisan coalitions to determine the most comprehensive approach for the federal government to impose on state and private entities. While mainstream assessments often consider the tools for regulatory oversight, it is also important to decipher the character of regulatory policy design. Due to the important relationship between individual actors and intergovernmental institutions in the decision-making processes, flexible and inclusive policies that encourage multi-actor collaboration yield perceivably positive results.

Theories of regulatory design often note the importance of a multiplicity of non-political actors in regulatory outcomes. Governmental institutions have the power to influence independent actors, but ultimately, must acknowledge governmental limitations in creating effective regulations. Tomas Koontz et al. present the role of “government as an encourager”<sup>4</sup> in enacting environmental policy that captures the most favorable result when compared to other policy pathways. They present the case of the Endangered Species Act of 1973 and its evolution in implementation from a strict protectionist prohibition to a more flexible regulation that incentivized actor collaboration. Section 9 of the ESA included a “prohibition on take” that prohibited any habitat modification that may affect any of the fish or wildlife species listed as endangered. In 1982, Congress amended the ESA to allow any actor affected by Section 9 to apply for an incidental take permit by

4 Tomas M. Koontz, Toddi Steelman, JoAnn Carmin, Katrina Smith Korfmacher, Cassandra Moseley, and Craig W. Thomas, *Collaborative Environmental Management: What Roles for Government?* (Washington, DC: Resources for the Future, 2004).

submitting a specific Habitat Conservation Plan (HCP). This change allowed “private actors and local and state governments to develop proactive plans to protect habitat in exchange for allowing some human activity to continue.”<sup>5</sup> Koontz notes that before the amendment, it was difficult to police compliance to the rule in large habitat areas; by creating incentives for collaboration, the proactive HCPs used individual actors as assets rather than detriments to achieving the desired goal. Cass Sunstein hails this type of approach as a way to “deflect governmental attention from means to ends in the hope of enlisting private creativity in the service of risk reduction policies.”<sup>6</sup>

These authors maintain that non-political actors are an important part of the regulatory process. Chris Koski notes that one of the key aspects of regulatory design is the communication of expectations.<sup>7</sup> Regulation is “a discourse between the target groups whose activities are to be modified and the entities that enforce regulation.”<sup>8</sup> Appropriate and positive discourse should lead to improved results of the regulation. Mark Van Vugt furthers this idea through the lens of social psychology in his meditation on the importance of promoting pro-environmental behaviors to achieve positive policy outcomes.<sup>9</sup> He argues that ultimately, the most effective way to promote widespread environmental protection is to encourage pro-environmental perspectives through a positive relationship between individuals and institutions.<sup>10</sup> This literature emphasizes the importance of lessening private resistance to a regulation.

A more empirical method for regulatory decision-making is cost-benefit analysis (CBA). This is the principle used primarily by regulators in the United States, by which agencies assign monetary values to different variables involved in a regulatory decision and regulate only if the benefits outweigh the costs. Opponents of CBA argue that it is too restrictive, prioritizing economic outcomes over possible harms or public health concerns.<sup>11</sup> Cass Sunstein is a chief proponent of CBA, noting that while it cannot tell regulators all they need to know, considering costs is important to creating effective policy.<sup>12</sup> To demonstrate, Sunstein considers the provisions within the Clean Air Act stating that the EPA must impose a uniform National Ambient Air Quality Standard that considers only public health risks and not costs. He questions whether it is sensible to make such assessments “in

5 Ibid, 64.

6 Cass Sunstein, *Risk and Reason: Safety, Law, and the Environment* (Cambridge: Cambridge University Press, 2002), 285.

7 Chris Koski, “Regulatory Choices: Analyzing State Policy Design,” *Law & Policy* 29, no. 4 (2007): 407-34. Accessed November 3, 2015, 3.

8 Chris Koski, “Regulatory Choices: Analyzing State Policy Design,” *Law & Policy* 29, no. 4 (2007): 407-34. Accessed November 3, 2015, 3.

9 Mark Van Vugt, “Averting the Tragedy of the Commons: Using Social Psychological Science to Protect the Environment,” *Current Directions in Psychological Science* 18, no. 3 (2009): 169–73, Accessed November 4, 2015, <http://www.jstor.org/stable/20696022>.

10 Ibid.

11 Cass Sunstein, “Cost-Benefit Analysis and the Environment,” *ETHICS* 115, no. 2 (2005): 351-85. Accessed November 5, 2015. doi:10.1086/426308.

12 Cass Sunstein, “Cost-Benefit Analysis and the Environment,” *ETHICS* 115, no. 2 (2005): 351-85. Accessed November 5, 2015. doi:10.1086/426308.

a cost vacuum,”<sup>13</sup> arguing that the diversity of the states necessitates a reconsideration of the uniform standard. Additionally, Sunstein defends CBA’s inherent consideration of the individual; representations of cost quantify individual actors’ assessments of risk more so than a stringent paternalistic approach.<sup>14</sup> Sunstein thus notes that realistic regulation must consider costs in order to preserve individual autonomy.

Another lens through which to discuss environmental regulation is the degree to which a standard is uniform or flexible. Leading environmental scholar Evan Ringquist explains that while uniform standards reflect the ideal of “equal protection,”<sup>15</sup> flexible standards reflect a realistic adaptation to state and local economic and environmental conditions. Because some ecosystems are better equipped to handle higher pollution loads, and some local economies and jobs are more dependent on industry than others, it makes little sense to hold all areas to identical standards. Additionally, Ringquist notes, “if a majority of citizens desire a level of environmental quality that is higher or lower than the federally mandated level, then these preferences should be reflected in the local or state environmental protection standards.”<sup>16</sup> While national interests can overlook smaller nuances or intricacies of regulatory outcomes, flexibility allows a democratization of regulatory decision-making.<sup>17</sup>

Finally, some scholars propose that regulators should shift toward market-based approaches, in order to minimize the costs and externalities of command-and-control measures. A behavioral economist, Sunstein champions economic incentives as the “regulatory tool of choice.”<sup>18</sup> He argues that market-based tools efficiently create incentives for desirable behavioral changes and permit the market to effectively curb negative industry actions. A simple example of an economic incentive is a tax; some scholars have taken issue with EPA’s seemingly “complex and arbitrary” Clean Power Plan, noting that a carbon tax would be more cost effective and more easily implemented.<sup>19</sup> While carbon taxes and cap-and-trade measures have yielded success in the past, scholars note that market factors do not always reliably change behavior.<sup>20</sup>

Ultimately, scholars disagree over the level to which regulation is necessary, but a more compelling and perhaps more easily answered question asks what type and character of regulatory approach fosters the most effective results. This analysis takes into account

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13 Cass Sunstein, *Risk and Reason: Safety, Law, and the Environment* (Cambridge: Cambridge University Press, 2002), 231.

14 Ibid.

15 Evan Ringquist, *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution* (Armonk, NY: Sharpe, 1993), 68.

16 Ibid.

17 Cass Sunstein, *Risk and Reason: Safety, Law, and the Environment* (Cambridge: Cambridge University Press, 2002).

18 Ibid., 269.

19 Philip Wallach and Alex Abdun-Nabi, “The EPA’s Carbon Plan Asks the Least from States That Pollute the Most,” *The Washington Post*, July 16, 2014. <https://www.washingtonpost.com/news/wonk/wp/2014/07/16/the-epas-carbon-plan-asks-the-least-from-states-that-pollute-the-most/>.

20 Cass Sunstein, *Risk and Reason: Safety, Law, and the Environment* (Cambridge: Cambridge University Press, 2002).

the influence of private actors in policy implementation. As state politics are generally more representative of specific state interests and diversity, there arises a relevant discussion of the appropriate level of federalism in environmental decision-making. This theoretical framework will assist in a discussion of how environmental and energy regulation in United States can create more universally consistent or effective policy outcomes.

### Findings

#### *Federalism in Education*

Tensions created between the influences of federal, state, and local actors distinctly characterize education policy in the United States. In this way, a view of education policy can serve as a helpful corollary to the tensions we see in energy policy. Due to the crosscutting and diverse interests of these actors, both education and environmental policy suffer from federal measures that neglect the interest of less powerful actors, as well as from fragmented measures that arise in different regions. Sweeping national education policies have done little in improving the proficiency of K-12 children or closing the achievement gap between students with differing socioeconomic backgrounds. Through an overzealous focus on state attainment combined with a lack of sufficient funding, education policy demonstrates the widespread failure of tone-deaf national policies.

Scholars argue that maintaining decentralized federalism in education is of chief importance in achieving favorable outcomes.<sup>21</sup> While smaller countries can herald relative success with singular national policies, the U.S. is accountable to numerous diverse regions of varying sizes and characters. Frederick Hess and Andrew Kelley of American Enterprise Institute note that bureaucrats and members of congress who are not held to the same standards of accountability as local officials and state leaders, who are responsible for the burdens of implementation, design federal education policies.<sup>22</sup> Thus, these one-size-fits-all measures are largely viewed as federal “unfunded mandates,” with insufficient guidelines as to how to meet the “impossible” standards.

No Child Left Behind (NCLB) showcases these tensions of federalism. While the act allowed states to develop their own standards in the core subject matters,<sup>23</sup> the policy ignored the deeper problems in the education system by placing too much emphasis on academic achievement through the monitoring of flawed test result data. Additionally, the built-in punishment structure of the funding mechanism often had the effect of state and local entities lowering standards to secure more funding or avoid federally mandated

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21 Frederick Hess and Andrew Kelley, “More Than a Slogan: Here Are Five Good Reasons Federalism Is so Important in Education,” *U.S. News and World Report*, September 15, 2015,

22 Frederick Hess and Andrew Kelley, “More Than a Slogan: Here Are Five Good Reasons Federalism Is so Important in Education,” *U.S. News and World Report*, September 15, 2015, <http://www.usnews.com/opinion/knowledge-bank/2015/09/15/5-reasons-federalism-in-education-matters>.

23 Maris Vinovskis, *From A Nation at Risk to No Child Left Behind: National Education Goals and the Creation of Federal Education Policy*, (New York: Teachers College Press, 2009).

punishments such as required tutoring.<sup>24</sup>

NCLB embodies the failure of federal entities to recognize state needs or anticipate unintended consequences, leading to a measure that has created uneven educational outcomes across the states<sup>25</sup> and has recently been the target of a congressional overhaul.<sup>26</sup> While the history of education policy indicates that the federal government is successful at identifying national trends and spotlighting salient issues (i.e. bringing attention to the achievement gap between white and minority students),<sup>27</sup> it is less apt to nationally regulate in an arena as vast and diverse as education. This example serves as a parable of the problem faced by national environmental regulators. The federal government is needed to serve as a central authority as well as to spearhead research and development efforts, but faces a key challenge in regulating the distinct geographical and political regions of the United States.

### *Statewide Differences in Environmental Policy and Outcomes*

Ronald Reagan's "new federalism" program stands as an iconic domestic policy effort in devolution that is hailed by the right as the long overdue bastion of individual liberty and decentralized powers. The effective consequences of this largely political chess-move were greatly unanticipated and unintended by Reagan and his policy experts.<sup>28</sup> State roles in environmental policy greatly expanded during the 1980s, and some states have proven to be much more progressive and successful than the national government in achieving environmentally favorable results. However, the sometimes-narrow state interests indicate that if states were left to their own accord, environmental problems would not be addressed in many states.

Historically, some states have embodied the role of "laboratories of democracy" in their creation and implementation of environmental policy and energy regulation. California is frequently cited as on the cutting edge in this arena; in the 1960s, California petitioned for federal approval to set tougher clean-air standards for that state than those

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24 Emmarie Huetteman and Motoko Rich, "House Restores Local Education Control in Revising No Child Left Behind," *The New York Times*, December 2, 2015, <http://www.nytimes.com/2015/12/03/us/house-restores-local-education-control-in-revising-no-child-left-behind.html?ref=todayspaper>.

25 Martin Carnoy, Emma Garcia, and Tatiana Khavenson, "Bringing It Back Home: Why State Comparisons Are More Useful than International Comparisons for Improving U.S. Education Policy," *Economic Policy Institute*, October 30, 2015.

26 Emmarie Huetteman and Motoko Rich, "House Restores Local Education Control in Revising No Child Left Behind," *The New York Times*, December 2, 2015, <http://www.nytimes.com/2015/12/03/us/house-restores-local-education-control-in-revising-no-child-left-behind.html?ref=todayspaper>.

27 Frederick Hess and Andrew Kelley, "More Than a Slogan: Here Are Five Good Reasons Federalism Is so Important in Education," *U.S. News and World Report*, September 15, 2015, <http://www.usnews.com/opinion/knowledge-bank/2015/09/15/5-reasons-federalism-in-education-matters>.

28 Evan Ringquist, *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution* (Armonk, NY: Sharpe, 1993), 62.

in place at the federal level<sup>29</sup> In 1991, 11 northeastern states agreed to adopt California's new strict guidelines for car emissions, resulting in one-third of the U.S. population being covered by standards more protective than those required by the federal government.<sup>30</sup> More recently, California's "Million Solar Roofs" program has reduced the price of photovoltaic solar power units by 30 to 60 percent,<sup>31</sup> spurring interest and innovation in clean energy. Governor Jerry Brown is leading the pack of American delegates calling for stronger pledges at the COP 21 gathering in Paris, and is seen abroad as "the strongest leader in the United States on climate change."<sup>32</sup> Ultimately, the success of environmental measures in California is largely a product of the political climate; pro-environment policies were continuous throughout the administrations of Arnold Schwarzenegger and Jerry Brown, indicating "voters value green policies more than party labels."<sup>33</sup> This aligns with previously addressed notions of the importance of pro-environmental behaviors in effective policy outcomes.<sup>34</sup>

West Virginia stands on the opposite end of the spectrum as having a poor environmental showing, as well a political climate that is hostile to environmental regulations. Based on data conglomeration from different national rankings, West Virginia ranks in the bottom 10 percent nationally in alternative energy, air and water pollution, carbon footprint, and policy.<sup>35</sup> Coal-fired electric power plants accounted for 99.5 percent of the state's net electricity generation in 2014, setting it low on the spectrum of energy resource diversity. Ohio, Pennsylvania, and Kentucky also rank low on several measures of environmental consciousness, indicating a broader regional trend; the importance of coal, a dirty fuel, doubtlessly impacts not only air quality measures, but also the strength of industry interest groups and thus the difficulty of navigating the political climate in environmentalism.

29 Mark Hertsgaard, "California Takes the Lead With New Green Initiatives," *Yale Environment* 360, March 8, 2015, [http://e360.yale.edu/feature/california\\_takes\\_the\\_lead\\_with\\_new\\_green\\_initiatives/2504](http://e360.yale.edu/feature/california_takes_the_lead_with_new_green_initiatives/2504).

30 Evan Ringquist, *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution* (Armonk, NY: Sharpe, 1993), 69.

31 Mark Hertsgaard, "California Takes the Lead With New Green Initiatives," *Yale Environment* 360, March 8, 2015, [http://e360.yale.edu/feature/california\\_takes\\_the\\_lead\\_with\\_new\\_green\\_initiatives/2504/](http://e360.yale.edu/feature/california_takes_the_lead_with_new_green_initiatives/2504/)

32 Gillis, Justin. "A Path for Climate Change Beyond Paris." *The New York Times*. December 1, 2015. <http://www.nytimes.com/2015/12/01/science/beyond-paris-climate-change-talks.html?ref=todayspaper>.

33 Mark Hertsgaard, "California Takes the Lead With New Green Initiatives," *Yale Environment* 360, March 8, 2015, [http://e360.yale.edu/feature/california\\_takes\\_the\\_lead\\_with\\_new\\_green\\_initiatives/2504/](http://e360.yale.edu/feature/california_takes_the_lead_with_new_green_initiatives/2504/)

34 Mark Van Vugt, "Averting the Tragedy of the Commons: Using Social Psychological Science to Protect the Environment," *Current Directions in Psychological Science* 18, no. 3 (2009): 169–73, Accessed November 4, 2015, <http://www.jstor.org/stable/20696022>.

35 "The Top Ten Most—and Least—Green U.S. States," *Daily Finance*, April 22, 2011, <http://www.dailyfinance.com/2011/04/22/top-earth-day-10-most-and-least-green-us-states/>.

Consequently, regional geographical factors greatly impact the environmental consciousness of a state's policy. The geography of California and other states along the Pacific Coast make policy designed to transition to greater reliance on solar energy fairly straightforward and opportunistic. The National Renewable Energy Laboratory estimates that California has the capacity to generate over 4,200 gigawatts of solar energy, more than 10 times the amount produced by all U.S. coal burning plants.<sup>36</sup> However, other states in different regions are likely to experience more growing pains in seeking a clean energy transition. The Southeast, for example, is more heavily reliant on fossil fuels and uses 20 percent more energy per capita than the rest of the country on average,<sup>37</sup> and many states in this region have large populations employed by the coal industry.

When the Clean Air Act was passed in 1963, of the 32 states that had some sort of air pollution regulations, only 15 had control authority over air pollutants, and only 4 to 6 of these were actually enforcing regulations.<sup>38</sup> Historically, it has not always been economically favorable for states to act in pursuit of environmental protection. States often have little incentive to regulate negative externalities, as it could put them at a "competitive disadvantage with respect to neighboring states in attracting industry."<sup>39</sup> While technological realities have changed drastically since 1963, state governments still face economic and political challenges to energy regulation; the tragedy of commons dilemma of environmental protection necessitates federal action.

While decentralized environmental politics have allowed some states to exceed national expectations, it clearly presents a problem for establishing a uniform national front in the fight against climate change. For example, greenhouse gas emissions data varies widely, with some states exhibiting a reduction in emissions year-to-year, while others exhibit increases.<sup>40</sup> The variation in results across the states points to the problem of achieving national policy goals due to the regional fractures of federalism. Left to their own devices, states would not achieve the level of emissions reductions necessary for effective environmental protection. However, the case study of NCLB shows the failure of heavy-handed federal regulatory measures as well. Ultimately, national energy policy must be perceptive of regional environmental differences.

### *The Clean Power Plan and the Flexible Regulatory Approach*

In August of 2015, the EPA proposed the Clean Power Plan (CPP), a federal rule to implement emissions guidelines for power plants, under section 111(d) of the federal Clean Air Act. The Obama Administration is hailing this plan as the greatest historical step forward in reducing carbon emissions and combatting climate change. The plan sets state-by-state standards for carbon emissions and calls on each state to submit its own comprehensive plan outlining how

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36 Kate Gordon and Kiley Kroh. "Regional Energy, National Solutions: A Real Energy Vision for America." *Center for American Progress*, October 1, 2012, [https://cdn.americanprogress.org/wp-content/uploads/2012/10/RER\\_full.pdf](https://cdn.americanprogress.org/wp-content/uploads/2012/10/RER_full.pdf), 34.

37 Ibid.

38 Evan Ringquist, *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution* (Armonk, NY: Sharpe, 1993), 46.

39 Ibid., 43.

40 Evan Ringquist, *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution* (Armonk, NY: Sharpe, 1993).

it will achieve the stated goal. The plans must be submitted by the end of 2017 for implementation to be carried out beginning in 2020. EPA promotes its plan as representing “national consistency, accountability, and a level playing field while reflecting each state’s energy mix.”<sup>41</sup>

By targeting each state separately and setting different goals rather than one national goal, the plan takes into account political and economic pragmatism. For example, while Washington is required to show a 71.89 percent reduction in emissions from 2012 to 2030, Kentucky is only required an 18.30 percent reduction.<sup>42</sup> Kentucky, ranking third nationally in coal production, could not realistically be asked to achieve the same reductions as Washington.

Although the CPP is still largely unpopular in coal-reliant regions, the plan ultimately takes into account the industry, economic, and labor interests of each state in setting its targets. This flexible policy approach aligns with literature detailing the importance of government’s role as an encourager.<sup>43</sup> Casting an overbearing law will not necessarily lead to successful policy outcomes, as states have sufficient capacity for political hostage-taking and noncompliance. The flexibility also allows states to design policy considering its own priorities, whether they are public health based, economic, environmental, or otherwise. The encouragement of proactive solutions recalls the importance of fostering pro-environmentalism in public opinion,<sup>44</sup> which would undoubtedly be stunted by too heavy of a regulatory stick.

Some opponents of the plan argue that such an approach is unfair; while the nation’s resources are diverse, pollution and carbon emissions are global issues, and each state bears the costs of one state’s reliance on the coal industry. A pervasive issue is the commonality of pollution concentrations in one state originating in another; for example, almost 90 percent of the sulfur and nitrogen dioxide concentrated in Minnesota originates elsewhere.<sup>45</sup> Ultimately, there arises a tension in subjecting “identical emitters to divergent standards, simply because their home states’ power mix is more or less carbon intensive.”<sup>46</sup>

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41 “Guidelines for Clean Power Plan Public Hearing,” *U.S. Environmental Protection Agency*, November 18, 2015.

42 Philip Wallach and Alex Abdun-Nabi, “The EPA’s Carbon Plan Asks the Least from States That Pollute the Most,” *The Washington Post*, July 16, 2014. <https://www.washingtonpost.com/news/wonk/wp/2014/07/16/the-epas-carbon-plan-asks-the-least-from-states-that-pollute-the-most/>.

43 Tomas M. Koontz, Toddi Steelman, JoAnn Carmin, Katrina Smith Korfmacher, Cassandra Moseley, and Craig W. Thomas, *Collaborative Environmental Management: What Roles for Government?* (Washington, DC: Resources for the Future, 2004).

44 Mark Van Vugt, “Averting the Tragedy of the Commons: Using Social Psychological Science to Protect the Environment,” *Current Directions in Psychological Science* 18, no. 3 (2009): 169–73, Accessed November 4, 2015, <http://www.jstor.org/stable/20696022>.

45 Evan Ringquist, *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution* (Armonk, NY: Sharpe, 1993), 43.

46 Philip Wallach and Alex Abdun-Nabi, “The EPA’s Carbon Plan Asks the Least from States That Pollute the Most,” *The Washington Post*, July 16, 2014. <https://www.washingtonpost.com/news/wonk/wp/2014/07/16/the-epas-carbon-plan-asks-the-least->

Furthermore, opponents<sup>47</sup> argue that the plan imposes an unequal distribution of regulatory costs, putting too high a burden on states already outpacing national emissions standards in what is viewed as the EPA's political attempt to avoid picking fights with high polluting states.

Although the burdens may on the surface appear unequal, it seems shortsighted to call the standards unfair. The goals are based on what is conceivable for each state to attain. At the current rate of reductions, states with higher goals such as Colorado (35.37%) and Arizona (51.68%) are already on track to achieve these reductions, as the necessary infrastructure is in place. In contrast, asking North Dakota to cut much more than the 10.57 percent required by the law would place great strains on the economy and would likely lead to noncompliance,<sup>47</sup> as 79 percent of North Dakota's net electricity generation comes from coal.<sup>48</sup> Studies of the impacts of uniform emission reduction standards and command-and-control provisions in other sections of the Clean Air Act showed that they were largely inefficient and had a negative impact on local economies.<sup>49</sup>

The "unfair" view thus somewhat neglects the important link between policy output and policy outcomes. A uniform policy certainly would not guarantee success of implementation and results. Achievable policy is more likely to induce compliance by the states, easing big polluters into the required behaviors for greater future reductions. This type of regulatory pragmatism is necessary to build the appropriate infrastructure to encourage habits of reduction. While emissions reductions are important, the effective weakening of "political resistance"<sup>50</sup> to environmental efforts is integral to this goal.

The Clean Power Plan is a move toward a more flexible approach in energy regulation. CPP places itself somewhere in the middle of market-based measures and command-and-control laws, effectively functioning as a collaborative environmental contract. Analogous precursors can be found in the realm of risk-reduction contracts, initiatives created by the EPA to encourage proactive cooperation in exchange for relaxed regulation. Project XL is one such relevant example that was popular with industry. EPA allowed companies to generate their preferred ways of achieving regulatory goals, and then allowed them to opt-out of certain regulatory requirements.<sup>51</sup> Essentially, the program incentivized the creation of unique and innovative ways of improving environmental performance by allowing the facilities a pass on certain regulatory permitting or reporting measures. The plans proposed by the facilities were required to be more stringent than those mandated by law.<sup>52</sup> As such, the measure encouraged proactive environmental management, producing better results and promoting a better attitude.

This is not to say that state governments will happily comply with the new  

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47 Micah Ragland (Associate Administrator for Public Engagement and Environmental Education at the U.S. EPA), interviewed by Madison Lane, November 18, 2015.

48 "North Dakota State Profile," *U.S. Energy Information Administration*, Accessed December 1, 2015, <http://www.eia.gov/state/?sid=ND>.

49 Evan Ringquist, *Environmental Protection at the State Level: Politics and Progress in Controlling Pollution* (Armonk, NY: Sharpe, 1993), 50.

50 Cass Sunstein, *Risk and Reason: Safety, Law, and the Environment* (Cambridge: Cambridge University Press, 2002), 252.

51 *Ibid.*, 284.

52 *Ibid.*

emissions standards set forth by the CPP; it is now the EPA's goal to work with governors individually in order to show them that it is in their best interests to submit a plan. Noncompliance will result in an EPA imposed one-size-fits-all federal plan to meet the stated goals. By working with state and local policy leaders to create a specialized state plan, governors can ensure that plans are composed and directed in the best interests of their citizens, and not created by national interests that may overlook certain intricacies of the state energy landscape.

Texas is one state that has voiced outrage at the CPP, but that could greatly benefit from the changes required by the law. Texas prides itself on being the “anti-California” in the renewable energy landscape.<sup>53</sup> The political climate is decidedly hostile to EPA intervention. However, despite being the number one carbon emitter in the country, Texas also produces more wind power than any other state, has high solar energy potential, and according to market projections by the Environmental Defense Fund, would be 88 percent of the way to meeting its CPP goal by 2030 without additional changes.<sup>54</sup> The Clean Power Plan provides a regulatory nudge for states like Texas, allowing state leaders to decide the most efficient or cost effective way to meet the standards.

The CPP also allows states the flexibility to work together to achieve emissions goals, another way of accounting for the diversity of U.S. geography. States can preserve the option for their regulated energy industries to find lower-cost reductions in neighboring states, such as through trading emissions credits.<sup>55</sup> Texas, with its plentiful natural resources, could sell excess wind energy to nearby states to assist them in a renewable energy transition, while reaping the economic benefits.<sup>56</sup> EPA leaders are currently in the process of working with state governors on these types of potential opportunities as state policymakers begin drafting implementation plans.

The CPP provides the necessary push to overcome state inaction and allows states flexibility in devising a unique plan. This leaves open the door for different tools such as cost-benefit analysis, market incentives, or simply the retirement of old coal-powered plants. States are better equipped to consider impacts on local economies than is the federal government. While state goals may diverge from federal goals, meeting emissions goals is ultimately a step forward. This approach taken by CPP solves many of the problems associated with the fragmented nature of energy policy in the United States, using state and local interests in pursuit of national goals.

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53 Neela Banerjee, “In climate politics, Texas aims to be the anti-California,” *LA Times*, November 7, 2010, <http://articles.latimes.com/2010/nov/07/nation/la-na-texas-climate-20101107>.

54 “The Clean Power Plan: An Enormous Economic Opportunity for Texas,” *Environmental Defense Fund*, 2015, Accessed December 1, 2015, <https://www.edf.org/sites/default/files/content/texas-cpp-factsheet.pdf>.

55 Franz Litz and Jennifer Macedonia, “Choosing a Policy Pathway for State 111(d) Plans to Meet State Objectives,” *Bipartisan Policy Center*, April 1, 2015, 6, <http://bipartisanpolicy.org/wp-content/uploads/2015/05/Policy-Pathways-Paper.pdf>.

56 “The Clean Power Plan: An Enormous Economic Opportunity for Texas,” *Environmental Defense Fund*, 2015, Accessed December 1, 2015, <https://www.edf.org/sites/default/files/content/texas-cpp-factsheet.pdf>.

*Conclusion and Thoughts for Further Research*

Energy policy will continue to be a very divisive topic in the United States. Nevertheless, with a new sense of urgency surrounding the global environmental, policy makers must face the issue head on. As this paper has attempted to show, the tools by which government faces environmental challenges are just as important as the policy goals. The goal of environmental protection through clean energy is clear; now the government must assess and refine its toolkit for the most effective results.

State geographical and political differences play an important role in the effective implementation of energy policy and thus must be kept in mind as policymakers address how each region can be a part of the clean energy future. While the goals of state lawmakers may be narrower or more reliant on economic considerations, this is not necessarily a negative, as local economies are important for environmental policy success as well. Theorists have emphasized the importance of fostering pro-environmental sentiments in individual non-political actors, and often, sweeping national measures can overlook these nuances. Unlike previous national legislation such as No Child Left Behind, EPA's Clean Power Plan is strongly tied to the ideals of federalism, and its flexibility will allow states to work with local industries to determine the best implementation tools. The CPP thus has the potential to be greatly successful in improving the U.S. energy landscape, but it must be monitored to ensure successful implementation.

Further research is necessary in determining the overall effectiveness of collaborative environmental contracts versus economic incentives. Both have seen some success, but there is little consensus over which type of measure is more effective, or whether a mix of the two is necessary. Additionally, interesting questions in this domain explore the extent to which special interest groups, such as environmental groups or the influential coal lobby, affect the political output of legislation. Ultimately, environmental regulation is a pressing concern that deserves a great deal of attention, and it is important for policymakers to assess the results of current policies in making policy and regulatory decisions moving forward.

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