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Etty, Thijs Heyvaert, Veerle Carlarne, Cinnamon et al.

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U.S. Climate Policy in the Trump Era

Daniel A. Farber¹

I. Introduction

There are many dramatic differences between the views of President Donald Trump and those of his predecessor, Barack Obama. One of the most important involves climate change. Obama led many actions to combat climate change. Trump has expressed skepticism about the existence of climate change and pledged to increase U.S. production of fossil fuels. He is attempting to repeal Obama's actions.

For those who view climate change as a threat, this change is a cause for dismay, not only in the United States but around the world. But although the situation may be bad, it may not be as grim as it seems. The United States is not a monolith, and there has been major resistance to Trump's views. As we will see, corporations and state governments had already begun work to reduce emissions. They have continued that work since Trump's election, and they have even intensified yet. Moreover, at least some of Trump's efforts may be reversed by the courts. In this lecture, I will describe those developments.

II. The Paris Agreement

The Paris Agreement pledges all of the world's nations to reduce their emissions of greenhouse gases in order to combat climate change. President Trump

¹ Sho Sato Professor of Law, University of California, Berkeley.

has announced a decision to withdraw the United States from this agreement. This action has received worldwide attention and strong criticism from other nations.

Even within the United States, there has been a strong reaction against Trump's withdrawal from the Paris Agreement. In an open letter, hundreds of businesses urged Trump to stick with the Paris Agreement.² The letter stated that "[c]ontinued US participation in the Paris Agreement, in order to provide the long-term direction needed to keep global temperature rise below 2°C." It also maintained that "[i]mplementing the Paris Agreement will enable and encourage businesses and investors to turn the billions of dollars in existing low-carbon investments into the trillions of dollars the world needs to bring clean energy and prosperity to all." Consequently, these businesses said, "[w]e support leaders around the world as they seek to implement the Paris Agreement and leverage this historic opportunity to tackle climate change." The list of companies signing the open letter included DuPont, eBay, Nike, Unilever, Levi Strauss & Co., Starbucks, General Mills, Hewlett Packard and Hilton.

After President Trump announced his intentional to withdraw from the Paris Agreement, many companies reacted by announcing their own intention to cut their own emissions despite Trump's action. The "We're Still In" group announced that:

The Trump administration's announcement undermines a key pillar in the fight against climate change and damages the world's ability to avoid the most dangerous and costly effects of climate change. Importantly, it is also out of step with what is happening in the United States....

² The letter can be found at http://lowcarbonusa.org/business.

In the absence of leadership from Washington, states, cities, counties, tribes, colleges and universities, businesses and investors, representing a sizeable percentage of the U.S. economy will pursue ambitious climate goals, working together to take forceful action and to ensure that the U.S. remains a global leader in reducing emissions.³

The list of signatories includes technology giants such as Apple, Google, Microsoft, and Facebook, along with hundreds of smaller firms.

Many cities and states also joined the "We're Still In" declaration. Among the states were California and New York, but also less likely jurisdictions such as North Carolina and Virginia. Cities such as San Francisco, Chicago, and New York also joined.

III. Federal Climate Regulation

There is no specific statute in the United States dealing with climate change. Instead, under Obama, the government made use of existing authority under other statutes. Trump is attempting to undo those actions. The legal issues are discussed below.

A. Federal Regulation Under Obama

The Supreme Court confronted the issue of EPA's regulatory authority in *Massachusetts v. EPA*.⁴ Although George W. Bush had endorsed limitations on carbon emissions in the 2008 campaign, he reversed course soon after taking office. During his two terms as President, the federal government resisted taking action on climate change. The Supreme Court held, however, that greenhouse gases are considered

³ https://www.wearestillin.com/we-are-still-declaration. $_{\rm 4549~U.S.~497~(2007).}$

"air pollutants" under the Clean Air Act and that the Environmental Protection Agency (EPA) must regulate them if it finds that they endanger human health or welfare.

By ruling that EPA did have regulatory authority regarding greenhouse gases and that its decision on whether to regulate these pollutants could only be based on scientific evidence, the Supreme Court's ruling set EPA on the path toward establishing federal climate policy.

Once EPA was directed to base its decision purely on science, there was little doubt about how it would ultimately rule. The scientific evidence on the link between greenhouse gases and climate change is compelling, as is the evidence about the risks involved in raising greenhouse gas levels in the future. Nevertheless, EPA faced some considerable challenges. First, it had to document the science in sufficient detail to stand up to attacks from industry and conservative state governments in court. Second, once it had decided to regulate greenhouse gases, it had to figure out how to do so within the confines of the Clean Air Act.

A. The Endangerment Finding

This first step toward regulation was a finding of endangerment. On remand, to no one's surprise, EPA made a formal finding that greenhouse gas emissions endanger human health or welfare. Under the Administrative Procedure Act, a court can set aside such a finding only if it is arbitrary or capricious. In considering such an issue, the court does not make its own judgment about the evidence, something well beyond its expertise. Instead, it probes (the decision-making record) to determine whether the agency gave a reasoned explanation of its judgment based on

the evidence in the record. Challengers will attempt to poke holes in the agency's logic or identify evidence that was ignored by the agency.

These challenges came before the D.C. Circuit in *Coalition for Responsible Regulation, Inc. v. EPA.*⁵ The challengers raised several issues about the EPA finding. First, they argued that EPA, in effect, had delegated its judgment to other bodies such as the IPCC and the National Research Council by relying on their scientific assessments. Clearly, the statute requires EPA to form its own judgment rather than blindly adopting the views of some other body. But EPA cited a large volume of evidence, not just the ultimate conclusions of these expert bodies, so this argument was something of a stretch. Indeed, the court rejected the argument as "little more than a semantic trick." In reality, the court said, EPA had merely made normal use of the existing scientific literature, and carefully evaluated the quality of these sources before relying on them.

Second, the challengers argued that the scientific evidence in the record did not support the finding of endangerment. The court carefully recounted the basis for this finding in the scientific evidence, concluding that there was substantial evidence that climate change endangers health and welfare. Industry argued, however, that there was too much uncertainty to support EPA's conclusion. In rejecting the industry argument, the court stressed that the statute is precautionary in nature and that to wait for certainty would block preventive regulation. In the court's view, the statute "requires a precautionary, forward-looking scientific judgment," so as "to prevent reasonably anticipated endangerment from maturing into concrete harm." It

⁵Coalition for Responsible Regulation, Inc. v. EPA, 684 F.3d 102 (D.C. Cir. 2012). The Supreme Court granted cert. on another issue in the case and reversed in part on that issue in Utility Air Regulatory Group v. EPA, 134 S.Ct. 2427 (2014).

is worth noting that this approach resonates with the Precautionary Principle found in international environmental law, though the court did not say so.

Once it had decided to make a finding of endangerment, EPA was then faced with the question of how to go about regulating greenhouse gases. This was a relatively straightforward issue in terms of vehicle emissions. Section 202 required EPA to impose standards for emissions from new motor vehicles once it had found endangerment, and EPA proceeded to do so without any huge difficulty. As discussed in the chapter on state regulation, the car industry was already under pressure because of regulations adopted in California, so EPA was not writing on a blank slate.

But it was more difficult to know how to approach emissions from stationary sources like power plants and factories.

The first EPA effort to extend the regulatory regime to stationary sources came at the same time as the endangerment finding. To deal with stationary sources, EPA first used a provision of the Clean Air Act⁶ that requires any new "major emitting facility" to use the "best available control technology [BACT] for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility."

In applying this provision, EPA had to deal with the problem of defining "major sources" for greenhouse gases. The statute defines a major source as one that emits 100 or 200 tons of a pollutant, depending on circumstances. These amounts are very substantial in terms of most pollutants, and only large factories or electrical generators are covered. But this is actually a fairly small amount of carbon dioxide, so applying this definition to greenhouse gases would mean that thousands of small

sources were covered. In applying this provision, EPA was faced with two major coverage issues. First, what facilities are covered by the statute? Second, once a facility is covered for whatever reason, are greenhouse gases among the pollutants for which BACT is required?

EPA decided that greenhouse gas limits applied to any facility that was considered a major source due to the quantity of pollutants other than greenhouses. The Supreme Court unanimously upheld this part of the regulation. EPA also decided that other plants would be covered only if they very large amounts of greenhouse gases (thousands of tons). The Supreme Court reversed that part of the regulation in Utility Air Regulatory Group v. EPA.7 In an opinion by Justice Scalia, the Court concluded that the agency should have realized its broad definition of major facilities was completely untenable. The term "air pollutant" would normally encompass greenhouse gases, per Massachusetts v. EPA, but in this case that interpretation would make no sense. Even EPA agreed that interpreting the statute to cover thousands of additional sources), would be absurd. EPA "lacked authority to 'tailor' the Act's unambiguous numerical thresholds to accommodate its greenhouse-gas-inclusive interpretation of the permitting triggers." "Instead," Justice Scalia continued, "the need to rewrite clear provisions of the statute should have alerted EPA that it had taken a wrong 'interpretative' turn." Given that EPA's numerical revision was invalid, its interpretation of the trigger requirement would mean coverage for "millions of small sources—including retail stores, offices, apartment buildings, shopping centers, schools, and churches." The Court rejected

⁷¹³⁴ S.Ct. 2427 (2014).

such an "enormous and transformative expansion in EPA's regulatory authority without clear congressional authorization."

In terms of "anyway" sources, however, the Court concluded that EPA was correct: once a source is classified as "major" because of its emission of conventional pollutants, it must use BACT for greenhouse gases. Given the specificity of the statutory language in covering all pollutants regulated anywhere in the Clean Air Act, it is hard to see how the Court could have ruled otherwise.

In another dissent, Justices Alito and Thomas argued that *Massachusetts v. EPA* had erred in holding that the Clean Air Act covers greenhouse gases. For that reason, they would have struck down the "anyway" rule as well. This seems to be an argument that is fated to go nowhere, since the other seven Justices are now firmly committed to applying the statute to greenhouse gases as a general matter. Indeed, the dissent only highlighted the fact that two of the four original dissenters in *Massachusetts v. EPA* (Scalia and Roberts) had conceded EPA's jurisdiction over greenhouse gases. Even if the Justice who replaced Scalia, Justice Gorsuch, sides with Thomas, there will still be a six person majority to uphold at least some EPA climate regulations.

The *UARG* decision did not have a dramatic impact on the effectiveness of the PSD rules, because at least 85% of greenhouse gases come from facilities that are considered "major" because of their emissions of other pollutants like sulfur dioxide. As yet, the Trump Administration has not attempted to repeal PSD coverage for "anyway" plants. Perhaps the reason is the fact that the rule has already been upheld by the courts, which makes it more difficult to make a cogent case for repeal. Or

perhaps the reason is an assumption that, in the absence of pressure from EPA, states may not find it hard to issue fairly toothless permits.

After issuing this regulation, the Obama EPA issued standards covering new electric power generators under section 111 of the statute.⁸ EPA set a standard of emission limit of one ton of CO₂ per megawatt-hour for natural gas plants providing baseload power (that is, running outside of peak power demand). The final standard for coal plants based on this technology was an emission limit of 2.8 tons of CO₂ per megawatt-hour. There will undoubtedly be strong disputes over whether carbon capture has been "adequately demonstrated."

In order to regulate existing power plants—especially existing coal-fired plants—EPA turned to section 111(d) of the Clean Air Act, ⁹ a previously obscure provision. Section 111(d) provides that EPA can require states to submit plans to control emissions from existing plants once it has issued a standard for new sources in the same category under section 111(b). Once EPA issued new source standards for greenhouse gases from power plants under section 111(b), section 111(d) came into play. If a state fails to submit a plan, EPA must submit its own enforceable plans for that state. The plans are supposed to be based on the standard of performance for the industry—that is, the best "system of continuous emission reduction" (BSER) that has been "adequately demonstrated" in terms of existing plants in that state. A crucial issue involved the scope of the term "system"—does it include only plant specific emission limitations measures, or could a system be defined more broadly?

842 U.S.C. § 7411.

⁹⁴² U.S.C. § 7411(d).

The Obama Administration's section 111(d) regulation is known as the Clean Power Plan. In defining BSER, the Clean Power Plan took a different approach for existing plants than EPA had used for new plants. It determined that the best system of emission reduction for existing units consisted instead of three building blocks: (1) efficiency improvements in coal-fired plants, (2) substitution of natural gas generation for coal-fired generation when feasible, and (3) increased use of renewables. Because the power system is organized around three interconnected grids (East, West, and Texas), EPA determined what emissions reductions could be feasibly achieved nationally by applying each building block in each of the three grid areas. It then used the least common denominator for each building block to set a national emissions reduction standard. Finally, EPA applied the building blocks to each state depending on its own mix of power sources—for instance, states that already made high use of natural gas and little use of coal obviously would find it more difficult to achieve reductions by further switching away from coal.

One of the main arguments of industry against the Clean Power Plan relates to the definition of the BSER. They argued that the "system" of control cannot include "beyond the fence line" measures such as increases in use of natural gas generation and renewables. Defining the system of pollution control to encompass changes in the amount of electricity introduced into the grid is a departure for EPA, which normally defines it as a type of pollution control equipment at the specific emitting facility. In effect, EPA is treating all the power generators on the state grid as part of a single unified source. This makes a certain amount of sense because of the way the grid operates—it has been called the world's most complicated machine

—and because of the practicalities of controlling carbon. But it may be too innovative for courts to accept.

B. Trump's Actions

The Trump Administration has been under some pressure from the conservatives to reopen the endangerment finding, but as yet, EPA Administrator Scott Pruitt has declined to do so, apparently because of concerns about the litigation risks involved. Thus, the endangerment finding stands intact. So far, there seems to have been no discussion of repealing the PSD permitting requirement for new plants. The Administration has discussed freezing the current greenhouse gas vehicle requirements in place, rather than allowing them to get stricter has initially planned. But so far, that has not happened.

Repealing a federal regulation is a lengthy process, that requires exactly the same steps as creating a new regulation. The Trump Administration has begun this process with a proposal to repeal the Clean Power Plan. ¹⁰ The Proposal relies solely on the "fenceline" argument discussed above. In other words, the Administration adopted industry's argument that the plan is invalid because EPA is limited to considering actions that can be implemented solely within the fence line of an individual emitter, such as installing new pollution control equipment. In order to reduce carbon dioxide emissions, the Plan would require utilities to scale back electricity generation at coal-fired plants in favor of generators using natural gas or renewable sources. ¹¹ In other words, according to the Trump Administration, section 111(d) authorizes the agency to impose efficiency improvements for coal-fired

^{10 82} Fed. Reg. 48039.

¹¹ See 80 Fed. Reg. 64662 et seq.

plants but not to require that the electricity output of a coal-fired plant be reduced in favor of other sources of electricity. This interpretation of the statute is the basis of EPA's justification for proposing to completely repeal the Plan. 12

Trump has also attempted to undo a number of other Obama-era climate initiatives. The Obama Administration created such an estimate by using the most widely cited models used by economists. Those models combine a climate change decided to focus on the global impacts of carbon. The Obama Administratin then used various discount rates, a crucial factor in calculating the social cost of carbon, to provide a range of estimates. The Trump Administration rescinded this estimate of the social cost of carbon and later did its own calculation. The new calculation considers only the direct harm of climate change in the United States and uses a high discount rate, which results in giving long-term harms from climate change very little weight. Thus, Trump's estimate essentially includes only harm within the United States within the next few decades. Naturally this estimate is much lower than Obama's.

One notable setback for the Trump Administration was part of a bill to fund the Defense Department. Section 335 of the Defense Authorization Act of 2018 (HR 2810) states that it is the sense of Congress that "climate change is a direct threat to the national security of the United States and is impacting stability in areas of the world both where the United States Armed Forces are operating today, and where strategic implications for future conflict exist." It also says that sea level rise "will

12 82 Fed. Reg. 48039-43.

¹³ Further information is available at

threaten the operations of more than 128 United States military sites, and it is possible that many of these at-risk bases could be submerged in the coming years." And moreover, it says, "As global temperatures rise, droughts and famines can lead to more failed states, which are breeding grounds of extremist and terrorist organizations." Thus, Congress has clearly identified ways in which foreign impacts in turn impose domestic costs on the U.S., which a cost-benefit analysis should not ignore. This may make it harder for the Trump Administration to justify ignoring global impacts.

IV. State Climate Initiatives

A. Pre-Trump Efforts

Among the states that are addressing climate change in meaningful ways, California has played a leading role. California legislation focusing specifically on climate change dates back to a 1988 law mandating an inventory of California greenhouse gas emissions. ¹⁴ In 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act, usually referred to as AB 32, ¹⁵ which requires California to reduce emissions to the 1990 level by 2020. This California law generated worldwide attention, including enthusiastic approval by the British Prime Minister at the time it was passed. The California effort undoubtedly received additional attention because the governor was an international celebrity and because it was such a stark contrast with the Bush Administration's recalcitrance. But there were also more tangible international steps involving California. The

¹⁴AB 4420 (Sher), Chapter 1506, Statutes of 1988.

¹⁵AB 32 (Nunez), Chapter 488, California Statutes of 2006, codified at Cal. Health & Safety Code \$\$ 38500 *et seq*.

Prime Minister and the Governor of California entered into an agreement to share best practices on market-based systems and to cooperate to investigate new technologies; similar agreements now exist between California and states and provinces in Australia and Canada. (We will discuss possible legal issues relating to such agreements later in the chapter). California has also pursued discussion with government authorities in China.

California has implemented AB 32 aggressively. The law itself is notably brief and gives the government enormous discretion about how to achieve its goals, though it does rule out a carbon tax. The California Air Resources Board (CARB) first developed nine "early action" measures, some of which focus on reducing emissions of non-CO₂ greenhouse gases. Another important early action was a low-carbon fuel standard to reduce the carbon intensity of transportation fuels by ten percent by 2020. But the CARB's most important action was to establish an emissions trading system, which was discussed in more detail in chapter 4. California's cap-and-trade program sets a declining, statewide cap on greenhouse gas emission. The program originally covered about 600 industrial facilities, with fuel distributors having been added to the program more recently. Many allowances have been distributed free to firms, but an increasing percentage will be auctioned. The auctions have already begun to generate significant amounts of revenue for the state. In 2016, the state invested \$1.1 billion from auction revenues in programs such as high-speed rail and sustainable affordable housing.

States have also combined efforts in regional programs, ¹⁶ including the Northeast Regional Greenhouse Gas Initiative (RGGI) and initiatives in New England, the Great Plains, the Southwest, and the West Coast. RGGI, which is currently composed of ten states, created a multistate trading system for power plant emissions with the goal of achieving a 10 percent reduction by 2019. ¹⁷ In 2013, the cap was reset to 91 million tons of carbon, down from 165 million tons. A quarter of the proceeds are auctioned, with the proceeds going to finance energy efficiency programs or reduce fee hikes caused by the program. Indeed, many of the carbon reductions associated with the program have stemmed from these energy efficiency programs rather than from the cap itself. (About eight states outside of RGGI have created similar funds with other funding sources.) The allowance prices remain low, indicating that the cap is still generous, but the cap is set to decline by 2.5 percent annually.

In addition to actions at the state level, many cities have adopted climate action plans. Although cities do not have the same extensive regulatory powers as state governments, some specific aspects of emission reduction relate to municipal activities in a fairly direct way. Efforts by city governments have taken many forms. Urban planning and land use control is an important municipal function with important implications for climate change. For instance, cities may use their building codes to encourage more energy-efficient buildings and their transit planning to promote public transportation. One area of interest is promotion of transportation-

16See Kirsten H. Engel, Mitigating Global Climate Change in the United States: A Regional Approach, 14 NYU ENVIL. L. J. 54 (2005).

¹⁷See http://www.rggi.org/design.

oriented development, where the goal is to promote additional development close to public transportation hubs. Cities can also reduce barriers to the use of renewable energy, such as zoning restrictions that could hinder rooftop solar.

In addition, city governments can reduce their own energy use and can adopt renewable sources of energy, such as generating electricity from methane produced by waste. Municipalities own a significant number of buildings and vehicles such as police cars, so potential emissions reductions are not trivial. Finally, a number of cities run their own municipal electrical utilities, which sometimes have adopted ambitious renewable energy and energy efficiency programs. Given the proportion of the population and the economy found in urban areas, these are not necessarily insignificant steps.

B. The Reaction to Trump

In the aftermath of Trump's election, several state governments have actually increased their efforts to combat climate change. For instance, New Jersey immediately rejoined RGGI when its Republican Governor was replaced in the 2017 election by a Democrat.

In California, the legislature adopted a new target in SB 32: reducing emissions 30% below 1990 levels by 2030. But the question remained how to reach this goal. In 2017, the California legislature adopted AB 398 by a two-thirds vote, extending the emissions trading system until 2030.

Rather than using cap-and-trade, Washington thus far has adopted the "trade" but not the "cap," in a distinctive hybrid of conventional regulation and

emissions trading. The state's Clean Air Rule went into effect in January 2017. 18 The rule requires major emitters of greenhouse gases to limit and reduce carbon pollution and incentivizes investments to reduce fossil fuel use and accelerate use of clean energy. Unlike California, Washington did not set a statewide cap on emissions. Instead, each facility is assigned its own emission reduction pathway, using its average emissions in 2012-2016 as a baseline. Thereafter, emissions must decrease at a rate of 1.7% per year. Every three years, a facility must demonstrate that it met its reduction goals or face penalties. There is also a reserve of emission reduction units (ERUs) to accommodate new facilities. (In effect, the sum of the targets for all individual plants still in operation plus the ERUs used from the reserve fund is equivalent to a statewide emissions cap, but the state itself never sets an explicit target for statewide emissions.) The state allows trading of ERUs and says that trading will also be allowed with out-of-state programs when those are approved.

The Washington scheme imposes lower costs on laggard firms that had high emissions in the baseline period, correspondingly penalizing those that had already started cutting emissions. On the other hand, because it is more focused on cuts at individual facilities, the Washington approach may be more appealing to environmental justice advocates than California's more conventional cap-and-trade system (which critics argue can allow harmful pollutants to concentrate in disadvantaged areas).

18 Washington State Department of Ecology, "Overview of the Clean Air Rule,"

https://ecology.wa.gov/Regulations-Permits/Laws-rules/Closed-rulemaking/WAC-173-442,-441-Overview. The rule has been challenged by several generators and utilities. https://www.usnews.com/news/beststates/washington/articles/2017-05-28/carbon-cap-rule-in-washington-faces-legal-challenge.

New York has also recently strengthened its approach to climate change. In May 2017, Governor Andrew Cuomo also announced a plan to cut methane emissions. In June, he announced that New York was joining the U.S. Climate Alliance. He had this to say on that occasion:

"New York State is committed to meeting the standards set forth in the Paris Accord regardless of Washington's irresponsible actions. We will not ignore the science and reality of climate change, which is why I am also signing an Executive Order confirming New York's leadership role in protecting our citizens, our environment, and our planet." 19

New York City has been a leader on climate change adaptation. In 2013, the city announced a \$20 billion adaptation plan, which includes both infrastructure such as dune and seawalls to protect against the sea as well as funding to help property owners adapt to higher risks. ²⁰ Guidelines adopted in 2017 require greater elevation: For sea level rise, the guidelines advise adding 16 inches to what current code requires for structures expected to be in use beyond 2040, and three feet for those expected to last the century. ²¹ The guidelines also point to an interactive map created by the city that projects flood hazards into the future and overlays them on city streets.

¹⁹ "Governor Andrew M. Cuomo Signs Executive Order and Commits New York to Uphold the Standards Set Forth in the Paris Accord," Governor Andrew M. Cuomo (June 1, 2017), https://www.governor.ny.gov/news/governor-andrew-m-cuomo-signs-executive-order-and-commits-new-york-uphold-standards-set-forth.

²⁰ Hilary Russ, "New York Lays Out \$20 Billion Plan to Adapt to Climate Change," Reuters (June 11, 2013), http://www.reuters.com/article/us-climate-newyork-plan/new-york-lays-out-20-billion-plan-to-adapt-to-climate-change-idUSBRE95A10120130611.

 $^{21\,\}rm Nicholas$ Kusnetz, "NYC Creates Climate Change Roadmap for Builders: Plan for Rising Seas," Inside Climate News (May 3, 2017), https://insideclimatenews.org/news/02052017/nyc-publishes-building-design-guidelines-adapting-climate-change.

While its geography and renewable resources differ greatly from those of California, similarly favorable politics and potentially high exposure to climate change risks have led New York to a position of policy leadership on the East Coast.

It is notable that these states not only continued their existing climate policies after Trump but have also strengthened them. Thus, climate policy may be under attack at the federal level, but it is continuing to thrive in some important states.

Interestingly, renewable energy has continued to expand even in conservative states that do not have any policies addressing climate change. For instance, The Electric Reliability Council of Texas (ERCOT), which operates most of the state's grid, 22 recently projected that in the next fifteen years, Texas will add almost 20 gigawatts (GW) of solar, equivalent to 15-20 new nuclear reactors. In fact, under virtually every scenario ERCOT considered, the only new capacity is solar, with no new fossil fuel plants expected. ERCOT also expects to retire about a third of that amount in coal generation together with some older, inefficient natural gas plants. The reason wind power does not play a greater role in these projections is probably that Texas is already #1 in the nation in terms of wind; in fact, if it were a country, it would be #6 in the world. So there is more potential for growth in the state's comparatively small solar sector. As the Texas example illustrates, cheap natural gas and renewables are pushing coal power plants out of operation across the United States, reducing greenhouse gas emissions.

V. The Courts

²² Electric Reliability Council of Texas, Inc., "2016 Long-Term System Assessment for the ERCOT Region," http://www.ercot.com/content/wcm/lists/89476/2016_Long_Term_System_Assessment_for_the_ERCOT_Regio n.pdf.

The federal courts have not surrendered to the Trump Administration's view of climate policy. They have continued to apply the law objectively and to require agencies to base their decisions on sound science. Only a few cases have reached the courts so far, but they provide some reason for hope that the courts will resist Trump's efforts to destroy federal climate policy. Consider these four cases.

In the first case, Tenth Circuit held that the government was required to consider climate change impacts when issuing coal leases.²³ This ruling will make it harder for the Administration in other issues involving fossil fuels. The agency argued that denying the coal leases would not affect global emissions because they would simply substitute for coal mined elsewhere. In rejecting the agency's analysis, the court that "it was an abuse of discretion to rely on an economic assumption, which contradicted basic economic principles." The court also went out of its way to rebut the agency's claim that climate change is an issue "on the frontiers of science," entitling the agency to special deference.

In a second case, the D.C. Circuit reversed the Trump Administration's suspension of an EPA rule limiting methane emissions from oil and gas operations. This ruling is noteworthy because it limits the ability of the Administration to get rid of existing rules without going through a formal rule-making process. The court rejected EPA's arguments that it had inherent authority to suspend rules and that its attempt to base the suspension on a specific provision of the statute was flatly contradicted by the record.²⁴

²³ WildEarth Guardians v. United States Bureau of Land Management, 870 F.3d 1222 (10^{th} Cir. 2017).

²⁴ Clean Air Council v. Pruitt, 862 F.3d 1 (D.C. Cir. 2017).

In a third ruling, the Ninth Circuit demanded that EPA move promptly to resolve a rule making regulating lead paint. Since delay is one of the most insidious forms of deregulation, this decision is significant as an indication that judges are unwilling to tolerate indefinite foot-dragging. The court put heavy pressure on the agency to move forward, directing it to issue a proposed rule within ninety days and a final rule within six months."²⁵

In the last of the four cases, the Ninth Circuit upheld a decision by the Obama Administration to classify the Arctice ringed seal as endangered due to climate change, despite the Trump Administration's skepticism about climate science.²⁶ The court said:

The [finding] that the Arctic ringed seal was likely to become endangered within the foreseeable future—was reasonable and supported by the record. [C]limate change models show the habitat of the Arctic ringed seals to be diminishing as sea ice recedes. "[T]he IPCC climate models constitut[e] the best available science and reasonably suppor[t] the determination that a species reliant on sea ice likely would become endangered in the foreseeable future."

There is little indication that the courts will be deferential to the Trump Administration's actions. Undoubtedly the Administration will win some cases in court, but the courts may be significant barriers to other efforts by the Administration.

²⁵ In re Community Voice, 878 F.3d 779 (9th Cir. 2017).

²⁶ Alask*a Oil and Gas Association v. Ross* (9th Cir. 2018), available at https://www.courthousenews.com/wp-content/uploads/2018/02/Ringed-Seals.pdf.

VI. Conclusion

Trump's election may put in danger much of the progress made under Obama in addressing environmental issues and even risk some earlier accomplishments. The Bush years provided a blueprint that still largely applies. Environmentalists were able to use a three-part strategy to deal with the anti-environmental pressures in D.C., and those tools remain available.

The first approach under Bush was to use whatever political leverage was available at the national level to block anti-environmental moves. This included using the Senate where possible to block legislative initiatives, and lobbying heavily on individual issues. This remains a definite possibility, considering the narrow margin in the Senate and that chamber's bevy of tools that can be used by the minority.

The second approach under Bush was to use the courts. Justice Kennedy remains the swing vote on the Supreme Court. He is certainly not a reliable environmental vote but is winnable on some issues. The lower courts have a heavy contingent of Obama appointees and should be more sympathetic overall, especially for the first few years before Trump has a chance to make a lot of appointments. National environmental organizations will play a critical role here, as will sympathetic state governments.

The final approach under Bush was to press forward as much as possible at the state level. California passed AB 32; the Northeastern states moved forward with RGGI; and many other states worked hard on issues like renewable energy. Because Republican control of state governments had increased in the meantime, this

strategy under Trump had to focus more on the regions where Democrats remains strong, such as the West Coast and the Northeast. The elections in November, 2018 may give the Democrats an opportunity to expand their power among the states, along new climate initiatives.

In short, while the Trump Administration poses a serious threat to global efforts to address climate change, Trump does not speak for the entire United States. Many influential institutions, including state governments, continue to take climate change serious and work to address the issue.