CLIMATE FEDERALISM IN THE TIME OF COVID-19: CAN THE STATES “SAVE” AMERICAN CLIMATE POLICY?

Kirsten Engel

1. INTRODUCTION

To many, the Trump administration has been a nightmare for U.S. progress on climate change. From the appointment of climate-change skeptics to influential administrative positions, to the rollback of greenhouse gas regulations applicable
to transportation\textsuperscript{3} and energy,\textsuperscript{4} to the initiation of the U.S. withdrawal from the Paris Climate Agreement,\textsuperscript{5} Trump's administration has systematically dismantled what federal climate regulations existed\textsuperscript{6} and has placed roadblocks to future climate action. As a result, progress on mitigating climate change through federal regulatory actions has come to a halt;\textsuperscript{7} some would even say it has reversed course to a point where the U.S. is facilitating climate change.\textsuperscript{8}

Yet, a singular focus on the actions of the current administration provides a distorted view of climate change mitigation policy in the U.S. Most critically, it leaves out the actions of state and local governments. Since the early 2000s, most climate policy has been "bottom up," originating from the states and local governments, as opposed to "top-down," or led by the federal government.\textsuperscript{9}

\begin{itemize}
\item \textsuperscript{4} Repeal of the Clean Power Plan; Emission Guidelines for Greenhouse Gas Emissions From Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations, 84 Fed. Reg. 32,520 (July 8, 2019) (to be codified at 40 C.F.R. pt. 60 (hereinafter the Affordable Clean Energy Rule, or "ACE" rule)).
\item \textsuperscript{8} Basev Sen, Opinion contributor, Dear countries at the Madrid climate talks, we're a rogue superpower. Sanction us, please., USA TODAY (Dec. 11, 2019), https://www.usatoday.com/story/opinion/2019/12/11/america-needs-shaming-sanctions-climate-change-rogue-state-column/2618901001/.
\item \textsuperscript{9} Barry Rabe, States on Steroids: The Intergovernmental Odyssey of American Climate Policy, 25 REV. POL'TY RES. 105, 124 (2008) (characterizing states as occupying an increasingly central role in American climate policy and considering one option for the future of climate policy to retain a strong bottom up emphasis); Katherine T. Trisolini, All Hands on Deck: Local Governments and the Potential for Bidirectional Climate Change, 62 STAN. L. REV. 669, 672 (2010) (in 2008 U.S. climate policy appeared to be "upside down" with the federal government having rejected the Kyoto Protocol and state and local governments having enacted emissions...
Piloted by California, New York and other east coast states, an increasing number of U.S. states and cities have acted to establish greenhouse gas (GHG) mitigation goals, increase renewable energy generation, reduce vehicle GHG emissions and shrink the climate footprint of the built environment. While the Obama administration used the Supreme Court’s interpretation of the Clean Air Act to promulgate rules limiting GHG emissions, this interpretation was brought to the Court by a coalition of states, cities, and environmental groups. Thus, even during the time of more pronounced federal activity, the executive ultimately owed much of its climate accomplishments to the states. Commentators have documented the continued efforts of states during the Trump administration to promote renewable energy, reduce GHGs from transportation, and adopt climate adaptation plans.

The question is thus sharply posed: going forward, can states counter the Trump administration’s climate roll-backs and reclaim U.S. climate policy? This question is critical to helping us know whether U.S. climate change progress is only possible if a new administration committed to mitigating climate change (if elected in November) or whether the U.S. might continue to make progress regardless. While a national climate action regulatory program is clearly more effective than uncoordinated state action, assuming states continue their pre-COVID-19 regulatory agendas, states—working individually or collectively—can at least fill in some of the gaps created by the Trump roll-backs, and create new models for future federal climate legislation.


11. Massachusetts v. EPA, 549 U.S. 497, 514 (2007) (given the Clean Air Act’s sweeping definition of “air pollutant,” it was unambiguous that the term included carbon dioxide and other greenhouse gases).


13. Massachusetts, 547 U.S. at 497 (list of petitioners).


Nevertheless, states attempting to address climate change face a host of new challenges. A lack of adequate national leadership on the pandemic is forcing states, and especially state governors, to pick up the slack in responding to this overwhelming health crisis. This may better equip them to respond to natural disasters that are projected to be more frequent and severe, such as wildfires, hurricanes and flooding. But the importance of responding to the pandemic will inevitably edge out other priorities, such as climate change, at the same time it threatens to drain state and local government coffers. Even aside from the curve-ball thrown by the pandemic, the prospects of robust state and local action on climate change will also depend upon legal variables extrinsic to climate policy debates, such as the success of efforts to preempt state regulation of GHGs through vehicle emission standards and energy generation.

In sum, although President Trump can withdraw the United States from of the Paris Climate Agreement and may succeed in rolling back federal climate regulations, he cannot extinguish the power of states, individually or collectively, to address climate change. Nevertheless, states currently face numerous, unanticipated challenges in addressing the climate crisis due to the global coronavirus pandemic. This, as well as legal hurdles to state power to address various aspects of the climate crisis, will shape the effectiveness of future state and local climate actions.

II. CLIMATE CHANGE AND THE TRUMP ERA

The Trump administration has acted systematically to dismantle federal climate change policy. The Administration’s roll-backs include, but are not limited to, repealing prior rules imposing emissions limitations on industries but extend to methodological issues that have the potential to affect carbon regulation in multiple areas and into the future.

16. See infra text accompanying notes 68–69.
17. See infra text accompanying notes 70–86.
18. See infra text accompanying notes 87–93.
19. See infra text accompanying notes 94–119.
20. In the “Climate Deregulation Tracker, the Sabin Center for Climate Change Law at Columbia Law School is documenting the steps taking by the Trump Administration and Congress to scale back or eliminate climate mitigation and adaptation measures. As of May 2020, between Congress and the Administration, nearly 150 deregulatory actions had been taken. Columbia University, Climate Deregulation Tracker, https://climate.law.columbia.edu/climate-deregulation-tracker (last visited May 8, 2020).
Several of Trump’s most notable climate regulatory roll-backs concern climate regulations imposed on major sources of GHGs by the Obama administration. For instance, the Obama EPA had famously imposed GHG emission limits upon new cars and trucks that were estimated to increase fuel economy to 54.5 miles per gallon by 2025. This regulation was expected to reduce GHGs by 2 billion metric tons. Given that, in 2010, mobile sources were responsible for 30% of all U.S. GHGs, this regulation would place a sizable dent in U.S. contribution to climate change. The Trump administration repealed the Obama rule and replaced it with its own, a rule that cuts GHG emissions reductions in the Obama rule by half and reduces the average miles per gallon that must be achieved by an automaker’s fleet to 40 mpg. A second example of a major policy shift concerns the Trump administration’s repeal and replacement of the Obama administration’s Clean Power Plan (CPP), a regulation, under the Clean Air Act, that was designed to reduce emissions from existing power plants. The CPP would have reduced GHG emissions from the electric generating sector by over 30% below 2005 levels, by 2030. To accomplish such a reduction, the CPP established federal emission reduction goals for states that could be met on the site of a coal-fired power plant as off-site, through such measures as the replacement of coal-fired generation with renewable energy generation. In contrast, the Trump rule replacing the CPP, the Affordable Clean Energy rule, expressly limits the scope of those measures to those that can occur on the site of an existing coal plant, thus sharply reducing the degree to which the regulation will facilitate GHG reductions.


22. Id. at 62,633.

23. Id. at 62,634.


26. Id. at 64,665.

27. Id. at 64,761 (interpreting the “best system of emissions reduction” (BSER), the key term of Section 111(d) of the Clean Air Act authorizing emissions reductions from existing power plants to include “actions that may occur off-site and actions that a third party takes pursuant to a commercial relationship with the owner/operator, so long as those actions enable the affected source to achieve its emission limitation”); id. at 64667 (providing that BSER includes “Substituting increased generation from new zero-emitting renewable energy generating capacity for generation from affected fossil fuel-fired generating units”).

28. ACE Rule, 84 Fed Reg. at 32,534.
Perhaps no action has so definitively signaled the Trump administration’s intention to reverse course on climate change than its decision in November 2019 to withdraw the U.S. from the Paris Agreement.\(^{29}\) This occurred shortly after nations warned that time was running out on the world’s ability to meet the Paris Agreement’s goal of maintaining world average temperatures below a 2°C rise.\(^{30}\) To make matters worse, in November 2019 the United Nations Environment Programme reported that the gap between countries’ emission levels that comply with the Paris Agreement and the emissions reductions necessary to stay below either a 2°C or 1.5°C warming by 2100—and the destructive climate impacts associated with such warming—is large.\(^{31}\) To avoid a 2°C warming, parties to the Paris Agreement must cut GHG emissions by 2.7%, and to avoid 1.5°C, countries must cut GHG emissions by 7.6%, each year between 2020 and 2030.\(^{32}\) To have the United States, the second largest emitter of GHGs,\(^{33}\) withdraw from the most recent global climate agreement, spells trouble for the world’s efforts to prevent the occurrence of destructive climate impacts.

The Trump roll-backs are not limited to repealing prior GHG reduction regulations, but extend to methodological issues that could affect regulations addressing carbon across the board and into the future. An example is the Administration’s decision to disband an interagency group that was organized to revise estimates on the social costs of carbon and formally withdraw the technical support documents that had previously been used to make such estimates.\(^{34}\) The social cost of carbon is used in calculating cost in cost-benefit determinations of various government actions that impact climate change by placing a dollar value on the most significant and quantifiable damages resulting from each additional

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\(^{29}\) See Pompeo, supra note 5.


\(^{31}\) United Nations environment programme, Emissions Gap Report 2019 XVIII (2019) (“The emissions gap is large. In 2030, annual emissions need to be 15 GtCO2e lower than current unconditional NDCs imply for the 2°C goal, and 32 GtCO2e lower for the 1.5°C goal.”). Allowing GHG emissions to push global average temperatures above 1.5°C will increase the frequency and intensity of climate impacts, such as the heatwaves and storms witnessed across the globe in the last several years. Id. at XIII.

\(^{32}\) Id. at XX.


ton of carbon emitted. The now-disbanded interagency working group had placed an estimate of $51 per ton of carbon emitted. In the absence of accurate estimates of the social cost of carbon, federal actions that negatively impact climate change can appear to provide greater net benefit than is actually the case.

III. STATE AND LOCAL CLIMATE INITIATIVES

Beginning in the 1990s, California, New York, and other east coast states began to take climate change regulation seriously, adopting measures to reduce emissions within their borders. Famously, California passed the first state-level GHG cap-and-trade law in 2006, which committed the state to reducing GHGs to 1990 levels by the year 2020, an approximately 30% reduction in state GHG emissions. This law has since been extended to reduce emissions by 40% below 1990 levels by 2030. California also issued the first GHG emissions standards for cars and trucks under its unique authority to issue its tailpipe emissions standards under the Clean Air Act that can be duplicated by other states.

California was not the only early adopter of climate change measures. A notable early move by northeastern states was the Regional Greenhouse Gas Initiative (RGGI), a first-in-the-nation regional GHG cap-and-trade regime applicable to coal and natural gas-fired power plants. Among the early, but more widely adopted, climate-related measure is the renewable portfolio standard. Adopted today by twenty-nine states and the District of Columbia, these standards encourage or require that a certain percentage of a utility’s electrical generation be sourced from renewable energy sources.


38. See CAL. HEALTH AND SAFETY CODE § 38500-38599. (West 2020).

39. See infra text accompanying notes 94–110 for a more complete discussion of the California vehicle emissions limits for GHGs.


Commentators have questioned the capacity of state and local climate measures to actually mitigate climate change impacts, and whether state and local governments can be trusted to fight climate change over the long haul.\(^\text{42}\) Given that climate change is a global problem resulting from the buildup of GHG concentrations resulting from GHG emissions from across the globe, the actions of a single state, much less a city, or so commentators have argued, cannot make an appreciable dent in climate impacts.\(^\text{43}\)

U.S. states such as California and Texas easily compete with other nations in terms of the size of their emissions.\(^\text{44}\) Accordingly, the argument that U.S. climate change reductions are minimal seems odd when international climate agreements are aimed at promoting emissions reductions by much smaller nation states. Nevertheless, regardless the number of tons of a GHG a given state or local government’s climate initiative reduces, there exist multiple ways that the impacts of a single state’s action on climate change can be magnified. States each other’s initiatives, aggregating emissions reductions across many states. States appear to have copied each other when adopting renewable portfolio standards.\(^\text{45}\) States can magnify the impact of their actions through multi-state agreements, establishing a regional climate program, such as the RGGI regional cap-and-trade program for reducing GHGs from power plants. Adoption of state standards applicable to manufacturers, such as energy efficiency standards, can trigger the enactment of federal legislation imposing federally preemptive uniform standards.\(^\text{46}\) Finally, states can file lawsuits. They can attempt to trigger climate regulation through legal actions against emitters (to abate emissions or pay damages)\(^\text{47}\) or against the federal government (for failing to address climate change).

The latter is, of course, a description of what Massachusetts and other states ultimately did to trigger federal regulation of GHG emissions under the Clean Air


\(^{43}\) Weiner, supra note 42; Outka & Feiock, supra note 42 at 668.


\(^{45}\) See North Carolina Clean Energy Technology, DSIRE, supra note 41.

\(^{46}\) See Engel, supra note 100 at 1026.

\(^{47}\) See Am. Electric Power v. Connecticut, 564 U.S. 410 (2011) (holding states’ suit against electric power companies for the abatement of greenhouse gas emissions under the theory of a federal common law of nuisance was displaced by the federal Clean Air Act but refusing to decide whether an action under state common law would be justiciable).
Act. When the EPA denied an earlier-filed petition to regulate greenhouse gas emissions from new motor vehicles, the states appealed the case to the U.S. Supreme Court. In a 5-4 decision in *Massachusetts v. EPA*, the Court ruled that GHG emissions were included within the definition of Clean Air Act-governed air pollutants and that the EPA must redetermine whether, on public health grounds, the Clean Air Act required emissions from new cars and trucks to be regulated.

As history can now attest, the EPA did go back to the drawing board. It engaged in a comprehensive effort to determine whether emissions of GHGs cause or contribute to the endangerment of public health or welfare, whether emitted from cars or trucks or other sources. The result, the agency’s “endangerment finding” rulemaking, concluded that GHG pollution generated by human activity is causing climate change and that GHG pollution will endanger health by: (1) increasing the number of hot days and heat waves, (2) increasing levels of ground-level ozone, and (3) increasing the number and frequency of extreme weather events such as severe storms and hurricanes.

Together, the *Massachusetts v. EPA* decision and the agency’s endangerment finding, both originally triggered by state legal action, made possible the Obama administration’s climate agenda: regulations of GHGs from multiple industrial sources already subject to Clean Air Act regulation. Following the endangerment finding, the Obama Administration issued a series of GHG regulations. These included the Administration’s 2010 and 2012 limits on GHGs emitted from motor vehicles, 2012 GHG limits on emissions from new coal-fired power plants, 2015 limits on such gases from existing coal and natural gas plants, and 2016 limits upon methane emitted from oil and gas production facilities.

**IV. POST PANDEMIC: CAN STATE AND LOCAL GOVERNMENTS REVERSE THE TRUMP ADMINISTRATION’S CLIMATE CHANGE ROLL-BACKS?**

Fast forward to 2020. In the wake of the Trump administration’s roll-back of climate regulations and the global coronavirus pandemic, what are the prospects for state and local governments taking up the slack? And what are the biggest impediments to their doing so?

This section will first argue that the necessity of addressing climate change is unchanged by the COVID-19 pandemic and, if anything, the pandemic

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50. *Id.* at 66,497–98.

51. See *supra* text accompanying notes 21–28.
demonstrates the critical importance of addressing climate change before it triggers more natural disasters. On the positive side, the role of states in the pandemic has only raised their stature vis-a-vis the federal government. This means governors are well-poised to use their executive powers to address a global threat that competes with that of the pandemic: climate change. Nevertheless, this section concludes that numerous barriers exist to states picking up the climate regulatory pieces in the wake of the Trump Administration's roll-backs, some that existed prior to the pandemic and others that result from the pandemic.

A. Climate Change is not going away

Today, the need to address climate change is more pressing than ever before. The Trump administration’s 2018 national climate assessment found that increasing greenhouse gas concentrations are causing high temperature extremes, an escalation in the number of heavy precipitation events, sea level rise, flooding, and an increase in the number of intense wildfires. The assessment warns that damage from climate change will causes losses to American infrastructure and property, and impede the rate of economic growth over the current century. The Trump administration’s abdication on climate change mitigation is an even more important reason for state and local action today. In the absence of a shift to a climate-friendly administration, action by state and local governments on climate may be, quite frankly, the only policy option available. Commentators have documented that many states have, in fact, been continuing to work on climate change, despite the Trump administration climate rollbacks.

Nevertheless, in the time of COVID-19, worrying about climate change may seem out of place. As of this writing, the global pandemic has killed over 75,000 persons in the United States, and has caused the highest levels of unemployment


53. Id. at vol. II, ch. 2.

54. Arroyo, supra note 142 at 310.

55. World Health Organization, WHO Coronavirus Disease (COVID-19) Dashboard, https://covid19.who.int/ (reporting that, as of May 10, 2020, the United States has the highest number of cases in the world).
since the Great Depression.\textsuperscript{56} To make matters worse, recent studies indicate that the virus could be with us for months, if not years.\textsuperscript{57}

Nevertheless, it can be argued that the coronavirus pandemic is the exact time we should worry about climate change. This is first and foremost because we now know better than ever about our lack of preparedness for a major health crisis. And yet, like the pandemic, climate change poses serious health risks. These include rising levels of air pollution, and more intense, extreme events are expected to increase exposure to waterborne and foodborne diseases, affecting food and water safety, extreme heat and cold-related deaths, and vector-borne diseases.\textsuperscript{58} In fact, experts estimate the annual, global death toll from climate change between 2030 and 2050 will range between 250,000 to 500,000 persons.\textsuperscript{59} As a global health crisis, the pandemic has stressed our healthcare system, demonstrating inadequacies in primary care capacity and treatment technology.\textsuperscript{60} Left unaddressed, climate change will impose an increasing burden on these same systems. But by addressing climate change now, we have the potential to reduce these burdens.

Addressing climate change today could also reduce the health risk injustices we are witnessing with respect to the pandemic along the lines of race and class. Commentators and international organizations alike point to the unequal distribution of climate damage by race, class and, between countries, by level of national economic development.\textsuperscript{61} Along with GHGs, particular matter and other toxic chemicals are emitted by the burning of fossil fuels by transportation and


\textsuperscript{58} See USGCRP 4th Assessment Report, \textit{supra} note 52 at vol. II, Summary Findings, ch. 6.

\textsuperscript{59} Andy Haines & Kristie Ebi, \textit{The Imperative for Climate Action to Protect Health}, 380 N. ENGL. J. MED. 263, 266 (2019) (stating that a World Health Organization estimate of 250,000 deaths annually between 2030 and 2050 due to “climate change–related increases in heat exposure in elderly people, as well as increases in diarrheal disease, malaria, dengue, coastal flooding, and childhood stunting” was “conservative” and citing a Lancet study estimating 529,000 deaths annually due to climate-induced food shortages).


industrial sources. Researchers are finding that exposure to higher levels of particulate matter is associated with a higher death rate from COVID-19. According to the EPA, African-Americans are exposed to significantly higher amounts of fine particulate matter (PM 2.5) than white Americans, a statistic that holds true regardless of wealth. Now researchers are finding that African-Americans are getting infected and dying from COVID-19 at rates disproportionate to white Americans. Researchers have also found that U.S. counties with high levels of air pollution are also seeing a significantly higher COVID-19 death rate. Analyzing data from over 3,000 counties, researchers found that higher levels of small particulate matter, PM 2.5, is associated with a higher rate of deaths from the virus.

In summary, now is precisely the time we should be thinking about climate change. The more we mitigate climate change and invest in ways of adapting to inevitable climate change impacts, the more we can avoid many of the negative impacts we are seeing play out in the current pandemic.


63. Ihab Makati, Adam F. Benson, et al., Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status, American Journal of Public Health, April 2018 (published online March 7, 2018), available at https://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2017.304297 (finding that African Americans had 1.54 times higher burden from emissions of fine particulates than did the overall population, a finding that held true not only nationally but within most states and counties as well, and was a more pronounced burden than those in poverty who had a 1.35 times higher burden than the overall population).

64. See John Eligon, Audra D. S. Burch, Dionne Searcey & Richard A. Oppel Jr., Black Americans Face Alarming Rates of Coronavirus Infection in Some States, N.Y. TIMES, April 7, 2020, available at https://www.nytimes.com/2020/04/07/us/coronavirus-race.html (reporting that, in Illinois, a state that is 15 percent African-American, 43 percent of all positive cases and 28 persons who have died of the virus are African-American and, similarly, in Michigan where 14 percent of the population is African-American, one-third of all positive cases and 40 percent of deaths are African-Americans).


66. Id.
B. State Response to COVID-19: A Dry Run for future State Leadership on Climate Change?

Commentators have widely criticized President Trump’s lack of national leadership with respect to the pandemic. The result has been to leave governors to fend for themselves—often at odds with each other—to map strategies for how to contain the virus and to obtain medical necessities such as personal protection equipment and virus testing kits. One commentator has even compared the national response to the pandemic to the time of the Articles of Confederation where states were left to fend for themselves, before our nation adopted the U.S. Constitution with its stronger role for the federal government.

The Trump administration’s lack of national leadership on the pandemic is prompting state governors to fill the void and many Americans believe they are doing a good job. Interestingly, the states, and especially the nation’s governors, are asserting themselves as leaders in ways important to addressing climate change. The pandemic might even be seen as a rehearsal of sorts for the exercise of powers and procedures that will be vital to states’ ability to be effective leaders in response to climate change, especially as it concerns natural disasters.


70. Peter Nicholas & Kathy Gilsinan, The End of the Imperial Presidency, THEATLANTIC.COM (May 2, 2020), https://www.theatlantic.com/politics/archive/2020/05/trump-governors-coronavirus/611023/ (by ceding control over the pandemic, Trump is enabling the nation’s governors to “flex their muscles”).

Take, for example, the power of a governor to declare an emergency.\textsuperscript{72} A declaration of an emergency enables a state to immediately access financial and material resources at the state level and can also result in the temporary waiver of usual regulatory restrictions that might otherwise apply, such as licensing requirements for personnel and procurement.\textsuperscript{73} If approved by the president, a state’s emergency declaration can provide the state access to federal disaster relief.\textsuperscript{74} All U.S. state governors have declared a state of emergency with respect to COVID-19.\textsuperscript{75} In some states, this has not gone entirely smoothly, with state lawmakers and others challenging the scope and duration of emergency orders calling for citizens to stay home or businesses to remain closed.\textsuperscript{76}

The experience being gained today by governors in declaring states of emergency, seeking disaster relief, coordinating emergency planning across their states, and even in debating the scope of such emergency declarations, may help them with respect to future climate change emergencies. Scientists warn that climate change brings with it more frequent and more intense storms such as

\textsuperscript{72} In many states, this power is provided to the governor under state statute. In Arizona, the governor has broad power to declare an emergency and can exercise all police powers vested in the state government to address the emergency. \textit{Ariz. Rev. Stat. Ann.} \textsection{26-303(D)-(E)} (West 2020), available at https://www.azleg.gov/ars/26/00303.htm. The emergency can be ended by the governor or through a concurrent resolution passed by the legislature. \textit{Id.} at 26-303(F).


hurricanes and larger and more catastrophic wildfires.\textsuperscript{77} Already such events have been the source of many state declarations of an emergency.\textsuperscript{78} While weather events, such as hurricanes and wildfires, consistent with climate impacts are usually reserved to coastal states or states with large national forests, the fact that governors of all fifty states have declared an emergency is ensuring that the governors of even those states that are usually immune to such environmental events receive experience with invoking and using the extreme powers made possible under such a declaration.

Aside from declaring emergencies, the pandemic has prompted governors to liberally use their powers to issue executive orders. While under normal circumstances, issuance of executive orders is fairly rare and generally control the actions of state agencies and activities on state-owned property and facilities. Now, however, as governors have fleshed out the scope of their pandemic emergency declarations with follow-up orders regarding evictions, schools, stay-at-home orders, elective medical procedures, business closures and re-openings, utility relief, property taxes, and licensing matters; it has become routine for governors to issue broad executive orders governing, not only the actions of state entities, but also those of private parties.\textsuperscript{79} Such orders have also become a necessity to responding to the pandemic crisis, especially given that so many state legislatures have recessed or ended their sessions during the pandemic.\textsuperscript{80} Lacking rules for remote debate and voting, lacking infrastructure to ensure proper social distancing; and either leery of, or constitutionally unable to, carry on business


without enabling the public to watch and participate, many state legislatures have met during the pandemic.  

Greater use of executive actions may also be a similarity between the pandemic and state climate change action. Much climate action on the state level thus far has been the result of executive action, especially through a governor’s executive orders. Through executive orders, governors have adopted statewide climate mitigation goals and plans. This use of executive action is attributable to many factors. Some state governors have favored action on climate change while such measures would be opposed by a majority of the legislature. Similarly, through his or her executive order authority, the governor may be able to impose energy and water efficiency measures with respect to state-owned buildings and vehicles, even if the political consensus to impose such measures on private businesses is lacking.

Finally, due to the nature of the coronavirus as a global pandemic—and in the absence of presidential leadership—some states are functioning as mini nation-states, grappling with the complexities of international supply chains of PPE and the potential for international travel restrictions. Similarly, due to the global

81. Id. State experiences differ markedly. Wisconsin and Utah were able to mimic legislative procedures and carry on the legislative session remotely while other states—38 in total—have open meeting requirements that require public meetings to be physically available to everyone. Id.


84. For example, in 2006, Governor Janet Napolitano of Arizona, a democrat who served in office during a time when the state legislature was controlled by a republican majority, issued an Executive Order requiring the state’s environment and transportation department to adopt the California clean car standards to reduce greenhouse gas emissions from new cars by 30 percent by 2016. See Arizona Governor Issues Executive Order for Reduction of Greenhouse Gases: focus on Transportation, GREENCARCONGRESS.COM (Sept. 12, 2006), https://www.greencarcongress.com/2006/09/arizona_governo.html.

nature of climate change, and in the absence of strong federal leadership, individual states have stepped onto the international stage, entering into agreements with other nations and measuring their emissions reductions in terms of global goals as opposed to national goals.  

V. IMPEDIMENTS TO STATE AND LOCAL CLIMATE INITIATIVES GOING FORWARD

A. Overwhelming Priority of Addressing the Pandemic

The pandemic may be a dry-run for the readiness of state governors in addressing climate change, but climate change is not likely to be considered a priority while states grapple with the health and economic fall-out of the coronavirus. Responding to this priority is also depleting state coffers of the financial resources they could otherwise devote to climate change policies going forward. Economists estimate that the pressures resulting from the pandemic on state and local budgets are more severe than that encountered during the Great Depression. The sum total of the shortfall through 2021 could top more than $500 billion. State shut-down orders are expected to cause sales and income tax revenues to plummet. Together with stemming the amount of revenue coming into state coffers, the pandemic is imposing new and unexpected costs on states. These are attributable to testing programs, the purchase of personal protective equipment, and unexpected outlays under various social programs.

Some of the economic hit of the pandemic will be blunted by current and future federal stimulus packages enacted by Congress. In April 2020, Congress enacted the Coronavirus Aid, Relief, and Economic Security Act (CARES), providing $2 trillion of aid in response to the pandemic. Some of the money will go to states,
and local and tribal governments to cover costs of responding to the coronavirus by state and local health departments as well as school districts and institutions of higher education. Additionally, many states have “rainy day” funds that can be accessed. While most states must pass a balanced budget every year, some have the capacity to carry a deficit into a succeeding year. Thus, the full scope of the economic hit to states is still unknown.

Many state climate actions do not have a price tag. For instance, the current budgetary crisis does not prevent a state from adopting a climate mitigation goal or a climate mitigation or adaptation plan. But for so many others—green fleet requirements for state vehicles, green building mandates for state buildings, tax and other incentives for renewable energy—the financial demands of responding to the coronavirus will surely present an obstacle to state action on climate change.

B. Legal Barriers

1. Federal preemption

Of equal concern are various legal barriers to state and local climate change initiatives going forward. Of these, the most significant are those imposed through preemption. Preemption can be effectuated by the federal government vis-a-vis the states and by the states vis-a-vis their own local governments. Regardless of who is preempting whom, preemption in the area of climate regulation generally stifles innovation and retards climate mitigation efforts.

Preemption, or rather the Trump administration’s threatened revocation of a statutory preemption waiver, currently threatens to undermine one of the most active and effective areas of state climate policy: state restrictions upon vehicle GHG emissions.

State vehicle emission standards are generally preempted by the Clean Air Act in order to shield automobile manufacturers from the necessity of designing fifty different vehicles to comply with fifty different emissions standards.


92. Andrew Nicla, Lawmakers grateful for rainy-day fund, some hold principles against it, AZ CAP. TIMES (Mar. 20, 2020), https://azcapoltimes.com/news/2020/03/20/lawmakers-grateful-for-rainy-day-fund-some-hold-to-principles-against-it/ (over the objections of some lawmakers, Arizona now sits on a one billion rainy day fund which it is already tapping into in order to respond to the pandemic).

93. This is true of Arizona where a debt incurred in one year can be carried over one additional year. AZ CONST. art. IX, § 4.

Nevertheless, an important exception to this preemption is vehicle emission standards issued by California that receive a federal waiver of preemption as well as those adopted by other states that are identical to California’s standards.95 This exception was a recognition of Los Angeles’ exceptionally bad air quality problems and the importance of preserving California’s efforts to address the problem through tough state-issued motor vehicle standards preceding passage of the Clean Air Act.96 California has historically used its exemption from preemption to adopt cutting edge pollution control standards that have been adopted, not only by an ever-larger group of states, but also in iterative fashion, by the EPA itself.97

California has also used its unique Clean Air Act authority to lead the nation in GHG vehicle emission standards. The state’s most recent suite of Clean Car standards, the so-called “Advanced Clean Cars” program, contains GHG emission standards for Model Years 2015–2025 and the Zero Emission Vehicle (“ZEV”) mandate.98 The latter is designed to increase the sale of electric vehicles by imposing a sales mandate ranging from 4.5% in 2018 to 22% by 2025.99 The EPA granted California a waiver of preemption for these standards in 2013.100

Recently, in an effort to crack down on their GHG emissions, more states have been adopting California’s Advanced Clean Car standards. Last year, Colorado, Minnesota, and New Mexico became the 11th, 12th and 13th states to adopt the


97. Id. at 1110.


California ZEV mandate. For Colorado, adoption of the standards helped fulfill the Governor’s prior executive order encouraging the sale of ZEVs.

Nevertheless, the Trump administration even more recently revoked the waiver the EPA had provided in 2013 to the Advanced Clean Car standards, rendering them technically preempted by the EPA’s less-stringent vehicle emission standards for the same model cars. In a final rule, the Trump administration claimed that California’s standards were preempted by federal fuel economy standards under the Energy Policy and Conservation Act (“EPCA”).

It also argued that California “does not need [its] standards to meet compelling and extraordinary conditions,” a condition that the EPA must find when initially approving a waiver application. Neither argument is particularly strong. The former argument has been rejected by two lower courts and contradicts statements by the U.S. Supreme Court regarding the lack of conflict between EPCA’s state fuel economy standard preemption and the Clean Air Act’s vehicle emission waiver authority. The latter contradicts the EPA’s position when approving California GHG-related waivers in 2009 and 2013.


104. Id. at 51,311.

105. Id. at 51,328.


107. Massachusetts v. EPA, 549 U.S. 497, 532 (2007) (stating the Department of Transportation’s power to establish fuel efficiency standards under EPCA did not excuse EPA from establishing GHG emissions standards under the Clean Air Act).

While the Trump administration’s waiver revocation is being challenged, until
the litigation is resolved, the threat of preemption is likely to discourage additional
states from adopting the California vehicle GHG standards. Transportation, and
specifically vehicles, are responsible for a large fraction of U.S. GHG emissions. In
2018, transportation was responsible for 28.2% of U.S. GHG emissions\textsuperscript{109} and
of these, approximately 80% were attributable to new cars and trucks.\textsuperscript{110} Thus the
impacts of preemption would cut off an important avenue for states to reduce GHG
emissions.

2. State Preemption of Local Climate Initiatives

While state lawmakers are known to bristle at federal preemption, they often
embrace it with respect to measures passed by local governments within their
boundaries. Nevertheless, cities and counties have been a vibrant source of climate
initiatives.\textsuperscript{111} Over 1,200 cities around the world have signed the Climate
Emergency Declaration and ninety four major world cities have announced their
support for the Paris Agreement.\textsuperscript{112} State preemption of local climate measures
threatens to eliminate this truly “bottom up” source of climate action.

An example from Arizona will serve to illustrate how state preemption of local
climate initiatives can delay the advancement of green energy initiatives.
Buildings and their construction are responsible for 39% of world GHG
emissions.\textsuperscript{113} Accordingly, it should not be surprising that banning natural gas
hook-ups in new housing developments would be an effective strategy to reducing
GHG emissions. In 2019, Berkeley, California became the first city in the nation

\textsuperscript{109} U.S. EPA, Sources of Greenhouse Gas Emissions,

\textsuperscript{110} U.S. EPA, Fast Facts Transportation Greenhouse Gas Emissions,
https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions (last visited
May 12, 2020)

\textsuperscript{111} See Flavie Halais, Cities Race to Slow Climate Change and Improve Life for All, WIRED

\textsuperscript{112} Id.

\textsuperscript{113} United Nations Environment Program, Global Status Report 2017 6 (2019),
https://www.worldgbc.org/sites/default/files/UNEP%20GABC_en%202018%28web%29.pdf
(“Buildings and construction together account for 36% of global final energy use and 39% of
energy-related carbon dioxide (CO2) emissions when upstream power generation is included.”).
to ban natural gas hook-ups for new buildings.\textsuperscript{114} Dozens of counties in California and some in Massachusetts are considering a similar move.\textsuperscript{115}

Nevertheless, the natural gas industry has been pushing back against this movement by to exclude gas from the sources of energy available to new housing developments. Under a law passed this year, Arizona law now prohibits cities and towns from charging higher fees or limiting permits for buildings that use certain utilities, like gas.\textsuperscript{116} The bill was supported by Arizona’s largest natural gas companies.\textsuperscript{117}

3. Direct democracy initiatives

It is hard to get more local than a city ordinance. But direct democracy initiatives might be considered to be one step more local than a local ordinance as they come directly from the individual voters themselves.

Climate change is a frequent topic of local initiatives in states that enable law to be made through such direct democracy measures. For instance, in 2018, Arizona voters went to the polls to vote on “Proposition 127,” a voter initiative to boost the proportion of renewable energy the state’s utilities must put online from 15\% by 2025 to 50\% by 2030.\textsuperscript{118}

The popularity of direct democracy initiatives for climate initiatives make them vulnerable to efforts to place barriers in the way of an initiative’s passage. Such efforts can range from requiring strict construction of various technical aspects of signing initiative petitions, to burdening the process of hiring paid initiative circulators, to prohibiting efforts to enable online signature of initiative


\textsuperscript{116}. H.B. 2686, 54th Leg. (2020).


\textsuperscript{118}. AZ Secretary of State, Proposition 127–Sample Ballot/Ballot format, https://azsos.gov/sites/default/files/Proposition_127_Final.pdf (last visited May 12, 2020).
petitions despite allowing online signing to take place with respect to candidate petitions.119

VI. CONCLUSION

States can save American climate policy, or at least continue addressing climate change regardless of what is done by the President. While states are currently crippled by the all-encompassing demands of responding to the COVID-19 pandemic, the lack of a coordinated federal response to the pandemic has actually elevated states’ importance. There are many ways in which state responses to the pandemic might be seen as a dry run for their response to the climate crisis in the years to come. Nevertheless, state and local action can be stymied by financial and legal barriers such as that of federal and state preemption.