

States Are Laying a Road Map for Climate Leadership

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The United States and the world face an urgent crisis—one that requires American leadership at home and abroad. But while the Trump administration is utterly failing in the task due to incompetence, indifference, corruption, or all three, America’s state and local governments are rising to the challenge and showing what leadership should look like.

Just as this has been true in the response to the COVID-19 pandemic,¹ so too does it apply when comparing federal and state leadership in confronting the climate crisis.

Under the Trump administration, U.S. federal climate policy is moving in precisely the wrong direction. Driven by corporate and fossil fuel interests that are replete among his Cabinet and top donors, President Donald Trump has been undermining protections against air pollution,² causing direct harm to clean energy industries and jobs,³ abandoning the Paris climate agreement,⁴ and putting the profits of fossil fuel corporations over the health of people and the planet.⁵

Meanwhile, state governments across the United States are taking meaningful action against climate change and toward building a clean energy economy. Local governments and tribal nations are leading as well. This leadership is critical in real terms: It is reducing carbon pollution that is harming American communities⁶—especially communities of color and low-income communities.⁷ This leadership is also important for showing the world that most Americans remain committed to climate solutions,⁸ and it is demonstrating that bold climate action is possible and popular.

This leadership is also helping to grow the clean energy industries that are some of America’s fastest-growing economic sectors. These industries employ approximately 3.3 million American workers⁹ and boast some of the nation’s fastest-growing careers.¹⁰ Clean energy jobs outnumber those in fossil fuel industries by 3-to-1,¹¹ although these industries are also being hit hard by the current economic crisis caused by the COVID-19 pandemic—and by the failed federal response.¹²

In fact, amid the economic fallout related to the pandemic, the failure of federal lawmakers to adequately support state and local governments could threaten the continued progress that these actors are making to combat the climate crisis. Some state and local lawmakers have already been forced to delay key clean energy investments and policy actions, and most could be forced to confront major budget shortfalls and triage key initiatives.¹³ Greater federal support to state and local governments will be critical to sustaining critical services and continue driving economic and climate progress.

State climate leadership is paving the way for ambitious national climate action

While state and local progress is important to preventing the worst effects of climate change, federal leadership is also critical. Last year was a record-breaker for greenhouse gas pollution,¹⁴ and the global scientific community has made clear that unprecedented action during the next decade is essential to avoid catastrophe.¹⁵

Federal lawmakers will be well served to learn the lessons of state and local climate leadership—not only in the effective policies that subnational governments have implemented, but just as importantly, in the coalitions developed and the organizing and advocacy that have catalyzed bold action.

Throughout the coming months, the Center for American Progress, the League of Conservation Voters, and other partners will examine state-level climate leadership and how these lessons can be used to inform federal climate action as well as action in other states. This issue brief begins with a concise examination of state, local, and tribal policy actions relating to key economic sectors, environmental justice, and a worker-centered energy transition.

And while states' actions are lighting the way for federal lawmakers, there are limits in what they can do. States are restrained in their powers of investment by state constitutional requirements for balanced budgets, for example, and they lack the federal government's power of the purse. This is especially important to note in light of the current pandemic-driven economic crisis. States lack the power to provide the large-scale national economic stimulus that is necessary to mitigate impacts related to the pandemic, making federal leadership critical. As Congress looks to invest in economic recovery, it should provide resources that sustain and expand state-driven clean energy, infrastructure, and conservation successes.

Additionally, of course, not every state is moving forward on climate action. Some are moving decisively backward, like the Trump administration—weakening pollution standards and undermining clean energy growth. Also, in examining state progress, it is important to note that no state or city, not even the greenest, is yet doing everything

necessary to address climate change; confront environmental racism and systemic injustice; or support high-quality jobs and a full economic transition to a new energy future. Accelerated leadership at every level of government will be critical. And nothing can match the power of an engaged and effective federal government to mobilize the entire nation.

Nonetheless, there are important lessons that a future U.S. president and Congress should derive from state progress across the country, as well as that of local governments and tribal nations, as they begin to craft a transformative national agenda. Such an agenda should be based on investing in good jobs; building a sustainable economy; creating standards for effective and sustained pollution reductions at the national and local levels; committing to justice and equity; and ending the federal handouts that prop up fossil fuel corporations and their pollution.

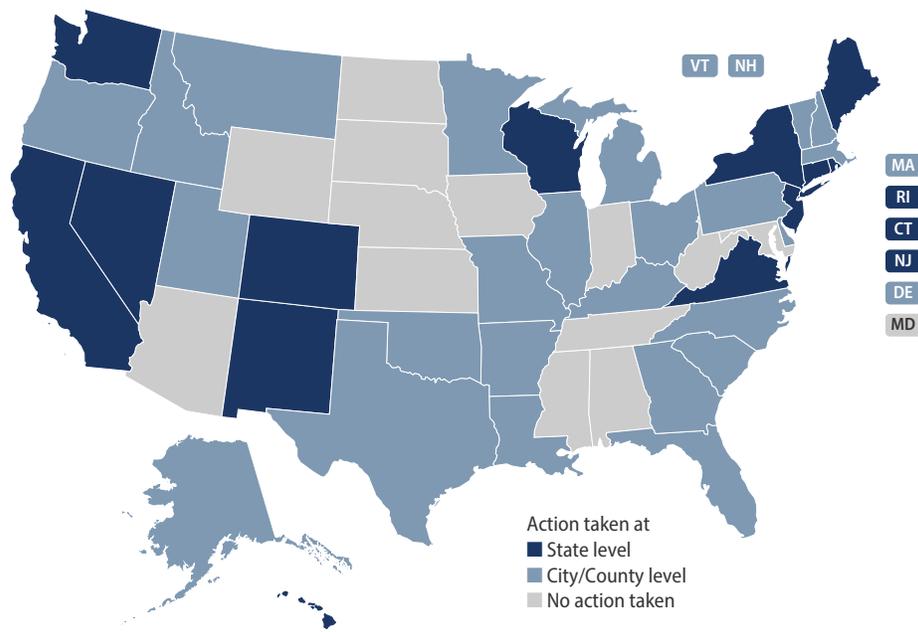
Recent state progress toward a 100 percent clean energy economy

State climate action is accelerating as more states are taking increasingly ambitious actions throughout the country. Currently, 15 states and territories have taken legislative or executive action to move toward a 100 percent clean energy future. This includes 10 states, along with Washington, D.C., and Puerto Rico, that have passed legislation to implement 100 percent clean electricity policies and economywide greenhouse gas pollution-reduction programs.¹⁶ And the majority of these state actions have occurred during the Trump presidency, with many following the election of climate-leading governors and state legislators in 2017, 2018, and 2019.¹⁷

In April, Virginia became the latest state—and the first state in the South—to enact 100 percent clean energy legislation. The Virginia Clean Economy Act commits to slashing greenhouse gas pollution in the power sector, sets some of the most ambitious targets for energy storage and offshore wind energy deployment in the country, and codifies into law the governor’s 2019 executive order for 100 percent clean electricity.¹⁸ Illinois Gov. JB Pritzker (D) has also committed his state to passing 100 percent clean energy legislation this year.¹⁹

Meanwhile, 2019 was a banner year for state climate leadership: Seven governors and the Washington, D.C., mayor signed 100 percent clean energy bills. Governors such as Gretchen Whitmer (D-MI) created new state climate offices and reorganized their agencies to take on the climate crisis,²⁰ while Washington state enacted various sector-specific clean energy policies for power, transportation, buildings, and industrial sources.²¹ And New York, Colorado, and Maine all locked in groundbreaking policies requiring state regulators to implement new rules guaranteeing economywide cuts in greenhouse gas pollution and to support front-line communities and workers in the energy transition.²²

FIGURE 1
100 percent clean policies by state as of April 2020



Note: For additional state, county, and city action details, explore the interactive map on the web version of this issue brief.
 Source: Author's review of relevant state policies, updated from: Center for American Progress, "State Fact Sheet: 100 Percent Clean Future," October 16, 2019, available at <https://www.americanprogress.org/issues/green/reports/2019/10/16/475863/state-fact-sheet-100-percent-clean-future/>.

These actions have played a crucial role in driving carbon pollution reductions, even as the Trump administration unravels the federal policies aimed at the same goal. A 2019 report from America’s Pledge, a coalition of nearly 4,000 states, cities, organizations, and institutions committed to fulfilling America’s climate pledge to the Paris agreement, found that “full achievement of already on-the-books policies from state and local actors—paired with rapidly shifting economics in the power sector—would reduce [U.S.] emissions 19 percent below 2005 levels by 2025.”²³ That’s nearly four-fifths of the short-term reductions—26 percent to 28 percent by 2025—that the United States committed to achieve under the original Paris agreement. That report also found that much more ambitious and rapidly scaled state and local action could help reduce domestic carbon pollution even more significantly by 2030.

In addition to state and local governments, tribal nations are taking the lead in their communities on planning for climate change. In fact, there are now more than 50 tribal climate action plans in effect across North America.²⁴ The Swinomish Tribe in the Pacific Northwest was the first community in the entire United States to make climate adaptation a priority.²⁵

The role of state, local, and tribal climate leadership also cannot be overlooked for its influence on the rest of the global community, which reacted with horror when President Trump announced on June 1, 2017, that the United States would leave the Paris climate agreement. Within 48 hours of that announcement, Govs. Jerry Brown (D-CA, now retired), Andrew Cuomo (D-NY), and Jay Inslee (D-WA) announced the formation of the U.S. Climate Alliance: a bipartisan coalition now comprising 24 states and two territories that remain committed to the Paris agreement and are working together to advance climate solutions. These states represent 55 percent of the U.S. population and 40 percent of the country's greenhouse gas pollution, and if they were their own country would boast the world's third-largest gross domestic product.²⁶ Many state, local, and tribal leaders are also members of We Are Still In—another bipartisan coalition with more than 3,500 business representatives, university presidents, faith leaders, cultural institutions, and community leaders who are similarly committed to the Paris agreement.²⁷

Through these coalitions, leaders have engaged in U.N. Framework Convention on Climate Change convenings and advanced international partnerships, such as those fighting against coal plant pollution and ocean acidification.²⁸ California has been in the vanguard on engaging in bilateral climate partnerships with countries around the world, including China and India.²⁹ All told, these initiatives have provided some measured encouragement to the international community that the United States might soon rejoin in full the global effort to confront this crisis.³⁰

A legacy of state clean energy leadership

While state clean energy leadership has accelerated in recent years, the legacy of this leadership extends back decades. Iowa was the first state to pass a renewable portfolio standard (RPS), when then-Gov. Terry Branstad (R-IA) signed the 1983 Alternative Energy Production law.³¹ That set off a popular movement resulting in RPS policies enacted in 28 states and Washington, D.C.³² In Colorado in 2004, 54 percent of voters approved Amendment 37—the first RPS in the country to be decided at the ballot rather than passed by a state legislature.³³

In 2006, California became the first state in the nation to adopt a comprehensive, economywide climate program, with the passage of AB 32.³⁴ That law resulted in the implementation of a limit and price on carbon pollution, a low-carbon fuel standard,³⁵ and related investments in renewable energy, energy efficiency, transit, electric vehicles (EVs), and pollution-free communities—all of which have put the Golden State in a climate leadership role for the country and the world.³⁶

In 2009, 10 states—Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont—banded together to create the Regional Greenhouse Gas Initiative (RGGI).³⁷ After leaving the agreement in 2011, New Jersey rejoined the program on January 1 of this year, Virginia plans to join in 2021, and Pennsylvania has committed to joining the program by 2022.³⁸

RGGI states use revenues derived from the carbon-reduction program to reinvest in their economies and in further pollution reductions via energy efficiency, renewables, energy bill assistance, and other climate strategies.

The history of state climate leadership has had a direct influence on national policy: Since the 1970s, California has set vehicle emissions and tailpipe pollution rules that are stricter than those of the federal government,³⁹ and 13 other states have adopted that state's standard—with more hoping to join this year, despite targeted action from the Trump administration to specifically suppress this progress.⁴⁰ Also, beginning in 1999, 12 states sued the federal government and eventually won the landmark 2007 U.S. Supreme Court case *Massachusetts v. Environmental Protection Agency*, which held that carbon pollution is an air pollutant subject to regulation under the federal Clean Air Act.⁴¹ That ruling, catalyzed by state leadership, enables future federal administrations to use that proven law to reduce greenhouse gas pollution throughout the economy.

Progress in each key economic sector

States have demonstrated leadership against the climate crisis in part by targeting individual sectors of the economy with standards and strategies toward a 100 percent clean energy future.

Electricity

The electricity sector is responsible for nearly 30 percent of U.S. greenhouse gas pollution.⁴² And while fossil fuels are already a declining share of electricity generation, this sector must rapidly decarbonize, making a complete transition to clean, renewable, and zero-emission energy resources. Altogether, 15 states and territories have taken legislative or executive action to move toward 100 percent clean electricity. Ten states, plus Washington, D.C., and Puerto Rico, have put these clean energy standards—or 100 percent targets with strong interim standards—into law. Others, such as Wisconsin, under Gov. Tony Evers (D), have committed to 100 percent clean electricity by executive order. Because of leadership by state and local governments, 1 in 3 Americans now live in a state or city that is committed to 100 percent clean electricity.⁴³ These subnational actions are also complemented by pledges from 12 large utilities, more than 160 cities, and at least 150 businesses to achieve 100 percent clean electricity or net-zero emissions.⁴⁴

Thirteen states currently have regulations in place limiting carbon pollution from the power sector. Pennsylvania is set to formally kick off its regulatory process this summer, and others, including North Carolina, are currently evaluating the option.⁴⁵

In addition to using standards and targeted policies to decarbonize power generation, states have been leading in the enforcement of energy efficiency resource standards (EERS), which reduce the total energy demand that must be met with clean electricity. A total of 26 states have passed binding EERS policies.⁴⁶

State and local governments have also used complementary policies to promote clean power and associated economic development. These include tax incentives and aggregate net-metering programs for distributed renewable energy that have been adopted in 17 states.⁴⁷ Another example is the creation of green banks that, beginning in Connecticut, have across the country invested more than \$3.6 billion in clean energy projects. These projects are generally aligned with other societal objectives, such as spurring job creation, supporting energy equity, and improving local air quality. Green banks have leveraged more than three times the amount of private investment for every \$1 of public investment.⁴⁸ Other states and local jurisdictions have implemented clean energy funds, infrastructure financing authority, and revolving loan funds. Texas' Loan Star and Nebraska's Dollar and Energy Saving loan programs were the first in the nation to utilize innovative public financing to deploy energy efficiency projects.⁴⁹

Transportation

Combustion of gasoline, diesel, and other fossil fuels in the transportation sector account for one-third of domestic greenhouse gas pollution, comprising the largest and an increasing sectoral share of U.S. emissions.⁵⁰ Transitioning this sector toward 100 percent clean and emissions-free operations will require federal action on vehicle electrification, expansion of public transit, smart growth, affordable housing, cleaner fuels, and more.

But state action on climate-smart transportation policy is an increasing trend: 43 states and Washington, D.C., took actions related to EVs and charging infrastructure during 2019 alone.⁵¹ These state policy actions, often supported by utilities and cities, provide starting points for federal policy. They include implementation of a zero-emission vehicle standard, led by California and joined by 12 other states, requiring automakers to sell certain percentages of zero-emission vehicles;⁵² invest in charging infrastructure;⁵³ reform electricity rates to support EVs, fast charging,⁵⁴ and electric buses and trucks; enhance EV purchase incentives;⁵⁵ and procure EVs for public vehicle fleets.⁵⁶

New Jersey enacted one of the strongest EV bills in the country in January and included plans to transition New Jersey Transit to 100 percent electric buses.⁵⁷ Many governors devoted portions of Volkswagen's settlement funds from violating the Clean Air Act and falsifying emissions standards⁵⁸ toward electric school bus purchases. Public school districts in a number of states, including Arizona, are moving forward with plans to purchase electric school busses.⁵⁹ And Maryland and Nevada recently passed legislation to support school districts transitioning to electric school buses.⁶⁰

In March, Oregon Gov. Kate Brown (D) signed a major climate executive order that included updating Oregon's Clean Fuels Program to make it the most ambitious in the country.⁶¹ That program requires gradual improvements in the carbon intensity of the fuels sold in the state and promotes investments in low-carbon biofuels and transportation electrification.

State and local governments have also been fighting to expand smart growth and public transit, often despite a lack of federal support or investment. New York’s Smart Growth Public Infrastructure Policy Act has been a model project review and public commenting program, ensuring that public infrastructure projects maximize environmental and public health benefits while mitigating climate risks to future generations.⁶² The California Department of Transportation developed a Smart Mobility Framework to guide the state’s transportation investments.⁶³ In 2019, Minnesota’s Department of Transportation released a pathway for decarbonizing its transportation sector, recommending the establishment of a Sustainable Transportation Advisory Council, promoting regional collaboration on EV corridors, and analyzing greenhouse gas pollution for all projects.⁶⁴

At the city level, Denver, Seattle, and Los Angeles have adopted programs to go 100 percent electric with their public transit systems. Los Angeles, one of the most car-congested cities in the country, aims to completely electrify its bus fleet by 2028.⁶⁵

Buildings

Residential and commercial buildings together consume about 38 percent of the energy used in the United States and produce 10 percent of domestic greenhouse gas pollution.⁶⁶ Electrifying buildings and increasing energy efficiency—and promoting both through better building codes—can dramatically reduce this sector’s contribution to climate change. California’s building codes offer a first-of-its-kind road map for decarbonization of the building sector, and the state has goals for all new residential construction to be net-zero energy after 2020, and all new commercial buildings by 2030.⁶⁷ In 2019, Maine passed legislation to increase annual electric heat pump installations—highly efficient home heating and cooling systems—from 7,500 per year to 20,000 per year.⁶⁸ Also in 2019, Washington state enacted legislation investing nearly \$80 million in energy retrofits and implementing the first energy standard in the country for existing commercial buildings.⁶⁹

At the local level, cities have long been leaders in crafting a clean buildings agenda. In one particularly significant example, New York City has prioritized large-scale energy efficiency improvements and has capped the carbon pollution that large buildings can legally emit, with hefty fines imposed for noncompliance.⁷⁰ There is also a growing movement in cities to ban gas in new buildings, with action taken in more than 20 cities as of March 2020.⁷¹

Relatedly, climate change is also a threat multiplier for America’s affordable housing crisis.⁷² Forward-looking states, such as California, are designing climate-smart building standards in a way that upholds equity and includes anti-displacement policy: California’s Healthy Homes Act, AB-1232, creates and expands anti-displacement protections for state energy efficiency programs serving low-income customers; prevents rent hikes by landlords who seek to benefit from energy upgrades; and guides agencies in data collection to ensure enforceability and better penetrate the unregulated affordable housing market.⁷³

Industry

Industrial activities contribute more than one-fifth of U.S. greenhouse gas emissions.⁷⁴ Fortunately, efforts to reduce industrial emissions are a critical opportunity to build a robust clean energy manufacturing sector, with enormous potential to support American manufacturing jobs and increase international competitiveness. And while the federal government has done very little to support these transformations or deploy low-carbon manufacturing technologies at scale,⁷⁵ states have led in these efforts. In 2017, California became the first state to institute a so-called Buy Clean standard, requiring government agencies to take into account suppliers' greenhouse gas emissions when purchasing materials, such as steel and glass, for infrastructure projects. Buy Clean California is strongly supported by labor unions, business and industry leaders, and environmental organizations, which understand that such a standard can support American jobs in domestic manufacturing industries that are committed to continuous improvement in their environmental impact.⁷⁶ A number of other states—including Washington state, Oregon, and Minnesota—are implementing or are considering their own Buy Clean pilot projects and policies.⁷⁷

Additionally, under the Obama administration, Environmental Protection Agency (EPA) regulations were put in place to reduce industrial sector hydrofluorocarbon (HFC) emissions present in chemicals used for refrigeration and air conditioning. These regulations kept the United States on track to satisfy the Kigali amendment to the international Montreal Protocol that was crafted to confront this climate superpollutant, which can trap thousands of times more heat per ton released into the atmosphere than 1 ton of carbon dioxide.⁷⁸ However, these rules were struck down by the U.S. Court of Appeals in 2017, and the Trump administration has refused to find a path forward on HFC reductions—even though they will benefit the future security of American cooling and cold storage manufacturers that are leading competitors in the global economy.⁷⁹ In this absence of federal action, leading states are working to fill the gap: All U.S. Climate Alliance states have committed to reducing short-lived climate pollutants, including HFCs, from industrial practices. As of 2019, eight states have taken action to curb specific HFC uses: California, Vermont, and Washington state have passed legislation to adopt HFC limits based on the former EPA rules, and Colorado, Connecticut, Delaware, Maryland, New Jersey, and New York have committed to similar regulatory action.⁸⁰

In addition to HFC emissions, industrial methane pollution is a critical issue for the U.S. manufacturing sector that must be confronted.⁸¹ Methane is a powerful greenhouse gas that traps between 28 and 36 times as much heat as carbon dioxide per ton emitted, and it is 84 times more potent than carbon dioxide over a 20-year time frame.⁸² The oil and gas industry in the United States is responsible for emitting 13 million tons of methane into the atmosphere every year—nearly 60 percent more than currently estimated by the EPA's inventory supply chain estimate.⁸³ While the Trump administration continues to roll back federal methane rules, leadership at the state level continues to advance:

Colorado's 2014 methane pollution rule became the basis for the Obama administration's federal methane standards, and the state is strengthening its rules by increasing protections at smaller oil and gas sources and expanding protections to pipelines and equipment.⁸⁴ Pennsylvania, under Gov. Tom Wolf (D), is expanding rules to cover the tens of thousands of existing oil and gas wells across the state.⁸⁵ New Mexico, under the leadership of Gov. Michelle Lujan Grisham (D), is reversing decades of lax oversight and crafting nation-leading methane standards.⁸⁶ And the Navajo Nation is looking to become the first tribal nation to create and administer its own methane-reduction regime.⁸⁷ These efforts are critical both to reduce pollution now as well as to maintain momentum for comprehensive federal action against methane pollution in the next administration.

Agriculture and lands

In the United States, lands and coastal areas sequester on net approximately 700 million metric tons of carbon dioxide equivalent per year, which is approximately one-tenth of total domestic emissions.⁸⁸ Of the 1 gigaton of additional annual sequestration that the National Academy of Sciences says is possible, half comes from forestry and better management of agricultural soils.⁸⁹ The 26 U.S. Climate Alliance states and territories have coalesced around shared priorities in climate policy for agriculture and working lands, including increasing natural carbon sequestration, and other states are taking action, too.

In 2017, Maryland passed legislation creating a Healthy Soils program through which the state provides farmers with education, technical assistance, and financial incentives to implement farm management practices that contribute to healthy soils, for biodiversity and soil sequestration.⁹⁰ For farmers who adopt cover crop practices, Iowa offers discounted crop insurance and cost-sharing and Nebraska provides financial incentives.⁹¹ Hawaii launched a Greenhouse Gas Sequestration Task Force in 2018 to identify ways to store carbon in its farms and natural areas such as forests.⁹² And the state is now offering grants, technical support, tax credits, and other incentives to help produce and distribute more compost and to generally build healthier soils. New Mexico's Healthy Soil Act offers grants to farmers and ranchers to plant cover crops or native grasses, switch to no-till practices, restore wetlands, use compost, and otherwise explicitly help increase the soil's organic matter and carbon content.⁹³

In addition, the Karuk Tribe in Northern California released their climate adaptation plan in 2019, recommending prescribed burning to manage lands and reduce wildfire risk.⁹⁴ Other tribal nations are implementing lands and resource management practices, such as relocating invasive plants and animals, redirecting agricultural runoff, contributing to reforestation efforts, and identifying harmful algae blooms. These include the Tulalip Tribes and the Jamestown S'Klallam Tribe of Washington state, as well as the Confederated Salish and Kootenai Tribes of Montana and numerous Alaskan tribal nations.⁹⁵

Environmental justice

Communities of color and economically disadvantaged groups have long been disproportionately affected by climate change and pollution. This is largely why the Equitable and Just National Climate Platform was launched last year, with the purpose of advancing the goals of economic, racial, climate, and environmental justice. The co-authors of the platform state: “Systemic racism and injustice have left economically disadvantaged communities, tribal communities, and communities of color exposed to the highest levels of toxic pollution, as well as the most vulnerable people subject to more powerful storms and floods, intense heat waves, deadly wildfires, devastating droughts, and other threats from the climate crisis.”⁹⁶ Approximately 250 environmental justice and national environmental organizations have signed on, calling for bold and equitable state and federal climate policies that improve air quality; increase access to affordable and sustainable electricity, water, and transportation for every community; support a rapid transition toward an inclusive, just, and pollution-free energy economy; and build safe and healthy infrastructure and communities.

A number of state and local governments have taken steps to address environmental and economic injustices, including by identifying and reducing disproportionately high levels of pollution in economically disadvantaged communities and communities of color, as well as by intentionally targeting prioritized investments into these communities. The most successful of these policies have been driven by the leadership of front-line communities who have organized, built power, and achieved the solutions they have defined for themselves. These provide instructive starting points for building better federal policy.

For example, New York state enacted the Climate Leadership and Community Protection Act in 2019, backed by a unique statewide coalition that included environmental organizations, economic justice advocates, labor unions, and other progressive groups.⁹⁷ In addition to requiring 100 percent renewable energy in the electric sector by 2040 and net-zero statewide emissions by midcentury, the law includes an equity screen to ensure state policies do not burden environmental justice communities. And it mandates that at least 35 percent of state investments in climate solutions go to disadvantaged communities.⁹⁸

Across the country, California was the first to implement a statewide assessment of pollution and environmental impacts through its CalEnviroScreen program, which is now being updated to include climate change impacts.⁹⁹ And in 2017, the state adopted AB 617, requiring the California Air Resources Board to directly address air quality in communities most exposed to toxic and criteria air pollutants.¹⁰⁰

CalEnviroScreen, in Washington state, Gov. Inslee is implementing an Environmental Health Disparities Map project: a statewide cumulative impact analysis of environmental and health disparities.¹⁰¹ And it is using those data to inform state policy implementation, including in its recently passed 100 percent clean electricity standard law that ensures utilities fund low-income energy assistance programs, such as through direct bill reductions, weatherization, and energy efficiency improvements.¹⁰²

The aforementioned Virginia Clean Economy Act, recently signed by Gov. Ralph Northam (D), also addresses important equity concerns associated with climate change and the clean energy transition. The law directs half of the state’s RGGI auction proceeds to energy efficiency upgrades for low-income Virginians and 45 percent to flood mitigation and coastal resilience with a set-aside for disadvantaged communities.¹⁰³

In North Carolina, the state Department of Environmental Quality formed an Environmental Justice and Equity Advisory Board “to assist the Department in achieving and maintaining the fair and equal treatment and meaningful involvement of North Carolinians regardless of where they live, their race, religion or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”¹⁰⁴ And in Michigan, Gov. Whitmer has created her state’s first Environmental Justice Advisory Council.¹⁰⁵

Despite this progress, many state and local policy actions have fallen short of what is needed to improve the public health and well-being of people living in communities overburdened by high levels of toxic pollution sources located near their homes and schools. Much more work is urgently needed at all levels of government, and in collaboration with environmental justice advocates, to design climate policies that reduce emissions and co-pollutants and to address the cumulative and deadly impacts of their concentration in economically disadvantaged communities and communities of color.

High-quality union jobs and economic transition

Many states are taking steps to center workers, high-quality job creation and retention, and workforce transition in their climate and clean energy policy agendas. While no state program goes far enough, these programs provide initial ideas for how federal lawmakers may do the same. Clean energy industries already employ more than 3 million Americans. But lawmakers at all levels can and should do more to ensure clean energy jobs are high quality with family-supporting wages and benefits, as well as to protect economic security for workers and communities transitioning off fossil fuels. The Solidarity for Climate Action platform, for example, calls for “creat[ing] and retain[ing] millions of high-quality jobs while putting forward bold solutions to climate change,” and it emphasizes that improving the accessibility and density of union jobs in the clean energy industry will empower workers, create quality jobs, and sustain families.¹⁰⁶

In supporting the creation and access to high-quality union jobs, Washington state’s 100 percent clean energy law provides a tiered system of tax exemptions promoting clean energy projects that meet certain workforce requirements. Those include projects developed under community workforce or project labor agreements; with compensation of workers at prevailing wages determined by collective bargaining; or with woman-, minority- or veteran-owned businesses.¹⁰⁷

In California, Gov. Gavin Newsom's (D) administration has strengthened support for unionized labor in the state's climate program, committing \$35 million per year of California's carbon revenues in the 2019-2020 state budget to two programs focused on ensuring that jobs created by clean energy investment programs are high quality. State climate investments also support a high-road construction career ladders program, providing \$165 million to preapprenticeships and apprenticeships in multicraft construction careers.¹⁰⁸

Following the successful model demonstrated by Climate Jobs New York, a coalition of labor unions, working with Gov. Cuomo to include strong labor standards—including prevailing wage protections—as part of New York state's commitment to robust offshore wind energy development,¹⁰⁹ the state established the Climate Jobs National Resource Center to support labor-led coalitions in numerous other states. These groups can be poised to drive an economic recovery agenda of investment in good jobs to build clean energy and sustainable infrastructure.

To assist fossil fuel communities in economic transition, New Mexico Gov. Lujan Grisham signed the New Mexico Energy Transition Act in 2019,¹¹⁰ which uses low-interest bonds to finance economic relief, such as severance pay and job training, for communities affected by coal plant closures.¹¹¹ Also that year, Colorado, under Gov. Jared Polis (D), created a state Office of Just Transition, with support from the Colorado AFL-CIO and environmentalists, to align and deliver targeted programming and funding to communities and workers affected by a transition from coal-fired electricity.¹¹² Similar legislation has been introduced in West Virginia.¹¹³

Conclusion

The urgent climate crisis requires the next president to put bold climate action at the top of this nation's agenda. And as they and Congress set out to implement that vision, they could start by learning from state and local leadership. Fortunately, it is clear that current and future federal lawmakers are heeding the lessons of this leadership. This has been evident by the ambitious climate plans put forward over the last year and by bills introduced during the 116th Congress, both showing the influence of states' climate leadership. These efforts have included a focus on investing in good jobs; building a clean energy future; creating standards and strategies targeting greenhouse gas pollution sector by sector; and committing to environmental and economic justice.

America needs leadership at every level of government to commit to bold clean energy action. The federal government must get back in the game. And states, local governments, and tribal nations must accelerate their own climate work. But especially as federal lawmakers consider national action, states' successes provide valuable insights into the policies and coalitions that will be required for success. Informed by the lessons from states, future federal leaders can create a powerful agenda to stop climate change and build a just and inclusive American clean energy economy.

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Endnotes

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