Follow the Leaders:
States Set Path to Accelerate
U.S. Progress on Climate

April, 2021
Introduction

Over the last four years, states have been climate leaders. Governors and legislators have embraced aggressive clean energy commitments that will grow their economies, cut local emissions that disproportionately harm disadvantaged communities, and create stable, high-paying jobs. Alongside this important work, state attorneys general have defended state and federal policies that cut greenhouse gas (GHG) emissions. As the United States lays out its path forward for meeting its obligations under the Paris Agreement in April 2021, it is crucial to acknowledge that states have been essential climate leaders and that work at the state level will continue to be critical to hitting the country’s Paris Agreement target. States have long shown that they can serve as laboratories for innovation. States can ensure sustained long-lasting work to cut emissions, independent of the balance of power in Washington, D.C. States have implemented programs that can serve as models for other jurisdictions seeking to reduce GHG emissions as well. And states have shown that clean energy programs strengthen local and regional economies and have the potential to create jobs needed in disadvantaged communities.

How did we get here? In December 2015, the world’s nations gathered in Paris to commit themselves to acting to avoid the worst possible climate outcomes. One hundred and ninety-six countries (referred to as state parties in the Agreement) adopted the Paris Agreement, an international treaty that aims to limit global temperature rise to 2 degrees Celsius above pre-industrial levels by cutting GHG emissions. Under the Paris Agreement, every five years, each state party must submit its “nationally determined contribution” (NDC). An NDC is a commitment to reduce GHG emissions by a certain percentage from the level of emissions in a baseline year, by a future date. The United States’ 2015 NDC pledged to reduce the country’s GHG emissions 26-28% from the 2005 emissions level by 2025. The Agreement entered into force on November 4, 2016. Though then-President Donald Trump announced that the United States would withdraw from the Agreement in June 2017, on his first day in office, President Biden announced the United States would reenter the Paris Agreement. In February 2021, the United States officially reentered the Agreement. Parties to the Paris Agreement were to have submitted their most recent NDC in 2020. Thus, the Biden administration has turned its attention to submitting the United States’ NDC in April 2021.

For the last four years under the Trump administration, the federal government refused to lead on achieving the GHG emissions cuts needed to fulfill the United States’ responsibilities under the Paris Agreement, and in fact launched a campaign to roll back most of the federal government’s major environmental policies aimed at cutting GHG emissions.

States and other subnational actors announced that they would remain committed to supporting the United States’ NDC goals, including aggressive emissions cuts and implementing numerous policies to reduce GHG emissions. At the same time, state attorneys general, along with many other advocates, worked tirelessly in court to defend strong environmental policies.

In this report, we compile a list of commitments made by multiple states and we describe the progress that those states have made in recent years on cutting GHG emissions. This compilation is designed to highlight the possibilities at the state level and is not comprehensive. Even beyond the states and actions listed in this compilation, other states have adopted programs that promote clean energy. For example, many states beyond the ones listed in this report have adopted renewable portfolio standards (RPS) and set renewable energy targets. In addition, the compilation is based on available public records and does not necessarily account for the newest efforts or the newest projections on emissions cuts.

This report shows the extent to which state leadership has put the United States on a path to achieving significant cuts in the 2021 NDC. And these state-level clean energy efforts have led to significant job creation in fields that can be structured to create high-quality jobs in traditionally disadvantaged communities. The U.S. renewable energy sector, excluding energy efficiency positions, supported more than 555,000 jobs in 2018. New York anticipates adding more than 10,000 jobs to the nearly 159,000 existing clean energy industry jobs in the state as it builds out its offshore wind program, and Massachusetts has seen an 86% growth in clean energy jobs since 2010. The importance of clean energy programs is highlighted by California’s experience as well. Though later dampened by the pandemic-induced recession, at the end of 2019, California supported more than half-a-million clean energy and energy efficiency jobs.

There are three important lessons to draw from the success of state-level efforts over the past four years to cut GHG emissions in the absence of federal leadership. These lessons should help guide a newly invigorated federal response as well as a robust sub-national response to the climate crisis.

First, states can and do serve as models of how the United States as a whole, including sub-nationals, can reduce GHG emissions. As this report shows, many states have made significant progress on achieving aggressive goals. Recent research indicated that the 24 states and Puerto Rico that have joined the U.S. Climate Alliance and committed to implement policies to reduce GHG emissions in line with the United States’ 2015 NDC had managed to reduce emissions 14% between 2005 and 2018, while seeing a 16% increase in per capita economic output. The 2021 NDC should explicitly acknowledge that leading climate states have been essential to achieving GHG emissions reductions over the last decade-and-a-half and have contributed to the implementation of the Paris Agreement’s goal — and that the programs implemented in those states can be replicated elsewhere.

Second, to ensure a measure of stability, the United States will need to rely on, at least in part, the commitments and progress states have made over the last four years to submit a NDC that will keep global temperature rise below 2 degrees Celsius. Earlier this year, an analysis showed that in the absence of federal action, states and other non-federal actions have the potential to reduce GHG emissions by 37% from the 2005 emissions level by 2030. Another report indicated that with federal government involvement, the United States could reduce GHG emissions 50% from 2005 levels by 2030. The administration’s NDC will have to recognize this progress and potential if the United States is to submit and then satisfy a bold NDC for this decade. The federal government needs states to continue to make substantial and long-term progress on climate commitments.
Third, given the essential role that states have played, the federal government should take steps to provide support to the states as they reduce their GHG emissions and contribute to achieving the United States’ NDC. Perhaps the most useful step would be for the Biden administration to acknowledge the achievements of U.S. states and other sub-national actors, and commit to supporting those efforts through affirmative measures. The Biden administration could issue an executive order that speaks to how the federal government will work with states on hitting the Paris Agreement’s vision. The order could instruct the federal government to support state climate progress and make clear that the administration welcomes state action on reducing GHG emissions across sectors. Lastly, the federal government should use federal funding to drive GHG emissions reductions, by, for example, directing grant programs and permitting to support robust emissions reduction efforts and issuing or reinstating rules, such as the Department of Transportation’s GHG Measure rule, which was rolled back by the Trump administration. In all these efforts, it is crucial for the federal government to encourage states to direct state spending towards lower or zero emission alternatives. The Biden administration should also consider appointing a coordinator on sub-national issues with the mandate to elevate sub-national needs and concerns to the federal climate team in the Domestic Policy Council.

Ultimately, the issuance of the United States’ 2021 NDC as it reenters the Paris Agreement presents an opportunity for the Biden administration to outline a path forward for the United States to contribute to the achievement of the Paris Agreement’s goal of keeping global temperature rise below 2 degrees Celsius. Numerous state attorneys general have advocated for strong federal and state climate policies, part of what makes it possible for the federal government to adopt affirmative clean energy and climate policies now. And because states have been reducing GHG emissions for years and are committed to doing so in the future, they will continue to be a critical component of any successful and consistent United States-based effort to hit the Paris Agreement target. Consequently, the 2021 NDC should recognize that leading states serve as a model for other states to scale up their climate ambitions, that the United States depends on continued state climate progress to meet the NDC, and that the federal government’s efforts need to be accompanied by affirmative federal support for states working to reduce GHG emissions.

State Summaries

California

Commitments

In 2016, California enacted legislation that requires the state to reduce its GHG emissions 40% below 1990 emissions levels by 2030, after having earlier set a limit to reduce emissions to 1990 emissions levels by 2020. California also set a goal of carbon neutrality by 2045 by executive order. The California Air Resources Board (CARB) is tasked with developing a scoping plan every five years to achieve the state’s emissions limits. California achieved its statutorily established 2020 emissions limit — 1990 emissions levels — ahead of schedule in 2016 and remained below the 1990 level through 2018. The 2017 scoping plan included a path for achieving the 2030 emissions goal of 40% below 1990 levels by 2030 that included a portfolio of policies: an extension of its economy-wide cap-and-trade program, effectively pricing carbon by capping economy-wide emissions; a 60% by 2030 renewable energy standard for the power sector; doubling the stringency of the state’s low carbon fuel standard by requiring that the carbon intensity of fuels be reduced 20% by 2030; and a goal that 100% of in-state sales of new passenger cars and trucks be zero-emission by 2035. Next year, CARB will release an updated scoping plan to assess progress towards achieving the 2030 emissions limit, which will reflect the climate initiatives the state has adopted since the 2017 scoping plan and up-to-date modeling on GHG emissions in the state. The 2022 scoping plan update will also lay out a path for how the state can achieve carbon neutrality by 2045, and include modeling on GHG emissions and forecasts through mid-century. Many of the efforts to achieve these targets will also help address local air pollution especially in disadvantaged communities.
**Colorado**

**Commitments**

In 2019, Colorado enacted a statute that sets GHG emissions reduction targets of 26% below 2005 levels by 2025, 50% below by 2030 and 90% by 2050. The state’s largest utility is also required to reduce carbon emissions by at least 80% by 2030, and other electric utilities in the state — comprising over 99% of the state’s electricity generation — are to file clean energy plans to achieve 80% or greater reductions in carbon emissions. The state passed legislation that will require the state’s largest utility to supply 100% of retail sales with clean energy sources by 2030 as long as doing so is “technically and economically feasible” and in the “public interest” in addition to requiring the use of the social cost of carbon as part of the utility’s resource planning. Also in 2019, the state passed legislation addressing appliance energy and water efficiency standards and building energy codes.

In 2014, Colorado became the first state to regulate methane emissions from the oil and gas production sector. Those methane regulations were revised in December of 2019 to minimize volatile organic compounds (VOC) and hydrocarbon emissions and to require more comprehensive leak detection and repair at oil and gas production facilities.

In 2018, the Colorado Air Quality Control Commission, adopted California’s low emission vehicle (LEV) standards, which will reduce GHG emissions by approximately 30 million tons over the lifetime of vehicles built for model-years 2022-2031 vehicles. Then in 2019, the Commission adopted zero emission vehicle (ZEV) rules, which will further reduce GHG emissions beginning with model-year 2023 vehicles.

**Progress to Date**

In January 2021, Colorado released its Greenhouse Gas Pollution Reduction Roadmap, laying out a pathway to achieving the state’s GHG emissions reduction targets, including shifting from coal to renewable energy; reducing methane pollution from oil and gas production; electrifying the transportation sector; and reducing emissions from buildings and industry. In May 2020, the Colorado Air Quality Control Commission established enhanced GHG reporting requirements and adopted a framework to phase out hydrofluorocarbons (HFC). In December of 2020, the Colorado Office of Just Transition finalized the state’s first Just Transition Action Plan, focused on supporting workers and communities impacted by the market transition away from coal. As of 2019, the state’s GHG emissions have decreased 7% from the 2005 level.

**Connecticut**

**Commitments**

In 2018, the state adopted a statutory target to reduce GHG emissions 45% below the 2001 level by 2030; its 2050 target is 80% below the 2001 level. That same year, Connecticut enacted legislation that will require 48% of the state’s retail electricity come from renewable sources by 2030. Additionally, the state is a member of the Regional Greenhouse Gas Initiative (RGGI), in which several states have enacted a mandatory cap-and-trade program to reduce carbon emissions in the power sector across those states 30% between 2020 and 2030. Lastly, Connecticut was one of four eastern jurisdictions that announced it would participate in the Transportation and Climate Initiative Program (TCI-P), a program that will require a 30% reduction in emissions from the transportation sector in the states that are part of the initiative between 2023 and 2032 and invest in alternative transportation solutions.

**Progress to Date**

Connecticut released a report in 2018, titled Building a Low Carbon Future for Connecticut, that laid out its strategies for meeting the state’s 2030 and 2050 GHG emissions reduction targets. Connecticut is working with other states on implementing TCI-P and engaging in discussions with stakeholders about that process. As of 2017, Connecticut had reduced its GHG emissions 21.6% below the 2005 level.

**Delaware**

**Commitments**

In 2014, the state set by executive action a target to reduce GHG emissions 30% below 2008 levels by 2030. In 2015, Delaware updated its RPS, requiring 25% of electricity sales in the state to come from renewable energy sources by 2025, with at least 3.5% from solar photovoltaics. Additionally, the state is a member of RGGI, in which several states have enacted a mandatory cap-and-trade program to reduce carbon emissions in the power sector across those states 30% between 2020 and 2030.

**Progress to Date**

Delaware is in the process of finalizing a climate action plan to minimize GHG emissions. As of 2017, Delaware had reduced its GHG emissions 37% from 2005 emissions levels.
Hawaii

**Commitments**

In 2018, Hawaii enacted a statutory target to reach net-zero GHG emissions by 2045.\(^{60}\) Previously, the state had adopted a RPS that required 100% of its net electricity sales to come from eligible renewable sources by 2045.\(^{61}\) In the transportation sector, the state also has an alternative fuel target of 30% by 2030.\(^{62}\)

**Progress to Date**

In response to the Paris Agreement, the state created the Hawaii Climate Change Mitigation and Adaptation Commission, which has focused on reducing GHG emissions from surface transportation and adaptation to sea level rise.\(^{63}\) As of 2016, Hawaii had reduced its GHG emissions 37.3% from the 2007 emissions level.\(^{64}\)

Illinois

**Commitments**

In 2019, the governor signed an executive order, entering the state into the U.S. Climate Alliance with a commitment to reduce GHG emissions 26-28% below the 2005 level by 2025.\(^{65}\) The state had previously updated its RPS, requiring 25% of electricity sales in the state to come from renewable energy sources by 2025, with 75% of the electricity used to meet the RPS to come from wind and solar power generation.\(^{66}\)

**Progress to Date**

As of 2016, Illinois carbon dioxide emissions declined 16.7% from 2005 levels.\(^{67}\)

Louisiana

**Commitments**

In 2020, the governor issued an executive order that committed the state to reduce GHG emissions 26-28% below the 2005 emissions level.\(^{70}\)

**Progress to Date**

In 2021, the Governor’s Office of Coastal Activities released an interim report, laying out the steps the Climate Initiatives Task Force will take over the next year to meet the state’s GHG emissions targets.\(^{71}\)

Maine

**Commitments**

In 2019, Maine set a target through executive order of achieving net-zero GHG emissions by 2050, and passed legislation establishing targets to reduce GHG emissions 45% below 1990 levels by 2030 and 80% below 1990 levels by 2050.\(^{72}\) Also in 2019, Maine updated its RPS, requiring 80% of the electricity sales in the state to come from renewable sources by 2030 and 100% by 2050.\(^{73}\) It also established a 4% target for thermal energy by 2030.\(^{74}\) Additionally, the state is a member of RGGI, in which several states have enacted a mandatory cap-and-trade program to reduce carbon emissions in the power sector across those states 30% between 2020 and 2030.\(^{75}\)

**Progress to Date**

In 2020, Maine published a four-year climate action plan detailing strategies for achieving its emissions reduction goals, including accelerating the state’s transition to electric vehicles, modernizing buildings to become more energy efficient, and growing Maine’s clean energy economy.\(^{76}\) As of 2017, Maine had reduced its greenhouse gas emissions by 17.5% below 1990 levels.\(^{77}\)
Maryland

Commitments

In 2016, Maryland passed the 2030 Greenhouse Gas Emissions Reduction Act to reduce GHG emissions 40% below 2006 levels by 2030. In 2019, Maryland updated its RPS, requiring 50% of electricity sales in the state to come from renewable sources by 2030, including a solar carve out of at least 14.5% by 2030, and at least 1,200 megawatts (MW) of offshore wind by 2030. Additionally, the state is a member of RGGI, in which several states have enacted a mandatory cap-and-trade program to reduce carbon emissions in the power sector across those states 30% between 2020 and 2030.

Progress to Date

In February 2021, the Maryland Department of the Environment released its plan for implementing strategies to reduce GHG emissions, which include investments in energy efficiency and clean and renewable energy solutions, clean transportation projects and widespread adoption of electric vehicles, and improved management of forests and farms to sequester more carbon in trees and soils. The plan puts Maryland on track to achieve a more ambitious goal of 50% emissions reductions by 2030, and calls for net-zero economy-wide GHG emissions by 2045. As of 2017, Maryland had already reduced its GHG emissions 29% from the 2006 level.

Massachusetts

Commitments

In 2021, the governor signed comprehensive climate change legislation, establishing a 2050 statewide emissions limit of net-zero GHG emissions with an interim 2030 target of 50% below the 1990 emissions level and a 2040 target of 70% below the 1990 level. The legislation also requires the state government to adopt sector-based GHG emissions limits for the power sector; transportation sector; and commercial and industrial and residential heating and cooling sectors.

In 2020, the state finalized amendments to its clean energy standard regulation requiring that 80% of electricity sales come from clean energy sources by 2050. Massachusetts has two separate cap-and-trade programs to reduce GHG emissions in the power sector: it is a member of RGGI and a state-run program that runs parallel to RGGI covering 21 large fossil fuel-fired power plants, which together with the state’s clean energy standard ensures reductions in aggregate carbon dioxide emissions from these facilities of 80% below the 2018 level by 2050. Last, the state has also adopted regulations that establish annually declining methane emissions limits for natural gas utilities in the state.

Massachusetts has adopted California’s LEV and ZEV programs for light- and medium-duty vehicles. At the end of 2020, Massachusetts was one of four jurisdictions that announced it would participate in TCI-P; a program that will require a 30% reduction in emissions from the transportation sector in the states that are part of the initiative between 2023 and 2032 and invest in alternative transportation solutions.

Progress to Date

In 2020, Massachusetts released its interim Clean Energy and Climate Plan for 2030, a blueprint for achieving the state’s GHG emissions limits equitably and affordably. Massachusetts is working with other states on implementing TCI-P and engaging in discussions with stakeholders about that process. As of 2017, the state had already reduced its GHG emissions 22.7% below the 1990 emissions level and 24.3% below the 2005 emissions level. The state is on track to meet the Paris Agreement goal of 26-28% reductions in GHG emissions levels from 2005 levels by 2025.
Michigan

**Commitments**

In 2019, the state, by executive order, adopted an executive directive that establishes a target of reducing GHG emissions by 26-28% from the 2005 emissions level by 2025 to contribute its share towards achieving the United States’ 2015 NDC. The state had previously adopted legislation that requires 15% of electricity produced in the state to come from renewable sources by 2021.

**Progress to Date**

In September 2020, the governor ordered the Michigan Office of Climate and Energy to coordinate the state’s efforts to achieve carbon neutrality by 2050 through the MI Healthy Climate Plan as outlined in two executive actions.

Minnesota

**Commitments**

The state has a statutory target to reduce GHG emissions to at least 30% below the 2005 emissions level by 2025. Additionally, Minnesota requires that its largest investor-owned utility provide 31.5% of its energy from renewable sources by 2020 and that other investor-owned utilities provide 26.5% of their energy from renewable sources by 2025 and that other utilities provide 25% of their energy from renewable sources by 2025.

**Progress to Date**

In December 2019, the governor issued an executive order that established a Climate Change Subcabinet to identify policies and strategies to achieve the state’s GHG emissions reductions target. As of 2018, Minnesota had reduced its GHG emissions 8% from the 2005 emissions level, but with a 29% reduction in the electricity sector. Still the state is taking steps to drive emissions down: at the end of 2020, it proposed a rule to adopt California’s clean car standards, which will reduce GHG emissions, and the governor announced a plan in January 2021 to achieve 100% clean energy by 2040.

Montana

**Commitments**

In 2019, the governor issued an executive order, entering the state into the U.S. Climate Alliance with a commitment to reduce GHG emissions 26-28% below the 2005 emissions level by 2025. The state has a renewable electricity standard which requires investor-owned utilities to obtain 15% of retail electricity sales from qualifying renewable resources.

**Progress to Date**

In 2020, Montana released the Montana Climate Solutions Plan, which included recommendations for reducing GHG emissions, advancing the research, development, and commercialization of new technologies necessary to reduce GHG emissions, and addressing the needs of communities and workers in transitions through economic and workforce development efforts. As of 2019, the state had reduced its carbon emissions 20% from the historically high level of 2007.

Nevada

**Commitments**

In 2019, Nevada passed legislation setting targets of reducing GHG emissions below 2005 levels by 28% in 2025 and by 45% in 2030 and of achieving net-zero emissions by 2050. In 2019, Nevada updated its RPS, requiring 50% of the electricity sales in the state to come from renewable sources by 2030. Power companies can also earn credit for up to 10% of the standard through energy efficiency measures from 2020 to 2024.

As of January 2021, the Nevada Division of Environmental Protection had a working draft of regulations to adopt California’s clean car standards, which will reduce GHG emissions from vehicles.

**Progress to Date**

In 2020, Nevada published its State Climate Strategy to provide a framework for reducing the state’s GHG emissions, laying the groundwork for climate adaptation and resilience, and establishing a structure for continued climate action across the state. As of 2016, Nevada had reduced its GHG emissions by 22% below 2005 levels.
New Jersey

Commitments

New Jersey enacted statutory targets in 2007 through the Global Warming Response Act to reduce GHG emissions 80% below 2006 levels by 2050 (80x50 goal).114 In May 2018, New Jersey passed the Clean Energy Act, which updated its RPS, requiring 50% of electricity sales in the state to come from renewable sources by 2030.115 The Clean Energy Act included requirements to increase energy efficiency, build upon the state’s 5.1% in-state solar build-out through a successor solar program, and develop at least 3,500 MW of offshore wind capacity by 2030.116 An executive order in November 2019 increased New Jersey’s offshore wind capacity goals to 7,500 MW by 2035 and an additional executive order in January 2020 established the New Jersey Protecting Against Climate Threats (NJ PACT) initiative to overhaul environmental regulations to address GHG emissions and climate change.117 In June 2019, New Jersey adopted rules permitting it to re-join RGGI on January 1, 2020, a mandatory cap-and-trade program to reduce carbon emissions in the power sector across participating states 30% between 2020 and 2030.118

Progress to Date

The Energy Master Plan, which delineates pathways to reach 100% clean energy, was released in January 2020.119 In October 2020, New Jersey issued the Global Warming Response Act 80x50 Report, which sets forth pathways for the energy and non-energy sectors to achieve the Act’s 80x50 goals and 100% clean energy.120 New Jersey awarded an offshore wind project of 1,100 MW on June 19, 2019 and anticipates awarding additional projects of up to 2,400 MW by the summer of 2021.121 As of 2017, New Jersey had already met the Global Warming Response Act’s near-term target of reducing GHG emissions to 1990 levels by 2020.122 By 2018, New Jersey had reduced GHG emissions 19.5% from the 2006 level.123

New Mexico

Commitments

In 2019, the governor issued an executive order to set the state objective as reducing GHG emissions 45% from 2005 levels by 2030.124 That same year, the state enacted a requirement that 100% of electricity sales come from carbon-free sources by 2045.125 Additionally, the governor also announced the state would pursue adoption of California’s clean car standards, which will reduce GHG emissions from vehicles.126

Progress to Date

In 2020, the state’s annual report on meeting the state’s GHG target showed progress: 1,346 MW of renewable energy is expected to have come online since the adoption of the carbon-free electricity requirement and the clean car standard is expected to be promulgated in 2021.127 In March 2021, the state Oil Conservation Commission adopted a rule that will require oil and gas producers in the state to capture 98% of the methane they produce by 2026.128

New York

Commitments

In 2019, New York enacted the Climate Leadership and Community Protection Act (CLCPA), which requires the development of a plan to achieve net-zero GHG emissions in New York by 2050.129 Further, the CLCPA requires limiting GHG emissions to 40% of 1990 levels by 2030 and 85% by 2050.130 The legislation also requires that 70% of the state’s electricity needs be met by renewable sources by 2030 and that the power sector eliminate GHG emissions 100% by 2040.131

Progress to Date

In the 18 months since the CLCPA was enacted, New York has taken several steps to achieve the statute’s vision. First, it has adopted, by regulation, limits on GHG emissions in 2030 and 2050 as a percentage of 1990 emissions as required by the CLCPA.132 Second, it has initiated the Climate Action Council — a 22-member committee that will prepare a plan to achieve the state’s climate and energy agenda.133 Third, in January 2021 the governor unveiled a slate of clean energy initiatives: renewable energy awards, community solar for local governments, climate justice jobs corps, and solar and efficiency retrofits for affordable housing.134 As New York continues to work to meet its goals, it will be building on the significant progress the state has already made in reducing its GHG emissions. As of 2016, New York had reduced its GHG emissions by 13% below 1990 levels and was “on the path” to achieving the 2015 NDC target of a 26-28% reduction from the 2005 level by 2025 within the state with a 21% reduction in the state’s GHG emissions since 2005.135
North Carolina

Commitments

In 2018, the governor issued an executive order that established the state’s GHG emissions target of 40% below the 2005 emissions level by 2025. The state has a RPS of 12.5% for investor-owned utilities by 2021 and 10% for municipal utilities and electric cooperatives by 2018. In 2017, the state passed legislation that establishes a competitive procurement process for renewable energy, a green source advantage program for major military installations, public universities, and large customers, and created a statutory provision called the Distributed Resources Access Act to expand rooftop solar, community solar, and other customer-sited solutions.

Progress to Date

In 2019, state agencies released a series of plans to meet the state’s GHG emissions target, including a plan for accelerating electric vehicle adoption and for reducing GHG emissions from the power sector 70% from 2005 levels by 2030 and attaining carbon neutrality by 2050. As of 2017, North Carolina had achieved a 24% reduction in GHG emissions from 2005 and a 33.7% reduction in power sector emissions.

Oregon

Commitments

In 2020, Oregon set targets through executive order to reduce GHG emissions 45% below 1990 levels by 2035 and 80% below 1990 levels by 2050. In 2016, Oregon updated its RPS, requiring 50% of electricity sales to come from renewable sources by 2040 and the phase-out of coal-fired electricity by 2035. Additionally, the state’s Department of Environmental Quality launched the Clean Fuels Program in 2016, which is intended to decrease the amount of pollution allowed from transportation fuels by 10% below 2010 levels by 2025.

Progress to Date

The executive order the governor signed in 2020 included the Oregon Climate Action Plan for reducing GHG emissions with strategies including strengthening the Clean Fuels Program, increasing the number of electric vehicles on the road, and setting more ambitious energy efficiency standards for buildings. As of 2019, Oregon had reduced its GHG emissions 9.4% below the 2000 emissions level.

Pennsylvania

Commitments

Pennsylvania adopted by executive action targets to reduce GHG emissions 26% below 2005 levels by 2025 and 80% below 2005 levels by 2050. Since 2004, Pennsylvania has had an alternative energy portfolio standard, requiring 18% of electricity to come from alternative energy sources by 2021. In September 2020, the Pennsylvania Environmental Quality Board initiated the formal rulemaking process for the state to join RGGI, in which several states have enacted a mandatory cap-and-trade program to reduce carbon emissions in the power sector across those states 30% between 2020 and 2030. A 2018 law allows public utilities to petition the Public Utilities Commission to consider alternative ratemaking mechanisms to decouple utility revenue from the volume of electricity sold.

Progress to Date

Pennsylvania released the fourth update of its Pennsylvania Climate Change Action Plan in 2019. The plan outlines 19 strategies to reduce GHG emissions 21% by 2025 compared to 2005 levels. Key aspects include recommended strategies to increase end use energy conservation and efficiency; implement sustainable transportation planning and practices; use agricultural best practices; increase use of clean, distributed electricity generation resources; and create a diverse portfolio of clean utility-scale electricity generation. Pennsylvania is currently working on the 2021 update to the Pennsylvania Climate Action Plan and finalizing the rulemaking that will provide for Pennsylvania’s participation in RGGI. As of 2017, Pennsylvania had reduced its GHG emissions nearly 19% below the 2005 emissions level.
Rhode Island

Commitments
Rhode Island has statutorily enacted GHG emissions reduction targets of 10% below 1990 emissions levels by 2020; 45% below 1990 levels by 2035; and 80% below 1990 levels by 2050.159 The state also has a RPS that requires that 38.5% of retail electricity sales come from qualifying renewable sources by 2035.160 Additionally, the state is a member of RGGI, in which several states have enacted a mandatory cap-and-trade program to reduce carbon emissions in the power sector across those states 30% between 2020 and 2030.161 Legislation requires the decoupling of utility revenues from the volume of natural gas and electricity sold.162 At the end of 2020, Rhode Island was one of four jurisdictions that announced it would participate in TCI-P, a program that will require a 30% reduction in emissions from the transportation sector in the states that are part of the initiative between 2023 and 2032 and invest in alternative transportation solutions.163

Progress to Date
In 2016, Rhode Island released its GHG emissions reduction plan, which includes strategies, programs, and actions to meet the state’s GHG emissions reductions targets.164 The report indicated that the state was on a path to meet and exceed the state’s target of 10% below 1990 levels by 2020.165 Rhode Island is working with other states on implementing TCI-P and engaging in discussions with stakeholders about that process.166

Vermont

Commitments
In 2020, the Vermont legislature enacted the Vermont Global Warming Solutions Act, which requires the state to reduce GHG emissions by 26% from the 2005 emissions level by 2025.167 Additionally, the Act requires the state to reduce its GHG emissions 40% below the 1990 baseline emissions level by 2030, and 80% below the 1990 emissions level by 2050.168 The Act also requires the adoption of a Vermont Climate Action Plan, which is to include measures for achieving the Act’s GHG emissions reduction requirements and for achieving net-zero emissions by 2050 across all economic sectors.169 Vermont has a renewable energy standard that will require that 75% of retail electricity sales come from eligible sources by 2032.170 Additionally, the state is a member of RGGI, in which several states have enacted a mandatory cap-and-trade program to reduce carbon emissions in the power sector across those states 30% between 2020 and 2030.171

Progress to Date
All Vermont distribution utilities met a 2017 interim requirement of the state’s renewable energy standard that 55% of retail electric sales come from eligible sources.172 As of 2016, the state’s GHG emissions were 4.6% below the 2005 emissions level.173

Virginia

Commitments
In 2020, Virginia enacted legislation that establishes a net-zero GHG emissions target by 2045.174 In 2020, Virginia adopted legislation that required the largest utility in the state to meet a 100% RPS by 2045 and the second largest utility in the state to meet a 100% RPS by 2050.175 On January 1, 2021, Virginia joined RGGI, in which several states have enacted a mandatory cap-and-trade program to reduce carbon emissions in the power sector across those states 30% between 2020 and 2030.176 In 2021, the governor signed legislation authorizing the Virginia Department of Environmental Quality to conduct an inventory of GHG emissions for the state.177 Virginia is also expected to adopt California’s clean car standards, which would reduce GHG emissions.178

Progress to Date
Currently, the state legislature is considering legislation that would create a cap-and-invest greenhouse gas reduction program,183 and legislation that would set a clean fuel standard to reduce transportation emissions, among other climate measures.184 As of 2018, the state’s GHG emissions have decreased 8.3% since 2000.185

Washington

Commitments
In 2020, Washington adopted a statutory GHG emissions reduction target of 45% below 1990 emissions levels by 2030 and 95% below 1990 levels by 2050.179 Also in 2020, the Washington legislature authorized full adoption of California’s clean car standards, including the ZEV program.180 In 2019, Washington enacted legislation that requires that 100% of retail electricity sales in the state come from renewable sources by 2045, and carbon neutrality in electrical generation by 2030.181 Washington also passed legislation in 2019 to phase out climate-polluting HFCs from refrigeration equipment and foams.182

Progress to Date
Currently, the state legislature is considering legislation that would create a cap-and-invest greenhouse gas reduction program,183 and legislation that would set a clean fuel standard to reduce transportation emissions, among other climate measures.184 As of 2018, the state’s GHG emissions have decreased 8.3% since 2000.185
Wisconsin

Commitments
In 2019, Wisconsin set a goal through executive order to achieve 100% carbon-free electricity by 2050 and to reduce emissions in line with the Paris Agreement. Wisconsin has a RPS that requires 10% of the electricity consumed in the state to come from renewable electricity by 2015.

Progress to Date
In 2020, Wisconsin’s Task Force on Climate Change published a report of policy recommendations for adapting to and mitigating the effects of climate change, including setting utility carbon-reduction goals, supporting hybrid-electric and electric vehicles, and establishing a Green Energy Advisory Council.

Washington, D.C.

Commitments
In 2017, by executive action, Washington, D.C. committed to achieving its portion of the United States’ 2015 NDC by reducing GHG emissions by 26-28% below the 2005 emissions level. In 2019, the city council adopted legislation to increase the renewable energy portfolio standard to 100% by 2032. At the end of 2020, Washington, D.C. was one of four jurisdictions that announced it would participate in TCI-P, a program that will require a 30% reduction in emissions from the transportation sector in the states that are part of the initiative between 2023 and 2032 and invest in alternative transportation solutions.

Progress to Date
In 2018, the city released its climate and clean energy action plan, identifying innovative strategies to reduce emissions from buildings, energy supply, and transportation and setting forth roadmaps with timelines to implement these strategies. Washington, D.C. is also working with other states on implementing TCI-P and engaging in discussions with stakeholders about that process. As of 2018, the city had reduced GHG emissions 27% below the 2006 emissions level.
GHG emissions: 9.23 MMTCO2e.


59 Dep't of Nat. Res. And Env't Control., Delaware Greenhouse Gas (GHG) Emissions Inventory 1990-2050 Mar. 29, 2021) (“Throughout 2020, the state engaged residents and businesses to develop Delaware’s Climate Action Plan.”).


47 245a.


43 Climate Change in Illinois 67, supra note 43.


41 20 Ill. Comp. Stat. 3855/1-75(c).

40 Climate Change in Illinois, supra note 66.

39 Iowa Code § 476.41 et seq.
