

No Turning Back

America's Governors Confronting the Climate Crisis & Building a Brighter Future



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CLIMATE ALLIANCE

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HIGHLIGHTING SOLUTIONS across the alliance

During Climate Week NY, Governor Jay Inslee (WA) joined U.S. Climate Alliance co-chairs Governor Hochul (NY) and Governor Lujan Grisham (NM) to announce the launch of the Governors' Climate-Ready Workforce Initiative. Together, they shared how the Initiative will work to grow career pathways in climate and clean energy fields, strengthen workforce diversity, and jointly train 1 million new registered apprentices by 2035 across the Alliance's states and territories.

Message from the Co-Chairs

merica is at an inflection point. A new president will be sworn in next year, power in Congress hangs in the balance, and recent Supreme Court decisions present new obstacles to climate action. At the same time, disasters driven by our changing climate continue to devastate our communities. In 2023 alone, the United States experienced 28 billion-dollar weather and climate disasters. For perspective, in the 1980s the country averaged just over three events per year of this scale.

Fortunately, the U.S. Climate Alliance is built to lead in challenging and uncertain times. In fact, our bipartisan climate action coalition of 24 U.S. governors got its start seven years ago when then-President Trump yanked the United States out of the Paris Agreement.

In those early years, despite significant headwinds, the Alliance fiercely and steadfastly protected our progress and kept our country on track.

Together, we backstopped federal environmental rules. We defended against challenges to critical state climate policies and regulations. And we filled the void on the international stage.

All of this work laid the foundation for the historic partnership we've forged with the Biden-Harris administration to slash climate pollution over the past few years. As you'll read in the pages that follow, this surge of investment, collaboration, and action is transforming how we generate and save energy, construct our homes and buildings, move around in our communities, manage and preserve land, and so much more. The result is better health, more jobs, and a stronger economy for the American people.

This report details this progress across our coalition over the past year – and provides dozens of examples of how our member states and territories are raising ambition and advancing the most impactful climate solutions. It also shows how these solutions are being shared and scaled across the Alliance. This includes

our recent launch of the Governors' Climate-Ready Workforce Initiative, in which our states and territories committed to collectively training 1 million new workers through registered apprenticeship programs by 2035.

We know we still have a steep hill to climb, but what we're doing is working. Just look at the numbers. Between 2005 and 2022 (the latest year with complete data), the Alliance reduced its collective net greenhouse gas emissions by 19 percent, continuing the coalition's trend of declining emissions over 15 years. Over the past three years, the pace with which Alliance members have been able to advance climate solutions nearly doubled compared to our first three years. And we continue to see record-breaking investments in the manufacture, purchase, and deployment of clean energy and clean technologies. In 2023, these investments jumped 32 percent from the previous year, reaching more than \$119 billion across Alliance states and delivering direct economic benefits for local communities.

All of this comes as the Alliance is being led by two women co-chairs for the very first time.

We hope you draw the same strength and resolve we do from the progress we've made and our unwavering commitment to keep America moving forward. Together, no matter the obstacles, we'll confront the climate crisis and build a brighter future. There's no turning back.



Kathy Hochul Governor, New York



Michelle Lujan Grisham Governor, New Mexico



HIGHLIGHTING SOLUTIONS across the alliance

The AES Hawai'i West O'ahu solar-plus-storage facility generates 12.5 MW of clean energy, supported by a 50 MWh battery energy storage system. The facility is located on 66 acres of open University of Hawai'i land, which is also used for sheep grazing to support the island's agricultural and food production needs.

Photo Credit: Office of Hawai'i Governor Josh Green

Executive Summary

The United States Climate Alliance is a bipartisan coalition of U.S. governors committed to securing America's net-zero future by advancing state-led, high-impact climate action. The Alliance was launched on June 1, 2017, by the governors of Washington, New York, and California to help fill the void left by former President Trump's decision to withdraw the United States from the Paris Agreement. Since then, the Alliance's story has been one of growth, progress, and results. The coalition today comprises two dozen governors who collectively represent approximately 55 percent of the U.S. population and 60 percent of the country's economy — and its governors are delivering increasingly bold solutions to the climate crisis.

Over the past four years, robust support from the federal government has supercharged Alliance members' work, from investing billions of dollars to help states and territories accelerate climate solutions to raising the federal floor for climate action nationwide. Recordbreaking investments in clean technologies across the nation are both a result of this historic leadership and a catalyst for future progress.

These investments come at a critical moment. As the nation faces more frequent and more severe climatedriven weather events, Alliance governors' commitment to a cleaner and safer future remains resolute. Since this bipartisan climate action coalition was formed, Alliance governors have faced many challenges and remained a strong and steady force in climate leadership both domestically and internationally. This report outlines the progress our coalition has made over the last year — and how enhanced collaboration through the Alliance has enabled member states and territories to raise their ambition, leverage their collective share of the economy, and scale successful approaches.

MAP ES-1. U.S. Climate Alliance Members (States and Territories)



ES-2 U.S. Climate Alliance Executive Committee







NEW MEXICO Gov. Luian Grisham



CALIFORNIA Gov. Newsom



WISCONSIN Gov. Evers



WASHINGTON
Gov. Inslee

In 2024, Alliance members launched the new Governors' Climate-Ready Workforce Initiative, an innovative partnership aimed at expanding career pathways in climate and clean energy fields, supporting new and existing workers in accessing these good-paying jobs, and collectively training 1 million new registered apprentices across the coalition by 2035. In addition, the coalition proudly named its new co-chairs and executive committee, including governors of New York, New Mexico, California, Wisconsin, and Washington to oversee the strategic direction of the coalition through the spring of 2025. For the first time, two female co-chairs are leading the Alliance - New York Governor Kathy Hochul and New Mexico Governor Michelle Lujan Grisham. With the addition of Wisconsin Governor Tony Evers, the executive committee has its first governor from the Midwest.

Measuring Our Progress

The bold leadership of Alliance states and territories has delivered real results through reducing emissions, growing the economy, and building healthier and more resilient communities. Between 2005 and 2022 (the latest year with complete data), the Alliance reduced its collective net greenhouse gas (GHG) emissions by 19 percent, continuing the coalition's trend of lowering emissions over 15 years.

Consistent with national trends, Alliance members' collective emissions in 2022 rose slightly over 2021 levels. This bump was primarily driven by increased

emissions in the buildings and industrial sectors as the nation's economy continued to recover from the COVID-19 pandemic. Looking ahead, increased investment and accelerated implementation of ambitious climate policies will enable even deeper reductions in the years to come.

Turning Federal Investments Into Action

Alliance members are moving quickly to harness the hundreds of billions of dollars of historic federal climate investments made possible through the *Infrastructure Investment and Jobs Act* (IIJA), the *Inflation Reduction Act* (IRA), and the *CHIPS and Science Act*. This historic funding has helped accelerate investments in the manufacture, purchase, and deployment of clean energy and clean technologies, with Alliance members continuing to see record-breaking investments year after year. For example:

- Between 2021 and 2023, investments in the development of manufacturing capacity for clean technology quadrupled nationwide, helping to strengthen the U.S. manufacturing sector overall and bolster manufacturing jobs here in America.
- In the first half of 2024, investments in the development of clean technology manufacturing capacity across Alliance states were nearly five times greater than those made in all of 2021.

- Large investments are propelling the adoption of utility-scale solar across Alliance member states and accelerating offshore wind deployment, with cumulative investment in offshore wind technologies growing from zero in mid-2023 to over \$1.6 billion in mid-2024.
- More households and businesses than ever are powering buildings with clean energy and adopting clean technologies such as zero-emissions vehicles, heat pumps, solar panels, and battery storage, with sales of these technologies rising steadily year over year.
- Alliance members are working to take full advantage of IRA's climate and clean energy tax incentives to help finance the deployment of clean energy and clean technology throughout their states and territories.

Alliance members captured more than \$70 million collectively in federal funds to build state capacity and develop new — or update existing — state and territorial climate and clean energy plans last year. This spring, all 24 Alliance members submitted priority climate action plans under the Biden-Harris administration's Climate Pollution Reduction Grants (CPRG) program, which outline how states and territories can advance near-term, high-priority, and implementation-ready solutions to reduce GHG emissions and supercharge climate action. This summer, as part of the second phase of the CPRG program, Alliance members collectively secured approximately \$2.6 billion in historic funding. These awards, made possible by IRA, will provide direct funding to 14 Alliance states to implement ambitious measures that deliver significant emissions reductions and community benefits. In total, these grants are expected to collectively reduce emissions by over 600 million metric tons of carbon dioxide equivalent by 2050.

Going Further, Faster, Together

The Alliance has forged a strong state-federal partnership with the Biden-Harris administration, working shoulder-to-shoulder with federal agencies to advance robust climate solutions. In early 2023, Alliance members provided over 20 recommendations of specific steps the federal government could take, using its executive and regulatory authority, to reduce emissions, increase climate resilience, advance environmental justice and

equity, and empower states to lead on climate action. As of mid-2024, the Biden-Harris administration had made substantial progress in advancing critical actions that align with these and other Alliance recommendations.

In 2024, Alliance members and the federal government together have advanced innovative pathways on shared priorities, including accelerating adoption of grid-enhancing technologies, advancing a climate-ready workforce, and mobilizing climate financing solutions. This partnership has demonstrated the remarkable and rapid progress on climate that is possible when ambitious state and territorial leadership is coupled with a strong, supportive, forward-looking federal government.

Continuing to Advance Bold Climate Action

Alliance members are advancing high-impact climate solutions while partnering with the federal government, local communities, and industry on whole-of-society approaches. For example, during the past year, Alliance members have:

- Crafted ambitious new climate action plans, implemented cross-sectoral emissions reduction programs, launched climate-centered governance structures, and regularly tracked progress toward their climate goals.
- Adopted next-generation building standards and codes, electrified households, and helped consumers save money on their energy and water bills.
- Deployed a wide range of financial policies and programs, leveraged diverse funding sources, and partnered across the public and private sectors to finance the net-zero transition.
- Expanded and modernized electricity distribution and transmission systems and deployed more zero-carbon energy sources.
- Invested in and planned for a decarbonized industrial future; created markets for low-carbon industrial products; advanced solutions to mitigate methane across oil and natural gas, waste, and agricultural sources; and continued to phase down hydrofluorocarbons.



Photo credit: Aaron Burden, Unsplash

- Worked with communities to develop just climate solutions; directed significant funding toward capacity-building and environmental justicefocused programs; and took actions to develop a diverse, equitable, and inclusive climateready workforce.
- Planned for, incentivized, and deployed natural climate solutions at scale, leveraging these solutions and healthy natural and working lands to support resilient communities and ecosystems.
- Considered the cost of climate change in their policy decision-making and advanced programs that put a direct price on carbon pollution to cost-effectively drive reductions while raising revenue to reinvest into communities.
- Prioritized climate adaptation and strengthened resilience by taking a whole-of-government approach, deployed equitable plans and roadmaps, and invested directly in communities to help them prepare to withstand and recover from future extreme events.
- Expanded access to cleaner and lower-cost vehicles, electric vehicle charging infrastructure, and multimodal transportation options.

Looking Ahead

While substantial progress has been made, the latest emissions data show that additional action is needed to achieve longer-term climate targets. With a change in the federal administration on the horizon, the pace of progress toward realizing these goals will be defined by how leaders at all levels of government respond to the latest science and their commitment to advancing — or rolling back — common-sense climate solutions.

The commitment of the U.S. Climate Alliance and its members remains resolute. This bipartisan climate action coalition was born in challenging times — when former President Trump decided to withdraw the United States from the Paris Agreement — and it is built with the strength and durability to withstand whatever uncertainty or headwinds may lie ahead. The Alliance has been a cross-cutting, consistent source of stateled leadership to uphold the United State's climate action both domestically and abroad. It is abundantly clear that Alliance governors are up to the task and well-positioned to continue leading the charge.



HIGHLIGHTING SOLUTIONS across the alliance

In November 2023, Michigan Governor Gretchen Whitmer signed a historic energy and climate action package that establishes a 100 percent clean energy standard, requires strong labor provisions to build clean energy, streamlines energy project construction, and lowers household utility costs.

Photo Credit: Office of Michigan Governor Gretchen Whitmer

Introduction

The Unites States Climate Alliance is a bipartisan coalition of U.S. governors committed to securing America's net-zero future by advancing state-led, high-impact climate action (Box 1). The Alliance was launched on June 1, 2017, by the governors of Washington, New York, and California to help fill the void left by former President Trump's decision to withdraw the United States from the Paris Agreement. Since then, the Alliance's story has been one of growth, progress, and results. The coalition today comprises two dozen governors who collectively represent approximately 55 percent of the U.S. population and 60 percent of the U.S. economy — and its governors are delivering increasingly bold solutions to the climate crisis.

Alliance governors have long been leaders on climate. Even before the coalition's founding, member states and territories leveraged the authority vested in them under the United States Constitution to advance policies and programs that support cleaner sources of energy and transportation and build greater resilience to climate-related impacts.

Establishment of the Alliance in 2017 was key to accelerating governors' climate efforts. Since its founding, member states and territories have worked together to enact a suite of ambitious climate policy solutions - centered around equity, justice, and a just transition — that accelerate meaningful emissions reductions and move the United States closer to meeting its climate goals. Enhanced collaboration through the Alliance has enabled member states and territories to raise their ambition, leverage their collective market share, and scale successful approaches. In fact, the pace with which Alliance states have been able to advance climate solutions nearly doubled, on average, over the last three years (2021–2023) compared to the Alliance's early days - often setting the stage for strengthened action at the federal level.1

The bold actions taken by Alliance governors come at a critical moment, with climate change posing

an ever-greater risk to human health as the planet nears major climatic tipping points. Scientists continue to clearly attribute the increased severity and frequency of extreme weather and disasters to climate change. In 2023 alone, the United States experienced 28 disasters that cost at least \$1 billion in damages — close to the total number of billion-dollar disasters seen across the entire decade of the 1980s.² Furthermore, the top three years for most billion-dollar disasters in U.S. history (2020, 2022, and 2023) have all happened in the last four years.

Extreme heat has emerged as among the most dangerous climate impacts facing Americans.³ In 2023, the U.S. experienced the highest number of heat waves since 1936, leading to a record-breaking number of heat-related deaths.⁴ This year is on track to be at least as hot, with hazardous heat levels experienced before summer even started across the Southwest, Midwest, Mid-Atlantic, and Northeast.^{5,6} Extreme heat continued through the summer, with Phoenix shattering heat records after experiencing 100 consecutive days surpassing 100 degrees Fahrenheit.⁷ As of July 2024, the planet had experienced 14 consecutive months in which the global average temperature broke warming records.⁸ Warmer temperatures have also contributed to an unprecedented uptick in

BOX 1 Alliance Member Commitments

Member Commitments

Alliance members are working to achieve the Paris Agreement's goal of keeping temperature increases below 1.5 degrees Celsius through four key commitments:

1. Reducing Emissions

Reducing collective net greenhouse gas (GHG) emissions at least 26-28 percent by 2025 and 50-52 percent by 2030, both below 2005 levels, and collectively achieving overall net-zero GHG emissions as soon as practicable, and no later than 2050.

2. Accelerating Action

Accelerating new and existing policies to reduce climate pollution, build resilience to the impacts of climate change, and promote clean energy deployment at the state and federal levels.

3. Centering Equity

Centering equity, environmental justice, and a just economic transition in their efforts to achieve their climate goals and create high-quality jobs.

4. Tracking Progress

Tracking and reporting progress to the global community in appropriate settings, including when the world convenes to take stock of the Paris Agreement.

mosquito-borne illnesses, resulting in a public health emergency in Puerto Rico,⁹ due to a rise in dengue. Recognizing the gravity of the threat, Alliance states and territories have ramped up preparedness planning and taken important steps to protect their residents.

However, simply responding to the impacts of climate change is insufficient. Driving down emissions at the state and federal levels is also critical to prevent future disasters. Collaboration will be needed across all levels of government — much like the partnership forged between Alliance governors and the Biden-Harris administration. This partnership is a powerful demonstration of what can be accomplished for the United States when leaders come together to meet the challenges facing the nation. The federal government's robust support over the last four years has supercharged Alliance members' work. The Biden-Harris administration has deployed billions of dollars to accelerate climate action in states and territories, strengthened the federal

regulatory floor for vehicle emissions and power plants, advanced environmental justice for overburdened and underserved communities, finalized rules to tackle methane emissions, and empowered states and territories to go further, faster to curb climate pollution.

This year's record-breaking investments in the manufacture and deployment of clean technologies have demonstrated yet again that climate action goes hand-in-hand with economic growth and job creation. ^{10,11} In 2023, electric vehicle (EV) sales in the United States reached a record 1.4 million vehicles, up from 1 million in 2022. ¹² The first quarter of 2024 saw the market continue to build on 2023's momentum, with six of the top 10 largest EV manufacturers seeing a 50 percent increase in sales from the year prior. ¹³ For the second year in a row, the popularity of heat pumps is growing, achieving a greater overall market share, ¹⁴ with more Americans buying heat pumps than gas furnaces in 2023. Renewable energy sources also reached a new high, producing a record 23 percent of U.S. electricity in 2023. ^{15,16}

Despite these encouraging trends, there remain many challenges — even at the highest levels — to the continued advancement of common-sense climate action. Recent decisions by the Supreme Court, such as *Loper Bright Enterprises v. Raimondo*, ¹⁷ have further constrained the federal government's ability to address climate change through regulations meant to safeguard citizens and communities. At the same time, some elected leaders continue to undermine the science and success of climate policies.

Yet, the Alliance has demonstrated the enduring impact of state-led, bipartisan climate action in propelling us toward realizing U.S. climate goals. Independent analysis from 2023 shows that Alliance states and territories are on track to meet their 2025 goal of reducing collective emissions to 26 percent below 2005 levels — a target that two years ago seemed out of reach.¹⁸

Regardless of the challenges and uncertainties ahead, Alliance members will continue to build on this momentum. Alliance governors remain committed to sustaining and strengthening climate leadership in 2025, driving further emissions reductions with the urgency needed to make the coalition's longer-term climate goals a reality.

Reflecting on 2024

As the Alliance celebrates its seventh year of state-led climate action, the pace of progress at the state and territorial level has accelerated — fueled by the advancement of novel policy approaches, new multi-state and multi-level partnerships, and the infusion of historic investments under the *Inflation Reduction Act* (IRA) that are curbing climate pollution and propelling progress.

In 2024, the coalition proudly named its new co-chairs and executive committee, which now includes the governors of New York, New Mexico, California, Wisconsin, and Washington. For the first time, two female co-chairs are leading the Alliance — New York Governor Kathy Hochul and New Mexico Governor Michelle Lujan Grisham. With the addition of Wisconsin Governor Tony Evers, the executive committee has its first governor from the Midwest. Together with Washington Governor Jay Inslee and California Governor Gavin Newsom, these leaders have been elected by their fellow governors to oversee the strategic direction of the coalition through the spring of 2025.

At the state level, Alliance members have sustained their momentum, adopting and implementing new solutions to the climate crisis. Member states and territories have taken action to make polluters pay for their share of climate damages incurred by communities and businesses. They have enacted stronger environmental justice protections for overburdened and underserved populations. They have taken concrete steps to expand the capacity of America's power grid and continue building the nation's offshore wind industry. And they have prioritized strategic land use decisions in support of safe, livable, and resilient communities.

Governors have also partnered with the Biden-Harris administration to develop ambitious climate plans and harness unprecedented federal resources to pursue the next generation of climate solutions. In spring 2024, all 24 Alliance members finalized priority climate action plans under the U.S. Environmental Protection Agency's (EPA) Climate Pollution Reduction Grant (CPRG) program, identifying near-term, high-priority, and implementation-ready measures that stand to significantly reduce emissions. In July, 14 Alliance states collectively secured more than \$2.5 billion from EPA to begin implementing

some of these measures, including strategies focused on accelerating the adoption of heat pumps, reducing industrial sector emissions, and leveraging the carbon sequestration power of natural and working lands, among many others. Earlier in the year, 23 Alliance members were collectively awarded nearly \$3 billion under EPA's Solar for All competition to dramatically expand residential solar energy in low-income communities.¹⁹

Multi-state collaboration has been another key theme this year. Twenty-two states joined the White House in launching the Federal-State Modern Grid Deployment Initiative, a joint effort to speed improvements to the power system and support the adoption of high-performance conductors and grid-enhancing technologies. The Alliance also hosted a Learning Lab on Methane Monitoring and Mitigation Technologies, which brought together more than 60 officials from 18 states, along with measurement experts, data providers, and federal agencies for a two-day interactive workshop focused on emerging methane monitoring, measurement, and detection technologies — including how to translate data into effective methane mitigation policies. ²¹

As in past years, Alliance governors demonstrated the power of their collective voice in advancing shared priorities. Together, coalition members called on the federal government to empower states to adopt regulations more protective of public health than applicable federal standards, such as the Advanced Clean Cars II regulation and the In-Use Locomotive Regulation.²² Eleven Alliance members joined forces to urge the Federal Energy Regulatory Commission (FERC) to rapidly finalize its long-term regional transmission planning rule, building on recommendations outlined in an Alliance letter from 2022.23 Notably, a final rule subsequently issued by FERC expanded states' pivotal role throughout the transmission planning process — and cited input provided by the Alliance throughout its final order.²⁴ And, the Alliance welcomed a critical final rule from EPA cutting emissions from new gas and existing coal power plants, which was informed by comments and feedback provided by the Alliance in 2022 and 2023.25

Taking on a new challenge — and opportunity — Alliance members launched an innovative partnership at Climate Week NYC to accelerate the development of a diverse, equitable, and inclusive climate-ready workforce and expand career pathways for new and existing workers into good-paying climate jobs. Through the Governors' Climate-Ready Workforce Initiative, members will



Photo credit: U.S. Climate Alliance

collaborate on a series of collective commitments and goals, including boosting job quality in climate-ready professions, building a substantially more diverse workforce, strengthening workers' economic mobility, and ensuring a sufficient supply of skilled workers equipped to help the United States achieve a clean, equitable, and resilient net-zero future. Recognizing that Registered Apprenticeships are an especially valuable workforce training model, governors committed to collectively support 1 million new workers in completing Registered Apprenticeships across the coalition by 2035. The initiative will also facilitate collaboration on sector-specific strategies to expand pathways into in-demand, climate-ready fields, including the fields of clean energy, fuels, and technology; clean buildings and industry; and resilient communities and lands.

Since this bipartisan climate action coalition was formed, Alliance governors have remained a strong and steady force in climate leadership both domestically and globally. This report outlines the progress being made to achieve collective climate goals while increasing resilience, growing the economy while improving air quality, and investing in a net-zero economy while ensuring environmental justice for communities most vulnerable to the devasting impacts of climate change. This momentum will continue in the years ahead as Alliance members work to uphold their commitment to going further, faster, together.



HIGHLIGHTING SOLUTIONS across the alliance

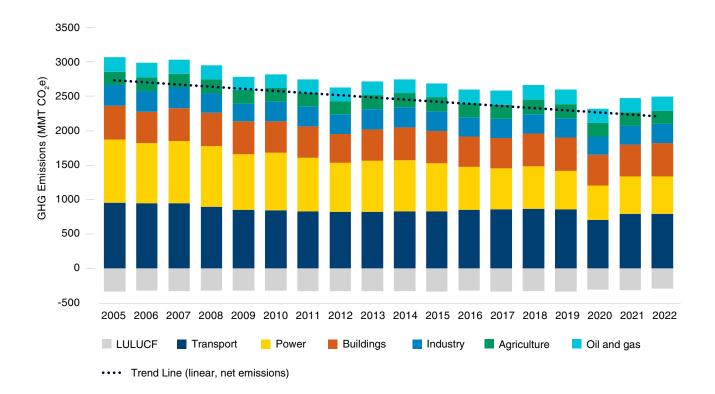
Governor Katie Hobbs celebrated the progress made to date at the Longroad Sun Streams complex, a 5,000-acre solar and storage complex that, upon completion by mid-2025, will generate enough solar energy to power 200,000 homes and provide more than \$300 million in benefits to Arizona schools and communities.

Photo Credit: Office of Arizona Governor Katie Hobbs

Measuring our Progress

Alliance states and territories reduced their collective net greenhouse gas (GHG) emissions by 19 percent between 2005 and 2022 (the latest year with complete data), continuing the coalition's trend of lowering emissions over the last 15 years (Figure 1). ²⁶ Collective emissions in 2022 rose slightly over 2021 levels, primarily driven by increased emissions in the buildings and industrial sectors as the economy continued to recover from the COVID-19 pandemic. While this bump in emissions aligns with national trends, Alliance members continued to outpace the rest of the United States in reducing emissions: Compared to 2005 levels, non-Alliance states and territories reduced collective net GHG emissions by only 13 percent.

FIGURE 1 The Alliance's collective net GHG emissions decreased an estimated 19 percent between 2005 and 2022.



Source: Rhodium Group Climate Deck

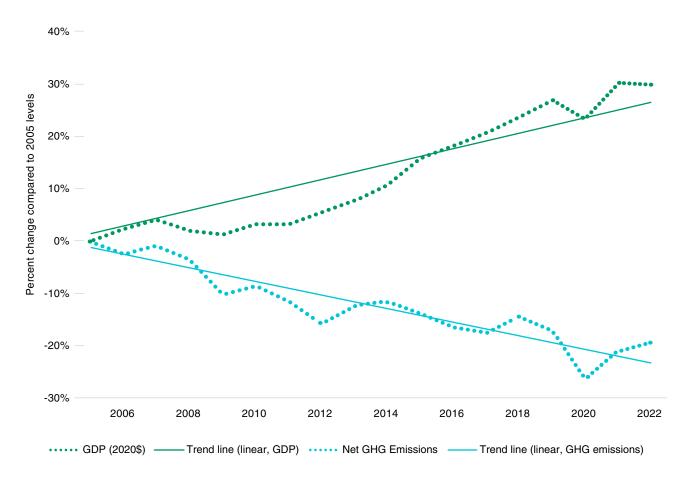
Looking ahead, independent analysis from the Rhodium Group shows the Alliance on track for its 2025 collective emissions target (26 percent below 2005 levels), with increased investment and accelerated implementation of bold climate policies enabling even deeper reductions in the years ahead.

As they pursue ambitious climate policies, Alliance members continue to prove that reducing emissions goes hand-in-hand with economic growth (Figure 2). Between 2005 and 2022, Alliance members realized a 30 percent increase in gross domestic product (GDP) while achieving a 19 percent reduction in net emissions.



Photo credit: Office of Massachusetts Governor Maura Healey

FIGURE 2 Between 2005 and 2022, Alliance members cut their GHG emissions while continuing to grow their economies.



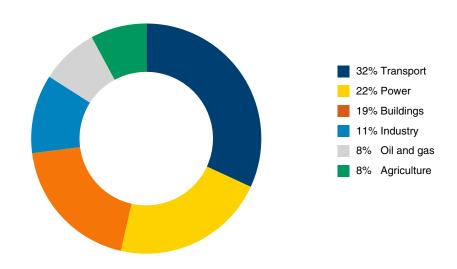
Source: Rhodium Group Climate Deck and Bureau of Economic Analysis

Additional key trends in Alliance states and territories between 2005 and 2022 include:

- Transportation remained the largest source of the Alliance's collective emissions by far, representing nearly one-third of total emissions (Figure 3). Transportation emissions remained largely unchanged between 2021 and 2022, suggesting that travel activity has completed its rebound from 2020 pandemic levels. As of 2022, Alliance members decreased their transportation emissions 17 percent below 2005 levels, a rate far greater than the five percent decrease achieved by the rest of the nation over the same timeframe. Alliance members also continued to benefit from strong climate policies that promote lower-carbon transportation options. In 2022, nearly 75 percent of all registered zero-emissions vehicles (ZEVs) in the United States were in Alliance states.27 Additionally, 66 percent of all publicly available EV chargers are located in Alliance states.²⁸
- Nearly half of electricity generated across the Alliance came from carbon-free sources, compared to only one-third in the rest of the United States.²⁹ Emissions from electricity generated in Alliance states and territories

- remained relatively flat between 2021 and 2022, with a decrease in coal-fired generation offset by an increase in natural gas and renewable energy generation. Importantly, the Alliance has decarbonized its power sector much faster than the rest of the United States, achieving a 41 percent reduction below 2005 levels compared with a 33 percent reduction in non-Alliance states.
- e Emissions from direct energy use in residential and commercial buildings increased by five percent from 2021 to 2022, returning to pre-pandemic levels. Despite efficiency gains from new appliance standards and the advancement of novel decarbonization policies, such as building performance standards, the sector continued to resist deeper emissions reductions due to a growing building stock, slow equipment turnover, and a changing climate. Notably, the United States experienced more days that were both colder and hotter than average in 2022 compared to 2021, resulting in higher energy demand for heating and air conditioning and driving an increase in emissions.³⁰
- Industrial sector emissions decreased by eight percent from 2005 to 2022. Although the industrial sector is the Alliance's fourth-highest





Source: Rhodium Group Climate Deck

source of collective emissions today, its emissions are projected to grow year-over-year due to national production trends and investments in new domestic manufacturing.³¹ To achieve collective emissions goals, Alliance members are working to accelerate policies that improve efficiency and support electrification of manufacturing processes and equipment.

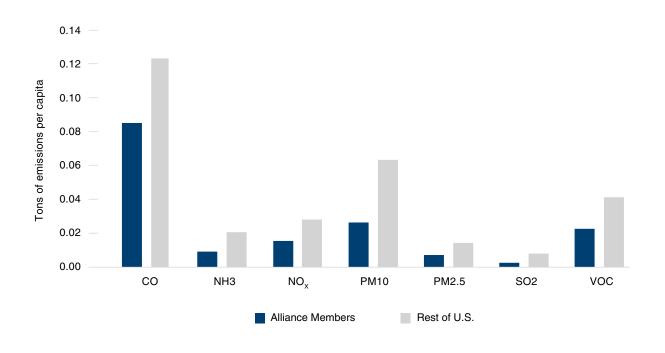
• Emissions sequestered by natural and working lands (NWL) across the Alliance have fallen by 11 percent since 2005. This degradation of the carbon sink largely aligns with national trends, where the national carbon sink has declined primarily due to a decrease in the rate of net carbon accumulation in forests and an increase in carbon dioxide emissions from urbanization. In 2022, NWLs sequestered carbon equivalent to 12 percent of the Alliance's gross collective emissions. To ensure this sector continues to play a role in achieving net-zero emissions, Alliance members are prioritizing actions that scale up NWL conservation and support

climate-smart land use planning, maximize carbon sequestration and resilience co-benefits, and conserve and enhance natural climate solutions while improving data collection on the sector.

In addition to reducing emissions, the policies and programs put in place by Alliance members are also delivering important benefits to families and communities. Compared to the rest of the country, Alliance members continue to:

- Employ more workers in the renewable energy and energy efficiency sectors.³³
- Achieve lower levels of dangerous air pollutants that can cause difficulty breathing and carry increased risk of asthma and heart disease, among other conditions (Figure 4).³⁴
- Execute more pre-disaster planning, such as developing statewide adaptation plans and identifying agency-specific roles.³⁵





Note: Data reflects air pollution from agriculture, fuel combustion, industrial processes, transportation, and waste sources. These data do not include air pollution from wildfire or prescribed burn sources. Chart includes data for Puerto Rico. Guam-specific data was not available. Source: U.S. Environmental Protection Agency



HIGHLIGHTING SOLUTIONS across the alliance

In July 2024, North Carolina Governor Roy Cooper was joined by U.S. Department of Transportation Secretary Pete Buttigieg for groundbreaking of the new S-Line Rail Project as part of the Raleigh to Richmond Innovating Rail Program, creating a faster passenger rail route between the two cities. Just seven months prior, the Biden-Harris administration announced a \$1.09 billion investment in the project through the Infrastructure Investment and Jobs Act.

Photo Credit: Office of North Carolina Governor Roy Cooper

Turning Federal Investments into Action

Alliance members are moving quickly to harness the hundreds of billions of dollars of historic federal climate investments made possible through the *Infrastructure Investment and Jobs Act* (IIJA), the *Inflation Reduction Act* (IRA), and the *CHIPS and Science Act*. Climate funding announcements by federal agencies nearly tripled between 2022 and 2023 — from \$29 billion to \$74 billion — and by mid-2024, this number increased again to a cumulative total of approximately \$150 billion in investments between 2022 and 2024.³⁶ Of that total, state and territorial governments received upwards of \$53 billion directly, 60 percent of which has gone to Alliance members. Throughout this past year, Alliance members have been collaborating and scaling up proven solutions to take full advantage of this opportunity, including engaging with the private sector, local governments, and federal agencies to maximize funding and advance shared climate goals.

Since the enactment of IRA, IIJA, and the CHIPS and Science Act, public and private investments in the manufacture, deployment, and purchase of clean technologies across energy, transportation, buildings, and industrial sectors have increased dramatically. States and territories across the United States have experienced a steady year-over-year increase that has seen fewer quarterly dips since the passage of these bills.³⁷ Between the first halves of 2021 and 2024, clean energy and clean technology investments in Alliance member states more than doubled (Figure 5) - an increase that has delivered direct economic benefits for local communities. In 2023 alone, these clean investments jumped 32 percent from the previous year, reaching more than \$119 billion. This year, Alliance members are already on track to continue this momentum, having reached over \$71 billion in investments by mid-2024 - a 29 percent increase from mid-2023 (Figure 6).

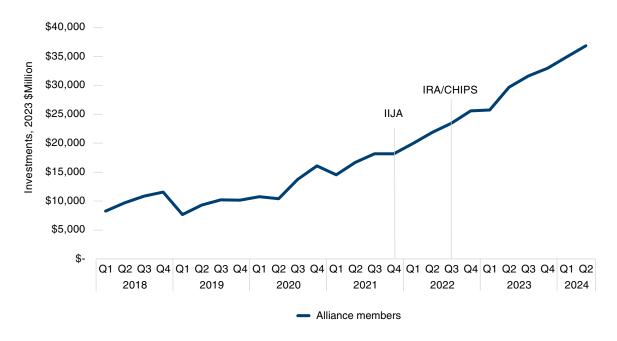
While landmark federal legislation has enabled these historic increases in investment, the benefits of these laws have not accrued on their own. Effective and impactful implementation is the result of close collaboration and partnership between federal agencies and Alliance members, along with industry, local

governments, consumers, and other implementation partners to support the uptake of new tax incentives and accelerated deployment of clean technologies — all with an eye toward securing our net-zero future.



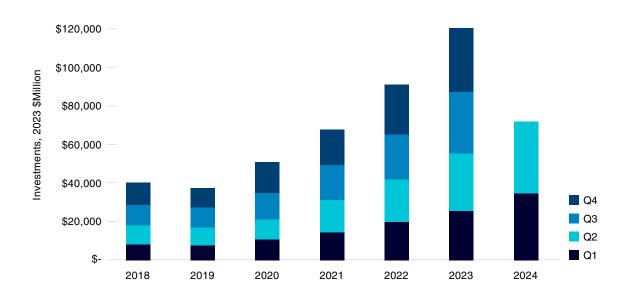
Photo credit: Office of Michigan Governor Gretchen Whitmer

FIGURE 5 Historic federal climate funding has helped accelerate investments in the manufacture, deployment, and purchase of clean energy and clean technology.



Note: Data does not include U.S. territories and was only available through Q2 of 2024. Source: Rhodium Group-MIT Center for Energy and Environmental Policy Research (CEEPR) Clean Investment Monitor data, version 2024_Q2.20240806.0.

FIGURE 6 Alliance members continue to see record-breaking clean investments year after year.



Note: Data does not include U.S. territories and was only available through Q2 of 2024. Source: Rhodium Group-MIT Center for Energy and Environmental Policy Research (CEEPR) Clean Investment Monitor data, version 2024_Q2.20240806.0.

Clean Technology Manufacturing Boom

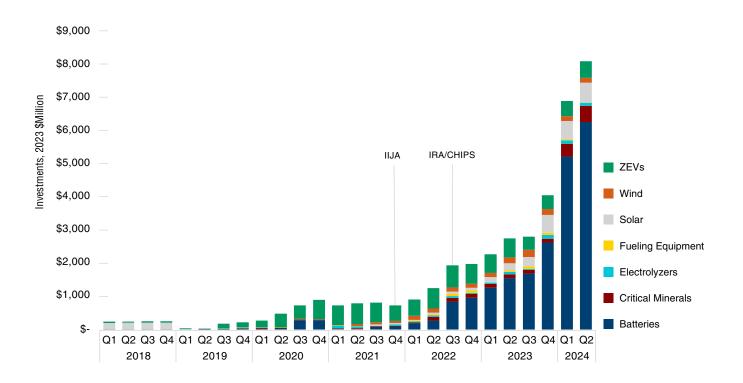
This clean investment includes the development of manufacturing capacity for clean technology, which has quadrupled nationwide between 2021 and 2023.³⁸ In the first two quarters of 2024, clean technology manufacturing investments have skyrocketed across Alliance states in particular, nearly quintupling members' total 2021 investments (Figure 7), compared to an almost threefold increase across the same timeframe among the remainder of the United States.³⁹ Such investments have helped increase the nation's capacity to produce more ZEVs, wind and solar technologies, electrolyzers, and critical minerals. The fastest-growing sector is battery manufacturing, with investments across Alliance states growing from \$26 million in the first half of 2021 to over \$11 billion in the first half of 2024.

Expanding Clean Manufacturing: State Success Stories

Michigan: Michigan is leading the nation in new clean energy investments announced since the passage of IRA, attracting more projects and jobs than any other state. Since August 2022, Michigan has drawn over \$25 billion in potential investments in new battery, electric vehicle, and clean energy manufacturing, along with 21,490 jobs. ⁴⁰ For example, Nel Hydrogen built a gigafactory in Michigan for production of electrolyzer technology for green hydrogen production, supporting over 500 jobs. This investment was supported by state dollars and the U.S. Department of Energy (DOE) Clean Hydrogen Electrolysis Program. ⁴¹

Minnesota: Minnesota provided \$15 million from the state's Minnesota Forward Fund to leverage a \$213.6 million loan from the U.S. DOE Loan Program Office

FIGURE 7 Investments in clean technology manufacturing capacity have nearly quintupled across the Alliance compared to 2021.



Note: Data does not include U.S. territories and was only available through Q2 of 2024. Source: Rhodium Group-MIT Center for Energy and Environmental Policy Research (CEEPR) Clean Investment Monitor data, version 2024_Q2.20240806.0.

for a biomanufacturing facility in Marshall, Minnesota. Solugen, the loan recipient and parent company of Bioforge Marshall, is a climate technology company focused on minimizing carbon emissions that will utilize Minnesota-grown corn to manufacture chemicals usually made from oil, resulting in significantly lower carbon emissions. The facility will manufacture various organic acids for use in concrete, cleaning, agriculture, and energy industries. The project is expected to create up to 100 jobs during construction and 56 highly skilled, full-time manufacturing jobs once fully operational.

New Jersey: In 2024, New Jersey awarded an additional 3,742 megawatts (MW) of offshore wind capacity to two projects, bringing the total awarded capacity for the state to 5,252 MW. Both projects have committed to supporting the establishment of a tower manufacturing facility at the New Jersey Wind Port, in addition to sourcing monopiles from, and investing in, the expansion of a monopile facility at the Port of Paulsboro. In the first 10 years of operation, the facility is expected to add 4,210 job years' worth of workforce opportunities, increase labor income by \$360 million, and boost New Jersey's gross domestic product by \$1.2 billion. Together, the projects are estimated to create more than 27,000 direct, indirect, and induced full-time equivalent job years. 43,44,45

New Mexico: New Mexico announced that Ebon Solar LLC plans to invest a total of \$942 million in New Mexico's solar industry. Ebon's plans include constructing an estimated 834,000-square-foot solar cell manufacturing facility in Albuquerque's Mesa del Sol industrial development area, creating over 900 new jobs. In addition, New Mexico announced that Star Scientific, a green hydrogen research and development company, has chosen New Mexico as the location for its first North American operation. The company is looking to acquire up to 50 acres and invest \$100 million into New Mexico, constructing 7 to 10 buildings for administration, design, testing, manufacturing, and laboratory research, and hire up to 200 employees in the state.

New York: In April 2024, as part of a \$500 million commitment to offshore wind supply chain activities, New York launched a \$200 million request for proposal (RFP) to support investments in infrastructure and manufacturing to grow the domestic offshore wind supply chain in New York. In addition, New York issued a request for information (RFI) to inform the

design of a \$300 million RFP focusing on major component offshore wind supply chain investments.⁴⁸

North Carolina: North Carolina announced new and expanded electric battery manufacturing facilities, a move that will bring thousands of new jobs to the state. Following the successful recruitment of Vietnamese EV manufacturer VinFast in 2022, Governor Cooper announced in October 2023 that Toyota plans to invest an additional \$8 billion in its electric battery manufacturing site in Randolph County, including hiring another 3,000 employees. 49 In the same month, Epsilon Advanced Materials, Inc., a global provider of synthetic graphite used in electric vehicle batteries, selected Brunswick County as its first manufacturing facility in the United States, creating 500 good-paying jobs. 50

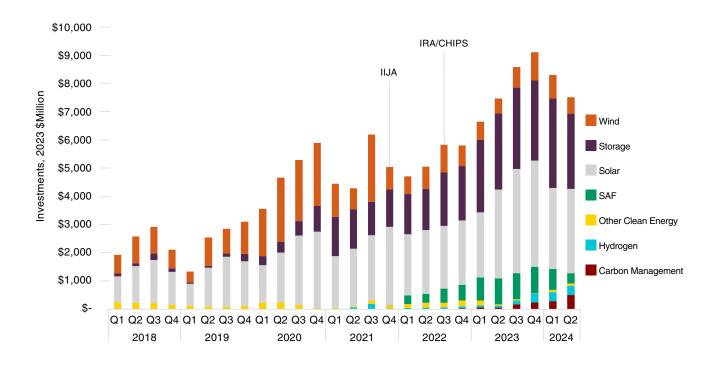
Washington: Governor Inslee celebrated the groundbreaking of construction at Sila Nanotechnologies' factory in Moses Lake, which will hire up to 500 Washingtonians to build next-generation battery technology for electric vehicles.⁵¹ Sila Technologies received a \$100 million grant from the U.S. DOE for this effort, which is also expected to entail workforce development partnerships with local schools, community colleges, and community organizations.⁵²

Wisconsin: Leading EV charging station manufacturer Ingeteam announced an expansion of its 14,000 square foot production facility in Milwaukee to increase its capacity to produce DC fast chargers and Level 2 chargers, creating hundreds of new good-paying jobs over the next five years.⁵³

Clean Energy and Industrial Investment

Alliance members have seen significant investments supporting the deployment of clean technologies that produce renewable energy, sustainably power U.S. homes and workplaces, and enable decarbonization of the hard-to-abate industrial sector. In the first quarter of this year, such investments across Alliance states had already risen nearly 25 percent compared to the same period last year, and by mid-2024 had nearly doubled the amount invested during the first half of 2021, right before the passage of IRA, IIJA, and CHIPS (Figure 8).

FIGURE 8 Alliance members have seen large investments in solar deployment, along with increased investments in energy storage, sustainable aviation fuel, and more.



Note: Data does not include U.S. territories and was only available through Q2 of 2024. Source: Rhodium Group-MIT Center for Energy and Environmental Policy Research (CEEPR) Clean Investment Monitor data, version 2024_Q2.20240806.0.

Since the enactment of these laws, large investments are propelling the adoption of utility-scale solar across Alliance members and accelerating offshore wind deployment. In just one year, cumulative investment in offshore wind technologies grew from zero in mid-2023 to over \$1.6 billion in mid-2024.⁵⁴ Additionally, a major uptick in battery manufacturing investment has enabled increases in storage deployment that complement these technologies, with an 11 percent increase in storage investments across Alliance states between the first halves of 2023 and 2024. Clean hydrogen has also seen rapid growth, with investments in the first half of 2024 increasing nine-fold over those in the first half of 2021.

Deploying Large-Scale Clean Energy and Technology: State Success Stories

Arizona, California, Colorado, Illinois, Maryland, Massachusetts, Michigan, Minnesota, New York, Pennsylvania, and Vermont: These Alliance states will host 15 industrial decarbonization projects awarded under the \$6 billion Industrial Demonstrations Program. Facilities in Alliance states will receive over \$1 billion in federal funding to demonstrate innovative technologies that deeply decarbonize manufacturing processes for aluminum, cement, glass, iron and steel, and processed foods. Technologies include industrial heat pumps, electric boilers, thermal batteries, and carbon capture.⁵⁵

California, ⁵⁶ Delaware, ⁵⁷ Illinois, ⁵⁸ Michigan, ⁵⁹ Minnesota, ⁶⁰ Oregon, ⁶¹ Pennsylvania, ⁶² New Jersey, Washington, ⁶³ and Wisconsin: ⁶⁴ These Alliance states all secured awards under the \$7 billion Regional Clean Hydrogen Hubs Program. Alliance members are involved in six of the seven regional hubs selected for awards, which will focus on producing clean hydrogen from renewable and nuclear electricity sources paired with electrolyzers and using that hydrogen to help decarbonize sectors like heavy industry and transportation that are not easily electrified. ⁶⁵

Arizona: Arizona is expanding clean energy generation at the Longroad Sun Streams complex, a 6,000-acre solar and storage complex that, upon completion by mid-2025, will generate enough solar energy to power 200,000 homes and provide more than \$300 million in benefits to Arizona schools and communities.⁶⁶

California: California's Food Production Investment Program has invested \$117.8 million in grants to help California food processors reduce emissions and support electrical grid reliability through the adoption of advanced energy technologies.⁶⁷ California has also been awarded over \$100 million from IIJA to implement the Community Energy Reliability and Resilience Investment Program, which, in March 2024, released a \$64 million grant funding opportunity that will fund between five and eight grid infrastructure projects that increase community energy resilience and reliability, advance energy and climate goals, improve energy justice and equity, and create good-paying jobs.⁶⁸

Michigan: Michigan made strides to restart a shuttered nuclear plant that, when operational, will provide enough clean, reliable energy to power over 800,000 homes, support nearly 2,000 jobs, and provide \$363 million in annual economic impact. The nuclear plant owner, with financial support from the state, received a \$1.52 billion loan from the U.S. DOE Loans Program Office to restart the plant and explore deploying small modular reactors on site. This investment would make Palisades the first successfully restarted nuclear power plant in U.S. history. 69,70 Michigan also made progress toward meeting its state storage standard: Using tax incentives from IRA, the state's largest utility built the region's largest battery energy storage project - which can store enough electricity to power 40,000 homes — on the site of a retired coal plant.71

New Mexico: The SunZia Southwest Transmission Project comprises two planned 500 kV transmission lines located across approximately 520 miles of federal, state, and private lands between central New Mexico and central Arizona. The purpose of the project is to transport up to 4,500 megawatts of primarily renewable energy from New Mexico to markets in Arizona and California.

New York: In June 2024, Governor Hochul announced that the New York Public Service Commission approved a new framework for the state to achieve 6 gigawatts (GW) of energy storage by 2030 to support

the buildout of storage deployments across the state. The roadmap earmarks at least 35 percent of the program's estimated cost of up to \$1.98 billion for projects that benefit disadvantaged communities and reduce emissions from fossil-fueled peaker plants.⁷³

Washington: The Washington Department of Commerce provided a loan to Twelve, a carbon-transformation company manufacturing an innovative electrochemical technology that uses electricity, water, and carbon dioxide to create chemicals, materials, and fuels, including sustainable aviation fuel. Building off the facility groundbreaking in 2023, the loan will accelerate the company's facility deployment in Moses Lake.⁷⁴

Wisconsin: Alliant Energy was approved to receive up to \$30.7 million through a long-duration energy storage (LDES) program for the Columbia Energy Storage Project, which plans to build and operate a compressed carbon dioxide LDES system at the soon-to-be-retired coal-fired Columbia Energy Center in Pacific, Wisconsin.⁷⁵

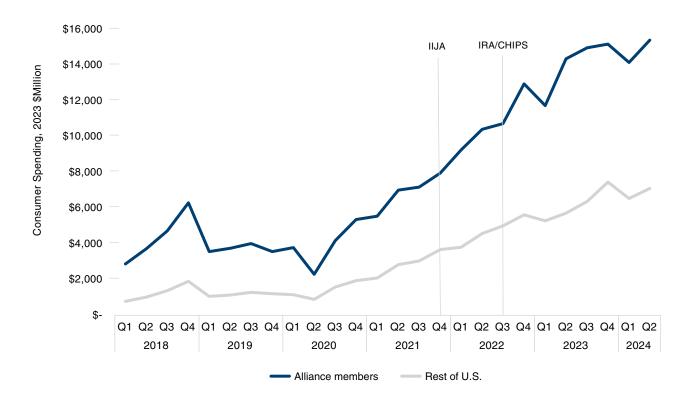
Accelerating Consumer Adoption of Clean Technologies

Across the Alliance, more households and businesses are powering their buildings with clean energy and adopting clean technologies like ZEVs, heat pumps, solar panels, and battery storage than ever before. With the historic incentives included in IIJA, IRA, and CHIPS, clean technology sales are steadily increasing year over year.⁷⁶

Most notably, Alliance states continue to lead the nation in ZEV sales, accounting for nearly 70 percent of all U.S. ZEV consumer sales in the first half of 2024 (Figure 9). This rapid deployment of ZEVs contributes to cleaner air, lessens dependence on foreign oil, and contributes much-needed progress toward decarbonization of the nation's largest-polluting sector.

Following the Alliance's announcement of a collective heat pump target last year, heat pump adoption among Alliance members is also expected to rise as states and territories collectively work to quadruple installations by 2030.⁷⁷ This will bolster an already high volume of heat pump sales, which have outpaced gas furnace sales since the passage of IRA and IIJA — even amid a nationwide decrease in heating, ventilation, and air conditioning (HVAC) equipment sales in 2023.^{78,79}

FIGURE 9 Alliance members continue to lead in ZEV consumer purchases.



Note: Data does not include U.S. territories and was only available through Q2 of 2024. Source: Rhodium Group-MIT Center for Energy and Environmental Policy Research (CEEPR) Clean Investment Monitor data. version 2024 Q2.20240806.0.

Accelerating Clean Technology Adoption in Homes and Businesses: State Success Stories

California: California is investing \$400 million in a statewide Equitable Building Decarbonization Direct Install Program to provide no-cost decarbonization retrofits to low-income households in disadvantaged communities. This program will reduce emissions in existing homes through the installation of efficient, electric, and flexible equipment while simultaneously advancing energy equity and resilience to extreme climate events. Additionally, California was awarded nearly \$100 million in June 2024 in Home Electrification and Appliance Rebate funding to expand the existing TECH Clean California residential decarbonization program statewide. This program will provide rebates to low- and moderate-income

households for efficient, electric, ENERGY-STAR certified equipment, such as heat pumps.

Maine: Maine received \$10 million from the U.S. Department of Energy to install 675 heat pumps in mobile and manufactured homes and to train local contractors to implement these projects.⁸²

Minnesota: Minnesota's new Climate Innovation
Finance Authority funded its first project by providing
a \$4.7 million bridge loan to The Heights project in
Saint Paul, Minnesota.⁸³ The loan allows the project
to begin construction of an affordable housing and
light industrial project that will use zero-carbon district
heating. The bridge loan will allow the project to access
IRA tax credits for the project, which will then be used
to repay the bridge loan. The Heights is a 112-acre
site being developed for over 1,000 units of affordable
housing and 1 million square feet of light industrial

space, which will provide over 1,000 livable wage jobs. The Heights has specific environmental justice goals, including being a carbon-free community.

New Jersey: Through IRA formula funding, New Jersey was allocated \$183 million under the Home Efficiency Rebates (HER) and Home Electrification and Appliance Rebates (HEAR) grants, made possible under IRA. The state is currently designing programs to serve multifamily buildings in low-income communities and integrate funding with existing energy efficiency programs.⁸⁴

New Mexico: New Mexico is taking a unique customer service-based approach to implementing its HER (\$43,999,070) and HEAR (\$43,742,970) awards. The state's programs give low-income New Mexicans point-of-sale rebates to improve home efficiency, purchase electric appliances, and electrify homes; engage energy coaches to connect consumers with rebates, creating a "one-stop shop" website to centralize rebate and tax credit options; and partner with local retailers to ensure that consumers can claim the rebates as close as possible to the point of sale.⁸⁵

New York: New York launched the nation's first HEAR program. The initial investment of nearly \$40 million will expand the reach of the State's EmPower+ program by allowing more low- and middle-income families to install cost-saving measures such as heat pumps, electrical panel upgrades, and insulation. So Since the launch, additional states across the country have announced steps to launch their own IRA home rebate programs in partnership with the U.S. Department of Energy.

North Carolina: North Carolina is validating its growing global reputation for the electric vehicle industry with the June 2024 announcement that IONNA LLC, a new company founded by seven of the world's leading automotive original equipment manufacturers (OEMs) — BMW Group, General Motors, Honda, Hyundai, Kia, Mercedes-Benz, and Stellantis — will establish its global headquarters in Durham. IONNA's new state-of-the-art facility will include a customer experience lab for research and development of software and hardware to create a planned network of more than 30,000 EV charging points.⁸⁷

Wisconsin: Wisconsin launched its Home Efficiency Rebates program, making it the first state in the nation to do so. Under this program, nearly \$75 million is available to Wisconsin homeowners to reduce the cost of critical energy-saving, whole-home energy efficiency improvements such as insulation and efficient heating and cooling equipment.⁸⁸

Investing in High-Priority Measures to Reduce Emissions

In 2023, Alliance members collectively captured more than \$70 million in federal funds to build state capacity and develop new - or update existing - state and territorial climate and clean energy plans. This year, all 24 Alliance members submitted their priority climate action plans,89 which outline how states and territories will make the most of this funding and advance nearterm, high-priority, and implementation-ready actions to greatly reduce emissions and supercharge climate action. Collectively, these plans include over 300 measures to address pressing climate issues within Alliance states and territories, aiming for broaderreaching impacts grounded in justice and equity. These plans cover a range of sectors, from decarbonizing the industrial sector and electricity generation to enhancing pedestrian-friendly infrastructure and retrofitting homes in low-income and disadvantaged communities.

This summer, Alliance members collectively secured approximately \$2.6 billion in historic funding as part of the second phase of the Biden-Harris administration's Climate Pollution Reduction Grants (CPRG) program. These awards, made possible by IRA, will provide direct funding to 14 Alliance states to implement ambitious measures that deliver significant emissions reductions, as well as substantial community benefits. In total, these grants are expected to collectively reduce emissions by over 600 million metric tons of carbon dioxide equivalent by 2050:

California's South Coast Air Quality Management District (\$499,997,415): The INVEST CLEAN project will decarbonize and cut air pollution from a vast goods movement network across Southern California through battery electric trucks and chargers aligned with the National Zero-Emission Freight Corridor Strategy, zero-emissions cargo handling equipment and locomotives, community benefits plans, and job training. 90

Colorado (\$329,008,738): The Colorado
Decarbonization Accelerator will reduce methane
emissions from landfills, coal mines, and natural
seepage; support decarbonization of large commercial



Photo credit: Office of Illinois Governor JB Pritzker

buildings; and accelerate local greenhouse gas reduction policies and projects. 91 The Decarbonize DRCOG: A Zero-Emission Building Initiative will provide free home retrofits and upgrade services for low-income and disadvantaged populations, offer free energy advising to home and building owners, provide rebates and incentives to accelerate the adoption of energy efficiency and electrification, and establish a building policy collaborative. 92

Connecticut, Delaware, Maryland, and New Jersey (\$248,900,000): The Clean Corridor Coalition project will deploy electric vehicle charging infrastructure for commercial zero-emissions medium- and heavy-duty vehicles on the I-95 freight corridor.⁹³

Connecticut, Maine, Massachusetts, and Rhode Island (\$450,000,000): The New England Heat Pump Accelerator will rapidly accelerate the adoption of cold-climate air-source heat pumps, heat pump water heaters, and ground source heat pumps in more than 500,000 residential buildings.⁹⁴ This coalition also includes New Hampshire.

Illinois (\$430,251,378): The Illinois CPRG Implementation Grant will advance building and industry decarbonization, freight electrification, climate-smart agriculture, and renewable energy deployment, supporting the state's commitment to achieve 100% carbon-free power by 2045.95

Maryland and North Carolina (\$421,238,074): The Atlantic Conservation Coalition will leverage the carbon sequestration power of natural and working lands, including coastal wetlands, peatlands, forests, and urban forestry. ⁹⁶ This coalition also includes South Carolina and Virginia.

Michigan (\$129,104,391): The Accelerating Siting, Zoning, and Permitting of 60 Percent Renewable Energy grant will provide incentives, technical assistance, and workforce development to help spur the adoption of renewable energy at the scale and pace needed to reach Michigan's goal of 60 percent renewable energy by 2030.97 As part of this award, the state sub-awarded funding to the Inter-Tribal Council of Michigan to collaborate with Tribal entities that did not receive a CPRG planning grant, increasing capacity for the council to convene Tribes around climate planning and technical assistance for Tribes across Michigan.

Minnesota (\$199,999,999): The Minnesota Climate-Smart Food Systems project will advance food system decarbonization, including through peatland restoration, climate-smart agriculture, energy efficiency, methane avoidance at landfills, vehicle and equipment electrification, low-global warming potential refrigerants, and food waste prevention.⁹⁸

Oregon (\$197,181,796): The Climate Equity and Resilience Through Action grant will reduce greenhouse gas emissions from multiple sectors, including through electric vehicle and charging rebates, building decarbonization incentives, food waste reduction, and landfill methane reduction.⁹⁹

Pennsylvania (\$396,108,225): The RISE-PA grant will reduce industrial sector emissions through a competitive grant program and incentives for small-, medium-, and large-scale decarbonization projects across Pennsylvania.¹⁰⁰



HIGHLIGHTING SOLUTIONS across the alliance

U.S. Climate Alliance members joined leaders across the Biden-Harris administration to discuss the rapid growth of career pathways in climate and clean energy fields and how states and territories — in partnership with the federal government — can expand Americans' access to the occupational skills-based training necessary to access these good-paying jobs.

Going Further, Faster, Together

The Alliance has forged a strong state-federal partnership with the Biden-Harris administration over the past four years, working shoulder-to-shoulder with federal agencies to advance the solutions needed to meet our shared climate goals. Since President Biden and Vice President Harris took office, Alliance members have partnered with the federal government to facilitate federal-state dialogues, co-host White House convenings, develop joint policy commitments, and deliver on the promise of historic climate investments made through IRA, IIJA, and the CHIPS and Science Act.

Throughout 2024, this collaboration has continued to deepen as Alliance members and the federal government have taken on new challenges and harnessed new opportunities. Together, they have advanced innovative pathways to decarbonize buildings, including through the Alliance's collective commitment to quadruple heat pump installations. They stood side-by-side to launch a new federal-state grid modernization initiative aimed at accelerating adoption of grid-enhancing technologies. They joined forces to advance a climate-ready workforce and expand proven workforce development models such as Registered Apprenticeships. And they have continued to collaborate on the technical needs of states and territories, including through a convening of Alliance members, experts, and federal officials on methane monitoring tools and technologies.

This partnership has demonstrated the remarkable and rapid progress on climate that is possible when ambitious state and territorial leadership is coupled with a strong, supportive, forward-looking federal government.

Progress on the Alliance's Recommended Federal Executive Actions

In February 2023, the Alliance marked the halfway point of President Biden's term by applauding the administration's historic climate action during its first

two years — and recommending a series of priority federal climate actions it could take in its next two years to accelerate the transition to a net-zero future. In a collective letter to President Biden, Alliance members provided over 20 recommendations of specific steps the federal government could take using its executive and regulatory authority to reduce emissions, increase climate resilience, advance environmental justice and equity, and empower states to lead on climate action.¹⁰¹

Top priorities from this letter included:

- Strengthening federal light-, medium-, and heavyduty vehicle standards by adopting emissions and fuel economy standards before 2024.
- Empowering states to set more stringent vehicle emissions standards by approving California waiver requests under the Clean Air Act.
- Tackling emissions from industrial facilities and electricity generation by rapidly adopting new standards under the Clean Air Act.
- Reducing harmful pollutants from buildings by establishing strong emissions-based standards for space and water heating equipment.
- Developing the first national adaptation strategy to ensure that climate resilience is embedded across all regions and sectors.

Going Further, Faster, Together

The Biden-Harris administration has made substantial progress in advancing critical actions that align with these and other Alliance recommendations (Figure 10). In the past year, the federal government has finalized regulations that strengthen carbon pollution standards for new gas and existing coal power plants; establish more protective federal emissions standards for light-, medium-, and heavy-duty vehicles; reduce

methane emissions in the oil and gas sector by tackling methane venting, leaking, and flaring; and advance many other shared priorities. Across sectors of the economy and across the whole of federal government, this administration has continued to deploy its federal executive authority to put the United States on a path to meeting our emissionsreduction targets and climate resilience goals.

FIGURE 10 The Biden-Harris administration has made significant progress that aligns with Alliance recommendations, strengthens federal climate regulations, empowers climate-leading states, and directs resources and tools to support climate action at all levels of government.



GHG Targets & Governance

Alliance Recommendation:

Lead by Example

Federal Progress to Date

- ✓ Finalized a rule to phase out fossil fuels in new and majorly renovated federal buildings.102
- ✓ Announced an investment of \$9.6 billion over five years to decarbonize and electrify the U.S. Postal Service fleet by 2026.103
- ✓ Set targets for more than 25 agencies to install charging ports and acquire zero-emissions vehicles. 104

Alliance Recommendation:

Improve, Expand, and **Expedite Climate Data** and Analytical Tools

Federal Progress to Date

- ✓ Released the National Strategy to Enhance the Nation's Greenhouse Gas Measurement and Monitoring Capabilities. 105
- ✓ Launched the U.S. GHG Center, 106 a multi-agency effort consolidating GHG information from observations and models.
- ✓ Incorporated updates to estimates for oil and gas and long-term research into methods for estimating emissions and sinks from forested land in the 2024 National Inventory of U.S. Greenhouse Gas Emissions and Sinks. 107
- ✓ Issued a rule that strengthens, expands, and updates methane emissions reporting requirements for oil and natural gas facilities under the Greenhouse Gas Reporting Program. 108
- ✓ Published annual update to EPA's State Inventory Tool.¹⁰⁹

FIGURE 10 (Continued): The Biden-Harris administration has made significant progress that aligns with Alliance recommendations

GHG Targets & Governance (Continued)

Alliance Recommendation:

Create Systems to Support a National Carbon Offsets Market

Federal Progress to Date

✓ Codified the U.S. government's commitment to advancing the responsible development of voluntary carbon markets by releasing a joint statement of policy and new principles. ¹¹⁰

Buildings

Alliance Recommendation:

Adopt Equipment and Building Efficiency Standards

Federal Progress to Date

- ✓ Finalized energy efficiency rules for residential appliances and commercial equipment, including space and water heaters.¹¹¹
- Made available \$1.1 billion in funding and grant opportunities that support state, local, territorial, and Tribal building energy code adoption.

Electricity

Alliance Recommendation:

Accelerate Offshore Wind Energy Deployment

Federal Progress to Date

- ✓ Approved nine offshore wind projects, totaling more than 13 gigawatts of offshore wind energy.¹¹²
- ✓ Released an interagency action plan to catalyze offshore wind energy, strengthen the domestic supply chain, and create good-paying, union jobs.¹¹³
- ✓ Signed a memorandum of understanding on offshore wind supply chain collaboration with nine East Coast states.¹¹⁴
- ✓ Launched the Atlantic Offshore Wind Transmission Action
 Plan to connect the first generation of Atlantic offshore wind
 projects to the electric grid and increase transmission.¹¹⁵
- ✓ Offered tax incentives, technical assistance, and innovative grant funding to support offshore wind equipment development and manufacturing, deployment, and transmission solutions.¹¹⁶

Going Further, Faster, Together

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FIGURE 10 (Continued): The Biden-Harris administration has made significant progress that aligns with Alliance recommendations

Electricity (Continued)

Alliance Recommendation:

Adopt Stringent Emissions Regulations

Federal Progress to Date

- √ Finalized rules for new gas and existing coal power plants under section 111 of the Clean Air Act.
- Strengthened National Ambient Air Quality Standards for Particulate Matter.
- ✓ Strengthened Mercury and Air Toxics Standards.
- ✓ Finalized the Coal Ash Rule.
- Released call for information for National Ambient Air Quality Standards for Ozone.

Alliance Recommendation:

Expedite Transmission Development

Federal Progress to Date

- ✓ Finalized specific requirements on how transmission providers must conduct long-term planning for regional transmission facilities and determine how to pay for them.¹¹⁷
- ✓ Launched the Federal-State Modern Grid Deployment Initiative alongside 22 states.¹¹⁸

Industry

Alliance Recommendation:

Partner with States on Buy Clean

Federal Progress to Date

- ✓ Launched the Federal-State Buy Clean Partnership with commitments from 12 leading states, since expanded to 13 participating states.¹¹⁹
- ✓ Announced and awarded billions of dollars in funding through IRA to support the Federal Buy Clean Initiative,¹²⁰ including improving the availability of low-carbon construction and supporting decarbonization projects under the Industrial Demonstrations Program.¹²¹
- ✓ Developed low embodied carbon material requirements that will be applied by the General Services Administration to 150 IRA projects.¹²²

Going Further, Faster, Together

FIGURE 10 (Continued): The Biden-Harris administration has made significant progress that aligns with Alliance recommendations

Industry (Continued)

- ✓ Announced \$1.2 billion in funding available to state departments of transportation to fund activities and projects that advance the use of low-carbon materials and products. 123
- ✓ Proposed a draft label program to help procurers easily identify low embodied carbon construction materials.124
- ✓ Joined international leaders in committing to advancing Buy Clean ambition at COP28.125,126

Alliance Recommendation:

Tackle Methane **Emissions**

Federal Progress to Date

√ Finalized a rule to sharply reduce methane emissions and other harmful air pollution from the oil and gas sector, including from existing sources for the first time.127



Just Transition & Equity

Alliance Recommendation:

Establish a National Civilian Climate Corps

Federal Progress to Date

✓ Established the American Climate Corps and swore in the first 9,000 members of a total 20,000 anticipated in the first year.128



Pricing Carbon & Valuing Climate Damages

Alliance Recommendation:

Update the Social Cost of Greenhouse Gases (SC-GHG)

Federal Progress to Date

√ Finalized EPA's updated SC-GHG estimates, reflecting the most recent science and methodological recommendations made by the National Academies of Science, Engineering, and Medicine.



Resilience

Alliance Recommendation:

Prioritize and Protect Climate-Vulnerable Communities

Federal Progress to Date

✓ Designated 483 community census tracts as Community Disaster Resilience Zones to assist communities that are most at-risk and in-need with respect to natural disasters and other climate impacts.129

FIGURE 10 (Continued): The Biden-Harris administration has made significant progress that aligns with Alliance recommendations

Resilience (Continued)

Alliance Recommendation:

Develop a National Adaptation Strategy

Federal Progress to Date

- ✓ Hosted the first White House Climate Resilience Summit and released the National Climate Resilience Framework. 130
- ✓ Released the Fifth National Climate Assessment, an updated comprehensive federal assessment of climate changes and their impacts, which includes a first-time accounting of disproportionate impacts and new chapters on both "Economics" and "Social Systems and Justice." 131
- ✓ Released updated Climate Adaptation Plans developed by more than 20 federal agencies. 132

Transportation

Alliance Recommendation:

Strengthen Federal Vehicle Standards

Federal Progress to Date

- √ Finalized vehicle emission standards for light-, medium-, and heavy-duty vehicles.
- ✓ Finalized Corporate Average Fuel Economy standards for light- and medium-duty vehicles.

Alliance Recommendation:

Strengthen Nonroad Vehicle Emission Standards

Federal Progress to Date

✓ Revised existing preemption regulations for nonroad vehicles and engines so states can more easily use their authority under the Clean Air Act to address air quality issues.133

Alliance Recommendation:

Prioritize VMT Reduction

Federal Progress to Date

✓ Outlined actions in the Housing Supply Action Plan to support jurisdictions that have reformed zoning and land use policies in IIJA grant funding allocations. 134

FIGURE 10 (Continued): The Biden-Harris administration has made significant progress that aligns with Alliance recommendations

Transportation (Continued)

- ✓ Published a memorandum affirming the U.S. Department of Transportation's goals for IIJA spending, including the importance of highway repair and maintenance in relation to reducing surface transportation-related emissions.¹³⁵
- ✓ Released the U.S. National Blueprint for Transportation Decarbonization, incorporating vehicle miles traveled (VMT) reduction measures that improve convenience through community design and land use planning, improving walkability, bikeability, and overall quality of life.¹³⁶

Alliance Recommendation:

Approve California Waiver Requests

Federal Progress to Date

- ✓ Approved California's waiver request for Advanced Clean Trucks regulation.
- Held a public hearing and comment opportunity for California's Advanced Clean Cars II waiver request.
- Held a public hearing and comment opportunity for California's In-Use Locomotive Regulation authorization request.
- Held a public hearing and comment opportunity for California's Advanced Clean Fleets waiver request.

Alliance Recommendation:

Support ZEV Infrastructure Deployment

Federal Progress to Date

- ✓ Released the first-ever national strategy to accelerate deployment of zero-emissions infrastructure for freight trucks.¹³⁷
- ✓ Awarded billions in funding through National Electric Vehicle Infrastructure (NEVI),¹³⁸ Charging and Fueling Infrastructure,¹³⁹ and Electric Vehicle Charger Reliability and Accessibility Accelerator¹⁴⁰ grant programs to support public charging infrastructure deployment.

FIGURE 10 (Continued): The Biden-Harris administration has made significant progress that aligns with Alliance recommendations

Transportation (Continued)

- ✓ Awarded \$7 million in funds to support planning for medium- and heavy-duty vehicle charging infrastructure.¹⁴¹
- ✓ Developed tools and resources, such as U-Finder,¹⁴² the *Community Charging* white paper,¹⁴³ and materials created by the ChargeX consortium,¹⁴⁴ to support the equitable and efficient deployment of ZEV infrastructure.

Alliance Recommendation:

Integrate Freight Decarbonization in Federal Plans

Federal Progress to Date

- √ Released the first-ever national strategy to accelerate deployment of zero-emissions infrastructure for freight trucks.¹⁴⁵
- ✓ Released the U.S. National Blueprint for Transportation Decarbonization, incorporating strategies and approaches to decarbonize freight emissions from on-road trucks, rail, maritime vessels, and aviation activities.¹⁴⁶
- ✓ Issued requests for information to help inform national strategy and approaches to rail decarbonization¹⁴⁷ and maritime decarbonization.¹⁴⁸

In 2024, the Alliance continued to build on its engagement with the federal government to support the strongest suite of rules and actions possible. The coalition's efforts included two letters to EPA calling for approval of California's Advanced Clean Cars II waiver¹⁴⁹ and In-Use Locomotive Regulation authorization.¹⁵⁰ Eleven Alliance members also joined forces to urge the Federal Energy Regulatory Commission (FERC) to rapidly finalize its long-term regional transmission planning rule, building on recommendations outlined in an Alliance letter from 2022.¹⁵¹ Notably, a final rule subsequently issued by FERC expanded states' pivotal role across the transmission planning process — and cited input provided by the Alliance throughout its final order.¹⁵²

While substantial progress has been made, additional federal leadership is needed to turn the United States' long-term climate targets into reality. However, recent decisions by the Supreme Court, such as *Loper Bright Enterprises v. Raimondo*, 153 have further constrained the federal government's ability to address climate change through regulations meant to safeguard residents and communities. At the same time, some elected leaders continue to undermine the science and success of climate policies. The Alliance will continue working collaboratively to advance the remainder of its recommendations, identify additional steps that can build on this momentum, and uphold the important actions that have been taken to date.

Innovative Partnerships and Convenings

In addition to supporting the advancement of key federal rules and actions, the Alliance has pioneered a series of innovative partnerships with the Biden-Harris administration to leverage the collective authority of both state and federal governments. The first such effort came in 2023, when the White House convened a state-federal Buy Clean dialogue and then joined together with 12 Alliance states to launch the Federal-State Buy Clean Partnership, aimed at supporting the procurement of lower-carbon materials in public infrastructure projects. From that first initiative came a framework for partnership that has since expanded to a much wider array of sectors and priorities — including grid modernization, workforce development, and methane mitigation. These efforts include:

- Advancing a Climate-Ready Workforce: Senior officials from 20 Alliance states joined the Biden-Harris administration at a White House convening on advancing a climate-ready workforce in spring 2024. Together, they discussed the rapid growth of climate-ready career pathways and how governors' offices and the administration can collaborate to ensure that all Americans have access to the training needed to benefit from these good-paying jobs. Federal officials highlighted the expansion of proven workforce development training models, such as Registered Apprenticeships and the American Climate Corps, while state officials shared lessons learned from innovative state workforce programs and policies.
- Modernizing and Expanding America's Electric Grid: The Alliance worked alongside the White House to launch the Federal-State Modern Grid Deployment Initiative in spring 2024, through which 22 states will work with one another and the federal government to bolster the capacity of America's electrical grid and more effectively meet current and future demand.^{154,155} Alliance leadership moderated a discussion with top officials from Colorado, Maine, New York, and Washington at the White House Summit on Modernizing the Power Grid to announce the new initiative.

- Mitigation: A Learning Lab on Methane
 Monitoring and Mitigation Technologies, hosted
 by the Alliance, convened more than 100
 participants in Washington, D.C. for a two-day
 interactive workshop on emerging methane
 monitoring, measurement, and detection
 technologies all critical to combatting
 methane pollution and its role in the climate
 crisis. 156 Biden administration officials from the
 Department of Energy, Environmental Protection
 Agency, and the U.S. GHG Center presented
 new federal rules, programs, and tools. Ben
 Poulter from the White House Office of Science
 and Technology delivered keynote remarks.
- Financing the Net-Zero Future: During the Alliance's Spring Semiannual Meeting, governors' offices convened in Washington, D.C. and came together with federal officials to discuss how states can most effectively absorb and deploy new federal climate funds, develop state approaches to complement and leverage federal financing, and maximize related benefits in overburdened and underserved communities. They were joined by federal officials from the U.S. Department of the Treasury, Department of Energy's Loan Programs Office, and Environmental Protection Agency's Greenhouse Gas Reduction Fund.

Alliance members have made enormous progress working shoulder-to-shoulder with the Biden-Harris administration. Each year of this administration has demonstrated a shared commitment to confronting the climate crisis through joint action, and each year has built upon the successes of those prior. Continued momentum is key to deliver on the Alliance's climate commitments.

Going Further, Faster, Together 37



HIGHLIGHTING SOLUTIONS across the alliance

In June 2024, Maryland Governor Wes Moore signed an executive order to advance Maryland's Climate Pollution Reduction Plan. The order directs a whole-of-government approach to address climate change, including requiring agencies to submit a Climate Implementation Plan by Nov. 1, action to propose new emissions standards, and the creation of the Governor's Subcabinet on Climate.

Photo Credit: Office of Maryland Governor Wes Moore

Continuing to Advance Bold Climate Action

Throughout 2024, Alliance members have worked individually and together to advance bold, high-impact actions across 10 key policy areas: GHG targets and governance, buildings, climate finance, electricity, industry, just transition and equity, natural and working lands, pricing carbon and valuing damages, resilience, and transportation. This chapter includes some of the newest and most groundbreaking actions that Alliance members have taken in each policy area during the past year. These state-led climate efforts are being deployed at scale to cut emissions, safeguard public health, grow the economy, and build climate resilience. For the most up-to-date, in-depth look at climate actions across each policy priority, explore the <u>U.S. Climate Alliance Policy Database</u>.

(P)	GHG Targets & Governance	40
Щē	Buildings	45
E	Climate Finance	50
4	Electricity	59
	Industry	66
	Just Transition & Equity	72
	Natural & Working Lands	80
ñ	Pricing Carbon & Valuing Climate Damages	85
∰ \$ \$	Resilience	88
\$	Transportation	94



Continuing to Advance Bold Climate Action

GHG Targets & Governance

Alliance members are setting ambitious climate targets, developing and implementing detailed action plans, adopting programs that reduce emissions simultaneously across multiple sources, tracking progress, and engaging with communities, businesses, and other stakeholders to chart a path toward a net-zero future.

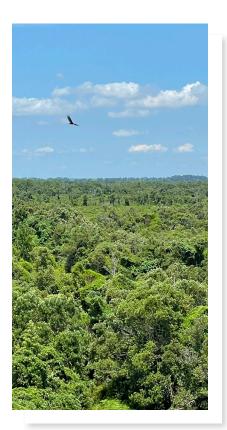


Photo credit: U.S. Climate Alliance

Member Action

The table below includes the number of members that have adopted — or are in the process of adopting — statutory and executive policies and actions. These counts are current as of September 2024.

Policies	# of Members
State climate action plans	24
Lead by Example programs and goals	23
Economy-wide GHG goals	20
Net-zero GHG goals	14

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

data.usclimatealliance.org

GHG Targets and Governance

During the past year, Alliance members have worked to secure a net-zero future by crafting ambitious new climate action plans, implementing cross-sectoral emissions reduction programs, launching climate-centered governance structures, and tracking progress toward their climate goals.

Measuring Progress

Alliance members continue to expand their capacity to measure progress and use data to set goals that are both ambitious and achievable, establish their most important climate priorities, and identify opportunities to increase action across the public and private sectors alike. For example, California enacted the Climate Corporate Data Accountability Act, which requires California businesses with over \$1 billion annual revenue to disclose both their direct and indirect GHG emissions.¹⁵⁷

In March 2024, all 24 Alliance states and territories submitted priority climate action plans¹⁵⁸ to EPA as part of the Climate Pollution Reduction Grants (CPRG)159 program, outlining a series of bold actions they can advance that are backed by a baseline GHG inventory assessment. This submission marked a pivotal moment in GHG quantification for several Alliance members - Arizona,160 Guam,161 Illinois,162 and **Michigan**¹⁶³ — all of whom either had not previously or regularly conducted statewide GHG emissions inventories. Thirteen other members, in addition to their participation in the CPRG program, published updated statewide emissions inventories: California, 164 Colorado,¹⁶⁵ Connecticut,¹⁶⁶ Delaware,¹⁶⁷ Hawai'i,¹⁶⁸ Maine,169 Massachusetts,170 New Jersey,171 New York, 172 North Carolina, 173 Pennsylvania, 174 Rhode Island,¹⁷⁵ and Vermont.¹⁷⁶ Other examples include:

Delaware: Published its 2023 Implementation Report: Delaware's Climate Action Plan,¹⁷⁷ which provides a comprehensive review of key progress in implementing the state's first-ever climate action plan, published in 2021. Publication of this document was also the first milestone in the state's *Climate Change Solutions Act of 2023*.¹⁷⁸



Maine: Published its *Maine Won't Wait* annual report, which tracks the state's progress toward key climate actions and milestones and casts attention to the future as the state works to deliver an updated climate action plan by the end of this year.¹⁷⁹ Maine also released its 2024 inventory report, which shows that as of 2021, the state had reduced its gross GHG emissions to 30 percent below 1990 levels, surpassing its medium-term goal of 10 percent reductions. Further, this newly available 2021 data shows that the state's lands sequestered a greater proportion of its gross GHG emissions (91 percent) than previous years, placing Maine squarely on the path toward carbon neutrality.¹⁸⁰

See more info on the Climate Policy Database:

https://data.usclimatealliance.org/action/2040 https://data.usclimatealliance.org/action/2071 Massachusetts: Published its Massachusetts Climate Report Card, which tracks the progress the commonwealth is making to achieve its climate goals, supporting public accountability and transparency. The assessment finds that overall, Massachusetts has made significant progress and is well positioned to meet its 2025 GHG target, but a strong policy response to existing and emerging challenges will be needed to meet its ambitious 2030 targets.¹⁸¹

Michigan: Published its *MI Healthy Climate Plan 2023 Report*, which found that, at just over 18 months after its issuance, many of the plan's goals had already been codified via legislation or advanced via executive actions, state budget investment, and federal funding.¹⁸²

North Carolina: Released the state's 2023 Climate Strategy Reports, as called for in Executive Order 80, Executive Order 246, and the NC Climate Risk Assessment and Resilience Plan. These reports outline cabinet agencies' respective climate vulnerabilities and mitigative actions.¹⁸³

Rhode Island: Released its 2021 GHG inventory which shows that, in alignment with nationwide post-pandemic trends, the state's emissions rebounded by 8.9 percent in 2021.¹⁸⁴ However, the state's emissions are still trending downward over a longer timescale. With a now 14.4 percent decrease from 1990-level emissions in 2021 (down from 20.1 percent in 2020),¹⁸⁵ Rhode Island is still in compliance with its 10 percent emissions reduction goal as mandated by the 2021 Act on Climate and continues to take action that ensures its 2030 targets remain achievable.

Vermont: Conducted its first life cycle analysis of energy sector emissions from 1990 to 2020, which will be updated annually as required by law. 186

Wisconsin: Released Wisconsin's 2024 Clean Energy Plan Progress Report, ¹⁸⁷ the second progress report released since the state's first-ever clean energy plan was published in 2022. The progress report outlines major actions taken by the state, local and Tribal governments, and the private sector to achieve Wisconsin's clean energy goals and continue momentum towards Governor Evers' goal of ensuring all electricity consumed in Wisconsin is 100 percent carbon-free by 2050.

Mapping Pathways to Long-Term Decarbonization

With ambitious emissions-reduction targets fast approaching in the coming years, several Alliance members have published updated climate action plans — in addition to their CPRG priority climate action plans — to meet the moment. Examples include:

Colorado: Released its Colorado Greenhouse Gas Pollution Reduction Roadmap 2.0, which finds that absent any new policy action after 2026, Colorado will meet its 2030 goal of reducing emissions by 50 percent from 2005 levels in 2031. The roadmap outlines 49 near-term administrative, regulatory, and rulemaking commitments that will continue to drive these emissions reductions in every sector through the end of the second Polis administration.¹⁸⁸



Guam: Invited residents to participate in community engagement events during June 2024 to contribute to the *Guåhan 2050 Sustainability Plan*, a roadmap and vision for Guam's future related to sustainable growth, development, and conservation.¹⁸⁹

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/2069

Hawai'i: Pursuant to Act 238, published its *Hawai'i Pathways to Decarbonization* report, which stresses that the state's emissions reduction targets — 50 percent below 2005 levels by 2030 and net-negative by 2045 — remain unchanged. The report presents aggressive scenarios to reach these targets that, while challenging, are potentially attainable with shared commitment, coordinated investments, and capitalization of near-term opportunities.¹⁹⁰



Photo credit: Office of Colorado Governor Jared Polis

Michigan: Signed a memorandum of understanding with Argonne National Lab to map Michigan's industrial emissions and research, develop, demonstrate, and deploy technologies that support industrial decarbonization, battery manufacturing and recycling, and more.¹⁹¹

Maryland: Published *Maryland's Climate Pollution Reduction Plan*, which lays out policies that are together projected to achieve the state's near-term goal of 60 percent emissions reductions from 2006 levels by 2031. Having already achieved its 30 percent emissions reduction target in 2020, this plan will maintain the state's momentum and put Maryland on a path to achieve net-zero emissions by 2045.¹⁹²

New Jersey: Directed agencies to update the state's energy master plan, which was developed to institute a statewide clean energy plan and help the state shift away from energy production that contributes to climate change. Informed by interagency collaboration and stakeholder feedback, the 2024 plan will incorporate a capital cost and rate impact analysis, as well as provide an overview of the state's progress toward achieving 100 percent clean energy by 2035 and an 80 percent reduction in greenhouse gas emissions by 2050, among other key clean energy and climate goals and benchmarks.¹⁹³

Leading by Example

Alliance governors are prioritizing a whole-ofgovernment approach to comprehensive, equitable, and lasting climate solutions. Examples include:



Connecticut: Opened the state's first net-zero executive branch building, the Western District Headquarters for the Department of Energy and Environmental Protection. The building features geothermal heating and cooling, rooftop solar panels, low-carbon concrete, smart building controls, heating and ventilation innovations, and more. The building will use 40 percent less energy and 50 percent less water than a building designed to comply with current baseline building and energy codes.¹⁹⁴

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/2067

Colorado: Established the Office of Sustainability within the Department of Personnel to work with state agencies and higher education institutions to implement and track progress toward meeting state climate goals, implementing sustainable procurement methods, installing energy-efficient equipment, meeting building performance standards, planning and constructing EV charging infrastructure, and reviewing and coordinating state agencies' applications for elective pay funding available under IRA.¹⁹⁵

Hawai'i: Announced the inauguration of a Climate Advisory Team comprising experts and stakeholders who will develop a comprehensive roadmap for the state's strategy to mitigate the financial impact of climate change. 196

Maine: Through Executive Order 5, set new efficiency, clean energy, and low-carbon materials standards for state-owned and leased buildings.¹⁹⁷ The state also received a Building Resilient Infrastructure and Communities grant from the Federal Emergency



Photo credit: Office of Rhode Island Governor Daniel McKee

Management Agency to conduct a climate vulnerability assessment of state-owned assets and develop agency-specific guidance for climate risk management.

Maryland: Through Executive Order 01.01.2024.19,¹⁹⁸ directed state agencies to advance Maryland's climate pollution reduction plan with a whole-of-government approach to address climate change, including requiring agencies to submit a climate implementation plan by November 2024, new emissions standards, and the creation of the governor's subcabinet on climate. Maryland also announced its first chief sustainability officer and chief resiliency officer, who together will work with state agencies to ensure the state meets its bold climate and environmental goals.¹⁹⁹

Minnesota: Minnesota's Office of Enterprise
Sustainability reported that Minnesota's state government operations achieved a 38 percent reduction in GHG emissions in 2023, compared to a 2005 baseline. With a goal of a 50 percent reduction by 2030, Minnesota's state government operations are more than three-quarters of the way to reaching their goal for emissions reductions.²⁰⁰ Many agencies, including the departments of administration, corrections, human services, military affairs, natural resources, transportation, veterans affairs,

and the Metropolitan Council have installed onsite solar to reduce operating costs and reduce emissions.

New York: Held its annual New York State Electric Vehicle Fleet Event, which showcases how the state is working to meet its goal of a 100-percent electric fleet of light-duty vehicles by 2035 and medium- and heavy-duty vehicles by 2040.²⁰¹

North Carolina: Through Executive Order 305, established native plant and "no net-loss" of wetlands and forests policies for new state construction projects and Department of Transportation right of ways.²⁰²

Rhode Island: Held its seventh annual Lead by Example Awards, where 20 state entities, municipalities, and public schools were recognized for renewable energy and energy efficiency achievements that are paramount in achieving 2021 Act on Climate goals.²⁰³



Continuing to Advance Bold Climate Action

Buildings

Alliance members are committed to decarbonizing the buildings sector, including collectively achieving zero-emission new construction as soon as practicable, accelerating efforts to eliminate emissions from existing buildings, and collectively quadrupling heat pump installations across the coalition by 2030.

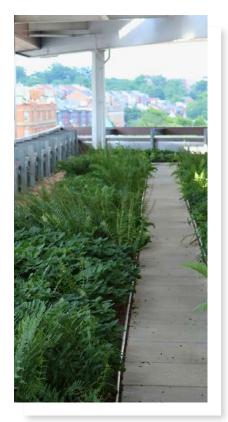


Photo credit: U.S. Climate Alliance

Member Action

The table below includes the number of members that have adopted - or are in the process of adopting - statutory and executive policies and actions. These counts are current as of September 2024.

Policies	# of Members
Energy efficiency resource standards	21
Appliance efficiency standards	14
Statewide building performance standards	4
Clean heat standards	4
Emissions-based equipment standards	4

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

data.usclimatealliance.org

Buildings

Direct and indirect emissions from buildings account for more than 30 percent of total U.S. GHG emissions. Although indirect emissions have decreased since 2005 due to a cleaner grid, direct building emissions have increased 8 percent since then. ²⁰⁴ During the past year, Alliance members have addressed this challenge head-on by developing and implementing innovative new policies that accelerate building decarbonization efforts, while identifying pathways that ensure the support and prioritization of vulnerable and low-income households and communities. By addressing the barriers to decarbonization faced by residents, building operators, contractors, and others, states and territories are also delivering benefits for families and communities — including lower energy costs, improved public health and well-being, and increased resilience.

Adopting Next-Generation Appliance and Equipment Efficiency Standards

Alliance members have accelerated the transition to safer and more efficient equipment and appliances by adopting next-generation efficiency standards. States that have adopted these standards are also helping consumers save money on their energy and water bills. Examples include:

California: Adopted first-in-the-nation flexible demand appliance standards for pool controls, enabling load shifting to reduce GHG emissions while supporting grid reliability and saving consumers money. ²⁰⁵ This is the first of many planned standards to advance load flexibility across the state. California also advanced measures for water and energy efficiency related to landscape irrigation, indoor plumbing fixtures, and commercial food service equipment.

Minnesota: Passed legislation ending the sale of fluorescent lamps, reducing unnecessary risks to building maintenance and custodial staff, waste and recycling workers, certain retail workers, and anyone in proximity to fluorescent lamps.²⁰⁶

Washington: Enacted the *Clean Lighting Bill* to reduce the threat of mercury exposure from breakages of mercury-containing fluorescent lamps, save consumers money on utility bills, and accelerate the transition to LED lighting solutions.²⁰⁷ Washington also updated its appliance efficiency standards to include residential ventilating fans and air purifiers.²⁰⁸

Adopting More Efficient Building Codes and Standards

Up-to-date residential and commercial building codes and standards are an integral tool in addressing the building sector's GHG emissions. Through IRA, the U.S. Department of Energy is investing \$1 billion in funding for states, territories, and local governments to adopt, implement, and enforce these codes and standards, 209 and Alliance members across the country are working to secure and deploy these funds to advance their efforts. Once allocated, this funding will support the adoption of the latest model energy codes, zero energy codes, and building performance standards. Other examples include:



Photo credit: Office of Washington Governor Jay Inslee

California: Secured \$2 million through IIJA to improve code enforcement and compliance by digitizing and automating the compliance documentation process. Enacted the *Building Energy Savings Act* to require the state to establish a building performance standard for energy efficiency improvements and emission reductions in large buildings by July 2026.²¹⁰ Lawmakers also passed the *Drought Resistant Buildings Act*,²¹¹ which establishes the California Buildings Standards Commission, tasked with developing and proposing mandatory building standards that strengthen potable water demand requirements for new buildings to 25 percent below current required levels, and minimize the use of potable water for non-potable uses.

Colorado: Approved Xcel Energy's first clean heat plan,²¹² which approves \$440 million in investments for building electrification, energy efficiency measures, and recovered methane, which together are expected to save the state up to 778,000 tons of GHG emissions annually. The plan is in response to 2021 legislation mandating that gas distribution utilities cut emissions 22 percent below 2015 levels by 2030. The state also began implementing new statewide requirements for local governments so that when they update any aspect of a building code, they adopt an energy code that meets or exceeds both IECC 2021 and a state EV ready, electric ready, and solar ready code.²¹³

EV-ready requirements for multifamily housing were also incorporated into the state electrical code.

Maryland: Proposed building energy performance standards²¹⁴ intended to reduce net GHG emissions 20 percent by 2030, as compared with 2025 levels for average buildings of similar construction and achieve net-zero direct emissions by 2040.



Massachusetts: Released a draft clean heat standard program²¹⁵ framework that includes standards for full electrification projects and annual requirements for electricity, natural gas, heating oil, and propane.

See more info on the Climate Policy Database: https://data.usclimatealliance.org/policy/1932

New Mexico: Enacted building code updates in January 2024 to ensure new homes are better suited for EV charging by requiring that outlets in garages are appropriate for EV charger installation. The updated codes also require multifamily buildings to set aside certain percentages of parking spaces able to accommodate EV charging, ensuring that home charging infrastructure is available to both renters and homeowners alike.²¹⁶

Advancing Building Decarbonization Through Planning and Innovation

Alliance members are making progress in decarbonizing the buildings sector through pathways that meet the specific needs of their states and territories. These pathways include energy efficiency programs and resource standards, utility planning, and renewable portfolio standards. Examples of planning and innovation include:

California: Enacted a Low Carbon Product Standard²¹⁷ that facilitates a credit trading platform for building materials and establishes a compliance system to reduce the carbon intensity of newly constructed buildings by the end of 2026.

Colorado: Enacted HB 24-1370 to require the Colorado Energy Office to designate pilot communities for neighborhood scale projects to replace gas service with electrification or thermal energy networks, where utilities and communities would work together to provide alternative thermal energy as an alternative to investment in gas system upgrades.²¹⁸

Maryland: Enacted HB 864 to align the state's successful energy efficiency program, EmPOWER, with the state's goal of reducing emissions 60 percent by 2030 and reaching net-zero emissions by 2045. ²¹⁹ The updates to EmPOWER will ensure additional businesses and households are able to access and install energy-efficient appliances.



Photo credit: Logan Bonjean, Unsplash



Michigan: Enacted new legislation that increases the state's energy efficiency standard for electric utilities from 1 to 1.5 percent (with corresponding increases for gas utilities) to help ratepayers reduce energy costs. This legislation requires a minimum of 25 percent of energy efficiency spending go toward low-income communities, allows electrification and whole-home energy improvements to be supported by energy efficiency programs, requires the assessment of electrification and energy efficiency, and encourages utilities to recruit, hire, and train people from low-income communities to do weatherization and energy efficiency work. 220 Governor Whitmer also enacted a law that invalidates overly restrictive homeowners associations, whose rules have prevented homeowners from installing technologies that would save them money while lowering energy use and emissions.221

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/1871

New Mexico: Approved the Public Service Company of New Mexico's 2024-26 energy efficiency and load management plan to move forward cost-effective energy and demand saving programs for residential and business customers while also adding an all-electric new construction pilot to lower utility bills, improve comfort, improve air quality, and reduce emissions.²²²

New York: Held a technical conference on utility thermal energy networks.²²³ The state's Public Service Commission also adopted an initial regulatory framework to advance thermal energy networks as an innovative solution to building decarbonization.²²⁴

Washington: Enacted HB 1589 requiring the state's largest utility to file plans outlining how it will meet statutory emissions requirements on or after January 2026, and every four years afterward, to achieve net-zero by 2050.²²⁵ The plans must contain programs to advance gas decarbonization for customers, use



Photo credit: Office of Maine Governor's Energy Office

alternative energy to the maximum practicable extent, meet cost targets, and include leak reductions.

Investing in Building Efficiency Upgrades and Electrification Programs

Alliance members continue to push for rapid and expansive investments in building decarbonization while upholding their commitments to ensuring a just and equitable transition. States across the coalition are leveraging \$8.8 billion in IRA funds to launch rebate programs that will help households save money on home improvement projects and lower their energy bills. Examples include:

Colorado: Announced \$7.7 million in awards to support 35 innovative projects to install geothermal heat pumps in buildings, study and develop interconnected geothermal systems between buildings, and test and confirm geothermal resources for zero-emissions electricity generation. The state also implemented new tax credit programs for air source and ground source heat pumps and thermal energy networks and awarded over \$415 million in grants for public building electrification and neighborhood scale electrification.

Hawai'i: Received the 2024 ENERGY STAR Partner of the Year Award for Energy Efficiency Program Delivery from EPA and DOE for the state's energy conservation program.²²⁷ Managed by the Hawai'i Public

Utilities Commission, the Hawai'i energy program was recognized for its work to help deploy ENERGY STAR products and best practices that increased sales of energy-efficient heat pump water heaters, refrigerators, and EV charging stations, as well as building energy benchmarking and affordability programs.

Maryland: Committed \$90 million to help electrify low- and middle-income households, install EV charging in underserved communities, and purchase and lease electric school buses.²²⁸ More than half the funds will go toward electrifying hospitals, schools, multifamily housing, and other community buildings.

New Jersey: Initiated proceedings and directed each electric public utility and gas public utility in the state to propose energy efficiency programs for the second three-year cycle of programs, implemented pursuant to the *New Jersey Clean Energy Act of 2018*. The Energy Efficiency Triennium 2 Framework addresses goals, targets, performance incentive mechanisms, energy savings carryover, building decarbonization start-up programs, and demand response programs.²²⁹

California: Launched the California Heat Pump Partnership, a public-private partnership that brings together state policy leaders, heat pump manufacturers, retailers, distributors, power providers, and other key market stakeholders to leverage the influx of federal and state incentives to rapidly scale the heat pump market and support Governor Newsom's momentous goal to install six million heat pumps by 2030.²³⁰



Continuing to Advance Bold Climate Action

Climate Finance

Alliance members are deploying a wide range of financial policies and programs, leveraging diverse funding sources, and partnering across the public and private sectors to finance the net-zero transition.



Photo credit: Office of New Jersey Governor Phil Murphy

Member Action

The table below includes the number of members that have adopted — or are in the process of adopting — statutory and executive policies and actions. These counts are current as of September 2024.

Policies	# of Members
Solar for All programs	23
Green and/or resilient infrastructure banks	18

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

data.usclimatealliance.org

Climate Finance

Mobilizing public and private financing for climate action is key to not only tackling the crisis – it also drives economic growth in climate and clean energy fields while creating millions of good-paying jobs. Over the past year, Alliance members have taken steps to harness historic federal investments, leverage clean energy tax incentives (Box 2), establish consumer rebate programs, stand up financing institutions, and fund local and Tribal solutions that can reduce emissions and strengthen climate resilience.

BOX 2 Harnessing IRA Tax Incentives in State Government



Photo Credit: U.S. Climate Alliance

Alliance members are working to take full advantage of IRA's climate and clean energy tax incentives, which make up two-thirds of the law's total investments. Importantly, IRA creates a new tax mechanism known as "elective pay" that empowers tax-exempt entities, including states, to directly file with the Internal Revenue Service to

receive payments for clean energy infrastructure upgrades made across state-owned assets for projects placed in service in 2023 and onward.²³¹ Throughout 2024, members across the coalition have been actively developing plans to utilize elective pay to help finance the deployment of clean energy and clean technology within their

states — in close partnership with municipalities, Tribal governments, and eligible nonprofits — including through technical assistance, bridge loans, education, and more.



Photo credit: Office of Michigan Governor Gretchen Whitmer

Finance Programs

Green banks help states leverage a combination of federal, state, and private sector funds to offer low-interest loans, grants, and other credit enhancements for projects that reduce emissions and build a cleaner economy. The EPA's Greenhouse Gas Reduction Fund (GGRF), established under IRA, is investing \$27 billion to create a national climate financing network to expand clean technology financing and build capacity to deploy these technologies, while prioritizing low-income and disadvantaged communities and cutting emissions (Box 3).²³² To maximize this unprecedented level of financing and accelerate climate action, Alliance members have established new green and resilient infrastructure banks of their own and expanded financial offerings that can be coupled with GGRF investments. Examples include:

Connecticut: Expanded two of the Connecticut Green Bank's flagship financing offerings for homes and commercial buildings, the Smart-E and C-PACE programs, to include projects related to climate adaptation, resiliency, and water infrastructure. ²³³ These additions allow home and building owners to protect their properties against extreme weather events and potential losses from climate change. The new measures added to the Smart-E and C-PACE programs are among the first steps forward in the Green Bank's environmental infrastructure scope expansion.

Massachusetts: Launched the Energy Saver Home Loan Program at the Massachusetts Community Climate Bank, ²³⁴ a new \$20 million program that will help low- and moderate-income homeowners make clean energy improvements to their homes. ²³⁵ The loan program will expand the accessibility of clean energy home improvements by employing flexible underwriting requirements and repayment structures that will lower monthly costs while also providing homeowners with wraparound customer service.

Michigan: Announced designation of the Michigan Department of Environment, Great Lakes, and Energy and the Michigan Economic Development Corporation as State Energy Financing Institutions by the U.S. DOE's Loan Programs Office (LPO). Through this joint program, the state will be able to provide funds for large-scale clean energy and industrial decarbonization projects eligible for LPO financing. ²³⁶ In partnership with Rewiring America, Michigan launched a Michigan-specific calculator to help homeowners and renters estimate how much they can save with clean energy incentives and tax credits created by IRA and other state, local, and utility programs. ²³⁷

Minnesota: Enacted legislation in fall 2023 establishing and funding the Minnesota Climate Innovation Finance Authority, a publicly accountable financing authority focused on catalyzing clean energy financing in



Photo credit: Office of Minnesota Governor Tim Walz

historically underserved communities. In 2024, the Minnesota Climate Innovation Finance Authority board convened to shape its strategy and approved its first project loan.²³⁸ Minnesota also adopted a climate roadmap for its State Board of Investment, which manages \$142 billion in state funds and is chaired by Governor Tim Walz.²³⁹ Among other efforts, the Board will invest \$1 billion over the next five years in companies related to the clean energy transition.

New Jersey: Created the New Jersey Green Bank, which will make investments in the clean energy sector to help advance the state's efforts to make an equitable transition to 100 percent clean energy. The New Jersey Green Bank will make clean energy investments through debt, credit enhancements, and other financial vehicles to attract private capital, and will be dedicated to investing in projects, technologies, and companies that align with the state's climate goals, such as zero-emissions transportation, building decarbonization and resiliency, and clean energy generation and storage.²⁴⁰

New Mexico: Created the New Mexico Climate Investment Center, which will issue low-interest loans to local projects aimed at reducing emissions, primarily by leveraging federal dollars under the GGRF.²⁴¹ Governor Lujan Grisham also signed HB252 into law, which creates tax credits for advanced manufacturing, clean cars and charging infrastructure, and geothermal heat pumps.²⁴²

New York: Created the Community Decarbonization Fund, a \$250 million wholesale lending pathway available to community development financial institutions and mission-driven lenders to enable them to provide more capital to eligible projects benefiting residents of disadvantaged communities. The fund gives applicants significant flexibility in the form of a 12-year loan to work with community owners and climate advocates to identify funding opportunities that meet greenhouse gas reduction goals.²⁴³

Rhode Island: Launched a \$2.6 million Energy Efficiency Conservation Block Grant Program that will help reduce emissions and community energy use while improving facility efficiency for municipalities.²⁴⁴



Wisconsin: Established the state's first Green Innovation Fund to finance clean energy and other projects in accordance with Governor Evers' Executive Order #195.²⁴⁵ Additionally, the Wisconsin Economic Development Corporation appointed a vice president of productivity and sustainability who is working to shape the fund's structure, governance, and strategic planning. The Wisconsin Economic Development Corporation is actively building a portfolio of clean energy projects throughout the state that could be supported by the fund.

See more info on the Climate Policy Database: https://data.usclimatealliance.org/policy/1356

BOX 3 Delivering the Benefits of Residential Solar to All Communities



Photo credit: Office of Maine Governor Janet Mills

The Biden-Harris administration is making unprecedented investments in state-led programs aimed at expanding residential solar in low-income and disadvantaged communities. These investments, created by IRA, are enabling households nationwide to overcome financial

and technical barriers to accessing distributed residential solar.

Alliance members are partnering with the federal government to ensure all households can benefit from this clean energy resource in their homes. This year, 23 Alliance members collectively secured

nearly \$3 billion through the EPA Solar for All program to deploy residential solar energy across the country. This historic program will help hundreds of thousands of low-income households save money and energy, while boosting resilience, improving public health, and creating high-quality jobs.



WASHINGTON Governor Jay Inslee

All is a game changer for America and a giant leap toward a more just and equitable transition," said Washington Governor Jay Inslee. "This record investment from the Biden administration will save hard-working families billions on their energy bills, improve health, and support local jobs and businesses — and the Alliance's governors are ready to deliver."



MAINE Governor Janet Mills

"Access to technology like solar and energy storage is critical to ensure the benefits of low-cost, clean energy are shared by people across Maine and the nation," said Maine Governor Janet Mills. "The Solar for All program provides an enormous opportunity to generate clean, home-grown energy while delivering significant cost savings for millions of Americans and accelerating clean energy job growth."

"Every community deserves clean, affordable, reliable energy, and Solar for

BOX 3 Continued: Delivering the Benefits of Residential Solar to All Communities

These funds were deployed through IRA's Greenhouse Gas Reduction Fund. Examples of how Alliance members are leveraging these investments include:²⁴⁶

Arizona



Executive Office of the State of Arizona (\$156,120,000): Solar for All Arizonans will create multiple innovative market mechanisms that accelerate distributed solar deployment in low-income and disadvantaged communities on rooftops, in neighborhood solar projects, and in solar-plus-storage systems.

Colorado



Colorado Energy Office (\$156,000,000): COS4A is an income-qualified program that will support all three installation types described in the EPA's program application guidance: single-family rooftop solar, multifamily rooftop solar, and community solar (for residential subscribers).²⁴⁷ The program will work with competitively selected, industry-leading partners to deliver, install, operate, and manage solar assets.

Guam



Guam Department of Administration (\$62,450,000): The program will provide access to renewable energy solutions to low and moderate-income households in Guam, especially focusing on homeowners who have been barred from investing in solar energy due to financial constraints.

Hawai'i



The Hawai'i Green Infrastructure Authority (\$62,450,000): This program will include on-bill financing for the installation of solar and storage systems on single-family dwellings and multifamily rental projects. Solar for All funds may also be used to finance residential-serving community solar projects with up to 5 MW nameplate capacity that deliver at least 50 percent of the power generated from the system to multiple residential customers within the same utility territory.

Maine



Maine Governor's Energy Office (\$62,120,000): The Maine Governor's Energy Office will provide financial and technical assistance enabling low-income and disadvantaged households across the state to access solar and energy storage. This award will also support workforce development opportunities ensuring quality clean energy jobs for disadvantaged communities.

Minnesota



Minnesota Department of Commerce (\$62,450,000): The Minnesota Commerce Department Division of Energy Resources will support residential-serving solar for low-income and disadvantaged households in communities across Minnesota, including the federally recognized Tribal communities that share the same geography.

BOX 3 Continued: Delivering the Benefits of Residential Solar to All Communities

New Jersey



New Jersey Board of Public Utilities (\$156,120,000): New Jersey's Solar for All award is anticipated to enable the state to deploy more than 175 MW of solar energy to benefit 22,000 overburdened households within the first five years of funding. The award also has the potential to result in 240,000 short tons of carbon dioxide (CO_2) emission reductions — approximately \$250 million in total energy bill savings over 30 years for residents in newly connected households — and to enable 90 MWh of associated storage through the board's multifamily solar program. This investment will enable New Jersey to support solar access for multifamily affordable housing, establish pathways to residential solar ownership for low-income disadvantaged community households, expand community solar initiatives, and spur solar workforce development to enable critical grid upgrades to support more solar generation in New Jersey. 248

New Mexico



New Mexico Energy, Minerals & Natural Resources Department (\$156,120,000): To help overcome existing barriers to widespread adoption of distributed solar generation, this program, designed to serve low-income and disadvantaged communities — both owners and renters, will bring the most isolated and off-grid residents, such as unelectrified homes, online and support grid resilience with onsite solar.

New York



New York Energy Research and Development Authority (NYSERDA) (\$250,000,000): In April 2024, Governor Hochul announced that New York was selected to receive nearly \$250 million for solar projects benefitting low-income residents. The grant funding, awarded to NYSERDA on behalf of a coalition of state partners, will allow New York to enhance its portfolio of highly successful and effective solar deployment, technical assistance, and workforce development programs as a part of the NY-Sun initiative. NYSERDA will also implement new programs that target specific barriers to solar deployment for low-income New Yorkers.²⁴⁹

North Carolina



North Carolina State Energy Office (\$156,120,000): Created the EnergizeNC coalition, a partnership between the North Carolina State Energy Office, North Carolina Clean Energy Fund, North Carolina Advanced Energy, and the North Carolina State University Clean Energy Technology Center, braiding together Solar For All funding, Department of Energy Home Energy Rebates, IRA tax credits, and additional financial support options to deliver whole-home solutions to disadvantaged communities.

Rhode Island



Rhode Island Office of Energy Resources and Commerce (\$49,330,000): The Solar for All Affordable Solar Access Pathways (ASAP) program focuses on providing access to affordable rooftop solar to low-to-moderate income communities in environmental justice areas, both addressing the urgent need for renewable energy and prioritizing those who have historically been underserved in the solar marketplace.

Washington



Washington State Department of Commerce (\$156,120,000): Washington will expand solar access to income-qualified residents and frontline communities through several programs, including a program focused on single-family homeowners, a program that helps multifamily affordable housing properties access other state and federal solar incentives, and a program focused on Tribal solar deployment.

BOX 3 Continued: Delivering the Benefits of Residential Solar to All Communities

Vermont



Vermont Department of Public Service (\$62,450,000): Vermont will expand access to residential solar by providing the incentives, organizational structures, and policies needed to install residential solar on the roofs of low-income and disadvantaged homeowners, affordable housing residents, and renters.

Wisconsin



Wisconsin Economic Development Corporation (\$62,400,000): Wisconsin's Solar for All program will support deployment of solar systems for low- and moderate-income households across the state as Wisconsin continues to work to build an economy for all. Wisconsin also celebrates the Midwest Tribal Energy Resources Association's Solar for All award, which will serve Tribal nations across the Midwest, including up to eight Tribal nations located in Wisconsin.^{250,251}

Funding Local Climate Solutions

Given the significant investments needed to address the climate crisis, states are prioritizing climate spending in their annual budgets. For example:

California: Approved \$1,550,000 in grant funds to maximize local government and Tribal government participation in statewide planning related to Senate Bill 100, the 100 Percent Clean Energy Act of 2018. The grant program will provide \$1,050,000 to California Native American Tribes for participation in statewide clean energy infrastructure planning and development activities, and \$500,000 to local government entities to develop new or updated land use planning documents that support clean energy development in their jurisdiction.²⁵²

Connecticut: Secured \$25 million in state funds for heat pump deployment as well as an amendment of the \$125 million state bond-funded multifamily housing retrofit pilot program to include both loans and grants for projects that support energy efficiency or address health concerns or safety barriers to energy upgrades in environmental justice communities.²⁵³

Michigan: Signed a fiscal year 2025 budget deal that includes over half a billion dollars to help implement

each sector strategy of the MI Healthy Climate Plan, including funding to deploy EV and hydrogen fueling infrastructure, incentivize the purchase of e-bikes, support regenerative agriculture, and expand funding for the state's nonprofit green bank.²⁵⁴ The state also announced the Battery and Advanced Manufacturing Challenge, a \$125 million investment that offers matching grants for battery and advanced manufacturing projects to help bring federal infrastructure funding for transformative projects to Michigan.²⁵⁵



New Mexico: Appropriated a historic \$300 million for the Land of Enchantment Legacy Fund in the state's fiscal year 2025 budget, establishing the first long-term funding stream for land and water conservation, agriculture, and outdoor recreation projects.²⁵⁶

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/1739



Photo credit: Office of North Carolina Governor Roy Cooper

New York: Enacted a budget that will plant 25 million trees by 2033, create the Resilient & Ready Program to protect New Yorkers from future storms, develop a state climate adaptation plan, and provide \$400 million for climate change mitigation projects, water source protection, conservation efforts, and recreation opportunities.²⁵⁷ This historic budget builds upon the success of the \$4.2 billion *Clean Water, Clean Air and Green Jobs Environmental Bond Act* that was overwhelmingly approved by New Yorkers in 2022.²⁵⁸

North Carolina: Appropriated \$200 million to flood resiliency and environmental conservation in the 2023–2025 biannual budget, including \$10 million to the Resilient Coastal Communities Program, \$30 million for a new disaster relief and mitigation fund, and \$20 million for a new coastal storm damage mitigation fund.²⁵⁹

Washington: Allotted over \$3.2 billion to climate, environmental, and conservation programs in its 2023–2025 biennial budget, including resources to help reduce energy costs for low-income families, advance emerging clean energy technology, electrify ports, and install solar photovoltaic arrays over irrigation canals in partnership with the Yakama Nation.²⁶⁰

Vermont: Allocated climate action funds representing new and expanded resources in fiscal year 2024, totaling \$501,963,654. Much of the increase in state funding was supported through federal funding that passed through to state agencies as state dollars, especially funding from the *American Rescue Plan Act*.²⁶¹

Increasing Transparency in Climate Spending

Alliance members are working to raise public awareness and increase transparency in the levels of federal and state-level climate spending across the country, with an eye toward ensuring the public fully understands how investments are being spent to tackle the climate crisis and benefit all Americans — particularly those in low-income and disadvantaged communities. Examples include:

Maryland: Published its first annual report on state agencies' spending on emissions reduction activities, as required by the *Climate Solutions Now Act* of 2022, with the aim of ensuring equitable outcomes and tracking the levels of funding directed toward disadvantaged communities.²⁶²

New Mexico: Released the New Mexico Federal Funding Dashboard,²⁶³ a public tool that can be used to track how federal dollars are being spent across the state.²⁶⁴

New York: The New York Green Bank issues quarterly and annual reports on the impact of its investments in relation to advancing clean energy goals and delivering benefits to disadvantaged communities. 265,266 Moreover, the state's Department of Public Service released its first annual report outlining progress towards, and the costs and benefits of, the climate and clean energy goals enshrined in New York's *Climate Leadership and Community Protection Act*. 267

Rhode Island: Launched a public dashboard tracking heat pump deployment and spending across the state, including commercial, residential, and income-eligible rebate access over time. 268



Continuing to Advance Bold Climate Action

Electricity

Alliance members are developing policy pathways and programs to decarbonize the electricity grid, including establishing interim targets and identifying opportunities to better align planning and procurement processes for generation, distribution, and transmission resources with our collective climate goals.



Photo credit: Dennis Schroeder, NREL

Member Action

The table below includes the number of members that have adopted — or are in the process of adopting — statutory and executive policies and actions. These counts are current as of September 2024.

Policies	# of Members
Clean electricity standards	24
100% clean electricity goals	19
Offshore wind goals	9
Energy storage goals	8

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

data.usclimatealliance.org

Electricity

Growing demands on America's electricity system, including the expansion of domestic manufacturing, increased adoption of electric vehicles, and growth of large data centers, are posing new challenges and opportunities as Alliance members continue working to decarbonize the grid. Addressing emissions from electricity generation is also critical to support decarbonization of the transportation, buildings, and industrial sectors, which all depend on rapid electrification. Alliance members continue to expand and modernize their distribution and transmission systems and deploy more zero-carbon energy sources to support this transition and deliver more affordable, clean, reliable, and resilient energy to their communities.

Progressing Toward 100 Percent Clean Energy

Transitioning to 100 percent clean energy is critical to reducing overall GHG emissions and strengthening U.S. energy independence. Alliance members continue to drive clean energy progress forward, including by adopting ambitious clean electricity goals that exceed national standards, expanding proven clean energy programs, utilizing key federal programs like Solar for All, and undertaking intentional planning and procurement processes to advance their clean energy goals. Examples include:

Colorado: Enacted legislation to extend the state's community solar program and help capture additional federal IRA funds. ²⁶⁹ The law will increase bill savings for income-qualified households, reserve capacity for community solar paired with storage, and prioritize projects sited on rooftops and brownfields. It also seeks to increase benefits to the grid by reserving half of community solar capacity for projects paired with storage. Colorado also began implementing investment tax credits for geothermal electricity development.

Connecticut: Adopted legislation to encourage more solar investments through new studies on community

solar, solar canopies, and municipal solar projects and a new uniform capacity tax for solar.²⁷⁰

Illinois: The Illinois Commerce Commission adopted the state's first Renewable Energy Access Plan,²⁷¹ an actionable roadmap to ensure the state meets its policy requirements for an equitable, reliable, and cost-effective clean electricity system.

Maryland: Through Executive Order 01.01.2024.19, directed the Maryland Energy Administration to establish a framework for a clean energy standard to achieve 100 percent clean energy by 2035 and directed the state to work with Regional Greenhouse Gas Initiative states to establish a new regional cap for carbon dioxide emissions from power plants that aligns with Maryland and partner states' 100 percent clean energy goals.²⁷²

Michigan: Adopted a sweeping package of clean energy policies, including a 100 percent clean energy standard by 2040, a 60 percent renewable energy and 2,500 MW storage standard by 2030; strengthened energy efficiency standards; expanded access to rooftop solar; and streamlined the process for wind, solar, and storage project permitting.²⁷³ Michigan also launched the Renewables Ready Community

program, the community Renewable Energy Academy, and other programs to provide incentives and technical assistance to communities who choose to host large-scale and community-serving renewable energy projects.²⁷⁴ Governor Whitmer enacted laws that require an assessment of the potential for the electrification of transportation, buildings, and industries; energy waste reduction; and demand response consistent with the state's climate goals.²⁷⁵

New Jersey: Enacted A4782/S3123 to further strengthen New Jersey's Community Solar Energy Program, which helps individuals without the ability to install solar on their rooftops access the benefits of clean energy while also lowering their energy bills.²⁷⁶ In the largest state solar solicitation award to date, the new Competitive Solar Incentive Program awarded 310 megawatts of solar, and the first state-incentivized energy storage project, following several record years for solar capacity installation in New Jersey. Among the awards is a 95 MW project, the largest solar project in the state to date, at the lowest cost per megawatt to ratepayers.²⁷⁷

New Mexico: Enacted HB91 to establish the Geothermal Projects Development Fund, designed to boost the development and deployment of geothermal energy resources across the state.²⁷⁸ This initiative aims to support innovative geothermal projects, enhance energy diversification, and contribute to New Mexico's clean energy goals.

New York: Announced the completion of the South Fork Wind project off the coast of New York. It is expected to generate enough renewable energy to power approximately 70,000 homes. New York also announced the start of construction for Sunrise Wind, which will power approximately 600,000 homes once completed in 2026, and authorization for the construction of Empire Offshore Wind, which will power approximately 388,000 homes once completed.^{279,280}

Pennsylvania: Announced Governor Josh Shapiro's legislative proposal entitled the Pennsylvania Reliable Energy Sustainability Standard, ²⁸¹ requiring the state to procure 50 percent of its electricity from a diverse range of energy resources by 2035, including 35 percent from clean energy sources like solar, wind, small modular reactors, and fusion; 10 percent from sustainable sources like large hydropower and battery storage; and 5 percent from ultra-low emission forms of natural gas and other alternative fuels.



Photo credit: Office of Pennsylvania Governor Josh Shapiro

Puerto Rico: Received the first tranche of resources through the Puerto Rico Energy Resilience Fund. The U.S. Department of Energy awarded a group of solar companies and nonprofits up to \$440 million to install rooftop solar and battery storage systems for vulnerable households in Puerto Rico, which will help lower energy bills for 30,000 to 40,000 single-family households and help the territory achieve its 100 percent renewable energy goal by 2050.

Vermont: Updated its Renewable Energy Standard in 2024 to accelerate the transition to carbon-free electricity, requiring most utilities to source 100 percent of their electricity from renewable sources by 2030.²⁸³ Under its provisions, all utilities must make the switch by 2035. The law also requires utilities, over time, to purchase about 20 percent of their energy from in-state renewable sources and an additional 20 percent from renewable sources in the region that can send power directly into the New England grid.



Photo credit: Bureau of Ocean Energy Management

Developing Offshore Wind

In 2021, the Biden-Harris administration established a target of deploying 30 gigawatts of offshore wind energy by 2030, and 15 gigawatts of floating offshore wind energy by 2035.²⁸⁴ Alliance members have made progress toward these goals — as well as their own state-level offshore wind targets — by developing wind energy resources in tandem with federal actions that accelerate offshore wind leasing. Examples include:

California: Adopted an Offshore Wind Energy Strategic Plan which establishes planning goals for floating offshore wind in federal ocean waters of up to 5 gigawatts by 2030 and 25 gigawatts by 2045. Dedicated over \$52 million to upgrade state ports to serve offshore wind activities. Provided over \$3 million for comprehensive environmental monitoring and research to develop offshore wind energy responsibly and maintain ecosystem protections and adaptive management. Advanced transmission approvals and plans and procurement policy to help build a robust floating offshore wind market in California, and to reach decarbonization, clean electricity, and climate goals.²⁸⁵

Connecticut, Massachusetts, and Rhode Island: Announced New England's first offshore wind multistate coordination memorandum of understanding, which creates a pathway for a potential coordinated selection of offshore wind as each state solicits offshore wind energy generation through their respective state procurements.²⁸⁶ This memorandum is the first of its kind in the United States.



Delaware: Enacted the *Delaware Energy Solutions Act*,²⁸⁷ which authorizes the State Energy Office to issue solicitations to procure offshore wind, sets a target of generating 1,200 megawatts of electricity from offshore wind farms, and increases options for interconnecting renewable energy resources to the transmission grid.

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/1891

Maine: Selected a section of the state-owned Sears Island reserved for port development as its preferred site for a port facility to support the floating offshore wind industry.²⁸⁸ The proposed port would be a purposebuilt facility for floating offshore wind fabrication, staging, assembly, maintenance, and deployment.

Maryland: Executed a memorandum of understanding with the U.S. Department of the Interior's Bureau of Ocean Energy Management²⁸⁹ to advance Maryland's offshore wind development in the Central Atlantic.²⁹⁰ The agreement will help the state build a more robust supply chain; create more jobs for Marylanders; and support more coordinated, resilient, and sustainable development of offshore wind generation.

New Jersey: The state's Research and Monitoring Initiative awarded nearly \$3.7 million in funding for scientific research projects that ensure ecologically responsible development of offshore wind energy.²⁹¹ The third solicitation for offshore wind generation capacity awarded 3,742 MW of capacity that will



Photo Credit: Peter Robbins, Unsplash

bring \$6.8 billion in economic benefits to New Jersey and provide enough domestically produced energy to power 1.8 million homes.²⁹² The state also opened its fourth solicitation for 1.2 to 4 GW of offshore wind generation capacity and announced plans to move up the fifth solicitation opportunity to 2025, a year earlier than previously planned.²⁹³

New York: Launched its fifth large-scale offshore wind procurement. The state also awarded \$4 million in grants for offshore wind training and workforce development to support eight State University of New York campus-led programs that will expand workforce development and training initiatives for jobs in constructing, manufacturing, installing, operating, and maintaining offshore wind farms.²⁹⁴ To date, New York has awarded \$8 million in Offshore Wind Training Institute grants to State University of New York campuses.



Oregon: Enacted HB 4080, which directs the Department of Land Conservation and Development to develop an Offshore Wind Roadmap that supports effective stakeholder engagement, local and regional coastal communities, the creation of an offshore wind energy workforce, protection of Tribal resources, and the achievement of state energy and climate policy objectives. The law also requires strong labor and supply chain standards.

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/2082

Modernizing Transmission and Distribution Grid Systems

Reaching the goal of a decarbonized grid will require significant investment in the transmission and distribution system. In 2024, Alliance members have taken important steps to improve transmission planning, siting, permitting, and cost allocation methodologies. For example, 22 states committed to the Federal-State Modern Grid Deployment Initiative²⁹⁵ and will work with the federal government to speed improvements to the electric grid. Participants in this initiative have committed to work together and with the federal government to support the adoption of high-performance conductors and grid-enhancing technologies, such as dynamic line ratings, to bolster the capacity of America's electric grid to meet current and future demands more effectively.²⁹⁶ Other examples of grid improvements include:

Arizona: Enacted HB 2003, which allows for the replacement of existing transmission lines, conductors, or wires without seeking a new certificate of environmental compatibility — making it faster and easier to expand transmission of renewable energy without disturbing additional lands.²⁹⁷

Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Rhode Island, and Vermont: Along with New Hampshire, signed a memorandum of understanding to establish a framework for coordinating activities to improve interregional transmission planning and development.²⁹⁸ The Northeast States Collaborative on Interregional Transmission is a first-in-the-nation effort to explore mutually beneficial opportunities to increase the flow of electricity among three different planning regions in the Northeast and assess offshore wind infrastructure needs and solutions. The collaborative will also produce



Photo credit: U.S. Department of Energy

a strategic action plan for promoting the development of interregional transmission projects for offshore wind resources to be harnessed off the Northeast coast and delivered to communities as clean, reliable power.

California: Received over \$600 million from the Grid Resilience and Innovation Partnership program to invest in grid-enhancing technologies, accelerate clean energy deployment, and invest in workforce training programs throughout the state. CHARGE 2T, the California Harnessing Advanced Reliable Grid Enhancing Technologies for Transmission program, will be implemented by the California Energy

Commission, the California Public Utilities Commission, the California Independent System Operator, and the state's two largest electric utilities, Pacific Gas & Electric Company and Southern California Edison.

Colorado: Enacted SB 218, which will modernize Colorado's grid planning to facilitate necessary infrastructure investment, promote a strong workforce, and ensure the state's largest utility meets its obligation to serve customers in a timely manner consistent with the state's climate goals and regulations. This bill also creates a virtual power plant program to support deployment of flexible grid technologies like battery storage and ties utility cost recovery to performance metrics.²⁹⁹ The state also enacted SB 212, which increases state technical assistance to local governments for renewable energy and transmission siting.³⁰⁰

Connecticut, Maine, Massachusetts, Rhode Island, and Vermont: Received an award of \$389 million through the competitive U.S. Department of Energy Grid Resilience and Innovation Program.³⁰¹ Power Up New England brings together all six New England states (including New Hampshire), ISO New England, two transmission companies (Eversource Energy and National Grid), and an emerging storage developer (Form Energy) to deploy an integrated portfolio of replicable, grid-benefitting technologies across the region. The project will include new and upgraded points of interconnection for up to 4800 MW of offshore wind and a multi-day energy storage system to increase electric reliability and resilience, diversify New England's resource mix, accelerate the region's clean energy transition, reduce energy burden on consumers, and deliver innovative models for further investments in New England and other regions.

Michigan: Took sweeping actions to improve the state's distribution grid and remove barriers to clean energy adoption, including requesting a comprehensive audit of regulated utility's distribution systems, enhancing interconnection rules and procedures, and establishing a performance-based rates proposal. 302,303 Michigan's Public Service Commission also approved an expedited review process for pilot programs to accelerate innovation and commercialization of new clean technologies and business models to support the rapid transformation of Michigan's energy system. 304



Minnesota: Enacted SF 4942, which will consolidate the state's permitting requirements into a single law and shorten the timeline for state regulators to review and permit projects. It creates two separate processes: a standard review for smaller wind and solar projects and power lines, and a major review for larger projects such as major transmission lines or power plants. Governor Walz also signed the omnibus transportation bill with new language allowing for the co-location of new high-voltage electric transmission in all existing Minnesota state and interstate highway corridors, providing guidance on prioritizing such corridors as a preferred route for new projects. 306

See more info on the Climate Policy Database:

https://data.usclimatealliance.org/action/1781 https://data.usclimatealliance.org/action/1900

New Mexico: The New Mexico Renewable Energy Transmission Authority (RETA) announced a first-of-its-kind memorandum of understanding with the Federal Permitting Improvement Steering Council to provide federal permitting support to RETA-supported projects that also qualify for coverage under the council's FAST-41 program.³⁰⁷

New York: Enacted the fiscal year 2024–2025 state budget, which included the governor's proposed Renewable Action through Project Interconnection and Deployment (RAPID) Act, designed to accelerate the clean energy transition by streamlining transmission infrastructure buildout. The RAPID Act also directs the New York State Department of Public Service to evaluate how to improve the process for interconnection of distributed energy resources.308 Additionally, the Public Service Commission launched its Grid of the Future proceeding first announced by Governor Hochul in her 2024 State of the State to study and develop flexible resources across New York's electric grid. The proceeding will enable the deployment of more distributed energy resources and virtual power plants that can provide resiliency

and flexibility services, improve grid reliability, and drive down costs for utility customers.³⁰⁹

Wisconsin: Awarded \$3 million through the U.S. Department of Energy Transmission Siting and Economic Development program to increase staff capacity and resources to accelerate its review of certain MISO Long Range Transmission Planning Tranche 1 Projects in the state, including three high-voltage transmission lines.³¹⁰ The Public Service Commission of Wisconsin will also increase its outreach and engagement with the public, improve its coordination with other siting entities, and develop plain language educational materials on high-voltage transmission lines.

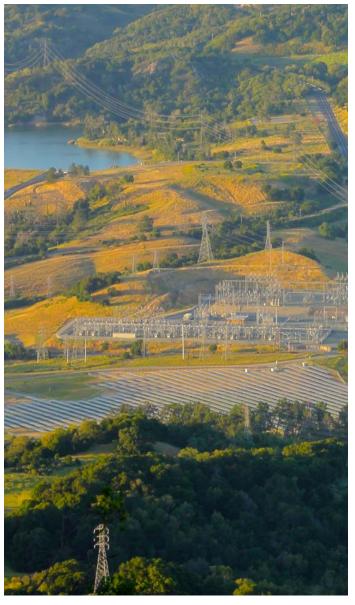


Photo credit: U.S. Department of Energy



Continuing to Advance Bold Climate Action

Industry

Alliance members are establishing innovative policy frameworks for eliminating GHG emissions from the industrial sector and its supply chains while fostering the growth of a strong, domestic clean manufacturing economy.

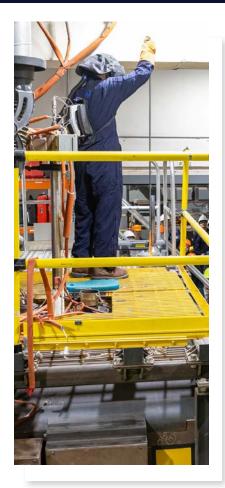


Photo credit: Office of Massachusetts Governor Maura Healey

Member Action

The table below includes the number of members that have adopted — or are in the process of adopting — statutory and executive policies and actions. These counts are current as of September 2024.

Policies	# of Members
Standards and programs to phase-down hydrofluorocarbons (HFCs)	11
Standards and programs to reduce methane from oil and gas, landfill, and agricultural sources	10
Buy Clean standards, studies, and incentive programs	9
Standards to reduce GHG emissions from industrial facilities	5

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

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Industry

The industrial sector — which includes manufacturing, mining, construction, and agriculture — is the third-largest source of greenhouse gas emissions in the United States. Projections indicate that it will become the highest-emitting sector by the 2030s, even after accounting for impacts of new federal laws. 311 Many industrial sources emit methane and hydrofluorocarbons (HFCs), which — although atmospherically short-lived with respect to CO_2 — are extremely potent greenhouse gases. Compared to CO_2 , methane has a warming effect that is 28-34 times stronger over a 100-year period and up to 86 times stronger over a 20-year period, while some HFCs are more than 10,000 times more potent over a 100-year period. 312 Reducing emissions from the highly polluting industrial sector is critical to meeting the goals of the Paris Agreement, as well as to advancing environmental justice, ensuring domestic competitiveness, and creating new good-paying jobs.

Investing in and Planning for a Decarbonized Industrial Future

Thanks to IIJA and IRA, the federal government is making historic investments in decarbonizing the industrial sector, including \$6 billion for industrial decarbonization demonstration projects, \$400 million in efficiency projects, \$8 billion in clean hydrogen production, and \$800 million in carbon capture and storage. Alliance members continue to create a policy environment that complements and builds on these federal efforts. State actions include creating tax incentives and grants to support key decarbonization pathways, releasing new industry-focused reports and climate plans, and advancing industrial decarbonization laws and regulations. Examples include:

California: Opened solicitations for the California Energy Commission's Industrial Decarbonization and Improvement of Grid Operations program, which will incentivize industrial projects that benefit the electric grid, electrify fossil-fueled processes, or utilize clean energy and storage, among others.³¹⁴

Colorado: Announced details for the first Colorado Industrial Tax Credit Offering competitive application cycle, making it one of the first states in the nation to offer tax credits for industries to invest in emissions reduction projects.315 The Colorado Energy Office also announced its first round of awardees for its Clean Air Program grants, awarding a total of \$3 million to help industry implement electric and steam-generating heat pumps.316 The Colorado Air Pollution Control Division announced it was seeking feedback on a new regulatory framework to reduce emissions from midstream oil and gas operations, which will inform a rule proposal targeting facilities that gather, compress, and process natural gas.317 Finally, Governor Polis enacted a law that further expands the regulatory authority of the state's Energy and Carbon Management Commission, in addition to defining and clarifying pore space ownership for carbon sequestration activity.318

Illinois: Enacted the Safety and Aid for the Environment in Carbon Capture and Sequestration Act, establishing an extensive framework for managing carbon capture activity in the state. The law requires capturing facilities



Photo credit: Office of New Mexico Governor Michelle Lujan Grisham

to store more carbon than they produce, creates a two-year CO₂ pipeline moratorium to allow federal safety regulations to finalize, clarifies pore space ownership, and requires injecting companies to monitor and report sequestration for 30 years in addition to paying into a state liability fund.³¹⁹

Maryland: Announced the availability of \$4.4 million through its Commercial, Industrial & Agricultural Grant Program for industrial and agricultural entities proposing efficiency, electrification, and combined heat and power upgrades.³²⁰

New Mexico: Announced plans to create a first-of-its-kind strategic water supply to increase drought resilience and advance clean energy production and storage. 321 The strategic water supply will support the nation's transition to renewable energy by providing resources for water-intensive processes around creating green hydrogen, storing energy produced by wind and solar, and manufacturing electric vehicles, microchips, solar panels, and wind turbines — all without putting further strain on the state's diminishing freshwater resources.

New York: Announced a \$16 million hydrogen and clean fuel program to support research, development, and demonstration projects and help leverage federal

hydrogen funding opportunities, promoting the use of clean hydrogen in industrial processes, clean transportation, energy storage, and for grid support.³²² Additionally, the New York State Energy Research and Development Authority announced the sixth round of its Commercial and Industrial Carbon Challenge, a competitive program to provide \$10 million in funding for industrial decarbonization projects.³²³



Pennsylvania: Governor Shapiro joined EPA Administrator Michael Regan to announce the commonwealth will receive \$396 million to develop and implement a statewide industrial decarbonization grant program known as Reducing Industrial Sector Emissions in Pennsylvania (RISE PA), which will provide funding for industries to reduce emissions and benefit the health and safety of surrounding communities.³²⁴

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/2101

Washington: Released a report assessing opportunities and challenges to advancing green electrolytic hydrogen and hydrogen-derived fuels in the state, including detailed modeling of anticipated demand for green hydrogen as part of Washington's path to a net-zero economy. 325 The state's commerce department also launched a \$67 million community decarbonization grant program, which included "hard to decarbonize sectors" like industry and manufacturing as eligible applicants, 326 and is conducting a statewide programmatic environmental impact statement analyzing green hydrogen facilities to identify impacts and mitigation for project developers. 327

Creating Markets for Low-Carbon Industrial Products

While investing in clean technology solutions at the facility level is important to industrial decarbonization,

another key approach is driving demand for low-carbon products. State and federal governments procure roughly half of the concrete and one-fifth of the steel purchased in the United States. ³²⁸ In 2023, Alliance states partnered with the Biden-Harris administration to launch the Federal-State Buy Clean Partnership, a collaboration aimed at sending a harmonized demand signal to the market and incentivizing the manufacture of low-carbon construction materials. ³²⁹ During the past year, 13 Alliance states convened with each other and with multiple federal agencies to shape new funding opportunities and programs, share best practices, and promote new policies. Examples include:

California, Oregon, and Washington: Along with cities and provinces in Canada, released the Pacific Coast Collaborative's (PCC) Vision and Action Plan to promote a regional low-carbon construction sector. This plan is the output of the PCC's Low Carbon Construction Task Force, launched at COP26 in 2021.

Colorado: Released its maximum acceptable global warming potential limits for materials covered by the *Buy Clean Colorado Act*³³¹ and finalized its tax incentives for low-embodied carbon building materials that meet these limits.³³²



New York: Adopted a first-in-the-nation Buy Clean Concrete mandate for state agencies. These rules establish emissions limits on concrete used in state-funded public building and transportation projects.³³³

See more info on the Climate Policy Database: https://data.usclimatealliance.org/policy/1656

Washington: Enacted HB 1282 — the *Buy Clean, Buy Fair Act* — which requires the reporting and tracking of GHG emissions associated with the manufacture of several building materials for large state construction projects, and establishes a work group with environmental, government,

industry, and labor partners that will support the transition to low-carbon construction.³³⁴

Mitigating Methane Emissions

Reducing methane is a key strategy for meeting national and international climate goals. This effort has been a primary focus during recent international climate conferences, including COP27 and COP28. During the past year, important new federal methane mitigation regulations and programs - particularly in the oil and gas sector — were advanced by EPA, DOE, and the U.S. Department of the Interior. Alliance co-chair and New Mexico Governor Michelle Lujan Grisham joined Biden-Harris administration officials at COP28 to help announce EPA's final rule tackling methane emissions in the oil and gas sector, as her state's regulations served as a foundation for the federal rule.335 At the event, Governor Lujan Grisham highlighted that emissions from New Mexico's oil and gas sector are now half of those in Texas per unit of production, following the state's leading methane and ozone regulations on the sector.³³⁶ Additional Alliance members are building on this momentum and advancing policies of their own, seeking new partnerships and addressing methane from the waste sector and agricultural sources. Other examples include:

California: Announced an expansion of its Subnational Methane Action Coalition at COP28. The effort, which was initially announced in September 2023 during Climate Week, has expanded to 15 signatories, which include jurisdictions from Bolivia, Brazil, Canada, Germany, South Korea, Spain, and the United States (Colorado).³³⁷

Colorado: Published the Oil and Natural Gas Intensity Verification Protocol in May 2024 that defines how upstream operators must develop measurement informed inventories for methane.³³⁸ The state also received \$43M in grants from the Methane Emission Reduction Program and Climate Pollution Reduction Grant Program to address methane emissions from oil and gas marginal wells, increase and continue methane monitoring, and develop methane reduction strategies for natural seeps, landfills, and coal mines.



Photo credit: Office of Pennsylvania Governor Josh Shapiro

Michigan: Plugged more than 200 orphaned and abandoned wells in less than a year, surpassing the total plugged over the previous decade combined.³³⁹

New York: Announced a \$21 million program for on-farm projects through the Concentrated Animal Feeding Operation (CAFO) Enhanced Nutrient and Methane Management Program, which will help CAFO-permitted farmers implement projects that enhance manure management systems for nutrient management while addressing methane and nitrous oxide emissions to benefit water quality and reduce emissions. The program also supports advancements in precision feed management to further improve nitrogen and phosphorus use efficiency and reduce livestock methane emissions.³⁴⁰

New Mexico: The Oil Conservation Division continues to operate five full-time plugging rigs, plugging 156 wells over fiscal years 2023 and 2024. The division is eligible for up to \$72 million in BIL formula grants to tackle the approximately 1,700 known and likely orphan wells on state and private land.

Pennsylvania: Announced that the Shapiro administration had plugged 100 orphaned and abandoned wells in just 10 months, surpassing the total plugged over the previous six years combined. More

than 350,000 orphan wells in Pennsylvania account for almost 8 percent of state methane emissions.³⁴¹



Washington: Finalized a rule to reduce methane emissions from landfills, which yield an estimated emissions benefit of 1.6 million metric tons of carbon dioxide annually. The Washington State Department of Ecology is also establishing a new grant program to help landfill owners and operators reduce emissions by meeting new standards for monitoring, testing, and reporting. More than \$9.6 million in grant funds generated by the *Climate Commitment Act* will be available in summer 2024.

See more info on the Climate Policy Database: https://data.usclimatealliance.org/policy/852



Photo credit: Office of Washington Governor Jay Inslee

Phasing Down Hydrofluorocarbons (HFCs)

Since the American Innovation and Manufacturing Act was enacted in 2020, Alliance states have focused on providing input and feedback to EPA on the development and implementation of HFC phasedown rules. Additionally, Alliance members continue to push for the inclusion of additional regulated end uses, global warming potential (GWP) thresholds, and refrigerant management programs in HFC policies at the state level. Examples include:

New Jersey: Enacted a law ensuring that lower-GWP refrigerants can be used in accordance with state and local building construction codes.³⁴⁴ New Jersey joins 16 other Alliance states that have adopted similar code language to enable the use of alternative refrigerants.

New York: Filed draft regulations to strengthen its existing HFC regulations that aim to drive further emissions reductions, particularly in the food retail sector. The regulations align with ongoing progress in deploying low-GWP refrigerant alternatives. New York also filed draft regulations to regulate sulfur hexafluoride, including phaseout of its use in the utility industry. New York's Department of Environmental Conservation recently announced funding for demonstration projects in retail food stores in disadvantaged communities that successfully deployed natural alternatives to HFCs in their refrigeration equipment, leading to lower emissions and energy savings. The department also released for public review and comment draft eligibility and

guidelines to allocate funding under the \$4.2 billion *Clean Water, Clean Air and Green Jobs Environmental Bond Act* of 2022 to support food security in disadvantaged communities. This program would leverage Bond Act funds to support the phaseout of harmful greenhouse gas emissions currently used as refrigerants in markets, grocery stores, and other facilities for food storage.³⁴⁷

Washington: Adopted rules updating Washington's HFC regulations. The new rules establish new maximum GWP thresholds for HFCs used in new stationary refrigeration and air conditioning equipment, small cans of refrigerant, and other products while also establishing a refrigerant management program with registration, leak inspection, leak repair, recordkeeping, and reporting requirements for owners or operators of large stationary refrigeration and air conditioning systems.³⁴⁸

Wisconsin: Enacted 2023 Wisconsin Act 76 ensuring Wisconsin heating, ventilation, air conditioning, and refrigeration manufacturers will be able to use EPA-approved refrigerants designated as appropriate alternatives to HFCs.³⁴⁹

Vermont: Awarded nearly \$1 million to the Vermont Energy Investment Corporation to provide incentives for grocers, convenience stores, and other facilities that require refrigeration for perishable products within the state to transition to lower GWP and/or natural refrigerants and install leak-detection systems to reduce refrigerant emissions from existing systems.



Continuing to Advance Bold Climate Action

Just Transition & Equity

Alliance members are partnering with frontline communities to develop climate and clean energy solutions, directing significant expenditures to create environmental and economic benefits for vulnerable and overburdened populations, and accelerating the development of a climate-ready workforce, including by collectively supporting 1 million new workers in completing Registered Apprenticeship programs across the coalition by 2035.



Photo credit: U.S. Department of Energy

Member Action

The table below includes the number of members that have adopted — or are in the process of adopting — statutory and executive policies and actions. These counts are current as of September 2024.

Policies	# of Members
Environmental justice screening and policy tools	20
Environmental justice offices or interagency bodies	18
Just transition offices or interagency bodies	11

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

data.usclimatealliance.org

Just Transition and Equity

As the nation transitions to a net-zero future, the policy decisions made today will be critical to ensuring the transition is just and equitable, addresses environmental inequities, and advances community-led solutions to the climate crisis. Alliance states and territories are working to ensure the benefits of historic climate investments and actions reach frontline communities that have disproportionately borne the burden of climate pollution and climate impacts. Alliance members have partnered with communities to develop just climate solutions; direct significant funding toward capacity building and environmental justice-focused programs; and develop a diverse, equitable, and inclusive climate-ready workforce.

Expanding Workforce Capacity and Training

Career pathways in climate-ready fields are growing rapidly. This includes job creation in the clean energy and clean technology sectors - such as solar, wind, electric vehicles, energy efficiency, and batteries along with opportunities for employment in roles that strengthen climate resilience and deploy natural climate solutions. To achieve a just transition, it is critical that all Americans, including those in underrepresented and underserved communities and those disproportionately impacted by climate change and the energy transition, have access to these climate-ready careers. Alliance members have adopted policies, made critical investments, and established new programs to expand pathways into high-quality employment that can support workers and their families throughout their careers (Box 4). Illinois, Michigan, New Mexico, and Vermont this year launched new state-based climate corps programs that provide skills-based training to support entry into climate-ready careers. 350,351 Other examples include:

California: Allocated \$50 million of IIJA funding to support the development of the California Workforce Development Board's High Road Construction Careers program. This program prioritizes partnerships that

link local building and construction trades councils to workforce boards, community colleges, and community-based organizations, creating structured pathways — with a standard core curriculum and critical supportive services — to state-certified apprenticeships in a variety of crafts. 352,353 The state also awarded \$26.7 million to shape training programs aimed at assisting workers impacted by the clean energy transition, helping prepare them for sectors that match their skills and offer comparable wages, including renewable energy, high-technology, construction, advanced manufacturing, and nanotechnology. Programs supported by these grants will not only provide training and job opportunities but may also facilitate general support services for workers during their transition into new stable roles that offer long-term growth potential. 354

Guam: Announced the fourth cohort of the Guam Green Growth Conservation Corps, who will undergo training in various sustainability-related areas, including agriculture and aquaculture, island beautification, invasive species removal, reforestation, circular economy practices, recycling, and renewable energy.³⁵⁵

Hawai'i: Launched the state's pilot career and technical education program for 2023–2024 school year, providing a framework for incorporating career

exploration, including those in clean energy, into high school curricula. The Hawai'i State Energy Office and the Hawai'i community colleges also continue to make substantial strides in the Good Jobs Hawai'i Challenge, launched in 2023, to support workforce education and training programs, pre-job experience, and job placement in clean energy.³⁵⁶

Massachusetts: Launched the Climate Careers Fund, an innovative cross-sector collaboration designed to support workforce training in climate-ready careers by filling workforce gaps, increasing access to economic mobility for workers, and supporting a diverse clean energy workforce. The initial fund pilot, which aims to reach \$10 million, will bring together public and private funding to support high-quality training programs providing a pathway to good-paying, in-demand climate jobs such as heating, ventilation, air conditioning, and refrigeration technicians; electricians; energy auditors; and electric vehicle mechanics, among others.³⁵⁷

Michigan: Passed a law creating and launching the Community and Worker Economic Transition Office, which will lead the development of a statewide plan to increase awareness of, and decrease barriers to, the high-tech, high-paying jobs coming into the state related to EV manufacturing and clean energy development.358 In partnership with U.S. DOE, Michigan established a \$50 million small supplier grant program to support auto suppliers in retooling their facilities to transition to electric vehicles and designated the state as an EV workforce hub to ensure Michigan workers have a pathway to good careers within their communities through equitable access to highquality training, education, and support services. 359 Additionally, Governor Whitmer issued Executive Directive 2024-1, which sets a goal to train 5,000 new infrastructure workers with industry-recognized certificates, credentials, or on-the-job training with a focus on infrastructure jobs created by IRA and IIJA.³⁶⁰ Michigan also enacted laws that created some of the nation's strongest labor protections for clean energy projects including requiring at least prevailing wage, project labor agreements, and the use of DOLcertified registered apprenticeship programs.361,362

New Jersey: Launched the \$7 million Green Workforce Training Grant Challenge to prepare New Jersey residents for green economy careers and fund wraparound services.³⁶³ The New Jersey Department of Labor and Workforce Development will invest \$10



Photo credit: Office of Illinois Govenor JB Pritzker

million to expand apprenticeship training centers to meet the growing need for skilled workers. Both initiatives focus on advancing diversity, equity, and inclusion and serving overburdened communities. The state also adopted the final regulations to implement its landmark Environmental Justice Law, the first in the nation, aimed at reducing pollution in historically overburdened communities and communities of color that have been subjected to a disproportionately high number of environmental and public health stressors.

New Mexico: Awarded \$1.5 million in U.S. DOE funding for the Training for Residential Energy Contractors program, designed to enhance residential contractors' skills and improve and strengthen existing programs for HVAC technicians, electricians, plumbers, and energy auditors. Additionally, through the *Energy Transition Act*, New Mexico assisted communities affected by the closure of the San Juan generating station in Waterflow, New Mexico. The program provided direct assistance to alleviate immediate and emergency expenses for displaced workers and then provided wage differential assistance and funding for direct training and apprenticeship programs to upskill and retrain displaced workers.³⁶⁶

BOX 4 U.S. Climate Alliance Launches Governors' Climate-Ready Workforce Initiative



Photo credit: U.S. Climate Alliance

At Climate Week NYC, Alliance governors were joined by Biden-Harris administration leadership to launch the Governors' Climate-Ready Workforce Initiative, a new initiative aimed at accelerating the development of a climate-ready workforce and expanding career pathways for new and existing workers into rapidly growing, in-demand climate fields. Through the new initiative, states and territories will collaborate on a series of collective commitments and goals, including boosting job quality in climate-ready professions, building a substantially more diverse workforce, strengthening workers' economic mobility, and ensuring a sufficient supply of skilled workers equipped to help the U.S. achieve a clean, equitable, and resilient net-zero future.

Recognizing that Registered
Apprenticeships are an especially
valuable and proven workforce
training model, empowering
workers to earn while they learn
in key climate-ready occupations
and industries, Alliance members
will work to collectively support 1
million new workers in completing
Registered Apprenticeship
programs across the coalition by
2035 as part of the new initiative.

Going forward, Alliance members will work together to advance sector-specific strategies through new multi-state cohorts focused on in-demand, climate-ready fields. These cohorts will provide a platform for states and territories to increase collaboration, share evidence-based practices, engage experts and stakeholders, and develop solutions

that can be scaled across the country. Cohorts to be launched in the initiative's first year will focus on careers in the fields of clean energy, fuels, and technologies; clean buildings and industry; and resilient communities and lands.

The initiative will be led by Alliance states and territories with support from the Alliance's Secretariat. In carrying out its goals, members will also collaborate directly with their workforce development system partners, labor unions, higher education institutions, industry, and other key partners that bring substantial expertise and experience in this work.



Photo credit: State of Maine Governor's Energy Office

New York: Announced \$11.6 million in funding to support the launch of four new programs related to workforce training, retraining, and apprenticeships preparing workers for employment in the renewable energy field, all incorporating wraparound services designed to help overcome obstacles to participation.³⁶⁷ A portion of this funding will also be dedicated to supporting local workforce development boards in helping workers transitioning from fossil fuel jobs.

North Carolina: Piloted a first-of-its kind course to train and certify technicians in the installation and maintenance of EV charging stations. The five-week Electric Vehicle Supply Equipment Field Technician Certification program was piloted at Wake Tech Community College from June 10 to July 23, 2024, with support from the North Carolina Business Committee for Education and the Siemens Foundation's EVeryone Charging Forward Initiative.³⁶⁸

Vermont: Developing a business model for a statewide weatherization training center to support weatherization and other construction trades in recruiting, training, and placing workers in careers. 369 Vermont Energy Investment Corporation and Vermont's Office of Economic Opportunity's weatherization program are partnering with Vermont Works for Women, ReSOURCE, Vermont Adult Learning, Vermont State University, the Energy Action Network, and others to develop this hub with a goal to diversify the workforce and bring underrepresented people into weatherization and related fields.

Wisconsin: Wisconsin's four investor-owned utilities signed a commitment with the state's building trades, electricians, laborers, carpenters, and equipment operators unions to use union workers to the fullest extent possible to build utility-scale renewable energy installations, a first-of-its-kind pledge in the nation.³⁷⁰

Supporting Community-Led Solutions to Environmental Justice Issues

It is critical that communities facing climate impacts are empowered to help shape the solutions being developed to address the crisis. States and territories have a pivotal role to play in ensuring that these communities can access and fully benefit from these solutions, including the unprecedented level of federal climate funding available through IRA and IIJA. Throughout the year, Alliance members have supported the development of community-led solutions through increased technical assistance and capacity building. Examples include:

California: Awarded more than \$100 million for 33 Tribal land projects, as part of the Tribal Nature-Based Solutions grant program. This first-in-the-nation effort supports the return of over 38,000 acres of ancestral land to Tribal stewardship and advancing nature-based solutions projects on these lands, a critical step in addressing historical wrongs committed against California Tribes.³⁷¹

Colorado: Approved Tri-State Generation and Transmission Association's electric resource plan settlement, which will offer \$70M in aid to communities in Northwest Colorado to offset the impact of closing power plants and coal mines; the utility plans to build 1,250 MW of new renewable and energy storage resources and achieve an 89 percent reduction in GHG emissions in Colorado in 2030.³⁷²



Hawai'i: In June 2024, the State of Hawai'i reached a historic agreement to the Navahine v. Hawai'i Department of Transportation case, the world's first youth-led constitutional climate case.373 The settlement agreement ultimately acknowledges the constitutional rights of Hawai'i's youth to a life-sustaining climate and confirms the commitment to plan and implement transformative changes to the Hawai'ian transportation system to achieve the state's goal of net-negative emissions by 2045. Thirteen youth from across the Hawaiian islands brought the case in June 2022, asserting their rights to a safe and healthy climate and asking the Hawai'i state government to take action to meet the climate emergency and enable Hawaiii's paradigm shift to a climate-safe, zero-emissions transportation system. Many of the plaintiffs were Native Hawai'ian youth, already experiencing climate harms to their well-being and their ability to perpetuate cultural practices.

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/2079

Michigan: Announced two new programs to support community-based organizations (CBOs), Tribal governments, and local governments in leveraging IRA and BIL funding. The Climate Justice Challenge made up to \$11 million in grant and technical assistance funding available to CBOs to maximize investments from the U.S. EPA's Climate Justice Community Change Grants. The Michigan Justice 40 Accelerator, a 12-month,

cohort-based program, designed for CBOs serving disadvantaged communities, allows participants to receive support to help successfully apply and deploy federal funding, enabling them to advance community-based clean energy and resilience projects. 374,375 Michigan also launched the state's first-ever, state funded Environmental Justice Impact Grants, a program that supports community projects designed to improve local public health, monitor pollution, and more. Eligible applicants include federally recognized Tribes, CBOs, local governments, schools, and childcare centers. 376,377

Pennsylvania: Launched the Energy Funding and Assistance Finder, an online tool to assist communities and organizations in identifying opportunities to receive funding and technical assistance for energy projects that can help reduce pollution, lower bills, and drive the adoption of new, clean, and efficient technologies.³⁷⁸

Colorado: Enacted SB24-212, which requires the Colorado Energy and Carbon Management Commission to provide technical assistance to local and Tribal governments in formulating land use codes for renewable energy projects and evaluating proposed projects. This legislation also requires the Colorado Energy Office to evaluate and report on local government permitting of renewable energy projects, as well as their community benefits. Local governments must get consent from Tribal governments before approving projects on Tribal land.³⁷⁹

Washington: Awarded over \$31 million for community-led decarbonization projects and \$11 million to community groups to support their capacity in advising the state on environmental justice. Washington also appropriated \$2 million to host community assemblies, venues to elevate community expertise, and solutions to budget- and policy-makers on sustainable investments to create a more climate-resilient Washington.

Wisconsin: Partnered with the Menominee Nation, the Lac Courte Oreilles Band of Lake Superior Chippewa, and the Great Lakes Indian Fish & Wildlife Commission, and awarded \$1.9 million from the America the Beautiful Challenge to foster effective manoomin (wild rice) management through state and Tribal intergovernmental collaboration, modeled after similar initiatives from Governor Evers' state budget proposals. The Wisconsin Department of Natural Resources and partner Tribal nations, organizations, and research partners will leverage the funding to develop strategic



Photo credit: Office of Hawai'i Govenor Josh Green

outreach, engagement, and implementation methods. Spiritually, culturally, and nutritionally important to Native Americans in Wisconsin, manoomin is particularly vulnerable to a range of climate change impacts.

Developing Statewide Capacity to Advance Environmental Justice

Alliance states and territories continue to build capacity to advance environmental justice and support a just economic and energy transition. Members are developing and updating a wide range of tools and guidance to ensure that agencies are equipped to identify disadvantaged communities within their state, prioritize their needs, and effectively report on how the benefits of new climate investments are reaching these communities. Alliance members have also established new offices and dedicated positions to ensure adequate capacity and expertise to carry out this work and develop and implement impactful climate policies and programs. Examples include:

Colorado: Enacted HB24-1338, which authorizes the Colorado Department of Public Health and Environment to carry out recommendations of

the Environmental Justice Action Task Force to address long-standing environmental injustices, including increased oversight of petroleum refineries, improved response to air pollution complaints, and an analysis of cumulative impacts of pollution.³⁸¹

Connecticut: Launched a second round of the Climate and Equity Grant Program in partnership with UConn CIRCA for community-based organizations and Tribal governments for projects that advance adaptation or mitigation efforts and, for the first time, additional funding to support participation in state climate planning meetings.³⁸²

Hawai'i: The Hawai'i Climate Change Mitigation and Adaptation Commission hired the state's first climate justice specialist to advance action on addressing the disproportionate impacts of climate change on low-income communities and communities of color especially Native Hawai'ians. The state's Energy Office hired its first energy equity coordinator, with the goal of ensuring that nobody is left behind in the state's transition to 100 percent clean energy. The energy equity coordinator's work includes developing and implementing an energy equity program, conducting policy analysis and advocacy, and coordinating with external partners.³⁸³

Maryland: Appointed its first assistant secretary for environmental justice, who will provide expert guidance to senior officials on how to advance environmental justice as a state priority.³⁸⁴ The state also launched the Just Transition Working Group, which will serve to advise the Maryland Climate Change Commission on equitable workforce development and training, including relating to energy efficient measures, transportation, natural working lands, renewable energy, and other clean energy technologies.³⁸⁵

Massachusetts: Developed the state's first-ever environmental justice strategy to ensure an equitable and just transition for all residents. The strategy addresses themes such as language access, analysis of project benefits and burdens, and meaningful community engagement, and includes various agencies' plans to embed environmental justice that is tailored to its mission.³⁸⁶

Michigan: Adopted a law that allows, for the first time ever, the Michigan Public Service Commission, the state's utility regulator, to consider nondiscrimination, equity, and environmental justice in utility resource plan



Photo credit: Office of Maryland Governor Wes Moore

decision-making.³⁸⁷ Governor Whitmer also enacted a law that expands funding for the Utility Consumer Participation Board, allowing more residents to intervene in proceedings. The law also expanded the number of cases that board members can intervene in and prioritized environmental justice communities and communities with high energy burden for grant funding.

New York: Released draft guidance for state entities to inform how they report on their compliance with the *Climate Leadership and Community Protection Act* requirement that a minimum of 35 percent, with the goal of 40 percent, of New York's clean energy investments benefit disadvantaged communities.³⁸⁸

Pennsylvania: Published the *Program Development Toolkit for Equitable Climate Action*, a toolkit designed to enable the Energy Programs Office to better prioritize the needs of environmental justice communities in the design of federal funding programs administered by the Department of Environmental Protection, and strengthen its abilities to promote climate actions that promote benefits and reduce harms within environmental justice communities.³⁸⁹ Pennsylvania also expanded its office of environmental justice team by appointing a regional environmental justice coordinator to each region of the state and expanding additional statewide support.³⁹⁰



North Carolina: Through Executive Order 292:
Advancing Environmental Justice in North Carolina, established the Governor's Environmental Justice
Advisory Council, required environmental justice goals and measurable outcomes for state agencies, and instructed the North Carolina Department of Information Technology to develop an environmental justice hub webpage, including a statewide environmental justice mapping tool. The order also called on state agencies to consider public health impacts in their permitting, policies, and programs to the furthest extent permissible by law.³⁹¹

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/1844



Continuing to Advance Bold Climate Action

Natural & Working Lands

Alliance members are scaling best practices for land management, restoration, and conservation to contribute to emissions reductions and carbon sequestration at the scale needed for deep decarbonization and, where appropriate, integrating natural and working lands into state mitigation and resilience plans with ambitious goals that center equity and prioritize actions that deliver multiple benefits.



Photo credit: Office of Wisconsin Governor Tony Evers

Member Action

The table below includes the number of members that have adopted — or are in the process of adopting — statutory and executive policies and actions. These counts are current as of September 2024.

Policies	# of Members
NWL in state GHG inventories	20
NWL conservation or sequestration goals	14
Healthy soils programs	11

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

data.usclimatealliance.org

Natural and Working Lands

The lands and waters of Alliance states and territories are essential to achieving netzero emissions by mid-century. The natural and working lands (NWL) sector — which includes farms, forests, wild areas, and coastal and ocean waters — stores the carbon equivalent of 12 percent of the Alliance's gross collective GHG emissions and provides essential benefits that include flood management, clean water, wildlife habitat, and reduction of urban heat. Yet the NWL sector is experiencing a long trend of losing stored carbon due to the impacts of climate change — including wildfires, drought, and other severe weather; land conversion to development; and other human activities. Alliance members worked to tackle this trend in 2024 by continuing to plan for, incentivize, and deploy natural climate solutions at scale, leveraging these solutions and healthy natural and working lands to support resilient communities and ecosystems.

Scaling Up NWL Ambition and Smart Land Use Planning

Alliance members have met land sector conservation goals and set new goals to enhance natural carbon sequestration, support community resilience, and protect critical habitats and biodiversity on land and in the ocean. Examples include:

Massachusetts: Through Executive Order 618, directed the state to develop biodiversity goals for 2030, 2040, and 2050. Massachusetts is the first state to set biodiversity metrics out to 2050 and the first on the East Coast to include coastal and marine biodiversity. The state also released a comprehensive work plan for the state's Forests as Climate Solutions Initiative that sets a goal to conserve 10 percent of state forests as reserves across all land ownership types, and announced a \$50 million investment in forest conservation and incentives for communities and private landowners.



California: Developed 81 nature-based solutions climate targets for 2030, 2038, and 2045 that contribute to the state's goals of achieving carbon neutrality no later than 2045 and protecting Californians from the climate crisis. As called for in Assembly Bill 1757 (2022), more than 40 state agency partners collaborated to set targets that cover California's eight kinds of land areas and include agency-specific actions that will help the state's NWLs meet the 2022 scoping plan's goal for NWL sector contributions to carbon neutrality. 393 In addition, Governor Newsom launched new partnerships with Norway, Sweden, and the Emilia-Romagna region of Italy to collaborate on climatesmart agriculture, deploying nature-based solutions, and protecting air quality and biodiversity, among other climate and clean energy efforts.394

See more info on the Climate Policy Database: https://data.usclimatealliance.org/policy/1838



Maryland: Achieved its 30 percent land conservation by 2030 goal, six years ahead of schedule. The state is developing plans to reach the 40 percent conservation goal by 2040 as required by the *Maryland the Beautiful Act*, which directs the state to conserve an additional 600,000 acres.³⁹⁵

See more info on the Climate Policy Database:

https://data.usclimatealliance.org/action/2064

Michigan: Launched the Michigan the Beautiful initiative, a collaborative process to achieve the state's 30 percent land and water conservation goal. The state accepted the White House's America the Beautiful Freshwater Challenge, a new initiative that sets national goals for wetland, river, and stream reconnection, restoration, and conservation, and calls participants to advance their own actions in support of these shared goals. Additionally, the state committed to the Trees Initiative, supporting the planting of over 250 million trees across the Midwest region by 2033. 396,397

New Jersey: Updating the 2001 state development and redevelopment plan to reflect current planning principles and best practices in the areas of land use, transportation, housing, environmental protection and enhancement, economic development, provision of public infrastructure, historic preservation, social justice, and adaptation to global climate change. The state also proposed a draft rule to modernize land resource protection statutes by prioritizing nature-based solutions and designing with nature through updates to the state's coastal zone management, freshwater wetlands protection, flood hazard area control, stormwater management, and other rules. 399

New York: Announced an initiative to plant 25 million trees throughout the state by 2033 and reduce the frequency of harmful algal blooms in the state's water bodies. As part of this effort, New York will provide annual grants to municipalities over three years to plant trees to support resilient reforestation and urban forests that mitigate potential extreme heat.⁴⁰⁰

North Carolina: Through Executive Order 305, set goals for state public and private partners to conserve 1 million new acres of forests and wetlands, restore 1 million new acres of forests and wetlands, and plant 1 million new trees in urban areas, all by 2040. The executive order, which seeks to implement many recommendations in North Carolina's 2020 Natural and Working Lands Action Plan, also sets new state policies, including a native plant policy for state-owned projects, no "net loss" of forests and wetlands, climate and biodiversity research, and promoting statewide conservation and restoration.

Wisconsin: Through Executive Order 221, committed the state to work with public, private, and non-governmental partners to increase Wisconsin's existing tree-planting goal so that 100 million trees are planted by December 31, 2030. The pledge is estimated to enable the state to store and exchange a total of 4.8 billion pounds of CO₂ per year, equivalent to approximately 11 percent of the state's current land-based carbon sink.⁴⁰²

Maximizing the Co-Benefits of NWLs

Natural and working lands provide carbon sequestration and habitat benefits, as well as substantial co-benefits for communities and landowners, including flood protection, production of local food, and support of equitable land management. Alliance members have supported these benefits by linking NWLs with policies and programs that support community resilience, just transition and equity, renewable energy production, transportation emissions, and land use planning. Examples include:

California: Awarded over \$100 million from the Tribal Nature-Based Solutions Grant Program to 33 Tribal land projects that will be used for ancestral land return, implementation of traditional ecological knowledge and Tribal expertise, habitat restoration, climate and wildfire resilience projects, and more.⁴⁰³

Colorado: Enacted legislation that aligns local and regional comprehensive plans with strategic growth goals to discourage the development of natural and agricultural lands for residential uses. 404 Colorado was also the first state to take action following the *Sackett v. EPA* decision, enacting dredge and fill regulation legislation to restore protections for state waters, including critical wetlands

and fens, which support up to 80 percent of all wildlife species in Colorado at some point in their lives. 405

Michigan: Enacted SB 277, which adds solar facilities as permitted uses for farmland under the state's *Farmland and Open Space Preservation Act*, allowing farmers more flexibility to co-locate solar on agricultural lands.⁴⁰⁶

North Carolina: Secured \$421 million in Climate Pollution Reduction Grant implementation funding to leverage carbon sequestration and climate resiliency through NWLs in partnership with Maryland, Virginia, and South Carolina. The funding will restore and protect over 200,000 acres of high-carbon peatlands, coastal marshes, and forests; reduce carbon emissions by an estimated 28 million metric tons of CO₂e by 2050; and support local agricultural and tourism economies for rural and underserved communities.⁴⁰⁷



Alliance members took significant steps to increase investments in natural and working lands in 2024, including providing historic levels of sustained funding, taking innovative approaches to financing, dedicating incentives and grants to municipalities and landowners, and cultivating collaborative investments that will help achieve multiple NWL, equity, and resilience goals. Examples of these NWL investments include:

Colorado: The state enacted legislation to create an agricultural stewardship tax credit to incentivize the implementation of qualified stewardship practices that benefit soil health, water efficiency, and ecosystems. The state also enacted legislation to increase the annual cap on conservation easement tax credits from \$45 million at present to \$50 million beginning in 2025, which will enable more land to be permanently protected under conservation easements. The legislation increased the refundable portion of these credits from \$50,000 to \$200,000 to make it more attractive to landowners.

Massachusetts: Awarded \$365,000 in grants to restore 234 acres of wildlife habitat and support biodiversity and habitat climate resiliency through its MassWildlife Habitat Management Grant Program. This program provides financial assistance to private and municipal owners of conserved lands to improve habitat for



Photo credit: U.S. Department of Energy

wildlife, steward biodiversity, enhance climate resiliency, and promote public recreational opportunities.⁴¹⁰

New Jersey: Awarded \$117 million in Green Acres funding aimed at the development and enhancement of parks and preservation of open space, as well as accessibility for differently abled children, the highest recommendation since 2009. Green Acres funding allows local governments and nonprofits to leverage millions of additional preservation dollars through matching federal, state, county, and local funds, as well as from private sources. Many of the projects recommended for funding this year address inclusivity and recreation for all, especially in overburdened communities. The state also awarded \$8.6 million in urban parks grants for park development projects serving adversely stressed overburdened communities in urban aid municipalities, prioritizing projects that enhance wetland and forest health, wildlife habitat, and utilize green infrastructure.411

New York: Appropriated a record \$81.8 million in funding for agricultural programs and initiatives to help farms implement environmentally sustainable practices and combat climate change. The Climate Resilient Farming grant program, which offered a record \$29 million in funding this year, supports projects to help farmers reduce emissions, protect water, ensure soil health, and increase on-farm resiliency to the effects of a changing climate. This year's program also includes a new funding track, agricultural forest management, with approximately \$1 million allocated to support healthy productive forests and afforestation on agricultural lands, goals that are part of the New York State Climate Action Council's Scoping Plan. 412



Rhode Island: Launched the Ocean State Climate Adaptation and Resilience Fund Program, a collaboration between the Rhode Island Department of Environmental Management, Rhode Island Coastal Resources Management Council, and Rhode Island Infrastructure Bank. This program will provide \$4 million in grants for adaptation and resilience projects on public lands that protect or enhance coastal or riverine habitats, including projects that provide public access to shorelines and riverbanks.⁴¹³

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/1906

Vermont: Passed S.213, the Flood Safety Act. This bill takes important steps to reduce the risk of future flooding and strengthen communities' resilience. The law has three main components: river corridor protections, wetland protections, and dam safety. Front and center in the law is better management of high-hazard river corridors by implementing statewide regulations to keep future development out of harm's way and allow space for rivers to store and slow floodwaters, which can help reduce flood impacts and costs for Vermonters.

Washington: Washington's *Climate Commitment Act* invested over \$161 million to support natural climate solutions in the 2024 supplemental budget, making a total biennial investment of over \$462 million. These funds invest in state and local projects to support clean water, healthy ecosystems, and natural solutions to sequestering carbon.

Wisconsin: Announced the completion of the largest forest conservation project in the state's history, permanently protecting more than 50,000 acres of the Pelican River Forest in northern Wisconsin.⁴¹⁴ Altogether, over 67,000 acres of the Pelican River Forest are now protected, ensuring the land remains forested and is sustainably managed as a working forest and continues to store approximately 19 million metric tons of CO_ae.

Improving NWLs in Greenhouse Gas Accounting

Alliance members continue to improve estimates of GHG emissions and carbon sequestration in natural and working lands, using the latest science to quantify the contribution of NWLs to net-zero goals. Examples include:

Connecticut: In response to Governor Ned Lamont's Executive Order 21-3, for the first time Connecticut included carbon sequestration by state forests and urban trees in its greenhouse gas inventory.⁴¹⁵

Maine, Massachusetts, and Vermont: Collaborated to study the role of NWLs, particularly forests, in achieving state net-zero goals, creating a Northeast Net Zero Collaborative to support shared learning and discussion around interstate collaboration to achieve jurisdictional, midcentury net-zero emissions goals collectively and in each state. The collaborative identified five key elements to achieving collective midcentury net-zero goals, including net-zero commitments accompanied by decarbonization pursuant to state law or regulation, GHG inventory intercomparison among member states, net-zero emissions accounting, common accounting administrative infrastructure across participating states, and investment to protect and enhance resilient carbon sequestration in NWLs.

North Carolina: Found that forests, agricultural lands, and natural lands sequestered an estimated 34 percent of the state's gross emissions in 2020, a much higher amount than previously reported. The state's 2024 GHG inventory also found that state forests and settlement lands are net carbon sinks while agricultural lands are a net source of emissions. 416

Vermont: Conducted a comprehensive review of agricultural datasets and models to optimize GHG inventory practices for the state's agricultural sector, including a review of climate-smart agricultural practices and assessment of data, tools, and models available for enhancing its agricultural emissions inventory. The final review ranked climate-smart agricultural practices based on their potential to mitigate Vermont's agricultural emissions and recommended how the state could utilize available datasets such as nutrient management plans and modeling tools such as USDA's COMET-Planner and DAYCENT to augment the EPA State Inventory Tool to produce more accurate estimates.



Continuing to Advance Bold Climate Action

Pricing Carbon & Valuing Climate Damages

Alliance members are incentivizing cost-effective emissions reductions by setting prices or caps on carbon pollution while also considering societal and environmental impacts of greenhouse gas emissions and climate change, including the social cost of greenhouse gases, across relevant policy-making and decision-making processes.



Photo credit: California Department of Forestry and Fire Protection

Member Action

The table below includes the number of members that have adopted — or are in the process of adopting — statutory and executive policies and actions. These counts are current as of September 2024.

Policies	# of Members
Social Cost of Greenhouse Gases in policymaking	14
Carbon market participation	12

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

data.usclimatealliance.org

Pricing Carbon and Valuing Climate Damages

Communities across the United States continue to feel the impacts of severe flooding, drought, wildfires, heat, and other extreme weather events. If emissions continue unabated, these impacts are projected to become more frequent and intense. Alliance members are considering the cost of climate change in their policy decision-making and advancing programs that put a direct price on carbon pollution, cost-effectively driving reductions while raising revenue to re-invest into communities.

Incentivizing Cost-Effective Emissions Reductions

Alliance members have developed and implemented economy-wide and sector-specific market-based programs that phase down climate pollution while generating revenue that can be re-invested into emissions reductions that benefit disadvantaged communities. Examples include:

California: Released its 2024 Annual Report to the Legislature on California Climate Investments Using Cap-and-Trade Auction Proceeds, which found that since 2014, \$11.0 billion has supported 578,500 individual projects, with 76 percent of these investments benefiting disadvantaged communities and low-income communities and households. These projects include contracting the construction of affordable housing units, planting urban trees, adding or expanding transit service, providing rebates for zero-emissions vehicles, and restoring or conserving land. In total, California climate investment projects have reduced over 100 million metric tons of CO₂e over the last 10 years.

California and Washington: Along with Quebec, announced that the three jurisdictions will be following their respective processes and exploring the potential to link carbon markets. 419 California and Quebec have operated a shared carbon market since 2014, with

Washington operating its own cap-and-invest program since 2023. Linking these carbon markets would increase the ability of these jurisdictions to implement cost-effective programs to fight climate change, while allowing each jurisdiction to maintain authority over its own program's design and enforcement.

New York: Released a pre-proposal outline for the regulatory components of its cap-and-invest program, including a mandatory greenhouse gas reporting rule, cap-and-invest rule, and auction rule. At the same time, New York released a climate affordability study that evaluates options for revenue distribution that support emissions reductions, ensure energy affordability, and deliver benefits to disadvantaged communities. 420

Pennsylvania: Proposed to establish a Pennsylvania-specific cap-and-invest program that would allow the commonwealth to set its own cap on energy sector carbon pollution.⁴²¹ This program was developed following the recommendations of Governor Shapiro's Regional Greenhouse Gas Initiative Working Group — consisting of labor leaders, environmental advocates, and industry — and would direct 70 percent of the revenue raised back to Pennsylvania residents as rebates on their electricity bills.⁴²²

Washington: Invested nearly \$3.3 billion of *Climate Commitment Act* (CCA) revenue following the adoption of the 2024 supplemental budget. Nearly \$1.4 billion (42 percent) is estimated to be directed to overburdened communities and \$255 million (7.8 percent) is being directed specifically to benefit Tribes. Tribal communities are eligible to apply for other CCA-funded programs, and the Legislature invested an additional \$209 million of CCA revenues in salmon restoration programs and projects that are important to protect Tribes' culture and treaty rights.

Valuing Damages from Climate Pollution

Alliance members use the social cost of greenhouse gases (SC-GHG) to quantify the economic benefits of acting now to avoid future climate impacts to human health, energy usage, labor productivity, and agriculture, among other factors, 424 and to incorporate these metrics into their policy decision-making. Methodology updates and advances in climate science suggest that governments have historically underestimated the societal costs of climate change. Compared to the latest government-wide estimate from 2021 - \$51 per ton — EPA's more recent update from 2023⁴²⁵ indicates that every metric ton of CO₂ emitted now costs society nearly four times as much, or \$190 per ton.426 Alliance members have also moved toward making polluters pay for climate damages incurred by states and their residents as a result of their actions. Examples include:

Maryland: Found that by meeting its climate targets (60 percent reduction in statewide emissions below 2006 levels by 2031 and achieving net-zero emissions by 2045), the state would see \$135 billion in societal benefits through 2050, based on EPA's updated SC-GHG values. 427 Maryland also found that through 2031, the new policies and investments identified in its climate plan would generate up to 27,400 new jobs, increase total personal income by \$2.5 billion, and deliver additional health benefits of \$142 to \$321 million.

New York: Collected feedback on potential updates to its value of carbon guidance to align with EPA's most recent updates.⁴²⁸

Puerto Rico: Filed a lawsuit against multinational energy and petrochemical companies to recover

costs the people of Puerto Rico have incurred to clean up the disasters caused by climate change, such as coastal erosion caused by rising sea levels, the formation of increasingly frequent and severe storms, extreme flooding, destruction of coral reefs and mangrove forests, degradation of air and water quality, loss of habitats and species, among other devastating impacts of climate change on the island.⁴²⁹

Washington: Utilized EPA's latest estimate of the social cost of methane (\$1,500 per metric ton) as part of the state's analysis of its new landfill methane emissions regulation, finding that the net present value of benefits resulting from these regulations (\$595 million over the 20-year planning frame of the adopted rule) greatly outweigh the costs (\$26.0 to \$26.5 million).⁴³⁰



Vermont: Enacted the Climate Superfund Act, establishing the Climate Superfund Cost Recovery Program at the Agency of Natural Resources. 431,432 This program requires covered fossil fuel companies to compensate the state for an amount equal to that entity's share of damages resulting from climate change. The law directs the agency to develop science-based methodologies and use publicly available data to identify responsible parties and determine their applicable share of covered emissions. By January 15, 2026, the state treasurer is directed to identify and estimate the costs of climate damages incurred by the state and its residents, including effects on public health, natural resources, biodiversity, agriculture, economic development, flood preparedness and safety, housing, and any other relevant effects. Resources raised through this program will help pay for climate change adaptation and resilience projects.

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/1859



Continuing to Advance Bold Climate Action

Resilience

Alliance members are integrating physical climate risk and prioritizing climate adaptation and equity in state planning and decision-making to help communities prevent, reduce, withstand, and recover from climate-related impacts and disasters. States, which have varying needs and capacity, will utilize and share best practices to bolster resilience and tailor effective solutions.



Photo credit: Office of Washington Govenor Jay Inslee

Member Action

The table below includes the number of members that have adopted — or are in the process of adopting — statutory and executive policies and actions. These counts are current as of September 2024.

Policies	# of Members
Resilience or adaptation plans	20
Resilience offices or interagency bodies	16

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

data.usclimatealliance.org

Resilience

Extreme weather and other climate impacts increasingly affect communities in every state and territory throughout the U.S. In 2023, disasters incurred a record-breaking \$28 billion in costs, and the year also saw historically high average temperatures; in fact, December 2023 was the hottest December on record. The increasing costs of severe storms, wildfires, droughts, and extreme heat and flooding events make planning, preparing, and adapting for the impacts of climate change imperative. Alliance members have prioritized climate adaptation and building resilience by taking a whole-of-government approach. Members are deploying equitable plans and roadmaps, creating new governance structures, and investing directly in communities to help them prepare to withstand and recover from future extreme events.

Planning for Resilience and Embedding Resilience into State Offices

Alliance states and territories are embedding climate resilience and adaptation into their climate and hazard mitigation plans. They are also creating new plans to confront increases in climate-related hazards and disasters and embedding resilience planning and policy into new offices within state government. Examples include:

California: Incorporated California's leading framework on climate adaptation, along with the most up-to-date information, into the updated state hazard mitigation plan. This integration ensures that the plan reflects the latest in climate science and effective adaptation strategies.



Arizona: Released *Arizona's Extreme Heat Preparedness Plan* and appointed the nation's first chief heat officer, who will be responsible for coordinating the implementation of the plan. 434

Following an extreme heat wave that set records in August of 2023, Arizona Governor Hobbs issued Executive Order 2023-16, *Extreme Heat Planning and Preparedness*, which called for the development of this plan, among other actions across state agencies for a whole-of-government approach. 435

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/1877

Colorado: Released a first-of-its-kind climate preparedness roadmap, which focuses on ways to better understand, prepare for, and adapt to the impacts of climate change, and outlines actions the administration can take to protect Colorado's future. This roadmap was produced by the newly formed Governor's Office of Climate Preparedness and Disaster Recovery, established by SB22-206 in 2022.

Connecticut: Announced its intent to create a new Resilience Office within the Department of Energy and Environmental Protection (DEEP) to administer resilience project implementation for the agency, including the DEEP Climate Resilience Fund, which was authorized to receive an additional \$40 million in funding in the fiscal year 2024–2025 state budget amendment. Additionally, the Department of Agriculture secured \$1.475 million in grant funding for farmers and nonprofits involved in production agriculture to invest in long-term climate resiliency projects that will decrease vulnerability to extreme weather events through regenerative agricultural practices.

Hawai'i: Established the Climate Advisory Team, a committee comprised of experts and stakeholders dedicated to tackling the challenges of climate disasters and providing a comprehensive roadmap for the state's strategy to mitigate the financial impact of climate change. One of its first projects will be to recommend steps to create a durable fund to mitigate climate change impacts and to develop a fair and comprehensive structure to resolve claims related to future disasters.

Maryland: Appointed the state's first chief resilience officer, ⁴⁴¹ a position created through legislation in 2022 that also established a new Office of Resilience in the Maryland Department of Emergency Management. ⁴⁴² Through a whole-of-government approach, the chief resilience officer will work with the new chief sustainability officer to address the current and future effects of climate change.

New Mexico: Released its inaugural New Mexico Climate Adaptation and Resilience Plan, designed to help agencies, local governments, Tribes, and residents adapt to critical climate challenges and minimize their impact on New Mexicans. During the summer of 2024, a statewide public engagement and outreach tour sought feedback.⁴⁴³



Photo credit: Office of Washington Governor Jay Inslee

New Jersey: Released an *Extreme Heat Resilience Action Plan* and launched its updated and enhanced
Heat Hub NJ, a user-friendly online resource to help the
public better understand and become more resilient
to the impacts of extreme heat in New Jersey.⁴⁴⁴ This
plan is the first of the state's resilience action plans to
be developed by the NJ Interagency Council on Climate
Resilience,⁴⁴⁵ as directed by Governor Murphy's 2019
Executive Order No. 89 and 2022 statewide climate
change resilience strategy,⁴⁴⁶ and heavily prioritizes
building resilient and healthy communities and
strengthening the resilience of New Jersey's ecosystems.

New York: Released the state's first *Extreme Heat Action Plan* to address current and future extreme heat impacts, prioritizing disadvantaged communities. This work will inform the comprehensive resiliency plan to protect New Yorkers from extreme weather, announced as part of Governor Hochul's 2024 State of the State.⁴⁴⁷ The plan builds upon ongoing adaptation policies and actions, including those to protect New York homes and businesses from future flooding, protect New Yorkers and state infrastructure (including transit infrastructure) from and prepare for storms and other extreme weather events,⁴⁴⁸ and protect vulnerable communities by advancing key recommendations.⁴⁴⁹

North Carolina: Released its NC Resilience Exchange website, which serves as a clearinghouse for resilience-related activities in North Carolina for local leaders. The resource helps communities understand their climate resilience needs through vulnerability mapping, identifying appropriate actions, and finding resources to implement solutions including funding opportunities and state experts.⁴⁵⁰

Vermont: Announced a joint effort between the governor's office and the treasurer's office to develop a comprehensive resilience implementation strategy by July 1, 2025. 451 The initiative will coincide with an update to the *Vermont Climate Action Plan*, enabling a coordinated and balanced approach to both mitigate emissions and accelerate efforts to adapt to the consequences of climate change.

Washington: Released the Washington State Climate Resilience Strategy for public comment. As directed by the Legislature under the state's integrated climate change response strategy, the Department of Ecology will finalize the plan by September 30, 2024. The updated plan will prioritize environmental justice; identify ways to aid local and Tribal governments; improve interagency efficiency and coordination of state efforts, including applying federal funding; and identify outcomes and actions that address the largest climate change risks and vulnerabilities, including through identifying metrics to report on progress.

Investing in Climate Resilience

Alliance states and territories understand the need to finance climate resilience projects to help communities withstand and recover from an increase in extreme weather and other climate impacts. During the past year, Alliance members secured federal funding and directed state investments into programs that increase climate resilience for local governments, Tribal governments, and communities. Three members — California Governor Gavin Newsom, Massachusetts Governor Maura Healey, and New York Governor Kathy Hochul — also brought this issue to the global stage while participating in the Vatican Climate Conference in May, delivering remarks to fellow world leaders on the importance of subnational leadership in climate resilience.⁴⁵⁵ Additional examples include:

California: Announced \$19 million in first-of-their-kind grants to support Tribal-led wildfire resilience projects. These grants, across 13 projects, will support California Native American Tribes in managing ancestral lands, employing traditional ecological knowledge in wildfire resilience, and improving wildfire safety for Tribal and surrounding communities. 456 California also granted \$120 million in Green Schoolyards awards to address the challenges posed by extreme heat in underserved K-12 public educational facilities. This program helps schools convert pavements to green spaces, trees, and vegetation and create drought-tolerant natural areas on school grounds, while helping children connect to nature. 457

Maine: Announced \$2.4 million in grants to 54 communities from the Community Resilience Partnership for projects such as protecting infrastructure from damaging storms or rising sea levels, increasing local planning capacity, and improving energy resilience and efficiency.⁴⁵⁸ In addition, Maine was awarded a \$69 million climate resilience grant through the National Oceanic and Atmospheric Administration's (NOAA) competitive Climate Resilience Grant Challenge to protect Maine's communities, environment, and working waterfronts from extreme storms, flooding, and rising sea levels. The Mills administration will use the \$69 million in grant funding to accelerate and expand its leadership on climate action by working with communities to take strong, pragmatic steps to address vulnerabilities, protect people, and ensure critical infrastructure is prepared for future impacts. 459

Michigan: Secured \$10 million in state resources to assist communities in adapting to and making their infrastructure more resilient to impacts of climate change, like flooding, through the installation of stormwater diversion infrastructure, and won \$50 million from the U.S. Department of Transportation's PROTECT program to help communities make surface transportation more resilient to natural hazards, like climate-related flooding.^{460,461}

Minnesota: Funded \$39 million for more than 60 projects to local and Tribal governments to plan for climate resilience and climate action, and to install climate-resilient stormwater infrastructure. 462 The grants awarded to date go beyond the original Justice 40 commitment provided in Minnesota's Climate Action Framework. An additional \$10 million grant opportunity is currently open for communities to prepare local

wastewater infrastructure for the impacts of climate change to increase resilience and protect water quality.

New Jersey: Received \$72.5 million through NOAA's Climate Resilience Regional Challenge for the *Building a Climate Ready NJ* initiative. With this investment, New Jersey will implement multiple projects that increase community and ecological resilience, make climate resilience planning accessible to a greater number of communities, and support them in bringing those plans to fruition with comprehensive technical assistance and robust education, outreach, and engagement.⁴⁶³

New York: Joined the Planetary Protocol for Climate Change Resilience. During the Vatican Climate Conference, Governor Hochul, alongside international leaders, announced \$300 million in investments in climate resilience in the state of New York, building on her announcement earlier this year of New York's comprehensive resiliency plan.⁴⁶⁴

North Carolina: Established and distributed funding from a \$30 million disaster relief and mitigation fund. Public authorities and nonprofits were eligible to apply for the grant for activities like flood stabilization and reduction efforts, transportation resilience projects, and pre-development assistance for small and underserved communities to identify and design shovel-ready projects related to disaster and flood resilience.⁴⁶⁵



Puerto Rico: Secured \$3 million in IRA funding to combat climate change and increase climate resilience — \$2.75 million for the U.S. Geological Survey to help address workforce capacity challenges and increase the climate expertise of Puerto Rico's Department of Natural and Environmental Resources, with a focus on climate adaptation, and \$250,000 for the U.S. Fish and Wildlife Service to continue implementation of the National Seed Strategy in Puerto Rico. 466

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/2083

Wisconsin: Enacted legislation to create and administer a pre-disaster flood resilience grant program that will support projects aimed at identifying and improving flood vulnerabilities and resilience priorities in local communities. Assessment grants of up to \$300,000 and implementation grants of up to \$200,000 enable municipalities, Tribes, counties, and regional planning commissions to proactively study and implement nature-based adaptation solutions such as floodplain and wetland restoration.⁴⁶⁷

Washington: Received a \$75.6 million award from the U.S. Department of Commerce and NOAA to make the state's coast more resilient to climate change and other coastal hazards. As part of the competitive Climate Resilience Regional Challenge, this funding will help enhance regional collaboration across Washington's coastal communities.⁴⁶⁸

Strengthening Resilience to Climate-Related Impacts and Disasters

Alliance members continue to address a rise in climaterelated impacts and disasters — including flooding, drought, wildfires, and extreme heat waves — by proactively bolstering the resilience of communities, ecosystems, and natural infrastructure. These strategies help build and plan for climate resilience, protecting vulnerable communities and mitigating the costs of future disasters. Examples include:

California: Embedded climate resilience for ecosystems, communities, and local economies into the state's new 81 nature-based climate solutions targets for 2030, setting targets for wildfire risk reduction, including targets for prescribed burning and other fuel reduction activities; coastal and wetland restoration to reduce the risk of flooding; improving soil health and reducing soil disturbance to increase resistance to drought and other climate impacts; and greening of urban areas to mitigate the impacts of extreme heat waves.469 California also launched ready.ca.gov ahead of Memorial Day in 2024, a new one-stop shop for Californians to prepare for emergencies and extreme weather. 470 Additionally, the state launched the Mediterranean Climate Action Partnership with 15 inaugural members representing regions in Africa, Australia, Europe, and North and South America working together to adapt to the increasing climate threats of drought, wildfire, and heat.471

Colorado: Enacted legislation to boost wildfire mitigation, including the *Assist Rural Community Wildfire-Related Grant Application* bill which appropriates \$200,000 to create a rural grant navigator program through the Colorado State Forest Service. This program will provide funding to non-government organizations that assist rural communities in applying for state or federal wildfire mitigation and preparedness grants.⁴⁷² Additionally, the *Extend Outreach Campaigns Wildfire Risk Mitigation* bill requires the state's forest service to conduct enhanced wildfire awareness month outreach campaigns and other outreach efforts through 2026–2027 to increase awareness of wildfire risk mitigation.⁴⁷³

Massachusetts: Announced the launch of the ResilientCoasts initiative, a holistic strategy for addressing the impacts of climate change along the coastline of Massachusetts. In collaboration with the state's 78 coastal communities, ResilientCoasts will pursue a multipronged approach to identify regulatory, policy, and funding mechanisms to develop focused long-term solutions. The Office of Coastal Zone Management hired a chief coastal resilience officer to lead this initiative.

Michigan: Developed a draft plan for considering and incorporating climate change adaptation and mitigation measures to minimize the climate-related impacts on Michigan's water resources.⁴⁷⁵

New Jersey: Released a proposal of its Resilient Environments and Landscapes (REAL) rule, 476 which was published for public comment in summer 2024. REAL is part of the New Jersey Protecting Against Climate Threats initiative directed by Governor Phil Murphy's 2020 E.O. 100. Through amendments to existing land resource protection rules, REAL will bolster the state's resilience to sea-level rise, coastal storm surge, flooding, and stormwater management concerns while improving water quality, protecting natural resources, and streamlining permitting processes that will expedite resilient investments in New Jersey's communities and economy. 477

New Mexico: Fully funded with over \$40 million in state and federal funds, the New Mexico Reforestation Center in Mora, one of the communities most impacted by the historic 2022 Hermits Peak/Calf Canyon fire, is under construction. ^{478,479} This facility will produce up to five million seedlings annually, allowing communities



Photo credit: Puerto Rico National Guard

recovering from wildfire to more effectively mitigate against climate impacts such as flooding, soil loss, water quality degradation, and future fires.

New York: Launched the implementation of the state's \$4.2 billion *Clean Water, Clean Air and Green Jobs Environmental Bond Act* of 2022, and enacted legislation requiring disclosure of flood risk and prioritization of nature-based solutions for stabilizing tidal shorelines. In November 2023, New York's major electric utilities filed climate vulnerability and resiliency plans. The utilities' plans outline their approach to mitigate the impacts of climate change to utility infrastructure, reduce restoration costs and outage times associated with extreme weather events, and enhance the reliability of their systems. 481

North Carolina: Finalized and released the new State Uniform Management Floodplain Policy in compliance with Executive Order 266.⁴⁸² The guidance will result in public buildings and structures that are more resilient to flooding and sea-level rise hazards, and will save taxpayer money and protect public investments while promoting innovative nature-based design solutions.

Rhode Island: Solicited project proposals for the Ocean State Climate Adaptation and Resilience Fund Program, which was established through legislation in 2021 and provides financial assistance in the form of grants for adaptation and resilience projects that protect or enhance coastal or riverine habitats to address the impacts of climate change. 483

Wisconsin: Enacted Senate Bill 222, now 2023 Wisconsin Act 265, which requires Wisconsin Emergency Management to create and administer a pre-disaster flood resilience grant program to provide grants for projects aimed at identifying and improving flood vulnerabilities and resilience priorities in local communities.⁴⁸⁴



Continuing to Advance Bold Climate Action

Transportation

Alliance members are developing policy pathways and programs to decarbonize the transportation sector by reducing vehicle miles traveled (VMT) and significantly increasing access to and the affordability of zero-emissions vehicles, clean fuels, and multi-modal options.



Photo credit: Office of California Govenor Gavin Newsom

Member Action

The table below includes the number of members that have adopted — or are in the process of adopting — statutory and executive policies and actions. These counts are current as of September 2024.

lembers

For the most up-to-date, in-depth breakdown of climate actions across the coalition, explore the Alliance Policy Database.

data.usclimatealliance.org

Transportation

The transportation sector remains the largest source of greenhouse gas emissions in the United States. Alliance members have focused decarbonization efforts in this sector on expanding access to zero-emissions vehicles (ZEVs), electric vehicle (EV) charging infrastructure, low-carbon fuels, and multimodal travel options. This year, Alliance members expanded access to cleaner and lower-cost vehicles and infrastructure while reducing vehicle miles traveled (VMT). At the federal level, EPA finalized vehicle emissions standards for light-, medium-, and heavy-duty vehicles that will increase consumer and business access to ZEVs nationwide. Additionally, EPA is currently considering California's waiver request for the Advanced Clean Cars II (ACC II) regulation, which would allow states to enforce vehicle emissions standards that can be more protective than federal standards.

Accelerating the Transition to Cleaner Vehicles

Shifting to zero-emissions vehicles not only helps mitigate emissions, but also improves health outcomes. Data have shown that as ZEV adoption increases, local air pollution levels and asthma-related emergency room visits drop. 486 Alliance members continue to adopt nation-leading standards that will accelerate the deployment of zero-emissions cars and trucks and deliver these health benefits to their own communities. In addition to states that adopted these standards in prior years, Colorado, 487 Delaware, 488 New Jersey, 489 New Mexico, 490 and Rhode Island 491 adopted ACC II through at least model year 2032, and Maryland, 492 New Mexico, 493 and Rhode Island 494 adopted the Advanced Clean Trucks rule. Members have also led by example and integrated ZEVs into their own fleets, as well as supported efforts to increase ZEV affordability and strengthen EV supply chains. Alliance members and their communities have leveraged federal funding to accelerate this transition, receiving at least \$1.3 billion in 2023 EPA Clean School Bus Program funding to support the deployment of more than 3,500 electric school buses. 495 Additionally, Alliance members and their transit agency partners are leveraging over

\$670 million in Federal Transit Administration bus program funding to support zero-emissions transit bus deployment efforts. 496 Other examples include:

Arizona: Secured \$1 million for programming to promote the electrification of heavy-duty fleets.

California: Announced a partnership with automaker Stellantis around supporting ZEV adoption and sales, investments in charging infrastructure, and reducing emissions from the vehicle fleet sold nationwide on an annual basis through 2026.⁴⁹⁷ Additionally, the state exceeded its Advanced Clean Trucks goal two years ahead of schedule, with one in six trucks sold in the state being zero-emissions in 2023.⁴⁹⁸

Colorado: Announced \$31.7 million in new grants to help local governments, nonprofits, and service providers bring 28 new electric transit buses to the state. 499 In addition, the Colorado Energy Office and Community Access Enterprise announced an additional \$9 million in funding for the Vehicle Exchange Colorado EV rebate initiative, which offers point-of-sale rebates to purchase or lease an EV for trading in an old or high-emitting vehicle. The initiative issued 1,301 rebates



Photo credit: Office of Illinois Governor JB Pritzker

during its first fiscal year — more than six-times the number of rebates the state expected to provide. In addition to making EVs more affordable, this effort supports the automobile industry's workforce through its partnership with the Clear the Air Foundation, which coordinates vehicle recycling and uses at least 35 percent of funds to provide scholarships and equipment to automotive technology students.

Delaware: Expanded its Clean Transportation Incentive Program to include electric vehicle rebates for used models and tiered funding to offer higher rebates for more affordably priced vehicles, helping a larger number of Delaware families access the benefit of driving electric. 500 The state also dedicated \$4 million in state funds for community charging efforts to target convenient charging outside of highway corridors targeted by National Electric Vehicle Infrastructure (NEVI) Formula Program funds.

Maryland: Launched its Zero-Emission Bus Pilot Program that will add seven new zero-emissions buses to the Maryland Transit Administration's local bus fleet while reducing emissions and improving air quality throughout the region.⁵⁰¹

Michigan: Through Executive Directive No. 2023-5, established targets for state fleets to convert light-duty vehicles to ZEVs by 2033 and convert medium- and heavy-duty vehicles to ZEVs by 2040. 502 It also directed the development of a Zero Emissions Plan to help meet these targets and facilitate any necessary infrastructure siting and build-out efforts.

Minnesota: Began accepting applications for its EV Rebate Program for the first time, providing up to \$2,500 for new EVs, along with \$600 for used EVs, to create pathways for more affordable EV ownership and leasing.⁵⁰³



New Jersey: Enacted the *Electric and Hybrid Vehicle Battery Management Act*, creating the first extended producer responsibility law in the country for EV batteries that directs the Department of Environmental Protection to establish a framework to help ensure proper EV battery recycling, reuse, and disposal in the state.⁵⁰⁴

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/1834

New Mexico: Enacted HB 252, which establishes new income tax credits that not only support the purchase of new or used ZEVs, but the purchase and installation of commercial and residential EV charging and fuel cell charging units as well.⁵⁰⁵

New York: Celebrated the introduction of 60 new electric transit buses that will operate in routes across New York City, and efforts by the Metropolitan Transportation Authority to install electric bus charging infrastructure across bus depots in the city. ⁵⁰⁶ The state also announced funding for electric school bus charging infrastructure under the historic \$4.2 billion Clean Water, Clean Air, and Green Jobs Environmental Bond Act through the New York School Bus Incentive Program.

North Carolina: Announced that the state reached its 2025 EV registration goal two years early, having

surpassed its initial goal of 80,000 ZEV registrations in November 2023,⁵⁰⁷ and is increasing efforts to meet the next target of 1.25 million ZEV registrations by 2030, as outlined in Executive Order 246.⁵⁰⁸

Washington: Enacted HB 1368, which creates a grant program using *Climate Commitment Act* funding that helps schools begin transitioning to electric buses, with an initial appropriation of \$50 million in the 2023–2025 biennial budget. Additionally, once the cost of electric buses becomes on par with diesel buses, school districts will be required to transition to electric buses.⁵⁰⁹

Expanding ZEV Infrastructure and Low-Carbon Fuels

To successfully transition to cleaner vehicles, Alliance members are focused on delivering a timely and equitable buildout of the EV charging and hydrogen fueling infrastructure needed to support the next generation of clean vehicles on the road, including for their own fleets. For example, Hawai'i,510 Maine,511 New York, 512 Pennsylvania, 513 and Vermont 514 opened their first National Electric Vehicle Infrastructure (NEVI) Formula Program-funded EV charging stations, and Rhode Island became the first state to complete Phase 1 of the NEVI program after the opening of its first NEVIfunded charging stations.515 Alliance members and their communities have also leveraged other federal funding sources to expand charging infrastructure. Thirty-five applicants in 15 Alliance states and territories, including several Alliance members, received nearly \$475 million in Charging and Fueling Infrastructure awards from the Federal Highway Administration to strategically deploy publicly accessible charging and fueling infrastructure.516 Sixteen applicants in 14 Alliance states, including several Alliance member agencies, received nearly \$140 million in EV Charger Reliability and Accessibility Accelerator awards from the Federal Highway Administration to repair or replace nearly 4,000 broken or nonoperational EV charging ports. 517 In addition, Alliance members are adopting and implementing low-carbon fuel standards to help reduce emissions from internal combustion engine fuels. Other examples include:

California: Celebrated surpassing 100,000 public and shared private EV chargers throughout the state in March, which are in addition to over 500,000 at-home chargers, ⁵¹⁸ along with the approval of a \$1.9 billion

investment plan to support the state's EV charging and hydrogen refueling goals. At least 50 percent of the ZEV infrastructure deployed through this plan will benefit disadvantaged or low-income communities.⁵¹⁹

Colorado: Announced \$21 million in grant awards through the Direct-Current Fast-Charging Plazas program. ⁵²⁰ Funded through the NEVI Program and the state's Community Access Enterprise, these grants create 290 new fast charger ports at 46 different sites across the state, expanding Coloradans' access to fast, affordable, and reliable EV chargers. This will increase Colorado's existing public fast-charger network of more than 1,000 ports by about 28 percent.

Delaware: Dedicated \$4 million in state funds for community charging efforts to target convenient charging outside of highway corridors targeted by NEVI funds.⁵²¹



Illinois: Announced more than \$82 million in grant awards for public EV charging infrastructure under its Driving a Cleaner Illinois program, which will fund approximately 2,600 new EV charging ports across the state, including 2,000 new fast-charging ports.⁵²²

See more info on the Climate Policy Database: https://data.usclimatealliance.org/policy/1977

Maryland: Enacted HB 1256, which directs the Public Service Commission to adopt regulations that establish expedited processes for supporting bidirectional vehicle charging to the power grid and to buildings.⁵²³

Massachusetts: Announced a \$50 million investment in a wide range of EV charging infrastructure programs, including those for curbside charging for renters, infrastructure for state fleets, transportation network companies, and mobile chargers for medium- and heavy-duty vehicles.⁵²⁴

Michigan: Enacted legislation enabling the state to receive and administer federal Department of Transportation grant funding, including NEVI funds, to bolster the state's EV infrastructure.⁵²⁵ Additionally, the Michigan Public Service Commission, for the first time, began requiring regulated utilities to file transportation electrification plans that outline EV-related investments through at least 2028⁵²⁶ and proposed a transportation electrification plan filing process and schedule for future plan filings.⁵²⁷

New Mexico: Enacted HB 41, which directs the initiation of a clean fuel standard rulemaking process that will decrease the carbon intensity of transportation fuels to at least 20 percent below 2018 levels by 2030 and at least 30 percent by 2040, requiring participating utilities to spend 50 percent of net credit revenues on transportation decarbonization in low-income and underserved communities. 528 Additionally, the state launched an EV charging station dashboard and published a Public EV Deployment Guide to increase awareness of and access to public charging infrastructure. 529

New York: As directed by Governor Hochul in her 2023 State of the State address, the New York State Public Service Commission launched a proceeding to identify and remove the barriers to the efficient and timely deployment of the charging infrastructure needed to electrify New York's medium- and heavy-duty vehicles.⁵³⁰

Wisconsin: Enacted Senate Bill 791 and Senate Bill 792, now 2023 Wisconsin Acts 121 and 122, respectively, enabling the state to receive and administer federal Department of Transportation grant funding, including NEVI funds, to bolster the state's EV infrastructure.⁵³¹

Supporting Location-Efficient Development and Multimodal Transportation

Alliance members have created incentives, programs, and plans to reduce vehicle miles traveled (VMT) through measures that equitably increase multimodal access to affordable housing, employment opportunities, and goods and services, along with measures that increase transportation options for all types of trips. For example, **Illinois, Minnesota, and Wisconsin** partnered in launching a new daily Amtrak rail service, the Borealis, connecting the Twin Cities, Milwaukee, and Chicago, ⁵³² with Alliance executive committee member and Wisconsin Governor Evers joining the inaugural trip. ⁵³³ Members have also leveraged federal funding to



Photo credit: Office of Washington Governor Jay Inslee

support additional interstate passenger rail initiatives. The Federal Railroad Administration awarded nearly \$24 billion for more than 55 passenger rail planning and construction projects in 21 Alliance states, including efforts for high-speed rail and to build a pipeline of projects nationwide.^{534,535} Other examples include:

Arizona: Enacted HB 2721 to require cities with more than 75,000 residents to allow the development of duplexes, triplexes, fourplexes, and townhomes (also known as missing middle housing) on all single-family lots within a mile of a city's central business district, 536 and HB 2720 to require the same cities to allow the construction of accessory dwelling units on all lots where single-family zoning is allowed. 537

California: Supported the California Transportation Commission's Local Transportation Climate Adaptation Program (LTCAP) through PROTECT Formula funds to provide competitive grants to local agencies for the development and implementation of capital projects to adapt local transportation infrastructure to climate change impacts. LTCAP Cycle One is supporting 15 projects totaling over \$300 million in resilience investments in disadvantaged communities, including two passenger rail projects and other projects with multimodal benefits. Remaining LTCAP funds will supplement further development of already programmed projects, as well as new projects.⁵³⁸



Photo credit: Office of North Carolina Governor Roy Cooper



Colorado: Enacted a suite of legislation to expand access to convenient, affordable, and safe transit options through increased funding,⁵³⁹ including from a new fee on oil and gas production. The state also required communities to permit construction of denser housing near transit,⁵⁴⁰ eliminate parking minimum requirements for residential development near transit,⁵⁴¹ allowing accessory dwelling units in residential areas, eliminating discriminatory occupancy restrictions,⁵⁴² and aligning local and regional planning efforts with strategic growth goals to discourage sprawl, promote infill development, and mitigate natural and agricultural land development for residential uses.⁵⁴³

See more info on the Climate Policy Database: https://data.usclimatealliance.org/action/2004 https://data.usclimatealliance.org/action/2003

Connecticut: Invited residents to participate in the 2024 Drive Less Connecticut Climate Challenge, in which participants eliminated almost 520,000 miles of vehicle travel by taking public transit, bicycling, or carpooling and removed 444,000 pounds of greenhouse gas emissions. It also resulted in the planting of 1,000 trees, since participants collectively met a Challenge goal of eliminating at least 30,000 car trips.⁵⁴⁴

Hawai'i: Enacted a suite of housing and planning legislation⁵⁴⁵ requiring large counties to add development potential in existing apartment or mixed-use districts,⁵⁴⁶ allowing residential uses in commercial districts and adaptive reuse of existing commercial buildings,⁵⁴⁷ and establishing a state planning task force to guide longrange state development and housing policy solutions.⁵⁴⁸

Maryland: In addition to setting goals in its 2050 transportation plan to move toward net-zero on-road transportation emissions by 2045, the state established a 20 percent VMT per capita reduction target below 2019 levels by 2050.⁵⁴⁹ Governor Moore also enacted legislation to remove barriers to affordable housing production and preservation, along with barriers to transit-oriented development.⁵⁵⁰

Massachusetts: Announced \$37 million in grant awards to support regional public transportation, including support for fleet electrification and to enhance and expand existing transit services, 551 which will allow several transit agencies in western Massachusetts to offer fare-free transit for at least the summer of 2024.552

North Carolina: Governor Cooper joined U.S. Department of Transportation Secretary Pete Buttigieg in Raleigh for the first groundbreaking of the S-Line Project, the major infrastructure project that will revitalize the federally designated Southeast Corridor of passenger rail. This comes at a time when NC By Train saw record ridership in the first half of 2024, 20 percent higher than during the same period in 2023. 554



HIGHLIGHTING SOLUTIONS across the alliance

Minnesota Governor Tim Walz celebrates historic investments to advance Minnesota's Climate Action Framework, passed during the state's 2023 legislative session.

Photo Credit: Office of Minnesota Governor Tim Walz



Photo credit: Office of Hawai'i Governor Josh Green

Looking Ahead

Climate change is no longer a far-off threat. Extreme heat, wildfires, flooding, drought, and other climate-fueled weather events continue to break records and threaten the well-being of communities across America and around the globe. In this critical moment, Alliance governors are driven by their continued commitment to deliver results and to achieve the goals of the Paris Agreement. Alliance states and territories are advancing the next generation of state-led climate solutions while partnering with the federal government, local communities, and industry on multi-level and whole-of-society approaches.

While substantial progress has been made, the latest emissions data shows that additional action is needed to achieve longer-term climate targets. With a change in the federal administration on the horizon, the pace of progress toward realizing these goals will be defined by how leaders at all levels of government respond to the latest science and their commitment to advancing — or rolling back — common-sense climate solutions.

The commitment of the U.S. Climate Alliance and its members remains resolute. This bipartisan climate action coalition was born in challenging times — when former President Trump decided to withdraw the United States from the Paris Agreement — and it is built with the strength and durability to withstand whatever uncertainty

or headwinds may lie ahead. It is abundantly clear that Alliance governors are not only up to this task, but also well-positioned to continue leading the charge.

The Alliance's efforts are working. The coalition is reducing emissions, growing the economy, building healthier and more resilient communities, and developing a stronger and more diverse climate-ready workforce. The pace of progress accelerated this year, with billions of dollars being invested in the manufacture and deployment of clean energy and clean technologies — all while creating good-paying jobs and helping chart the path toward net-zero. With the Alliance's continued leadership in 2025 and beyond, the future is bright.

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