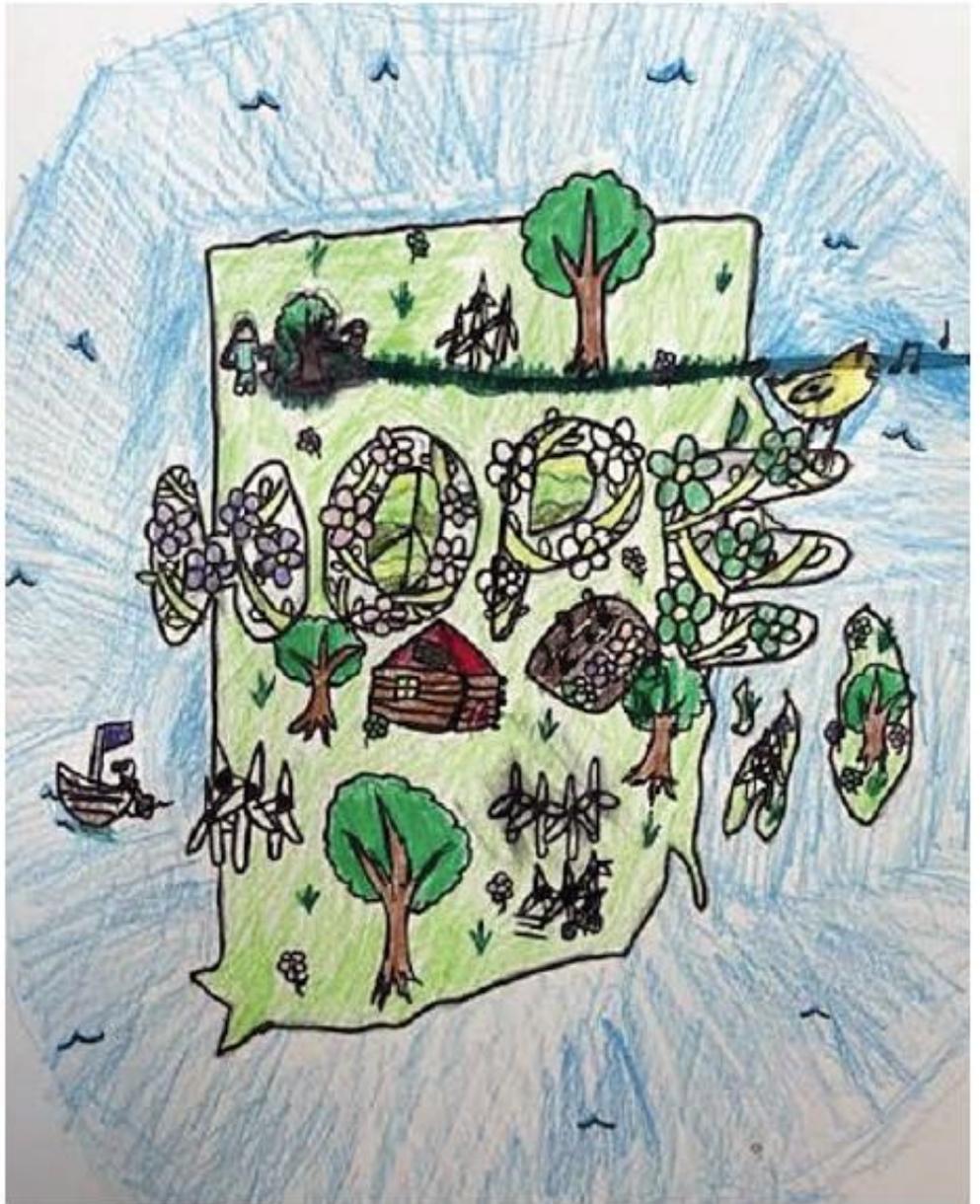


RIEC⁴

DECEMBER 2025



RHODE ISLAND 2025 CLIMATE ACTION STRATEGY RI EXECUTIVE CLIMATE CHANGE COORDINATING COUNCIL

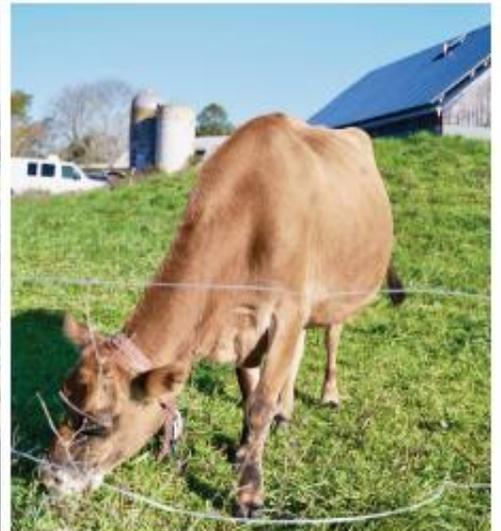


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Acronym Definitions

Acronym	Definition
ACPs	Alternative Compliance Payments
AMF	Advanced Metering Functionality
ARPA	American Rescue Plan Act
BIL	Bipartisan Infrastructure Law
BPS	Building Performance Standards
CamSys	Cambridge Systematics
Btu	British Thermal Unit
CAP	Community Action Program
CARB	California Air Resource Board
CBECS	Commercial Building Energy Consumption Survey
CCAP	Comprehensive Climate Action Plan
ccASHP	Cold-Climate Air Source Heat Pump
CHS	Clean Heat Standard
CPRG	Climate Pollution Reduction Grant
CH ₄	Methane
CO ₂	Carbon dioxide
CPRG	Climate Pollution Reduction Grant
CTs	Combustion Turbines
DCAMM	Division of Capital Asset Management
CTDEEP	Connecticut Department of Environmental Protection
DOA	Department of Administration
EC4	Executive Climate Change Coordinating Council
E3	Energy and Environmental Economics
EECBG	Energy Efficiency and Conservation Block Grant Program
EEC	Energy Efficiency Council
EIA	US Energy Information Agency
ELCC	Effective Load Carrying Capacity
EPCA	Energy Policy and Conservation Act
EVs	Electric Vehicles
GGRF	Greenhouse Gas Reduction Fund
GHG	Greenhouse gas emissions
GHHI	Green & Healthy Homes Initiative
HVAC	Heating, Ventilating and Air Conditioning
ICCT	International Council on Clean Transportation
ICE	Internal Combustion Engine
IIJA	Infrastructure Investment and Jobs Act
IRA	Inflation Reduction Act
ISO-NE	ISO New England
LDCs	Local Distribution Companies

LIHEAP	Low-Income Home Energy Assistance Program
LMI	Low- and Moderate- Income
L RTP	Long Range Transportation Plan
LT	Long-term
MHDVs	Medium- and Heavy- Duty Vehicles
NECEC	New England Clean Energy Connect
MMT	Million Metric Tons
N ₂ O	Nitrous oxide
NEEP	Northeast Energy Efficiency Partnership
NEVI	National Electric Vehicle Infrastructure
NREL	National Renewable Energy Laboratory
NIT	Narragansett Indian Tribe
NWA	Non-Wire Alternative
O&M	Operations and Maintenance
OER	Rhode Island Office of Energy Resources
PUC	Public Utilities Commission
PHEVs	Plug-in Hybrid Electric Vehicle
RECs	Renewable Energy Certificates
RES	Renewable Energy Standard
RIDE	Rhode Island Department of Education
RIDEM	Rhode Island Department of Environmental Management
RIDOT	Rhode Island Department of Transportation
RIIB	Rhode Island Infrastructure Bank
RIEC4	Executive Climate Change Coordinating Council
RIPTA	Rhode Island Public Transit Authority
RIPUC	Rhode Island Public Utilities Commission
RIRRC	Rhode Island Resource Recovery Corporation
RPS	Renewable Portfolio Standard
SBC	System Benefit Charge
SEP	State Energy Program
SWIFR	Solid Waste and Infrastructure for Recycling
TMP	Transit Master Plan
T&D	Transmission and Distribution
TBtu	Trillion British Thermal Unit
VMT	Vehicle Miles Traveled
WAP	Weatherization Assistance Program
ZEVs	Zero Emission Vehicles
ACCII	Advanced Clean Cars II

Letter from the Executive Climate Change Coordination Council

Pursuant to the requirements of the Act on Climate (R.I. Gen. Laws § 42-6.2), this Strategy report provides the State of Rhode Island’s updated assessment of progress toward the mandated greenhouse-gas reduction targets for 2030, 2040, and 2050, and outlines policies, programs, and actions that support progress toward those targets. It offers an accounting of where Rhode Island stands today, while recognizing that the federal policies and economic landscape in which earlier strategies were developed have shifted significantly.

Since 2021, when the Act on Climate was enacted, Rhode Island has developed and implemented a range of programs, laws, and regulations designed to place the state on a clear trajectory toward meeting its 2030 greenhouse gas reduction targets. Rhode Island has been a national leader in offshore wind development—committing to long-term power purchases, investing significantly in port infrastructure, and partnering with labor organizations to support a just transition of the workforce. Modeling indicates that continued, effective implementation of these state programs, as originally designed, would position Rhode Island to achieve its 2030 goals.

However, this trajectory now faces material uncertainty due to recent shifts in federal policy, which affect both the availability of federal funding and the underlying programs that were assumed in earlier planning. These shifts will have devastating and immediate consequences for Rhode Island’s climate planning. While this Strategy focuses on impacts to our climate-change portfolio, the broader federal rollbacks are poised to trigger severe disruptions across energy, environmental protection, health care, and food-security systems, placing extraordinary strain on state agencies and undermining long-standing strategic investments.

With respect specifically to climate initiatives, the Trump Administration’s actions will materially disrupt Rhode Island’s ability to meet its statutory emissions-reduction obligations. Numerous examples illustrate the magnitude of this harm:

- + Rescission of key Clean Air Act authorities that supported clean-vehicle deployment. These federal rollbacks eliminate tools Rhode Island relied upon to accelerate the transition to cleaner vehicles—directly constraining progress in the transportation sector, the state’s largest source of greenhouse-gas emissions.
- + Termination of \$7,500 EV tax credits established under the Inflation Reduction Act. The loss of federal incentives—particularly for electric vehicles, battery storage, and distributed clean-energy technologies—significantly weakens Rhode Island’s ability to drive down emissions through consumer adoption and private-sector investment. For Rhode Island to replace this the repealed federal tax credit over the next several years, the cost would be hundreds of millions of dollars.

- + Deliberate federal efforts to stall and constrain offshore wind development. By creating regulatory barriers and uncertainty around project approvals, the Administration has jeopardized one of Rhode Island’s most significant clean-energy pathways and introduced substantial risk that could deter private-sector investment.
- + Elimination of federal clean-energy tax credits and grants, including programs such as RI’s \$49M Solar for All grant. The removal of these tax credit and grant opportunities cuts off critical funding streams that were designed to expand access to renewable energy, especially for low- and moderate-income households, and undermines the state’s ability to scale community-based clean-energy programs.
- + Termination of clean energy investment and production tax credits established under the Inflation Reduction Act: The elimination of IRA investment tax credits makes new clean-energy projects more expensive to develop in Rhode Island while also tightening the regional supply of Renewable Energy Certificates (RECs), the tradable credits that represent one megawatt-hour of eligible renewable generation, which in turn drives up the cost of complying with the state’s Renewable Energy Standard (RES), the mandate requiring suppliers to procure a growing share of their electricity from renewables.

Taken together, these actions will require us to consider a fundamental pivot in our planning and execution, as the federal landscape has shifted in ways that likely compromise our ability to deliver on climate commitments without some adjustment.

In light of these structural changes, the Executive Climate Change Coordinating Council acknowledges that future policy must strike a more deliberate balance: protecting utility affordability for Rhode Island families while charting a realistic, regionally aligned set of climate goals that reflect the new federal environment.

Electric rate relief and stability are essential for achieving the Act on Climate, because without confidence that electricity will remain affordable, households will not fully embrace the economy-wide electrification, like winter heat-pump use, instead reverting to cheaper fossil fuel options, undermining emissions goals and slowing the broad consumer adoption needed for real progress.

This recalibration is essential to maintaining economic competitiveness, supporting household electrification, and ensuring Rhode Island can pursue durable, achievable emissions reductions in the years ahead.

Respectfully submitted,

Terrence Gray, P.E.

Director, Rhode Island Department of Environmental Management
Chairperson, the Executive Climate Change Coordinating Council

Acknowledgements

The Council expresses its deepest thanks and appreciation to all the voices who contributed to the development of RI's 2025 Climate Action Strategy. The member agencies of the EC4, both leadership and dedicated staff, have provided continuous input, feedback, and direction over the past year in pursuit of developing a strategy that charts a path for meeting that state's climate goals and spurs action that will result in measurable progress here in Rhode Island. The Project Team consisting of RIDEM and RIOER provided consistent dedication to engaging with a broad group of interested stakeholders throughout 2025.

Thanks also goes out to the teams at Energy and Environmental Economics, Inc. (E3), Lighthouse Consulting Group, and BW Research who provided superior technical analysis, facilitation, research, and guidance as the state's consultants on this important project. Cambridge Systematics provided key guidance and analysis in support of identifying strategies to reduce transportation sector emissions.

The EC4's two advisory bodies, the 'Advisory Board' and 'Scientific and Technical Advisory Board', provided consistent feedback and assessment, and created additional avenues for public engagement throughout 2025.

The USEPA's Climate Pollution Reduction Grant (CPRG) provided the necessary financial support to allow Rhode Island to undertake such a robust approach as it worked to simultaneously complete this Strategy and its Comprehensive Climate Action Plan (CCAP).

Most importantly, we value all the members of the public and organizations who cared deeply enough to dedicate many hours joining listening sessions, providing feedback, and helping to share news about the Strategy's progress throughout 2025. Many Rhode Islanders cared enough to offer their climate concerns, ideas, and encouragement to the Council and it is deeply appreciated.

Executive Summary

In April 2021, Rhode Island enacted the Act on Climate, setting enforceable greenhouse gas (GHG) reduction targets of 45% below 1990 levels by 2030, 80% by 2040, and net-zero by 2050 (RIGL Chapter 42-6.2). The Executive Climate Change Coordinating Council (EC4) leads interagency coordination for achievement of these goals. Following the 2022 update to the former Greenhouse Gas Emissions Reduction Plan (2016), EC4 has developed the 2025 Rhode Island Climate Action Strategy for submission by December 31, 2025. Pursuant to RIGL 42-6.2-2, the Strategy includes programs, actions and strategies to meet the Act on Climate’s mandated targets and will be updated every five years. This Strategy will serve as the state’s comprehensive plan for reducing emissions while advancing equity, affordability, and a just transition for workers and environmental justice (EJ) populations. The development of the plan included robust stakeholder engagement, detailed emissions modeling, and analyses of policies and actions, costs, health outcomes, and workforce needs to support decarbonization in RI.

As part of this Strategy, EC4 is putting forward the following options for implementation to guide climate action over the next five years. These options focus on accelerating decarbonization while ensuring economic opportunity, workforce preparedness, and equitable participation across all Rhode Island communities.

Options for Implementation

The Executive Climate Change Coordinating Council recognizes that future policy ought to strike a more deliberate balance—protecting utility affordability for Rhode Island families while furthering realistic, regionally aligned climate goals that reflect the new federal landscape that will directly impact states clean energy and climate change efforts.

Electric rate affordability and stability are essential for achieving the Act on Climate, because without confidence that electricity will remain affordable, households will not fully embrace the economy-wide electrification, like heat-pump usage during winter months, instead reverting to cheaper fossil fuel options, undermining emissions goals and slowing the broad consumer adoption needed for real progress.

State funding options and potential extensions or modifications to existing programs and policies that would support continued progress toward emissions-reduction targets while establishing a more affordable and sustainable pathway to decarbonization:

- ✦ **Renewable Energy Standard (RES):** Recent federal policy changes and market disruptions are increasing the cost of RES compliance for Rhode Island ratepayers and warrant a reassessment of the program’s structure to ensure an affordable path to decarbonization. The State should consider updates (such as aligning the standards and REC eligibility rules with regional practice); however, modifications should be paired with sustainable investment in local and regional clean-energy resources to ensure continued progress toward emissions-reduction targets. Total RES compliance costs are projected to reach approximately \$125 million in 2026—funded entirely by ratepayers—and are expected to grow by more than \$20 million annually for the foreseeable future.

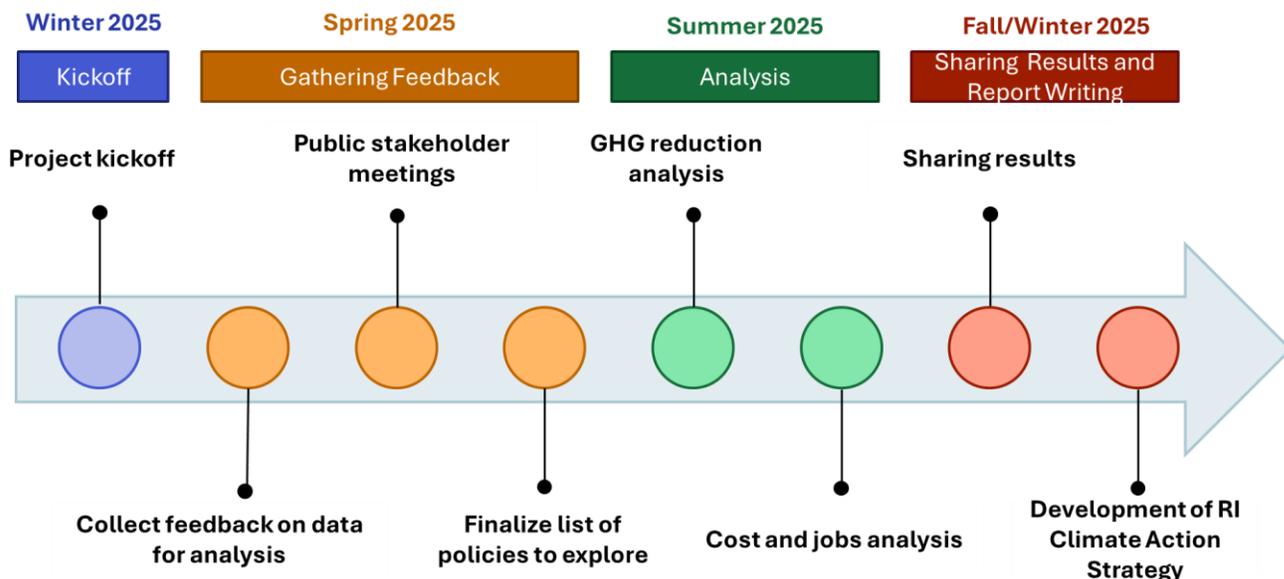
- + **Energy Efficiency and Renewable Energy Programs:** The State should continue its energy-efficiency and renewable-energy programs, while applying more sustainable investment levels to better align with regional peers. This approach can help moderate energy bills while sustaining emissions-reduction efforts, workforce development, and ongoing project activity.
- + Codify in state law Governor McKee’s **Lead by Example** Executive Order to: (1) ensure the continuation of the Office of Energy Resource’s energy-benchmarking of state properties that are greater than 25,000 square feet; (2) establish a voluntary opt-in pathway for municipalities to benchmark their own buildings greater than 25,000 square feet; and (3) authorize the Office Energy Resources to provide technical assistance to state agencies and participating municipalities, including annual reporting requirements to Governor McKee and the General Assembly on state and municipal energy benchmarking efforts.
- + **Maximize and deploy all remaining federal energy funds** to accelerate installation of EV charging infrastructure, municipal energy efficiency projects and expand access to heat pumps and electric stoves statewide.
- + Continue investing in the **Clean Heat RI** program to expand household access to heat-pump installations and support statewide clean-heat adoption.
- + Targeted focus on the integration of **pre-weatherization energy and energy efficiency funds** to maximize energy efficiency savings in households and multi-family properties.
- + Pursue a Clean Energy, Green Economy, Resilience **Bond on the 2026 ballot.**
- + **Continue investing** in the state’s EV rebate program, household EV-charging incentives, and electric-bicycle rebates to sustain clean-transportation progress in the absence of federal support.
- + **Capitalize the Rhode Island Infrastructure Bank’s Resilient Rhody Fund** to provide a stable, dedicated source of support for municipal resilience projects, including stormwater upgrades, floodproofing, watershed restoration, urban tree planting, and coastal protection, to help communities mitigate the escalating impacts of climate change.
- + A **commercial scale energy storage program** is developed and launched by the Office of Energy Resources.
- + Ensure the **Revolution Wind** project comes online in 2026, delivering power to more than 350,000 households and becoming Rhode Island’s second offshore wind installation.
- + Governor McKee appoints Secretary of the **Executive Office of Housing** to EC4 (and formalize Department of Labor & Training and RI Department of Education membership).
- + Governor McKee extends **voluntary Climate Leadership Challenge to RI businesses** –
 - The Department of Environmental Management and the Office of Energy Resources develop notification and reporting structure
 - Governor McKee organizes and presides over annual recognition ceremony
- + The Department of Environmental Management and the Office of Energy Resources **engage with RI auto dealers** and large fleet operators on increasing availability of EVs and GHG reductions.
- + The Department of Environmental Management works with other states to develop **alternatives to EPA models and data sources for GHG inventory calculations.**
- + The Office of Energy Resources initiates a **communication campaign promoting RI leadership** and progress in availability of EV charging infrastructure.

- + RI Department of Education continues implementing **school readiness programs**.
- + RI Department of Transportation continues to calculate and consider **GHG impacts in STIP**.
- + RI Department of Labor & Training continues to support the **Green Energy Workforce Advisory Committee** on workforce development, job creation, and a just transition.
- + EC4 agencies continue to **support community conversations with environmental justice communities** to ensure programs benefit historically underserved neighborhoods.
- + The Department of Environmental Management and Commerce work together to **explore opportunities to expand organic waste diversion**, anaerobic digestion, and the generation of renewable natural gas in Rhode Island.
- + The Department of Environmental Management works with the University of Rhode Island, farmers, and advocates to expand **regenerative agricultural techniques** across the state.
- + The RI Public Transit Authority **continues flex service, van pool, & “transit for visitors” initiatives**.
- + As funding allows, the Department of Environmental Management and the RI Public Transit Authority continue transition of public transit and school bus fleets to **hybrid and EV buses**.
- + The Department of Environmental Management pilots and extends **battery powered landscaping programs**.
- + The Department of Environmental Management, with the assistance of other EC4 agencies, publishes an **annual report highlighting progress** on the policies and programs that are detailed in the strategy along with new policies/programs that are enacted.

About the Plan

The development of the 2025 Climate Action Strategy spanned roughly 14 months, from late 2024 through December 2025 (Figure 1). The development of the Strategy was led by the Rhode Island Department of Environmental Management (RIDEM) and the Office of Energy Resources (OER). To support this effort, EC4 engaged a consulting team comprised of Energy and Environmental Economics (E3), Lighthouse Consulting, and BW Research Partnership. The state and consulting team conducted extensive stakeholder engagement, policy and funding analysis, and comprehensive quantitative modeling. The modeling efforts were informed by stakeholder feedback and interagency coordination.

Figure 1: Timeline and Process for Developing the Rhode Island Climate Action Strategy



The Rhode Island Climate Action Strategy provides guidance for RI to achieve the goals set out by the Act on Climate. The plan investigates:

- + **Where are we today?** Current emissions across all major sectors, based on the latest GHG inventory
- + **What emissions path are we on now?** The expected emissions trajectory under existing state policies and programs
- + **What additional actions are needed?** Additional actions and strategies that would put the state on the path to achieve near- and long-term climate goals

Beyond emissions, the Rhode Island Climate Action Strategy explores how decarbonization would reshape Rhode Island’s energy system and economy, including:

- + **Technology adoption:** Transitions in the home appliances and vehicles that Rhode Islanders will adopt and how that equipment is used.
- + **Energy demand:** Changes in the use of fuels – such as natural gas, distillate fuel oil, and gasoline – and electricity as electrification accelerates and technology becomes more efficient.
- + **Electric sector transformation:** The magnitude and timing of increased electric load and impacts of the Renewable Energy Standard, which requires 100% of retail electricity sales to come from renewable sources by 2033.
- + **Societal costs and benefits:** Incremental societal costs of new low-carbon resources, technologies, and infrastructure across all sectors and regions of Rhode Island, alongside estimated societal benefits such as avoided climate damages and improved air quality.
- + **Household costs and benefits:** Impact of costs on individual households – such as the upfront costs of low-emission technologies (e.g., heat pumps, electric vehicles), changes

to ongoing equipment operations & maintenance (O&M) costs, and impact on household utility bills.

- + **Workforce considerations:** Job creation, potential displacement, and training needs in the transition to a cleaner energy economy.
- + **Equity and environmental justice:** Distribution of costs and benefits across low-income and disadvantaged communities, ensuring that the transition to a clean energy economy is inclusive and equitable.

Rhode Island **stakeholders' interests and priorities were a core focus** of the development of the Rhode Island Climate Action Strategy. Stakeholder engagement was conducted from January to December 2025, beginning with a project kickoff led by the state and consulting team in January 2025. Between February and May 2025, the team hosted 10 stakeholder meetings, including virtual and in-person across the state, to gather input on topics such as energy, transportation, buildings, workforce, and environmental justice. Subsequent webinars were held in the fall 2025 to share modeling results and key findings. Throughout the process, the state also sought input online via Rhode Island's state climate website, where study inputs and assumptions were posted and stakeholders could continuously submit feedback via SmartComment, a web-based public comment platform.

Key themes that emerged from the public engagement process include:

- + **Urgency and actionability:** Stakeholders consistently called for a shift from planning to near-term implementation, supported by clear timelines, accountability mechanisms, and transparent progress tracking.
- + **Coordination across key parties:** Participants emphasized the need for stronger cross-sector and interagency collaboration, especially in transportation, housing, and energy, to streamline processes and align local and state actions.
- + **Equity and community trust:** Ensuring affordability, equitable investment, and community-led engagement were voiced as essential. Building trust requires ongoing, transparent communication, education, and outreach, particularly in communities disproportionately impacted by climate change.
- + **Clean energy and electrification:** Broad support was voiced for building and transportation electrification, grid modernization, and distributed energy resources. Stakeholders urged action to overcome barriers such as high upfront costs, split incentives, and access for renters and small businesses.
- + **Workforce and economic transition:** Stakeholders stressed the need to grow a skilled, inclusive clean energy workforce while protecting and retraining workers affected by the transition away from fossil fuels.

In addition to the broader stakeholder engagement efforts outlined above, RIDEM funded six community groups to conduct outreach directly within their communities. These projects reached a broad range of participants that included labor apprentices, youth, families, renters, homeowners, transit riders, and others who provided valuable insight into the potential for decarbonization activities to support all Rhode Islanders. Participants emphasized the importance of more community-centered events and transparent communication about specific programs. Strategies to

overcome barriers to participation include direct outreach, simple educational materials, and access to consultations and personalized assistance.

The quantitative modeling and analysis of near-term strategies to meet Rhode Island’s emissions targets were directly informed by this extensive stakeholder engagement and the key priorities identified by Rhode Islanders and state agencies. This feedback underscored the need for timely, coordinated, and equitable action – emphasizing implementation over planning, stronger collaboration across sectors, and a just transition toward clean energy and electrification. While the plan evaluates the impacts of decarbonization strategies across both near- and long-term horizons, it places particular emphasis on the next four years and examples of near-term steps the state can take to continue reducing GHG emissions by 2030. These near-term actions are designed to accelerate progress toward Rhode Island’s 2030 target of achieving a 45% reduction in emissions below 1990 levels, while laying the groundwork for sustained, equitable decarbonization in the decades ahead.

Centering Equity

The Act on Climate requires that the Climate Action Strategy incorporates equity throughout its design and implementation. Achieving the state’s emission reduction goals must go hand in hand with ensuring that the benefits of the clean energy transition are shared equitably and that no community is left behind.

Centering equity, developing people-focused solutions, and recognizing the important of community organizations in advancing Rhode Island’s climate goals are highlighted in this Strategy. Affordability, public health impacts, access to transportation and workforce needs are all addressed, and the EC4 will continue to ensure these critical topics will be uplifted as implementation of this Strategy moves into 2026 and beyond.

Specific approaches to advancing equity will vary depending on the particular GHG reduction strategies or actions pursued by RI, but some overarching considerations include:

Affordable and accessible clean energy programs and incentives for households and businesses.

Reliable, low-cost, and low-emission transportation options that expand mobility and accessibility.

Quality jobs and training pathways that enable Rhode Islanders to thrive in the clean energy economy.

Protection from displacement and other unintended impacts as homes and neighborhoods undergo energy efficiency and electrification improvements.

Communication and transparency with the public and local communities as strategies are implemented.

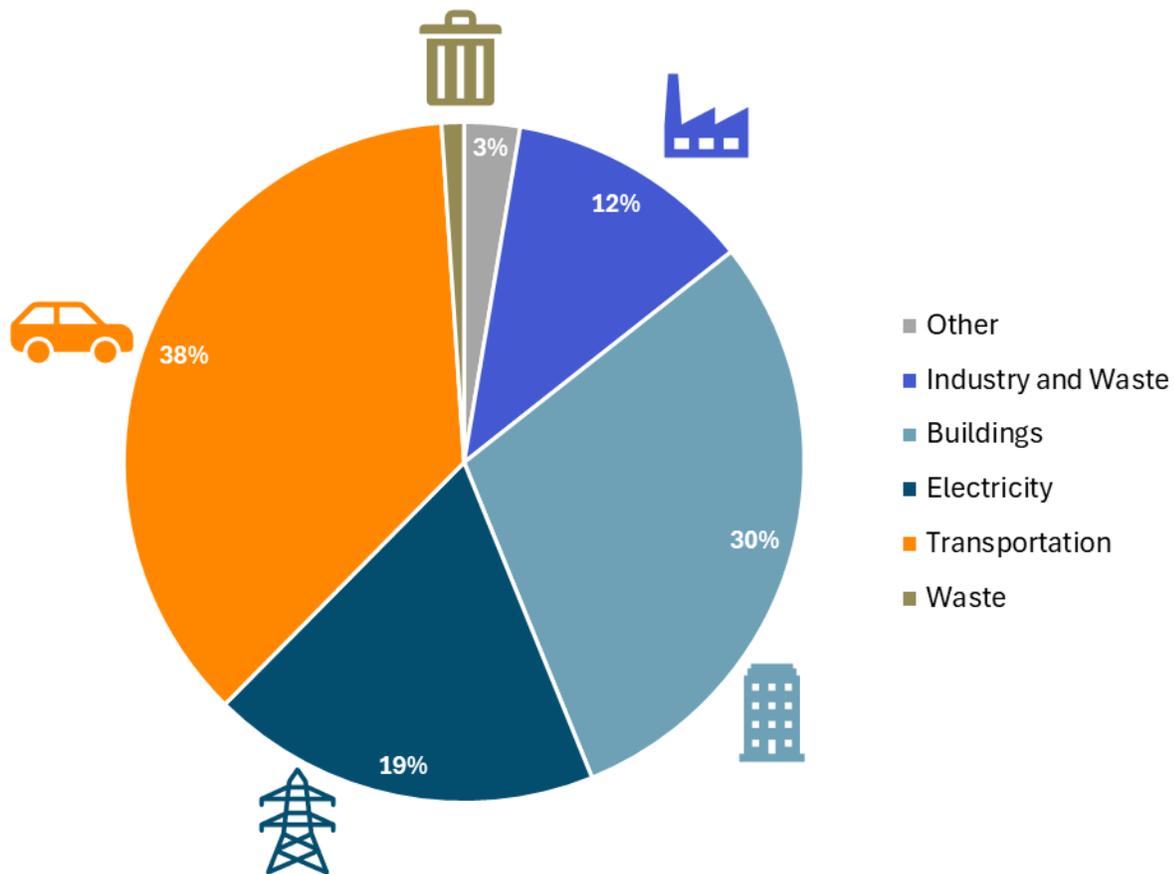
Rhode Island's Current Landscape

Rhode Island's Current Emissions

The first step to evaluating pathways to decarbonization is to assess where we are today. Based on the state's latest GHG inventory (2022)¹, **Rhode Island's net emissions are 9.60 MMT CO₂e**, a 18.3% reduction below 1990 levels, and the state has met the 2020 mandate of 10% reduction from 1990 levels as set by the Act on Climate.²

Emissions stem from every major sector of the economy, as outlined in Figure 2 below.

Figure 2: GHG Emissions in Rhode Island in 2022 (%)



The Act on Climate established Rhode Island's 2050 GHG reduction targets as a "net" target. For the purposes of this study, it was assumed that 2030 and 2040 are also net targets. Net emissions

¹ The 2022 GHG Inventory was released in December 2024. GHG inventories are often released 2-3 years after the covered year due to lags in data reporting. *While the results of the [2022 RI Greenhouse Inventory](#) are displayed here, the emissions projections in this report incorporate the minor adjustments applied to calendar year 2022 as reflected in the [2023 RI Greenhouse Gas Inventory](#)*

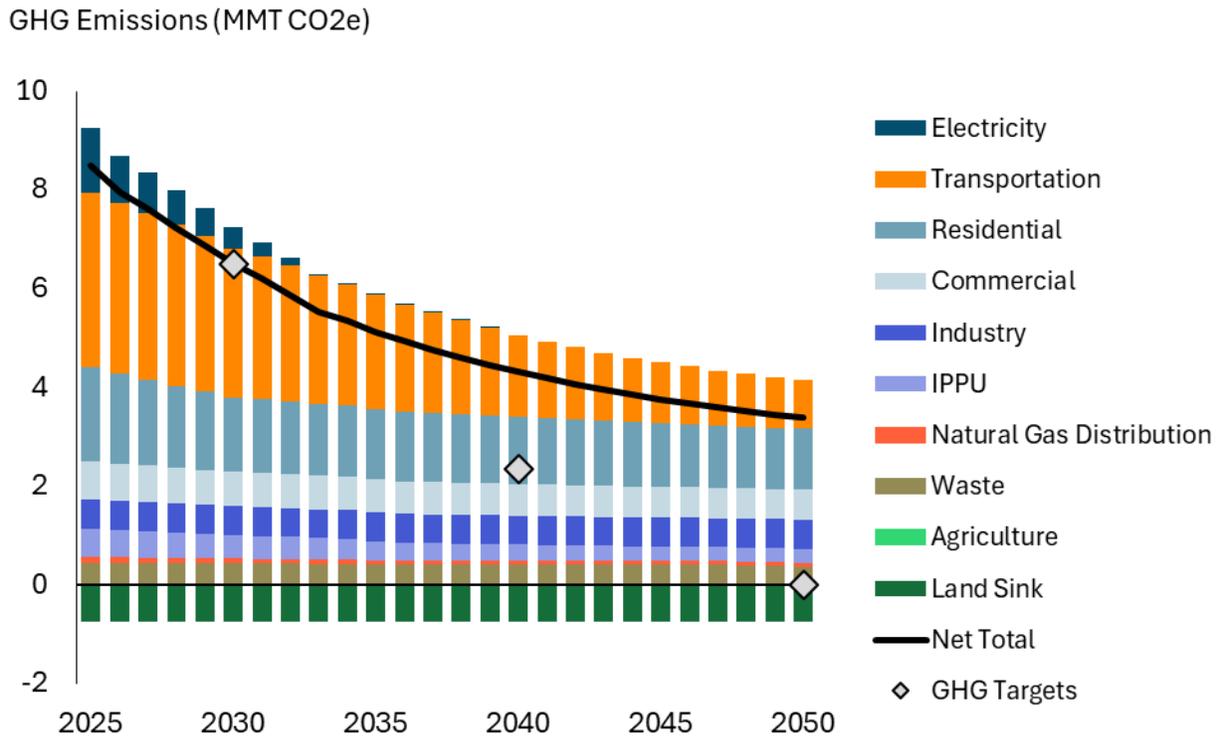
² After 2022, all future year emissions are modeled rather than directly benchmarked to historical data given the time lag in reporting.

targets measure Rhode Island’s GHG emissions after accounting for the total emissions released minus the emissions reduced or removed through carbon removal or sequestration. Unlike gross emissions accounting, which looks only at total emissions produced, net accounting reflects the overall balance after those reductions and removals. A key component of carbon sequestration in Rhode Island is the state’s natural land sink, such as forests that absorb carbon from the atmosphere. Rhode Island will continue to prioritize protecting the health and integrity of its natural ecosystems and enhancing their carbon sequestration and storage through natural climate solutions. Further details on natural climate solutions can be found in the body of the report and Appendix.

Progress Under Current Policies

After establishing where we currently are in terms of GHG emissions today, the next step is to explore what level of emissions reductions can be achieved under current policies while recognizing that the federal government landscape has created significant uncertainty. The analysis indicates that Rhode Island is on track to meet its 2030 emissions reduction target of 45% below 1990 levels if current policies and programs are successfully implemented (Figure 3). Meeting this goal, however, will also require several enabling conditions beyond state programs, including the expansion of regional markets and supportive infrastructure. Examples of these supporting factors include the build-out of EV charging infrastructure and continued renewable energy deployment across New England, both of which are critical to ensuring the modeled emissions reductions materialize. In later years, emissions reductions in the Current Policy scenario reach 62% below 1990 levels by 2040 and 70% below 1990 levels by 2050. This progress is a strong start, however additional actions will be necessary to close the gaps and meet the targets of 80% below 1990 levels by 2040 and net-zero by 2050.

Figure 3: Economy-wide GHG Emissions Under the Current Policy Scenario



Emissions reductions in the Current Policy scenario are driven by the following state laws, programs, and regulations, all of which are impacted by shifts in federal policy in 2025³:

- + The **Renewable Energy Standard (RES)**, which requires that 100% of retail electricity sales are met with renewable sources by 2033
- + Existing **State Energy Efficiency Programs**, which encourage weatherization and appliance efficiency upgrades in buildings
- + Existing state heat pump incentive programs like **Clean Heat RI**, which encourage heat pump adoption in buildings
- + Existing state electric vehicle incentives such as through the **DRIVE EV program**
- + High levels of zero emission vehicle (ZEV) adoption in line with the **Advanced Clean Cars II (ACCII) and Advanced Clean Trucks (ACT) rules⁴**, which are requirements for automakers to sell a growing percentage of new zero-emission vehicles over time



Shifting Federal Landscape

Rhode Island has a strong foundation of existing climate and clean energy policies, but ongoing changes at the federal level create many unknowns that could influence how these state policies move forward and how climate action will progress in the years ahead. The Trump administration, through HR14⁵ and associated regulatory actions, has reduced federal funding for states and local energy programs by hundreds of millions of dollars, repealed multiple clean energy tax credits incentives and initiated the rollback of federal clean car standards. Federal actions outside Rhode Island’s control have introduced significant uncertainty into the climate planning process. A Rhode Island report issued in October 2025 by Governor McKee’s Office of Management and Budget estimates that HR1 terminated or froze over \$75 million in federal funding support for Rhode Island energy investments, scientific research, and critical infrastructure. Similarly, it ended the Inflation

³ The current policy scenario did not assume the continuation or enforcement of several federal climate and energy policies—such as vehicle fuel economy (CAFE) standards and appliance efficiency standards—due to recent federal rollbacks. That being said, federal rollbacks of climate policies are still expected to influence Rhode Island’s progress by making it more challenging to achieve the goals of existing state policies and programs.

⁴ It’s worth noting that while the ACCII and ACT regulations will contribute to progress toward RI’s 2030 emissions targets, their greatest impact on GHG reductions will occur in the longer term – by 2040 and 2050. This is because it takes time for higher EV sales shares to translate into significant changes in the overall vehicle fleet. Even if all new vehicle sales were EVs, these sales only replace retiring gasoline and diesel vehicles, meaning the full benefits of the transition will unfold gradually as the existing fleet turns over. This dynamic reflects the lag between increased EV sales and the actual growth of EVs on the road.

⁵ U.S. Congress. (2025–2026). *H.R. 1 — One Big Beautiful Bill Act (119th Congress)*; <https://www.congress.gov/bills/119th-congress/house-bill/1>

Reduction Act's (IRA) clean-energy tax credits, cutting clean-energy investment and froze over \$80 million in grants, while pausing vehicle-emissions standards, threatening Rhode Island's ability to meet its climate goals.⁶

These recent federal policy changes have direct implications for Rhode Island's decarbonization requirements, starting with the RES. The rollback and loss of federal support for offshore wind and other renewable projects, along with reduced federal incentives, makes it harder and more expensive for developers to bring new clean energy online. These shifts are already affecting the regional renewable pipeline, including reductions in the interconnection queue.⁷ Similarly, the phaseout of federal energy efficiency and heat pump incentives raise the cost of weatherization and electrification for households and businesses, which reduces the reach and effectiveness of Rhode Island's existing energy efficiency and state-level heat pump incentives such as Clean Heat RI.

Federal transportation policies have also shifted in ways that affect Rhode Island's climate goals. The rollback of vehicle tax credits and weaker federal fuel economy standards make EVs comparatively more expensive than internal combustion engine vehicles in the near-term, slowing sales and making it harder for state EV incentive programs, like DRIVE EV, to achieve strong market uptake. Specifically, the federal EV tax credit of \$7,500 ended after September 30, 2025. The effects of this are already being felt across the country, with the Cox Automotive EV Market Monitor reporting a nearly 50% drop in EV sales between September and October nationally.⁸ Additionally, revoking California's waiver could prevent Rhode Island from enforcing the ACCII and ACT rules, which rely on that federal authority. Without these rules, automakers may no longer be required to deliver an increasing share of ZEVs to the state, leading to lower EV availability and slower progress toward Rhode Island's transportation-sector GHG reductions. A deeper discussion of the uncertainty around ACCII and ACT is discussed in the sections below and the Technical Appendix.

Rhode Island has challenged many of these federal policies and decision via litigation through the Office of the Attorney General and in coordination with other impacted states. These federal policies and decisions have gutted critical federal support for Rhode Island's families and communities. RI has mounted challenges to RI's pursuit of clean offshore wind (Revolution Wind), access to solar by low- and moderate-income families (Solar for All), and the adoption of ACCII and ACT to highlight a few.

Despite these challenges, Rhode Island will forge ahead in the face of this shifting landscape and continue to collaborate across all agencies in 2026 and beyond.

⁶ See RI Office of Management & Budget — H.R. 1 Report and Analysis (2025 Oct 30); <https://omb.ri.gov/sites/g/files/xkgbur751/files/2025-10/OMB%20H.R.%201%20Report%2025.10.30.pdf> for a copy of the full report and full analysis on impacts to RI.

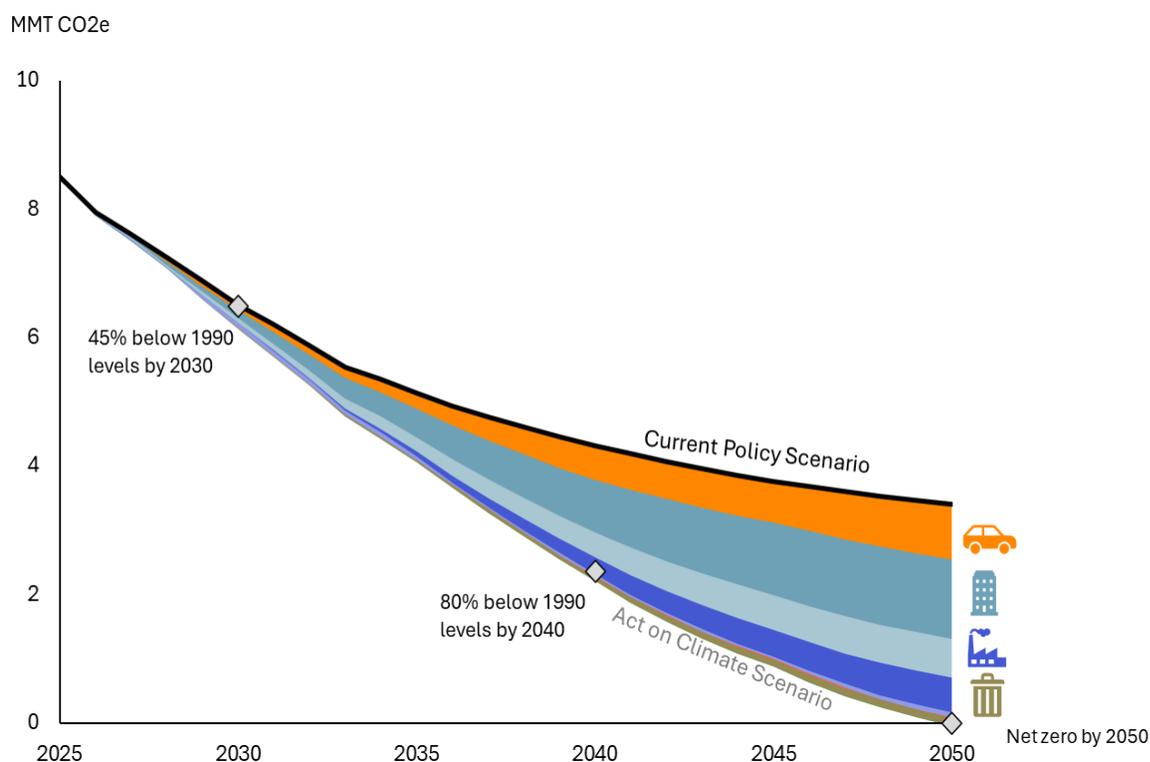
⁷ For example, Table 3 of https://www.potomaceconomics.com/wp-content/uploads/2025/06/ISO-NE-2024-EMM-Annual-Report_Final.pdf describes 4.9 GW of solar and solar + battery projects in the queue at the end of May 2025. As of December 2025, only 1.4 GW of solar projects are listed as "Active" in the queue: <https://irtt.iso-ne.com/reports/external>

⁸ Cox Automotive Inc. EV Market Monitor: October 2025. October 2025. <https://www.coxautoinc.com/insights-hub/ev-market-monitor-october-2025/>

The Path to Net-Zero

To achieve 2040 and 2050 targets, additional action will be needed beyond the successful implementation of current policies. Reaching 2040 and 2050 targets will require additional ambition across all major sources of emissions in the state like transportation, buildings, and industry, as shown in Figure 4 below. The additional actions modeled in the Act on Climate scenario include: deeper ZEV adoption for medium- and heavy-duty vehicles beyond the requirements of ACT and decarbonization of off-road sources like marine and aviation fuel; ambitious adoption of heat pumps in residential and commercial buildings; and electrification of 70% of industrial fossil fuel demand with the remaining portion replaced by renewable fuels.⁹¹⁰

Figure 4: GHG Reductions by Sector in Act on Climate Scenario



Impact on Technology Adoption

Achieving the emissions reductions goals as set out by the Act on Climate will require a transformation in the technologies that Rhode Islanders use daily for heating their homes, cooking, and commuting.

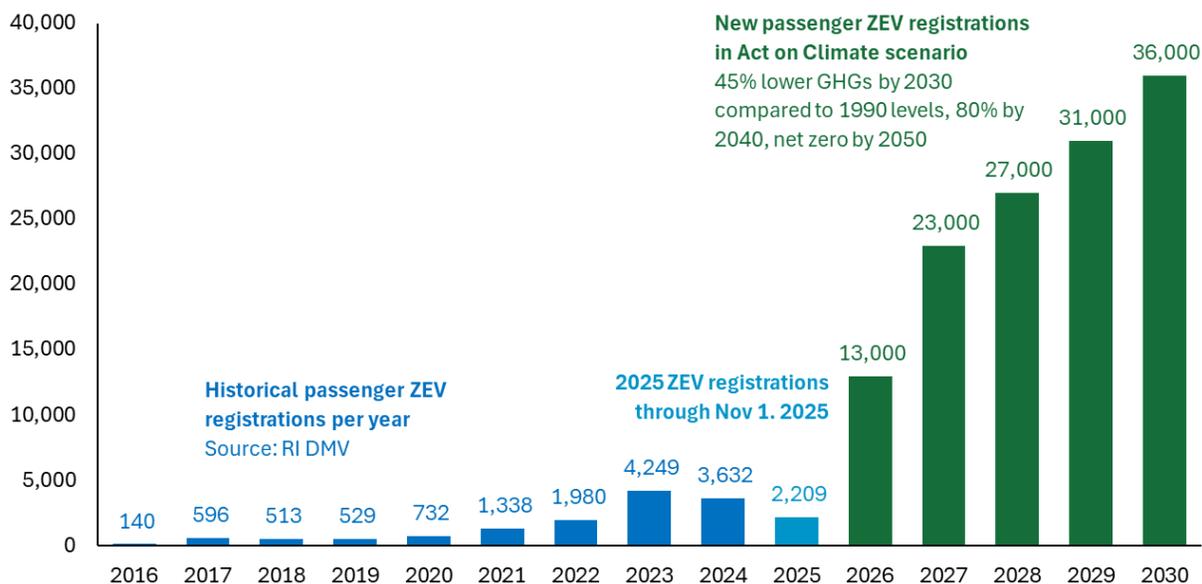
¹⁰ The Act on Climate Scenario does not represent RI's plan for specific actions to meet the 2040 and 2050 targets, rather it represents an example of policies to be considered for implementation.

Transportation is currently Rhode Island’s highest emitting sector, contributing 3.65 MMT CO₂e in 2022, around 35% of total gross GHG emissions. In the transportation sector, **transitioning from internal combustion engine vehicles powered by gasoline or diesel to ZEVs will be fundamental to reaching the state’s climate goals**. In the Act on Climate scenario, it’s assumed about 142,000 EVs would be on the road by 2030, necessitating the annual sale of 13,000 EVs sold in 2026 increasing to 36,000 EVs sold in 2030 (Figure 5). To accelerate the uptake of light-duty EVs in the state, Rhode Island has adopted ACCII, which requires that by 2035, 100% of new light-duty vehicles (LDVs) delivered to dealerships in Rhode Island be zero-emission.^{11,12} It’s worth noting that recent federal government action that repealed the EV tax credit several years earlier than expected creates challenges for the state’s EV adoption efforts.

Figure 5: New Annual EV Registrations Needed to Reach Act on Climate¹³

Passenger EV Registrations in Act on Climate Scenario

Annual Passenger ZEV Registrations



Medium- and heavy-duty vehicles (MHDVs), such as box trucks and school buses, will also need to transition to ZEVs in order to hit climate targets. To encourage this uptake, Rhode Island has adopted ACT, which similarly sets progressively stricter sales requirements for zero-emission trucks to Rhode Island dealerships. The percentage of new trucks that must be zero-emission depends on the weight class, reaching 40-75% by 2035, with different mandated milestones over time. Additionally, expanding electrification beyond trucks to public transit – such as public buses and rail – will also be important for achieving deeper emissions reductions in the transportation sector.

¹¹ ACCII is assumed to be adopted in both the Current Policy Scenario and the Act on Climate and is discussed further as a near-term carbon reduction strategy in the below sections.

¹² This could allow for plug-in hybrids and hydrogen fuel cell vehicles.

¹³ This chart only represents new EV registrations and registration renewals are excluded

To support these high levels of vehicle electrification, it will be important for Rhode Island to continue expanding its charging infrastructure. The state has already made significant progress in growing its charging network over the past several years – with over 950 charging ports available for charging,¹⁴ many installed via programs such as Electrify RI¹⁵ and the National EV Infrastructure (NEVI) program.¹⁶ Rhode Island is committed to further expansion to meet future EV charging demand as adoption grows. For example, NREL estimates that by 2030, Rhode Island will need almost 5,000 charging ports to support estimated EV charging needs.¹⁷

In the buildings sector, **building equipment will transition from a primary reliance on fossil-fuel based options toward decarbonized technologies**, like heat pumps. Under the Current Policy scenario, technology adoption is expected to be driven by existing state programs and forthcoming state home efficiency and heat pump programs scheduled to launch in 2026. For example, the Clean Heat Rhode Island program provides incentives for heat pumps, which is anticipated to drive steady but moderate market growth. By 2050, current policies and programs are estimated to result in 16% of homes having heat pumps.

The Act on Climate Scenario assumes a complete transformation of building heating technologies by 2050, representing one possible pathway that relies heavily on a mix of all-electric and hybrid heat pumps.¹⁸ In this pathway, 100% of buildings adopt heat pumps by 2050, with approximately 36% installed as hybrid systems that retain existing fossil fuel equipment for use on the coldest days of the year. This represents one potential mix of all-electric and hybrid heat pump technologies; however, other heating solutions, market developments, or future policies may influence the availability, cost-effectiveness, or adoption of alternative building technologies. In the near term, the modeled pathway in the Act on Climate scenario results in roughly 70,000 total heat pumps installed by 2030 – requiring an increase in annual sales from about 3,000 heat pumps sold per year in 2025 to about 15,000 sold per year in 2030 (Figure 6).

¹⁴ U.S. Department of Energy, Alternative Fuels Data Center. (n.d.). Alternative Fueling Station Locator; https://afdc.energy.gov/stations#/analyze?region=US-RI&show_map=true&country=US&access=public&access=private&fuel=ELEC&lpg_secondary=true&hy_nonretail=true&ev_levels=all

¹⁵ State of Rhode Island, Office of Energy Resources. (n.d.). Electrify RI Program; <https://energy.ri.gov/transportation/ev-charging/electrify-ri-program>

¹⁶ State of Rhode Island, Office of Energy Resources. (n.d.). Rhode Island Electric Vehicle Incentive Program (RIEV); <https://energy.ri.gov/rinevi>

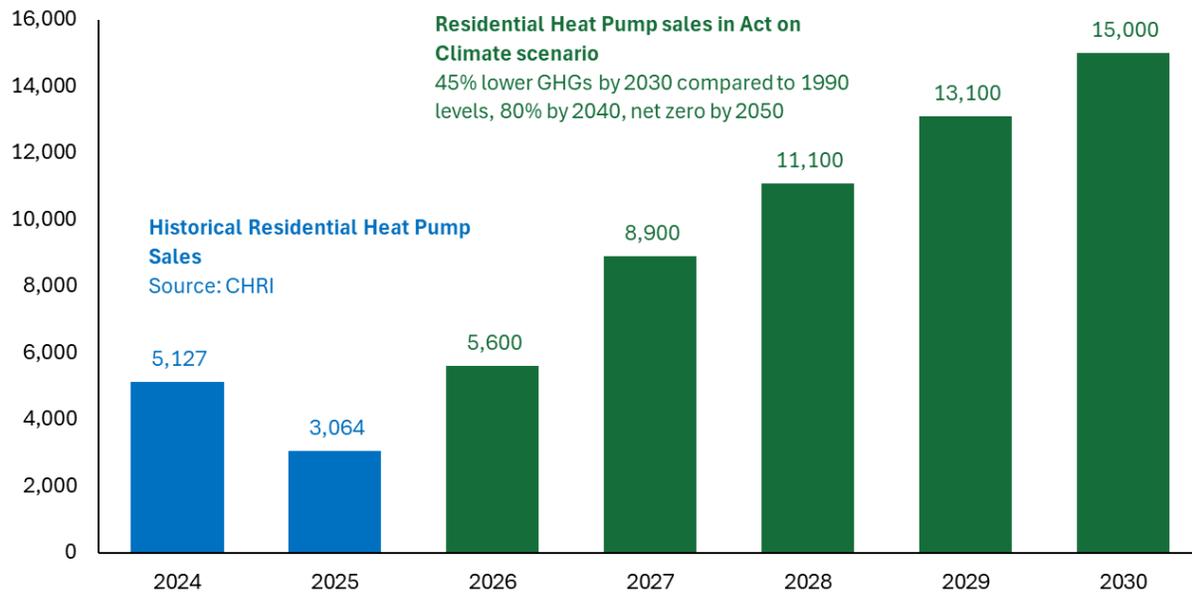
¹⁷ National Renewable Energy Laboratory. (2023). The 2030 National Charging Network: Estimating U.S. Light-Duty Demand for Electric Vehicle Charging Infrastructure; <https://docs.nrel.gov/docs/fy23osti/85654.pdf>

¹⁸ While a mix of all-electric and hybrid heat pumps is the pathway modeled in the Act on Climate scenario, it does not represent the only possible pathway for decarbonizing the buildings sector. The RI Future of Gas Docket 22-01-NG Technical Analysis explores additional scenarios for decarbonizing the buildings sector using a broad mix of technologies and solutions.

Figure 6: Annual Heat Pump Sales Required to Reach Act on Climate Scenario¹⁹

HP Sales in Act on Climate scenario

Annual Heat Pump Sales



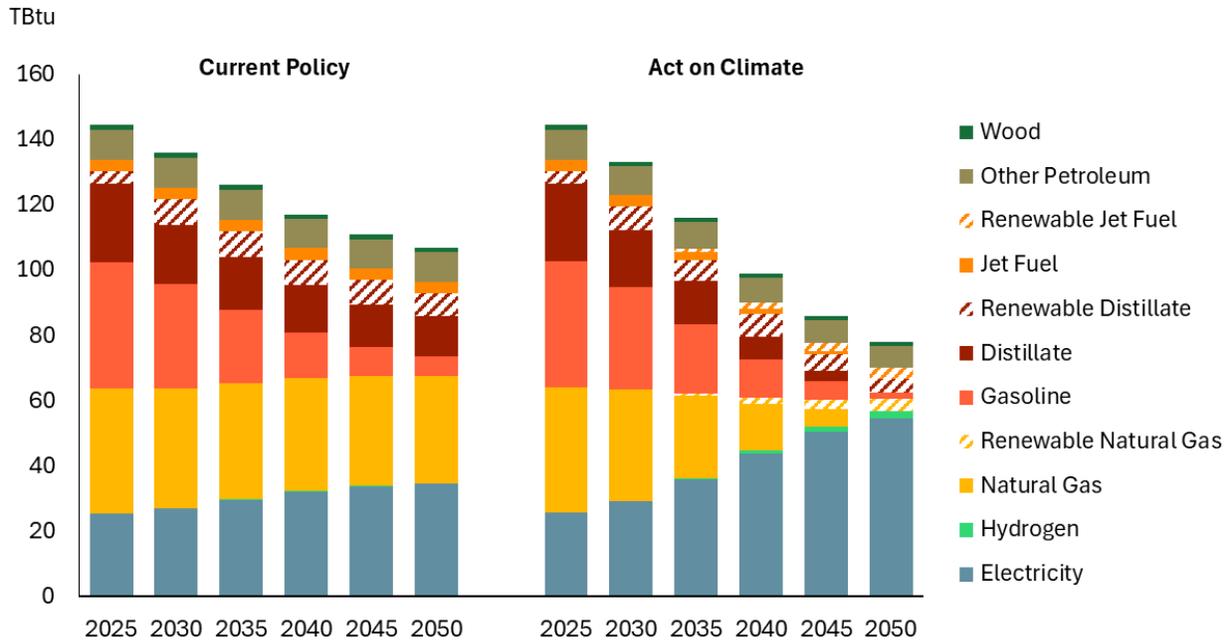
Changes in How Rhode Islanders Use Energy

As Rhode Island advances its GHG reduction efforts and transitions to new technologies, the state’s energy system will undergo key changes. **Under both the Current Policy and Act on Climate scenarios, Rhode Island shifts away from fossil fuels toward a cleaner, more electrified economy** resulting in homes, businesses, and vehicles increasing reliance on electricity rather than oil, propane, and gasoline. This transition will be supported by continued improvements in energy efficiency and transit, driven by programs that expand weatherization, deepen energy efficiency efforts, advance building performance, and increase investments in clean, efficient buses. Together these efforts result in an overall decline in final energy demand even as the population and economy grow. Figure 7 demonstrates how energy demand in Rhode Island is expected to shift over time under both current policies and the Act on Climate scenario. In the Current Policy scenario (Figure 7, left), the primary driver of changes in energy demand over time is the reduction in gasoline and increase in electricity demand due to the adoption of EVs in line with ACCII and ACT. Under the Act on Climate scenario (Figure 7, right), electricity demand is estimated to rise, and there is a decline in all fossil fuels, such as natural gas and distillate from building decarbonization, and gasoline from transportation electrification. There is also some increase in low-carbon fuels, primarily for use in MHDV vehicles and hard-to-decarbonize industrial processes. Throughout this transition, it will be essential to balance emission reduction efforts with energy affordability, ensuring that homes and businesses have reliable, reasonably priced energy.

¹⁹ Includes both all-electric and hybrid systems.

Figure 7: Change in Energy Demand over Time for Current Policy (left) and Act on Climate Scenarios (right)

Final Energy Demand by Fuel Type



Changes to the Electric Grid

The electric grid will play an important role in Rhode Island’s climate goals. Electricity powers homes, businesses, and increasingly, vehicles and heating systems. As the state transitions away from fossil fuels, the electric grid becomes both a key driver of emissions reductions and a critical enabler of broader decarbonization across transportation and buildings. The Rhode Island Climate Action Strategy includes an exploration into how the electric sector will evolve in the future given its importance in Rhode Island achieving the Act on Climate. Between now and 2050, renewable generation - from resources such as offshore wind, onshore wind, and solar - would need to expand to meet rising electricity demand, which could increase by up to 36% by 2050 under the Current Policy scenario and up to 112% under the Act on Climate scenario, as well as higher RES requirements that reach 100% by 2033. Over the next 10 years, investments in the electric sector are expected to be driven by the need to add renewable energy resources to meet rising state renewable targets, alongside necessary upgrades to aging infrastructure. After 2035, investment decisions are likely to increasingly focus on reducing GHG emissions in line with New England states’ climate targets and maintaining reliability under growing electricity demand from widespread building and vehicle electrification. Throughout this period, investment planning will also need to balance these system needs with affordability considerations for customers.

Renewable energy resources will need to be added both within Rhode Island and across the broader New England region. Achieving this will require continued collaboration and partnership with neighboring states to advance shared clean energy goals and build a decarbonized regional grid.

Key Uncertainties that Could Affect Rhode Island's Progress

As stated above, the analysis found that achieving current policies can help Rhode Island stay on track to reach the 2030 Act on Climate GHG reduction target of 45% below 1990 levels. To achieve this target, reductions will need to come from:

- + **Decarbonization of the electric grid**, driven by Rhode Island and other state renewable and clean electricity policies.
- + **Transportation electrification** in line with ACCII and ACT rules and supported by incentives to lower upfront costs
- + **Building electrification and efficiency** driven by heat pump incentives and market transformation
- + **Carbon sequestration** from maintaining Rhode Island's natural land sinks

However, it is important to note the uncertainty regarding whether these achievements will be fully realized in time to meet the 2030 target and how effectively they will deliver the expected emissions reductions for Rhode Island. Key uncertainties are highlighted below and described in more detail in the main body of the report.

Decarbonization of the Electric Grid

Decarbonization of the electric grid in Rhode Island depends both on Rhode Island's compliance with its RES and on the New England electric system transitioning to a cleaner grid mix over time. Because Rhode Island is part of a regional grid and meets a portion of its RES through purchasing RECs from projects in neighboring states, progress across the broader region is essential to achieving the state's decarbonization goals. Compliance with the RES can be met through the procurement of renewable energy projects, purchase of renewable energy certificates (RECs) from renewable generation across New England, or through making alternative compliance payments. As outlined in the Rhode Island Public Utilities Commission's RES Compliance report, Rhode Island is expected to be able to meet its RES targets in the coming years, but the cost of compliance with the RES is uncertain.²⁰ The total cost of complying with the RES will depend on several factors – including market-based REC prices and the cost of renewable energy procured.

New England faces several federal headwinds that could slow progress toward a clean electricity future. Growing federal pushback on offshore wind, including permitting delays, litigation, and shifting political support, has introduced uncertainty for projects that were expected to contribute to the regional renewable portfolio. Termination of IRA clean electricity tax credits further threaten project economics. Additionally, a broader cooling of the renewables market is evident across the region: financing conditions have tightened, supply-chain risks are elevated, and notably, there is

²⁰ Rhode Island Office of Energy Resources. 2023 Renewable Energy Standard Annual Compliance Report. November 2025. <https://rhodeislandres.com/wp-content/uploads/2025/11/2023-RES-Annual-Compliance-Report.pdf>

now less solar capacity in the interconnection queue than earlier in 2025.²¹ Together, these pressures could slow New England’s pace toward its clean electricity goals.

At the same time, there will be an increasing demand for renewables across New England due to states' rising renewable targets and electricity loads. Given this and the headwinds described above, monitoring of the regional renewables market will be needed over the coming years to ensure Rhode Island is on track to meet the RES.

The GHG emissions intensity of the New England electric grid will also impact the ability of the electric sector to decarbonize, especially in years before RI’s RES target grows to 100% in 2033. While emissions from electricity generation in New England are expected to decline in the upcoming years, the rate of decline will depend in part on whether hydro imports from Quebec on existing transmission lines recover to historical levels. Higher grid emissions increase the chance that additional emissions reduction measures may be required to hit the 2030 target.

Transportation Electrification

Under current policies, transportation decarbonization in the transportation sector over the next decade is largely driven by compliance with ACCII and ACT rules. These rules both follow California’s emissions standards, which are more stringent than federal regulations due to a previously-granted EPA waiver. As of fall 2025, the current Congress has attempted to revoke California’s waivers and ability to set emissions standards, but these actions are currently being challenged in federal court by California and other states. While these actions are being actively litigated, whether or not ACCII and ACT will be implemented starting in 2027 is unclear.

Due to the uncertainty of the implementation of ACCII and ACT, the project team modeled a Current Policy Scenario without ZEV Waivers as a sensitivity to understand the emissions impact if Rhode Island is unable to achieve compliance with these rules. The analysis shows that without ACCII and ACT, Rhode Island is estimated to reduce GHG emissions by 43% below 1990 levels by 2030—falling short of the 45% target. In later years, the state would continue to miss Act on Climate requirements without substantial vehicle electrification, reaching only a 53% reduction by 2040 and a 58% reduction by 2050. The detailed results of this sensitivity analysis can be found in the Appendix.

Additionally, the Trump administration recently terminated the \$7,500 EV tax credits that were previously established under the IRA. Without these tax credits, incentivizing widespread EV adoption will be even more challenging.

Building Electrification and Efficiency

In the Current Policy scenario, most building sector emissions reductions come from increased heat pump adoption and energy efficiency upgrades in Rhode Island homes between now and 2030. These measures reduce fossil fuel combustion and overall energy demand, driving down GHG

²¹ For example, Table 3 of https://www.potomaceconomics.com/wp-content/uploads/2025/06/ISO-NE-2024-EMM-Annual-Report_Final.pdf describes 4.9 GW of solar and solar + battery projects in the queue at the end of May 2025. As of December 2025, only 1.4 GW of solar projects are listed as “Active” in the queue: <https://irtt.iso-ne.com/reports/external>

emissions. Because heat pumps typically have higher upfront costs than fossil fuel systems, the CHRI program provides incentives that help encourage households to adopt these cleaner technologies.

The Current Policy scenario assumes that CHRI incentives are the primary driver of heat pump adoption over the next four years. Although the program exhausted \$25 million of its initial funding in early 2025, an additional \$10 million was announced in July 2025. The Current Policy trajectory assumes this new funding will be distributed between 2026 and 2030. Any changes to the program’s timing or funding levels, however, could influence the pace and scale of heat pump adoption – and, in turn, Rhode Island’s ability to achieve 2030 building sector GHG reduction targets.

Additional heat pump adoption above what was assumed in the Current Policy scenario could occur through the New England Heat Pump Accelerator program, which received a \$450 million grant from the EPA Climate Pollution Reduction Grant Program. Heat pump adoption incentivized through the Accelerator was not included in the Current Policy scenario due to uncertainty around final program design and expected impacts. However, estimates of potential impact of this program are included in the near-term carbon reduction strategies section of the report.

Energy efficiency measures, in addition to heat pump adoption, are a key contributor to reducing emissions in buildings. In the Current Policy scenario, efficiency levels for the residential, commercial, and industrial sectors are modeled using the annual measures and energy savings outlined in the Third Draft of the 2026 Annual Energy Efficiency Plan.²² Actual savings in future years may be higher or lower depending on the final 2026 plan and subsequent plans. Any changes to achieved efficiency levels could influence Rhode Island’s progress toward meeting the 2030 emissions target.

Natural and Working Lands

The Current Policy scenario assumes Rhode Island's natural carbon sink will be maintained to continue sequestering 0.75 MMT CO₂e per year from now until 2050. This will require efforts in conservation of forests, farms and wetlands; sustainable management of forests and farms; and expansion of urban greenery. If the natural carbon sink in Rhode Island is not able to be maintained at the same level as today, additional emissions reductions measures in other sectors may be required.

Costs and Benefits of Decarbonization

Achieving Rhode Island’s Act on Climate targets will involve transformations in how energy and technology are used across the state, as outlined above. These transformations will require investments across the state’s energy systems, transportation, buildings, and industries. Decarbonization will entail new infrastructure, technology deployment, and behavioral changes that come with associated costs. However, decarbonization also leads to benefits – such as avoided

²² Rhode Island Energy & Energy Efficiency and Resource Management Council. 2026 Energy Efficiency Plan Main Text Outline (Draft Three). September 5, 2025. <https://eec.ri.gov/wp-content/uploads/2025/09/00-2026-Efficiency-Plan-Main-Text-Outline-9-5-2025.pdf>

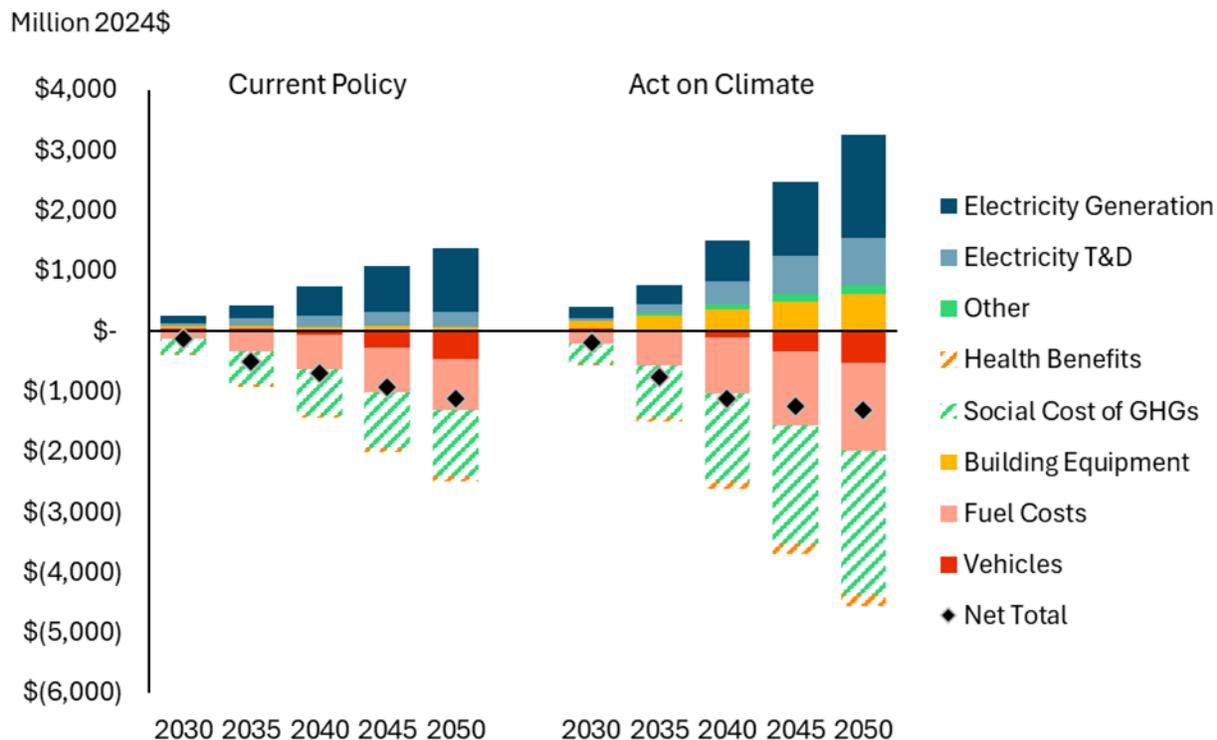
damages from climate change and savings on fossil fuel spending. To assess these impacts, the analysis compared the incremental costs and benefits of different pathways: continuing with current policies, taking additional action under the Act on Climate, and doing nothing (referred to as “business-as-usual”)²³. The results show that while achieving GHG reduction targets requires greater investment in clean energy technologies, infrastructure, and system upgrades compared to business-as-usual, these incremental costs may be balanced by long-term benefits.

Overall, the analysis found that **the incremental societal benefits of decarbonization are estimated to outweigh the incremental costs**, in both Current Policy and Act on Climate Scenarios. Decarbonization reduces spending on fossil fuels, avoids the economic and health damages caused by climate change, and delivers cleaner air and healthier communities across the state. By 2050, the societal net benefits under current policies compared to business-as-usual are estimated to be about \$1.1B, while the societal net benefits under Act on Climate compared to business-as-usual are estimated to be about \$1.3B (Figure 8).

Key drivers of incremental cost increases include investments in the electric sector – such as generation and transmission and distribution (“T&D”) – as well as upfront costs for building equipment like heat pumps. Cost savings are driven by the avoided cost of gasoline-powered vehicles, fossil fuel savings, and the social cost of GHGs. The social cost of GHGs represents the estimated monetary value of the damages caused by emitting GHGs – including impacts on property, agriculture, natural ecosystems, and the economy.

²³ The business-as-usual scenario just assumes population growth, with no climate policies.

Figure 8: Societal Costs of Decarbonization under Current Policies (left) and Act on Climate (right)



In addition to societal costs, it is important to consider the cost impacts on individual customers in RI, such as the upfront cost impacts of different technology types and changes to energy bills.

In many cases, electric technologies are more expensive than equipment powered by fossil fuels,²⁴ leading to an upfront **cost gap between fossil fuel technologies and decarbonized equipment**. An average electric sedan is about \$13k more expensive than an internal combustion engine sedan²⁵, and average cold-climate air source heat pump (ccASHP) is about \$19k more expensive than a gas furnace.²⁶ These cost variances represent averages for a single-family home – the exact upfront cost for technologies will depend on the type of equipment and site specifications. Cost gaps can be mitigated through existing state rebate programs, such as DRIVE EV for electric vehicles, and Clean Heat RI for heat pump rebates. It is worth noting that as decarbonized technologies become more

²⁴ Under present day prices. Over time, this dynamic may shift. For example, it is expected that the cost gap between internal combustion engine vehicles and EVs will close, as more models come to market.

²⁵ International Council on Clean Transportation (ICCT). Assessment of Light-Duty Electric Vehicle Costs and Consumer Benefits in the United States in the 2022-2035 Tie Frame. 2022 <https://theicct.org/wp-content/uploads/2022/10/ev-cost-benefits-2035-oct22.pdf>. Prices also adjusted to reflect real world 2024 prices from Edmunds: <https://www.edmunds.com/car-buying/average-price-electric-car-vs-gas-car.html>.

²⁶ Northeast States for Coordinated Air Use Management (NESCAUM). (2024 October 30). Heat Pumps in the Northeast and Mid-Atlantic: Costs and Market Trends; <https://www.nescaum.org/documents/Heat-Pumps-in-the-Northeast-and-Mid-Atlantic---Costs-and-Market-Trends.pdf>

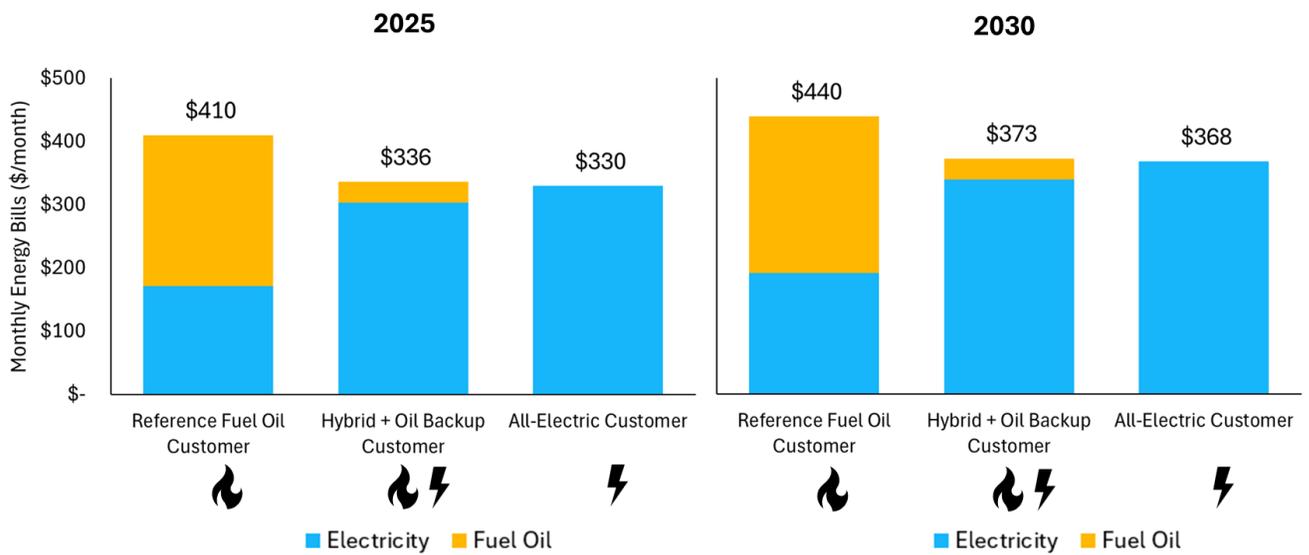
See also: Clean Heat Rhode Island (March 2025 Program Statistics), Rhode Island Office of Energy Resources — data last updated March 5, 2025.

widely commercialized, their upfront costs are expected to decline, narrowing the cost gap between clean energy solutions and fossil fuel-powered equipment over time.

The **bill impacts of electrification can vary** depending on factors like customer type, vehicle type, building type/age, existing fuel sources, level of energy efficiency, and other site-specific conditions.

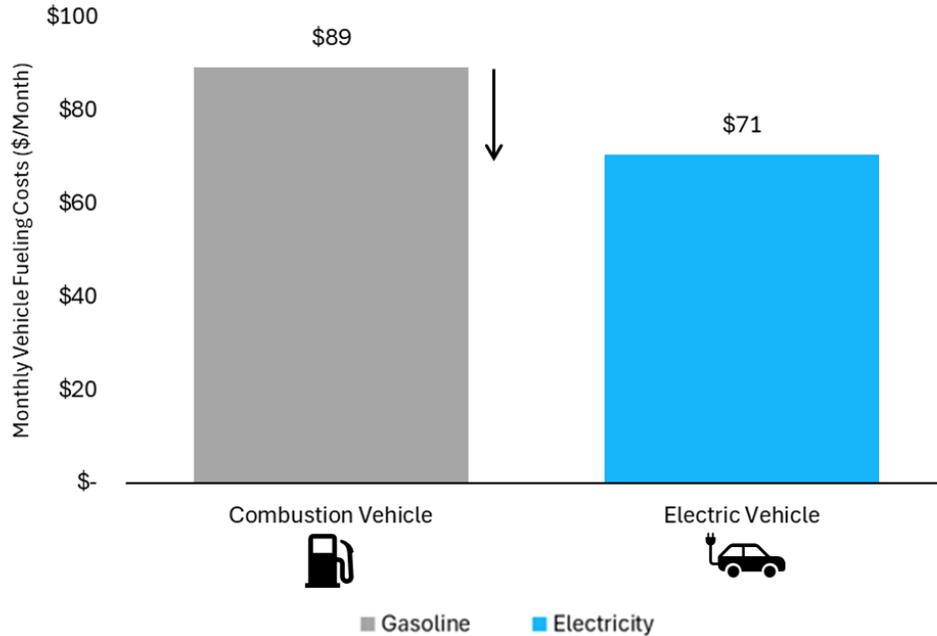
The analysis found that in some cases, customers are likely to see bill savings as a result of decarbonization. For example, customers currently using oil for heating could experience bill savings after electrification due to the high cost of oil (Figure 9).

Figure 9: Example Monthly Energy Bills for Single Family Oil vs. Electric Customers in 2025 and 2030 (2024\$)



Additionally, EV charging generally costs less than fueling a comparable gasoline-powered vehicle (Figure 10).

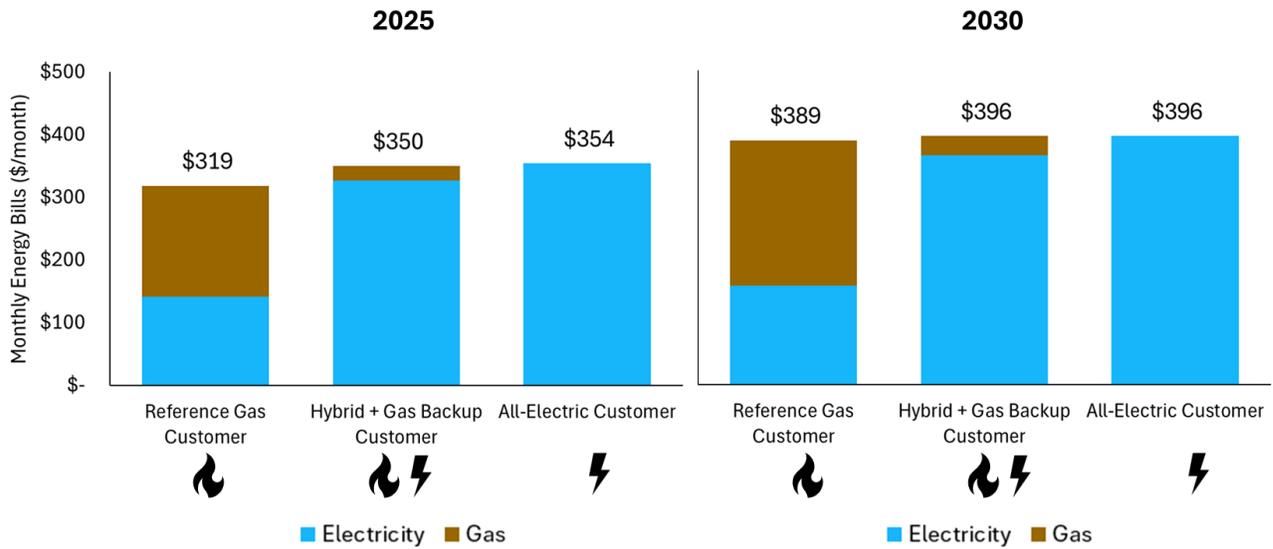
Figure 10: Example Monthly Vehicle Energy Costs for Gasoline vs. Electric Vehicle in 2025 (2024\$)



The cost savings for oil customers that adopt a heat pump, and for gasoline vehicle owners who switch to EVs represent outcomes that are aligned with climate and affordability goals.

However, customers using natural gas may see bill increases when switching to electric heat pumps (Figure 11). There are tools to address issues of affordability and mitigate potential bill increases, such as alternative electric rate structures, energy efficiency retrofits, advanced meters, and smart thermostats. Rhode Island's Future of Gas Docket, as led by the Rhode Island Public Utilities Commission (PUC), will provide specific recommendations for it to consider in the development of next steps regarding the regulated gas distribution business in Rhode Island relative to the goals in the Act on Climate.

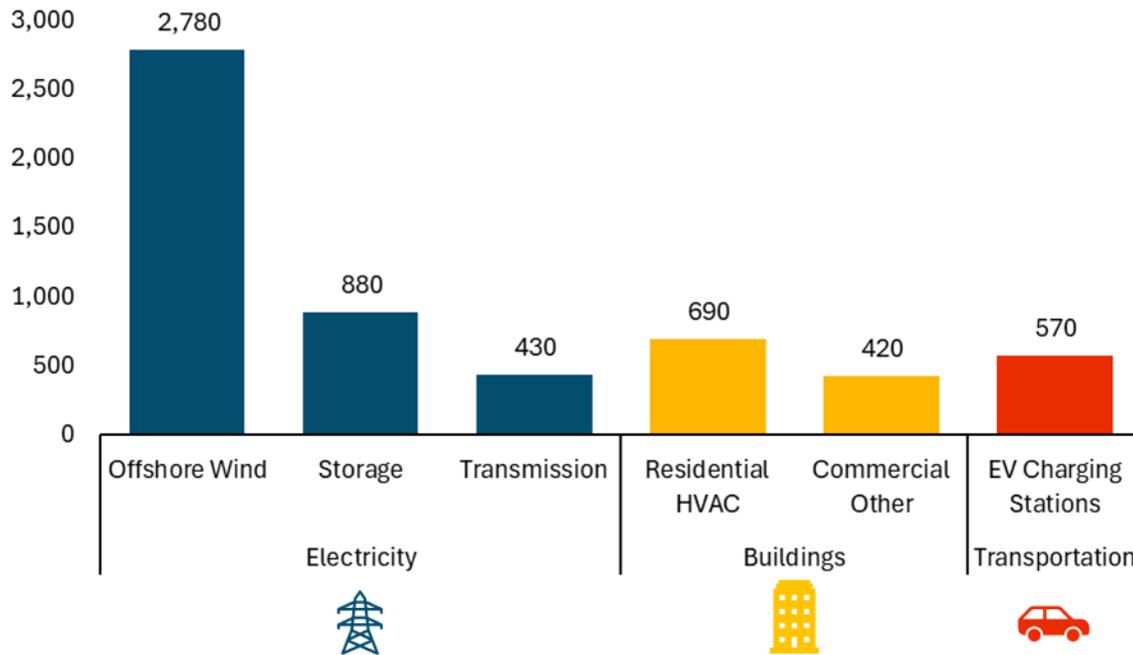
Figure 11: Example Monthly Energy Bills for Single Family Gas vs. Electric Customers in 2025 and 2030 (2024\$)



Impacts on Workforce and the Green Economy

Achieving the goals of Rhode Island’s Act on Climate will require a workforce transition to meet the state’s decarbonization targets. To better understand this shift, an analysis was conducted to assess how decarbonization will affect employment and workforce needs across key sectors. The process also included extensive stakeholder engagement through interviews, community listening sessions, and a survey of clean energy businesses. Overall, the findings show that in the Act on Climate scenario, **Rhode Island could expect steady growth in the clean energy and climate workforce**, with an estimated net gain of more than 6,600 new jobs by 2035 compared to today, and sustaining a net gain of 3,800 from today to 2050, largely in electricity, buildings, and transportation (Figure 12). Additionally, RIPTA estimates that Transit Master Plan implementation would lead to the creation of additional transit focused jobs.

Figure 12: Net Jobs Gain by 2035 in Act on Climate Scenario²⁷



Note: Offshore wind capacity values reflect modeling assumptions that the current federal leasing and permitting restrictions would be resolved within the next several years. Under this assumption, new OSW project timelines were shifted approximately five years later than initially planned, rather than eliminated entirely. This approach assumes continued progress toward lifting the federal ban, as well as recent developments such as Ørsted’s successful legal challenge allowing work on the Revolution Wind project to proceed.

While many occupations are estimated to see growth as a result of achieving Rhode Island’s Act on Climate, there are some occupations that are expected to experience a decline in jobs – such as automotive attendants. However, many jobs that are expected to decline have closely related occupations in the clean energy economy that workers could move into with training and reskilling efforts.

In addition to the energy sector showing steady growth across multiple industries, the sector is also defined by a relatively young labor force and has a history of high worker satisfaction. These factors point toward a resilient and motivated workforce well positioned to advance the state’s clean energy and climate goals. To realize this potential and ensure a just transition for workers, targeted short-term reskilling, clearer career pathways, and stronger coordination to connect transferable skills are essential. Rhode Island’s training and education ecosystem provides a strong foundation, but continued success will depend on close collaboration among employers, educators, and community partners.

²⁷ Commercial Other jobs refer to jobs related to working on water heating, lighting, and appliances in commercial buildings.

Near-Term Carbon Reduction Strategies

Rhode Island's current policies have already driven meaningful progress toward reducing GHG emissions, but additional action is needed to keep the state on track for its 2030 goal and to close the remaining gap to meet the 2040 and 2050 Act on Climate targets. To help chart a path forward, the state has identified **18 potential GHG reduction strategies** that could accelerate progress in the decades ahead. Beginning to advance these strategies in the near term would not only strengthen Rhode Island's ability to meet its longer-term climate mandates, but could also help sustain momentum toward 2030, especially in the face of shifting federal policies and broader market uncertainties.

This analysis is distinct from the long-term pathways scenarios described above, which outline how much further Rhode Island must go to meet its future climate targets. While the pathways modeling illustrates the interconnected measures needed for economy-wide decarbonization, the specific carbon reduction strategies presented here focus on near-term policies, programs, and projects that Rhode Island could implement to accelerate emissions reductions. These strategies aim to drive emission reductions across key sectors such as transportation, buildings, and industry, while reinforcing Rhode Island's leadership in climate action.

Electricity

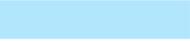
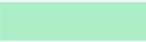
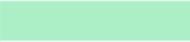
The core strategy for decarbonizing the electric sector in Rhode Island is the state's Renewable Energy Standard (RES). The RES sets a goal for 100 percent of the state's electricity retail sales to come from renewable sources by 2033. Achieving the RES will involve a combination of utility-scale renewable energy procurements, the expansion of distributed generation such as rooftop solar, and the acquisition of renewable energy certificates (RECs). These efforts may be complemented by state and federal programs designed to lower barriers to renewable energy adoption for households, businesses, and communities though recent federal policy shifts make continued availability of such programs increasingly uncertain.

Transportation

The most significant opportunities to reduce transportation emissions in Rhode Island involve decreasing overall driving and shifting the remaining vehicle fleet toward zero-emission technologies. Expanding mode shift and transit investments – including enhancements to public transit, active transportation infrastructure, and micromobility options – were all specifically modeled in the carbon reduction strategy analysis, with estimated GHG impacts based on reductions in vehicle miles traveled (VMT). At the same time, Rhode Island has already adopted the ACCII and ACT rules to accelerate the transition to zero-emission vehicles (ZEVs) across all vehicle classes. However, uncertainty around implementation and enforcement underscores the importance of complementary policies and programs that continue to make EVs more affordable, lower upfront costs, and build the charging infrastructure needed to support widespread adoption. Maintaining and expanding existing initiatives, such as the state-led DRIVE EV rebate program, NEVI-funded charger network, and public fleet and bus electrification, were also modeled in the analysis and remain essential components of a clean, equitable, and accessible transportation system for Rhode Island.

The full list of transportation strategies the state is exploring for potential implementation is presented in Table 1 below. Each strategy differs in its equity focus, level of stakeholder interest, and effectiveness in reducing GHG emissions, as illustrated in the accompanying metrics within the table. These differences highlight how each strategy could contribute uniquely to the state’s transportation and climate goals.

Table 1: Transportation-Focused Near-Term Strategies

Strategy 	Equity Focus 	Stakeholder Priority 	GHG Reduction Impact 	2025-2050 GHG Reductions (ktCO2e)
Public Fleet Electrification				200
Travel Pricing Mechanisms				500
NEVI Charger Funding				900
Transit and School Bus Electrification				700
Mode Shifting and Transit				1,000
Maintain and Adjust State EV Incentives				1,700
Advanced Clean Trucks (ACT)				3,700
Advanced Clean Cars II (ACCII)				17,300

Note: Strategies with a stronger equity focus included direct financial incentives and programs aimed at serving low-income residents. Medium impact strategies included indirect benefits such as air quality benefits. A smaller bar reflects that the strategy contains a narrower focus on equity considerations than other strategies included in the analysis.

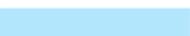
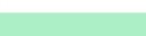
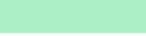
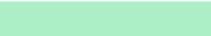
Buildings

Decarbonizing RI’s building sector will require a combination of expanded incentive programs and new policy frameworks to drive widespread electrification and efficiency. The state’s long-standing energy efficiency programs and the Clean Heat RI heat pump incentive program remain the foundation of this transition, providing critical support for weatherization, equipment upgrades, and energy cost savings. The carbon reduction strategy analysis specifically modeled the GHG impacts of maintaining and adjusting these existing programs, as well as introducing new initiatives such as a potential Building Performance Standard (BPS) and Clean Heat Standard (CHS), which would establish long-term performance and emissions targets for building owners and fuel suppliers. The analysis also modeled complementary strategies like the New England Heat Pump Accelerator and Pre-Weatherization and Whole Home Electrification programs, which expand access to incentives,

support workforce training, and promote equitable participation in the clean energy transition. Building decarbonization will also need to balance cost of compliance impacts, staffing and/or technical resources available to property owners and businesses. Together, maintaining existing programs while exploring new strategies could position Rhode Island to achieve meaningful, equitable emissions reductions in the buildings sector.

The full list of building strategies the state is exploring for potential implementation is presented in Table 2 below. Each strategy differs in its equity focus, level of stakeholder interest, and effectiveness in reducing GHG emissions, as illustrated in the accompanying metrics within the table. These differences highlight how each strategy could contribute uniquely to the state’s building decarbonization and climate goals.

Table 2: Buildings-Focused Near-Term Strategies

Strategy 	Equity Focus 	Stakeholder Priority 	GHG Reduction Impact 	2025-2050 GHG Reductions (ktCO2e)
All Electric New Construction				800
Maintain & Adjust State EE Incentives				1,400
Increased Pre-Weatherization + Whole Home Electrification Incentives				1,900
Government Building Decarbonization				2,100
New England Heat Pump Accelerator				7,800
Building Performance Standard				5,700
Clean Heat Standard				24,500

Note: Strategies with a stronger equity focus included direct financial incentives and programs aimed at serving low-income residents. Medium impact strategies included indirect benefits such as air quality benefits. A smaller bar reflects that the strategy contains a narrower focus on equity considerations than other strategies included in the analysis.

Industry and Waste

In RI’s industrial and waste sectors, the modeled GHG reduction strategies focus on a combination of targeted standards and sustainable fuel and materials management policies. Establishing large facility emissions standards and renewable fuel blending requirements for off-road equipment can drive near-term reductions in hard-to-abate industrial activities. The team also modeled organic waste diversion strategies, including composting and anaerobic digestion, which reduce methane emissions while generating beneficial byproducts such as compost and biogas.

The full list of industry and waste strategies the state is exploring for potential implementation is presented in Table 3 below. Each strategy differs in its equity focus, level of stakeholder interest, and effectiveness in reducing GHG emissions, as illustrated in the accompanying metrics within the table. These differences highlight how each strategy could contribute uniquely to the state’s pollution reduction and climate goals.

Table 3: Industry and Waste-Focused Near-Term Strategies

Strategy 	Equity Focus 	Stakeholder Priority 	GHG Reduction Impact 	2025-2050 GHG Reductions (ktCO2e)
Large Facility Emissions Standards				500
Off Road Fleet Renewable Fuel Blending Requirements				1,400
Organic Waste Diversion				1,500

Note: Strategies with a stronger equity focus included direct financial incentives and programs aimed at serving low-income residents. Medium impact strategies included indirect benefits such as air quality benefits. A smaller bar reflects that the strategy contains a narrower focus on equity considerations than other strategies included in the analysis.

Further details on all strategies can be found in the body of the report and Appendix.

Summary of Key Findings

The key findings below capture major takeaways from the Climate Action Strategy, outlining critical insights to inform Rhode Island’s next steps toward achieving its climate goals.

- + If successfully implemented, current state laws and policies can help Rhode Island meet its 2030 GHG reduction target, but uncertainties remain. Stakeholders are calling for continued support and implementation of these programs despite loss of federal funding.
 - Under current state laws and policies, the RES, State Energy Efficiency Program, DRIVE EV Rebate Program, Clean Heat Rhode Island Program, and ACCII/ACT regulations are the largest drivers of emissions reductions.
- + Achieving the 2030 GHG reduction target will depend heavily on continued compliance with the Rhode Island RES and the ongoing decarbonization of the ISO-NE grid
- + There are many additional near-term GHG reduction strategies Rhode Island can pursue to get a head start on the deeper reductions needed for 2040 and 2050. These strategies can also achieve further emissions reductions by 2030, which is especially important in the face of near-term uncertainty and federal headwinds.
- + Meeting climate goals will shift the way Rhode Islanders use technology and energy.
 - Reaching the Act on Climate targets will require an increase in efficiency, heat pump, and EV adoption over the next five years and beyond.

- + Rhode Island’s energy system is expected to transition from direct fossil fuel use toward increased electricity demand, which will have a net social and health benefit.
- + Economy-wide decarbonization entails costs, but the estimated societal benefits of reducing GHG emissions are estimated to outweigh the costs.
- + Climate action is estimated to deliver substantial public health benefits for RI, especially in lower income communities.
- + Decarbonized technologies vary in both upfront costs and longer-term bill impacts. Some ongoing costs, like EV charging vs gasoline, are often cheaper, while some upfront costs like for electric trucks and other new technologies may require support to be competitive in the near future.
- + Rhode Island’s clean energy economy will add thousands of new jobs by 2035.
 - Realizing the clean energy workforce potential will require targeted, short-term reskilling; clearer, more visible career pathways; and coordinated efforts to connect transferable skills to high-quality, accessible clean energy employment opportunities.
- + Implementing the Rhode Island Climate Action Strategy can advance equity if the barriers to adoption and participation are removed. Consideration should be given to how all residents can access the full range of climate benefits including air quality improvement, high-quality jobs, weatherized homes, and efficient technology.

Conclusion

Rhode Island’s 2025 Strategy provides options for reducing emissions while advancing equity, affordability, and a just transition for workers and environmental justice populations. Many actions, programs, laws and regulations have already been put in place to advance the state’s climate goals. The federal government has spent much of 2025 eliminating climate programs, cutting clean energy and transportation funding, and proposing roll backs to environmental regulations and offshore wind project permits. The impacts of these federal policy changes have been widespread, especially on the affordability of clean energy and transition to a lower carbon economy. We expect that federal actions continuing into 2026 and beyond will likely result in additional uncertainty for Rhode Island. Despite all of this, Rhode Island forges ahead.

In fact, modeling shows that Rhode Island would be on track to meet its second target for 2030 if existing state efforts can continue as initially developed. The uncertainties while omnipresent, reinforce the need for continued action and innovative thinking.

As was highlighted in the Rhode Island 2022 Climate Update, discussions to identify and allocate resources to support ongoing and new decarbonization efforts will continue. The decarbonization and transition of Rhode Island’s economy must be done carefully, and deliberately with affordability in mind, to meet the goals set forth in the Act on Climate. The EC4 looks forward to working with the Governor’s Office and state legislative leaders beginning in 2026 to advance the priorities identified in this Strategy.

1. Introduction

Motivation for Climate Action

Since the development of the 2016 Greenhouse Gas Reduction Plan, Rhode Island has been continuously refining and evaluating our greenhouse gas mitigation pathways. The state has been a leader in both energy efficiency and clean energy adoption. We have explored state and regional mechanisms for promoting clean transportation and adopting clean heating technology. Through participation in the Regional Greenhouse Gas Initiative (RGGI), Rhode Island has invested nearly \$80M in energy efficiency, renewable energy, and natural lands management initiatives resulting in an avoidance of over one million tons of CO₂.²⁸ The 2021 Act on Climate set clear priorities and mandates for our work going forward. The 2022 Update to the 2016 Greenhouse Gas Reduction Plan was the first plan required by the Act and it showed we were moving in the right direction, but more work needed to be done. Since that time, we have continued to build our toolkit and to support policies and programs that build on the work we have done. We adopted California's Clean Cars and Clean Trucks programs, started rebate programs for EVs and residential heat pumps, and have supported EC4 agencies with funding through an annual budget. We have expanded the EC4 attendance with additional agencies and are encouraging an all of government approach.

The 2025 Climate Action Strategy comes at a pivotal time. While federal support for greenhouse gas mitigation strategies is waning, the effects of the changing climate are accelerating. Rhode Island is warming faster than the national average, with more extreme heat days and more frequent and intense storms increasing flood risk. Sea levels along the Rhode Island coast have risen over 10 inches since 1930, with an additional one to four feet of additional rise expected by 2100. The effects of climate change are felt disproportionately across the state. We are in a time where the costs for housing, food, energy, and transportation are all rising. Low-income households, communities of color, and coastal residents are disproportionately exposed to climate risks. Renters and residents of older, inefficient housing face higher energy burdens and limited adaptation options. Language access, mobility limitations, and systemic underinvestment exacerbate vulnerability in emergency scenarios.

We must address the affordability issue to ensure that all members of our community have equal access to the economic and health benefits of new technology. Addressing climate change now will help to correct long-standing inequities in energy, housing, transportation, and health and will minimize future costs and disruptions to communities, businesses and infrastructure.

²⁸ Rhode Island Office of Energy Resources (2025). RGGI Investments Dashboard. <https://energy.ri.gov/rggi-investments-dashboard>

About the 2025 Rhode Island Climate Action Strategy

In April 2021, Rhode Island enacted the Act on Climate, establishing enforceable greenhouse gas (GHG) reduction targets of 45% below 1990 levels by 2030, 80% by 2040, and net-zero by 2050.²⁹ The Executive Climate Change Coordinating Council (EC4), originally created in 2014 under the *Resilient Rhode Island Act*, brings together leaders from across state agencies to coordinate implementation of strategies that achieve these reduction goals.³⁰ Under the Act on Climate, the EC4 is required to regularly update the state’s core GHG reduction planning document. The first milestone was the 2022 update to the 2016 Greenhouse Gas Emissions Reduction Plan, submitted to the Governor and General Assembly in December 2022.³¹ The next step is the development and submission of the 2025 Rhode Island Climate Action Strategy by December 31, 2025. The Strategy will be updated every 5 years thereafter.

The 2025 Strategy will serve as a comprehensive plan for reducing GHG emissions statewide while advancing equity and supporting a just transition for workers and disadvantaged communities. Core elements of the Rhode Island Climate Action Strategy include:

- + **Robust stakeholder engagement** to ensure Rhode Islanders’ feedback and priorities are integrated into the plan (page 38)
- + **2022 GHG emissions** to establish a baseline for measuring future changes in GHG emissions (page 58)³²
- + **Future GHG reduction modeling** to evaluate long-term emissions scenarios and the impact of individual near-term actions on reducing emissions (page 63)
- + **Costs and benefits analysis** to measure the costs (upfront technology costs, etc.) and benefits (avoided climate damages, improved air quality) of climate action (page 79)
- + **Near-term carbon reduction strategies** that Rhode Island could explore to reduce GHGs in the next few years (page 88)
- + **Workforce and job analysis** to identify employment opportunities, jobs needed, and skills required for RI’s clean energy transition (page 119)
- + **Health benefits analysis** to quantify the public health improvements from reduced air pollution and cleaner energy systems (page 125)
- + **Considerations of equity and environmental justice (EJ)** to ensure the communities most impacted by climate change benefit from actions to reduce emissions

²⁹ Rhode Island General Assembly. (n.d.). Senate Bill S-0078A;

<https://webserver.rilegislature.gov/BillText/BillText21/SenateText21/S0078A.pdf>

³⁰ State of Rhode Island. (n.d.). Rhode Island Executive Climate Change Coordinating Council (EC4) — Overview;

<https://climatechange.ri.gov/ri-executive-climate-change-coordinating-council-ec4-overview>

<https://climatechange.ri.gov/ri-executive-climate-change-coordinating-council-ec4-overview>

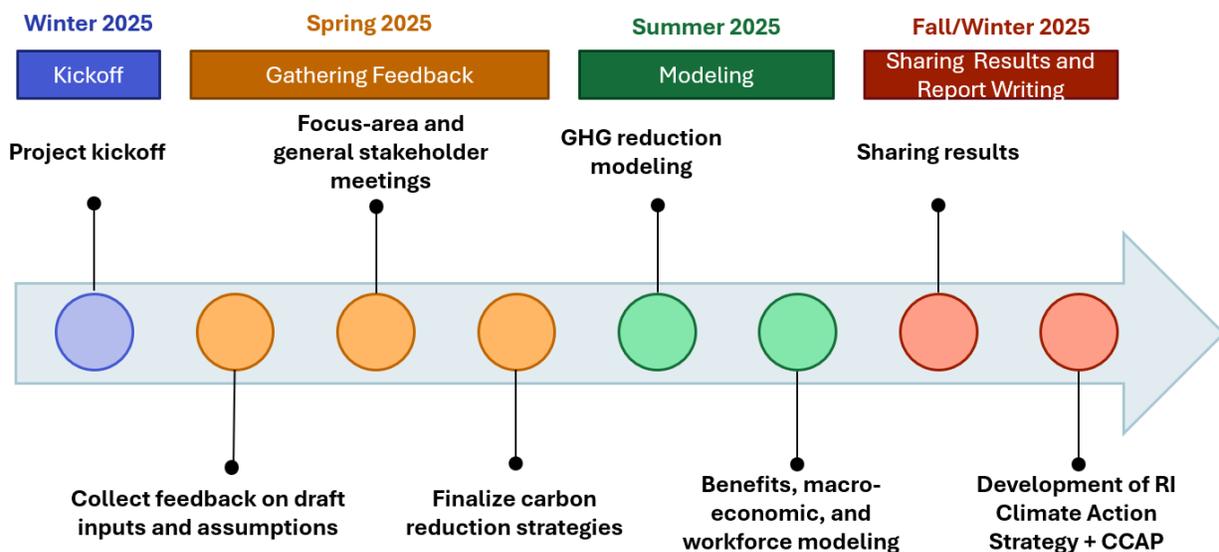
³¹ 2022 Climate Update found at <https://climatechange.ri.gov/ri-executive-climate-change-coordinating-council-ec4/publications-reports>

³² At the time of the analysis, the RI 2022 GHG Inventory was the latest data available.

How the Climate Action Strategy was Developed

The process for developing the 2025 Rhode Island Climate Action Strategy extended over an approximate 14-month period between late 2024 and December 2025 (Figure 13). Through a competitive procurement process, EC4 engaged a team of consultants, Energy and Environmental Economics (E3), Lighthouse Consulting, and BW Research. The state worked with the consultant team on stakeholder engagement, qualitative research on policy and funding options, comprehensive quantitative modeling, and drafting the final report. The quantitative modeling covered RI's current and estimated future GHG emissions, impacts on how Rhode Islanders use technology and energy, emissions reductions from near-term carbon reduction strategies, electric sector implications, key equity considerations, as well as associated cost, public health, and workforce impacts.

Figure 13: Process and Timeline for Rhode Island Climate Action Strategy



Alignment with Other Federal, Regional, and Local Plans

The 2025 Climate Action Strategy is just one of several planning efforts the state has been working on. The Strategy was produced in parallel with other ongoing studies and planning exercises, such as:

- + The **Comprehensive Climate Action Plan (CCAP)**, which is the second deliverable as part of the EPA's Climate Pollution Reduction Grant (CPRG) program. The CCAP was submitted to EPA on December 1, 2025.
- + The **Rhode Island Statewide Coastal Resilience Plan**, which outlines how the state will adapt and respond to growing climate risks such as sea level rise and extreme weather. The plan is scheduled to be finalized in early 2026.
- + The **Future of Regulated Gas Distribution Business report**, which explores the impact of the Act on Climate on the future of gas distribution in Rhode Island. The Future of Gas Technical Analysis was submitted in April 2024, and the policy report is forthcoming.

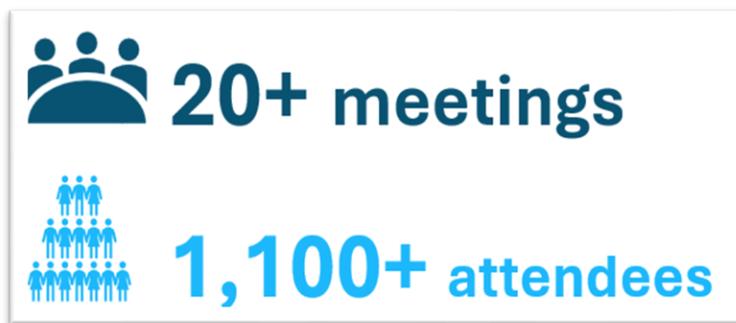
- + The **Rhode Island Long Range Transportation Plan (LRTP)**, which outlines the vision for the transportation system over the next 25 years. The plan is scheduled for publication in December 2025.
- + The **Transit Master Plan (TMP)**, which explores improvements to the state’s transit services. The TMP was published in December 2020.
- + The **Climate Change Engagement Grants and related outreach efforts**, which support climate engagement across the state. These efforts include a youth climate conference and a climate-and-health community of practice with Equity Zone communities.
- + The **Rhode Island Solid Waste Management Plan**, which supports efforts to protect human health and the environment. The plan provides guidance for an effective solid waste system and identifies strategies to prevent, recycle, and manage waste. The plan is scheduled for publication in December 2025.
- + The **State Energy Plan**, which represents the state’s first data-driven energy planning and policy document. The plan provides a long-term, comprehensive energy strategy for Rhode Island.
- + The annual **Clean Energy Jobs Report**, which provides year-over-year data on clean energy employment by technology sector and value-chain segment. The 2024 report was published in late 2025.

Role of Public Engagement

The Rhode Island Climate Action Strategy modeling and plan development was heavily informed by feedback from state agencies, advocates, industry experts, utilities, and the public. The stakeholder engagement process is discussed in detail in the next chapter.

2. Community & Stakeholder Perspectives

Climate change affects everyone and taking action to address it will require strong collaboration across all types of institutions, organizations, and agencies. Meaningful progress also depends on building public understanding and ensuring that climate solutions reflect community priorities and do not cause unintended harm. That’s why stakeholder engagement and public feedback were central to developing the Rhode Island Climate Action Strategy – to ensure the plan reflects the voices, needs, and values of the people it’s designed to serve. It also reflects close interagency coordination, ensuring that the strategy aligns with each state agency’s priorities, builds on their expertise, and focuses on solutions that are practical and achievable within their areas of responsibility.



Throughout the development of the Rhode Island Climate Action Strategy, the state held more than **20 meetings** that brought together over **1,100 participants** from across the state. These meetings created space for residents, community groups, businesses, and government representatives to share their ideas

and concerns about how Rhode Island can take effective, fair, and achievable climate action.

Overview of Stakeholder Engagement Process

The Rhode Island OER and RIDEM, in partnership with the consultant team, led a comprehensive, multi-phase stakeholder engagement process throughout 2025. This work informed the development of both the Comprehensive Climate Action Plan (CCAP) and the Rhode Island 2025 Climate Action Strategy Plan.

The stakeholder engagement process used multiple methods to gather input and keep Rhode Islanders involved. This process included direct **meetings and coordination** with stakeholders, as well as opportunities for the public to **review materials and share comments**.

Meetings and Coordination

The state held regular meetings and webinars to share information, discuss modeling approaches, and gather feedback from Rhode Island stakeholders. These conversations helped ensure that the analysis and Climate Action Strategy reflected local knowledge, community priorities, and technical expertise. The meetings and coordination activities were organized into several stages that took place across the duration of the project, as shown in Figure 14 and described in detail in the text below the figure. This structure prioritized stakeholder input at key decision points and ensured Rhode Islanders were engaged throughout the entirety of the process.

Figure 14: Overview of Stakeholder Meetings and Coordination Process



Engagement Grants: RIDEM provided grants to six community groups for direct engagement with community members. These projects were conducted from the fall of 2024 through the spring of 2025. The project team held several meetings with these groups for collaborative learning and discussion of what community members were saying. The reports and outcomes were incorporated into the themes and policy recommendations in the strategy. More information about findings from the engagement with the six community groups can be found in the *Learnings from Parallel Engagement Efforts* section below.

Rhode Island Climate Action Strategy Project Kickoff: In January 2025, OER and RIDEM kicked off the public stakeholder engagement process.

Strategy Development: From February to May 2025, the project team conducted extensive stakeholder engagement to inform and shape the Rhode Island 2025 Climate Action Strategy. This phase included:

- + Ten public stakeholder meetings, covering key topic areas related to climate action, such as transportation, energy, buildings, workforce, municipalities, and environmental justice (EJ). Most of the meetings were held online via Zoom, while 3 were held in-person, in Woonsocket, Providence, and Newport.
- + Ongoing technical engagement, including release of Pathways model inputs and assumptions for public comment, and dedicated Q&A sessions with state agencies on RI-specific data.
- + Coordination with RI’s electric and gas utilities and the Rhode Island Public Utilities Commission (RIPUC).
- + Multiple channels of feedback with the public, including verbal input during meetings, Zoom chat comments, breakout session conversations, notes on posters during in-person meetings, surveys responses, and SmartComment submissions.

- + Continued engagement with RIDEM project grantees as they finalized their projects and submitted reports.
- + Presentations to EC4, EC4 Advisory Board, and the EC4 Science & Technical Advisory Board (STAB)



Photos from the Woonsocket (left) and Newport (right) engagement sessions

Interagency Coordination: In spring and summer of 2025, the project team met with a cross section of state agencies to further develop the strategies in major sectors of the economy, such as transportation and buildings. Activities included two 3-hour in-person working sessions with transportation and buildings-focused state agencies to develop near-term GHG strategies based on community and stakeholder priorities.

Sharing Results and Rollout of Plan: In Fall 2025, the project team held three public webinars to discuss key modeling results and framing for the report. In December 2025, the project team held a final public webinar to present the final report and key findings. Specific activities included:

- + Ongoing interagency coordination and presentation of results to key building, transportation, and energy-focused agencies
- + Three public webinars focused on the major themes: *Carbon Reduction Strategies*, *Pathways to Decarbonization*, and *Workforce and the Green Economy*.
- + Release of the Executive Summary for public comment.
- + Release of modeling results and data visualizations for public comment.
- + Presentations to EC4, EC4 Advisory Board, and the EC4 Science & Technical Advisory Board.
- + A final public webinar to present the complete plan and next steps: *Rhode Island Acts on Climate: Key Outcomes of the 2025 Climate Action Strategy*.

What Rhode Islanders Said

Feedback was analyzed and organized into major themes, which are discussed in detail below. Additional information can be found on the state’s climate website under ‘Stakeholder Feedback Summary’.³³

Cross-Cutting Themes

- + **Desire to shift from planning to immediate, well-funded implementation of climate strategies:** Stakeholders consistently emphasized the need for clear accountability mechanisms, timelines, and transparent progress tracking to ensure that actions are followed through and not delayed by additional rounds of planning. This urgency was emphasized specifically in discussions around building decarbonization and public transit investments.
- + **Fragmentation and lack of coordination across state agencies, municipalities, utilities, and transit authorities:** Stakeholders highlighted the need for cross-sector and interagency collaboration, especially in areas like transportation planning, EV infrastructure deployment, and energy system upgrades. Participants urged the state to provide clearer guidance and streamlined processes to help municipalities and community groups align with statewide climate goals.
- + **Resilience and climate risk integration:** Many stakeholders linked climate mitigation with adaptation, emphasizing that decarbonization strategies must also build resilience to flooding, sea level rise, and extreme heat in frontline communities.
- + **Concern about meeting climate goals:** Many participants noted that meeting decarbonization goals may be unrealistic without new funding sources, strong political will, sustained incentives, and strategies to reduce high upfront and electricity costs. Stakeholders stressed the challenge of reaching 2030 goals in the face of funding gaps and termination of federal programs.

Environmental Justice and Equity

- + **Equitable investments:** Participants called for prioritizing investments in low-income and historically overburdened communities, including targeted programs for weatherization, electrification, clean transport, and resilience. Stakeholders particularly emphasized the need for targeted investments for transportation decarbonization strategies to deliver direct benefits to EJ communities. Specific recommendations included reliable bus service, improved bus stop infrastructure, bus electrification, and upgrades to sidewalks and bike lanes to ensure accessibility.

³³ State of Rhode Island. (n.d.). Rhode Island Executive Climate Change Coordinating Council — Climate Change Rhode Island: Strategic Plan & Resources; <https://climatechange.ri.gov/media/1946/download?language=en>

- + **Education and engagement:** Participants stressed the importance of transparent decision making, open access to data, and frequent public communication. Building trust, particularly in EJ communities will require intentional outreach, culturally relevant materials, and ongoing opportunities for two-way engagement, not just during major planning milestones. There was a clear message that engagement must go beyond one-time consultations and instead be community-led, sustained, and reflective of local priorities, particularly in neighborhoods disproportionately impacted by pollution, climate risks or underinvestment. Suggestions included trusted local ambassadors, better outreach, and ongoing clear communication to build public trust.
- + **Cost and affordability:** Stakeholders stressed the importance of making decarbonization accessible by reducing upfront costs, expanding incentives, simplifying application processes, and ensuring rebates and financing options are available to renters, low-income households, and small businesses. Participants noted concern about cost and affordability barriers to implementing many of the near-term carbon reduction strategies.
- + **Address displacement and gentrification risks:** Participants expressed concern that building decarbonization efforts could contribute to the displacement of low-income renters if not designed or implemented equitably. Stakeholders suggested solutions such as embedding tenant protections into building upgrade programs in order to maintain housing stability.

Transportation

- + **Expand EV charging infrastructure:** Stakeholders emphasized the need to grow Rhode Island’s EV charging network, especially in rural areas, multifamily housing, and EJ communities. Key recommendations included improving charger reliability, supporting vehicle-to-grid technologies, and integrating EV planning with local infrastructure efforts.
- + **Strengthen public transit:** There was widespread support for increasing investment in RIPTA, expanding service areas, and fully implementing the Transit Master Plan. Transit was viewed as essential public infrastructure deserving long-term funding and coordination with land use planning.
- + **Promote mode shift:** Participants urged the state to reduce car dependence by investing in biking, walking, and greenway infrastructure, especially in tandem with transit-oriented development and land use reforms that support compact, walkable communities.
- + **Electrify bus fleets:** Electrification of school and public bus fleets was strongly supported as a near-term strategy to reduce emissions and modernize transit.
- + **Ensure affordability and accessibility:** Stakeholders emphasized that transportation systems, EVs and public transit alike, must be affordable, reliable, and accessible to low-income Rhode Islanders. The importance of incentives for low-income EV adoption was emphasized.

Buildings

- + **Accelerate equitable electrification:** Electrification of residential and commercial buildings was widely supported by stakeholders. Participants emphasized the need to address barriers such as high upfront costs for heat pumps, split incentives between landlords and renters, and risks of tenant displacement as homes are upgraded and improved.
- + **Mandate all-electric new construction:** Many stakeholders supported policies that require all-electric systems in new buildings and discouraged further investment in natural gas infrastructure.
- + **Expand incentives and financing:** Heat pump incentives, low-interest loans, and pre-weatherization support were seen as essential to enable equitable electrification. Participants also supported electricity rate structures that make electric heating affordable.
- + **Retrofit aging buildings:** Upgrading existing buildings was seen as critical to equitable climate action, particularly those facing structural or health barriers such as mold and lead. Stakeholders emphasized the need for programs that prepare buildings for electrification and weatherization, including pre-weatherization programs.
- + **Adopt performance standards and benchmarking:** Stakeholders recommended setting energy performance standards for large buildings and requiring benchmarking as a foundational tool to track and reduce emissions.
- + **Focus on execution:** Delays due to extended planning were a concern. Stakeholders urged the state to focus on executing existing building strategies with measurable outcomes and adequate funding.

Workforce

- + **Grow an inclusive, skilled clean energy workforce:** Participants called for accessible job training programs, apprenticeships, and community college partnerships to prepare workers for roles in EV deployment, solar installation, building upgrades, and related fields. Stakeholders voiced they would like to see clear data on job forecasts and transparent reporting as the clean energy workforce is developed.
- + **Support workers in transition:** Stakeholders emphasized the need for transition planning and job protections for fossil fuel-related workers (HVAC technicians, oil delivery personnel). Supportive policies, trust-building, and public recognition were seen as vital. Participants specifically highlighted the need for automotive retraining programs and union/industry partnerships to support transitions into clean energy jobs.
- + **Center equity in workforce development:** Wraparound support such as childcare, transportation assistance, and language access were recommended to ensure broader participation in workforce development programs. Participants stressed the need for family-sustaining wages and benefits, particularly for underrepresented communities.

- + **Coordinate across sectors:** Stakeholders recommended stronger coordination among workforce boards, municipalities, unions, and economic development agencies to align training and hiring efforts with climate goals.
- + **Workforce development:** Across multiple sessions, participants emphasized the need to build a strong, inclusive clean energy workforce. This includes accessible training programs, certification pathways, and wraparound supports such as childcare, transportation assistance, and language access. There was widespread agreement that green jobs should be secure, well-paid, and come with benefits, particularly for workers impacted by fossil fuel phase-out, such as HVAC technicians and fuel delivery workers. Stakeholders emphasized the need for potential funding sources to build career pathways that incorporate re-skilling for workers.

Energy

- + **Grid modernization:** Stakeholders also expressed broad support for modernizing the grid. Smart grid technologies were seen as critical to improving system reliability, enhancing resilience, and reducing long-term infrastructure costs.
- + **Distributed energy resources:** Participants voiced strong support for distributed energy resources. Many called for increased investment in rooftop and community solar, virtual power plants, and thermal energy networks.

Municipalities

- + **Advance decarbonization of municipal facilities:** Stakeholders advocated for expanded renewable energy and energy efficiency projects on municipal properties (solar carports, streetlights, heat pumps). Support for municipal aggregation was also raised as a way to boost local energy control.
- + **Invest in regional planning and coordination:** Participants highlighted the need for regional collaboration across towns to align energy, housing, and infrastructure strategies – reducing duplication and maximizing shared benefits.
- + **Build local capacity:** Many smaller municipalities lack the staff, funding, and expertise needed to advance climate goals. Stakeholders requested state-provided tools, templates, and technical assistance to help local governments plan and implement projects effectively.
- + **Establish resilience hubs:** Participants recommended creating resilience hubs in vulnerable areas to maintain access to energy, water, cooling, and other essential services during climate emergencies.
- + **Prioritize equity at the local level:** Stakeholders emphasized the importance of targeting municipal climate investments in EJ communities, improving access to localized data, and ensuring local plans reflect equity goals.

Summary and Key Findings

- + **Implementation and coordination:** Stakeholders broadly expressed frustration with slow progress and emphasized the need for immediate, well-funded implementation of climate strategies, rather than additional planning phases. Participants frequently noted the fragmentation of climate-related efforts across agencies and called for better coordination, especially in areas like transportation, land use, housing, and energy infrastructure.
- + **Equitable access and community trust:** Equity was a dominant concern especially in the context of electrification, transit investments, and incentive programs. Stakeholders called for prioritization of low-income and EJ communities when pursuing GHG reduction strategies, more user-friendly program/funding design, and meaningful community engagement that builds long-term trust.
- + **Clean energy and electrification:** Electrification of buildings and transportation paired with grid modernization and expansion of distributed energy resources was seen as central to achieving climate goals. There was strong interest in heat pumps, EV charging, and solar access. At the same time, stakeholders stressed the need to address barriers to building electrification, find solutions to prevent displacement or gentrification after building upgrades, and address the split incentive between landlords and renters. Participants also emphasized the need for broader EV charging infrastructure to support transportation electrification and expanded public transit access.
- + **Affordability and workforce transition:** Stakeholders expressed concern about affordability impacts of climate actions, especially for EJ populations. There was strong support for workforce transition planning, job training, and protecting workers currently in fossil fuel-related industries. Participants highlighted the need for the growing workforce to include jobs with good wages, benefits, and opportunities for advancement.

Learnings from Parallel Engagement Efforts

Alongside the stakeholder engagement led by the state between January and December 2025, DEM also funded six community groups to conduct outreach to their communities around the development of the 2025 Climate Action Strategy. These projects reached a broad range of folks including farmers at the African Alliance of Rhode Island, apprentice graduates with Building Futures, and youth activists with Youth in Action and Movement Education Outdoors. Roots 2Empower, Green Energy Consumers Alliance, and the East Bay Community Action Program each hosted workshops and listening sessions to hear about the needs and interests of community members.



Green Energy Consumers Alliance hosted seven conversations about climate change in underserved communities in Rhode Island. They hosted four in-person community engagement sessions focused on climate change and environmental justice, and three interactive climate workshops. The in-person sessions were hosted with a different local community-based organization for each: Roots

2Empower, George Wiley Center, Progreso Latino, & Conexion Latina. Roots 2Empower partnered on the three-part climate workshop series. Participants were supported with childcare, refreshments, and stipends.

Topics addressed during engagement sessions included the science and consequences of climate change, environmental justice, state leadership in Rhode Island, clean energy technology incentives, and clean energy jobs and economic benefits. Discussion points in the workshops included personal experience, familiarity with environmental justice, engagement with the 2025 climate action strategy, and accessing clean energy incentives. Many people expressed that they are already experiencing the effects of climate change, including allergies, flooding, heat waves, and difficulty growing plants and food. Many individuals advocated for more accessible and reliable public transportation. Folks also expressed that they would like more information about the environment such as where power plants are located, and information on toxic waste and wildfires. A need was expressed for translation services specifically into Portuguese.

People attending the sessions showed high interest in solar panels, heat pumps, and e-bikes, but had concerns with equipment costs, added operating costs, and difficulty getting support for installation and understanding rebates. More transparent communication on energy programs is needed to build trust. Some felt that the Community Action Programs (CAPS) many not have sufficient information to fully support community members. Several attendees suggested having a centralized hotline for inquiries about incentive programs along with more support for CAP agencies. Key barriers included a need for more community events, simpler educational materials, better outreach, and access to free consultations.



AARI
African Alliance of
Rhode Island

The African Alliance supported three youth interns who collaborated on understanding the local effects of climate change and sharing their findings with community members to raise awareness and encourage discussion about solutions. The team wrote and shared educational materials that include hands on activities that can motivate youth to find solutions to climate affects. The three interns were able to share their knowledge with students who visited the African Alliance farm, and they worked on selling value-added products from the farm such as pickled okra and carrot apple jam.





east bay community action program

The Bristol, East Providence, and Warren Health Equity Zones partnered with the Town of Barrington to host a series of community events engaging residents in conversations around climate resiliency, extreme weather, and long-term solutions to the problems facing coastal communities. Events were hosted at libraries, senior centers, parks, and more, and were open to all residents, including kids. Topics ranged from concerns about how extreme weather is impacting traditional seasonal work in Rhode Island, such as snow plowing, to answering questions about heat pump conversions, and learning what items are considered a necessity in a weather emergency.

Ten total events were held in the four East Bay towns. These ranged from “Coffee Hour Conversations” at senior centers and the Barrington Library, to focus groups with HEZ collaborative members, and phone interviews with interested residents. Communities were the most engaged when they spoke about how greenhouse gas emissions lead to extreme weather and how that impacts daily living. Participants were supported with kid-friendly activities and refreshments, rideshare vouchers, and the ability to reach out through phone, email, or zoom. Special sessions were designed to attract parents with school-aged children. Partner events included an Open (f)Arms Retreat animal habitats activity, and the Week of the Young Child brought presentations and hands on activities.



Primary concerns expressed were related to extreme weather – extreme heat, cold, and increased amounts of flooding, rainfall, and heavy winds. Residents thought that increased utilization of public

transportation and EVs would be beneficial in the long term, but they do not believe current infrastructure supports usage, and do not have a trusted source of information. Residents in each community are concerned with basements flooding and the high cost of heating and cooling their homes. Suggestions included more education for residents on the importance of emissions reductions and resources to lower them, clearly marked evacuation routes, engaging on emergency planning, expanded public transit, and planting more trees.



Youth leaders and members from Youth in Action spent time learning about local climate issues on a two-day retreat with Movement Education Outdoors where they discussed their vision for what they wanted to see in the environment and

created posters and rap lyrics about their experiences in the community dealing with environmental issues. They came up with a list of topics to share with the community at the annual Youth in Action Bloom fundraiser. The topics were presented on poster boards where attendees were able to respond to several questions. A big focus for the group was on the importance of green spaces.



Questions included “Why is access to green spaces important?” and “How can we raise awareness of these places in the community?” Answers to what things about green space do we enjoy the most included the gentle nudge to be present, bringing the community together, feeling healthy, and enjoying the quiet, the colors, and the birds. Folks expressed the importance of green spaces to help ground us without technology, support physical and mental health, and create respect for nature.

Suggestions included more community events, better signage about the locations of green spaces, and promoting their use through social media and raising awareness.



Roots 2Empower

Roots 2Empower spoke with 220 community members over a series of seven meetings between July and

October 2024 in Pawtucket, Central Falls, and Providence. During these meetings, they educated participants about the causes of climate change from an environmental justice lens, provided an overview of state climate action, and gathered feedback. Over half of participants were likely or very

likely to participate in environmental justice initiatives in their community and were eager to learn more.

When participants were asked about impacts and concerns, the biggest theme to emerge was related to extreme weather—specifically more severe storms, hotter summers, and heavier rainfall, and the related impacts on health, housing, and transportation. People were feeling these impacts in housing that could not accommodate air conditioning or through struggling to afford the additional energy costs. Some reported that their working conditions are not equipped for heat and humidity. People also noted their cars being damaged in flooding and not being able to get to work on inaccessible roads. The decline in air quality raised concerns for people with asthma, especially those with children in schools with poor air quality. Increases in allergy symptoms and associated health costs were also a concern, as was increases in food and energy prices.



Feedback specific to implementation of the Act on Climate included the need for more community centered events and support so that folks can participate in these efforts. Many felt that it would take a sustained effort and an inclusive approach for a better understanding of the information being presented and development of a vision for climate resilience. For the issues of energy efficiency rebates and incentives, there were questions about additional costs and working with landlords. Many people felt that their current living situations were already undesirable and were worried about their ability to make housing upgrades.

Themes around visions for building climate resilience included the need for participatory democracy and giving community members access to resources and decision-making. Participants envision a more walkable city and an increase in bike culture. More public transit, dignified housing, accessible and affordable childcare, food justice, and community gardens were envisioned. There was an overwhelming desire for more green spaces with an emphasis on culture, diversity, and regenerative practices. To many participants, these needs are not separate from climate action or civic engagement, but a foundational part. After years of state-sanctioned divestment in communities of

color and low-wealth communities, the state must make a consistent and long-term effort to rebuild trust and to center community input in their planning.



Building Futures prepares Rhode Islanders for rewarding careers in construction through pre-apprenticeship programs and partners with public and private entities to create equitable paths to family-sustaining careers. Building Futures completed 126 Climate Impact surveys with program graduates, most of whom are currently working as apprentices, journeymen, and minority contractor business owners in building trades occupations.

They also educated graduates about programs available to support their personal consumer choices related to decarbonizing their homes and transportation.

Two climate action workshops were held in partnership with Roots 2Empower to organize feedback on the Climate Action Strategy. Building Futures also participated in the Department of Labor and Training and Governor's Workforce Board conversations about setting guidelines for a just transition to a carbon neutral economy, and they engaged their Advisory Board of union leaders, contractors, and project owners in discussions about climate forward skills and the expansion of Registered Apprenticeship opportunities for young workers in the green economy.

The Climate Action Survey completed by program graduates prompted participants to speak to their knowledge and interest in moving to EVs, in retrofitting their homes with solar and heat pumps, and in making other energy-efficiency improvements. It tested how much information about incentive programs was getting to the community, and how likely they would be to take advantage of those programs. The survey also asked questions about skill attainment that graduates would like to achieve relative to clean energy innovations in the field, and asked how the changing climate, like exceptionally severe weather, was impacting their work lives.

Following the survey, Building Futures shared information about incentive programs and rebates with program alumni and with many of the building trades union registered apprenticeship programs. They engaged with respondents who had strong responses, especially on climate impacts on working conditions and health, and with those who provided any strong response to the survey to ensure that participants understood options to protect themselves and ways to participate in broader conversations and action.

The Role of Resilience

In 2024, the RI General Assembly adopted the Act on Coasts (RIGL Chapter 46-23.4) which calls for the creation and maintenance of a statewide coastal resilience plan. Intended to assess community vulnerabilities and recommend resilience and financing strategies, the plan is in the final stages of development and due to be finalized in early 2026.

At the intersection of climate mitigation and resilience are solutions that create parallel pathways to reduce emissions while building capacity to withstand climate impacts. Resilience strategies can increase our adaptive capacity and support mitigation by using green infrastructure, clean energy, and nature-based solutions. Recognizing that certain actions like protecting forests and supporting smart growth address mitigation while also protecting people and systems from harm has been a driver behind RI's ongoing climate planning. Developing resilient infrastructure in RI that serves both purposes is critical.

The 2025 Statewide Coastal Resilience Plan, also known as Resilient Rhody 2025, intends to integrate all federal, municipal, and state efforts into a comprehensive and actionable plan. As RI's communities face increasing risks from sea level rise, extreme weather, and other impacts of climate change, the need to prioritize action, explore funding opportunities and coordinate across all layers of government is essential.

2025 Statewide Coastal Resilience Plan looks to:

- Help secure Rhode Island's communities and economy
- Develop a rigorous vulnerability assessment for state assets
- Identify priority assets for investment
- Engage across state and municipal government to build consensus and capacity
- Include robust community and stakeholder engagement
- Provide funding and investment strategies to advance identified projects

The 2025 Statewide Coastal Resilience Plan will be available in draft and final from under the Resilient Rhody tab on the state climate website at www.climatechange.ri.gov.

How Rhode Islanders' Feedback Shaped the Plan

Overall, the 2025 Climate Action Strategy reflects the collective feedback heard from the engagement efforts in 2024 and 2025. The state aimed to create a plan that centers Rhode Islanders' top priorities: equity and environmental justice, affordability, and near-term strategy implementation.

A summary of some specific ways Rhode Islanders' feedback was considered in the development of the Rhode Island Climate Action Strategy is shown below in Table 4, with more details in the Technical Appendix. Input from both the public and Rhode Island state agencies directly shaped the

Rhode Island 2025 Climate Action Strategy through changes to the engagement process, updates to the modeling inputs and assumptions, and consideration of additional carbon reduction strategies to address community and stakeholder priorities.

Table 4: How Stakeholder Input Shaped the Plan

Category	What Was Heard	How Feedback Was Used
Stakeholder Engagement Process	Advanced notice of meetings is required	The state sent “save-the-dates” further in advance
	Desire to review materials before stakeholder sessions	The state updated timelines to ensure materials were sent to participants before each meeting
	Process was missing business engagement	RIDEM and OER coordinated with Commerce RI to hold conversations focused on business
Community policy and program priorities	Desire to shift from planning to immediate implementation of climate strategies	The Rhode Island Climate Action Strategy focused on the development of near-term carbon reduction strategies to pursue over the next few years
	Concerns about fragmented coordination across agencies	Close coordination across many state agencies to develop the plan (e.g., utilities, RIPUC, ISO-NE, RIDOT, RIPTA, etc.)
	The importance of equity throughout the entire process	Equity considerations for each near-term GHG reduction strategy were considered
	Desire to see equity-focused strategies for buildings and transportation	Additional strategies added to the plan, including a pre-weatherization strategy and one focused on mode shift and transit
Data, inputs, and assumptions for modeling	Concern about outdated data sources and data sources not specific to RI	Sources updated to public and/or RI-specific sources
	Questions about individual modeling inputs and assumptions	Many inputs and assumptions updated based on stakeholder feedback, and a formal Response to Comment document posted

3. Pathways to Decarbonization

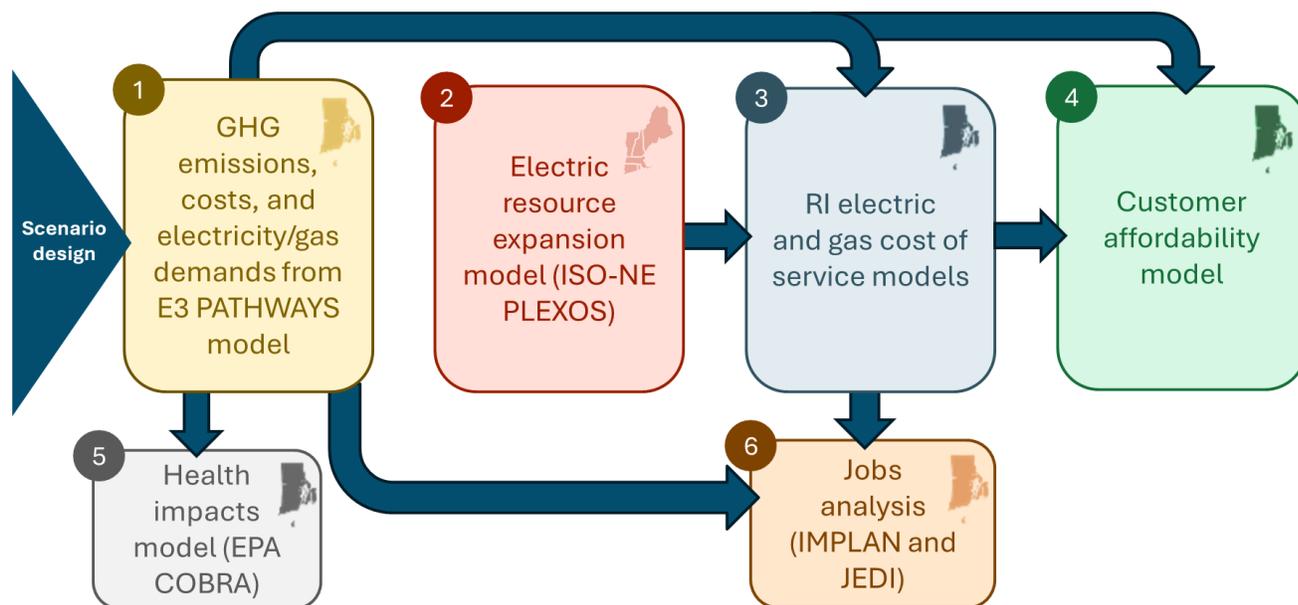
The following *Pathways to Decarbonization* analysis explores the emissions reduction pathways of current policies and the incremental actions needed to reach the Act on Climate. The analysis illustrates the level of transformation needed and in which parts of the economy, such as buildings, transportation, and industry. This work examines not only estimated future GHG emissions under current policies, but also how Rhode Islanders might use energy differently in the years ahead, including changes in fuels, electricity use, and technologies like heating systems and vehicles. The analysis also considers what meeting the Act on Climate could mean for the electric grid, how costs and benefits may shift for utility customers and society, and the potential impacts on Rhode Island's workforce. The modeling was shaped by the stakeholder input outlined above, and all key assumptions were reviewed and vetted by Rhode Island stakeholders through that process.

Approach to Quantitative Modeling

To evaluate potential emissions reductions under current Rhode Island policy and those required to meet the Act on Climate targets, the state used a scenario-based modeling approach. This approach considered distinct scenarios to assess different plausible futures in Rhode Island. The scenarios in this analysis are not predictions of the future; rather, they explore “what if” questions about how energy use, emissions, and costs could change over time under different assumptions. The detailed assumptions underpinning each scenario cover buildings and heating systems, customer characteristics, vehicle and driving patterns, levels of energy efficiency, emissions accounting methodology, and the current policy landscape. Scenario assumptions were then fed into the comprehensive modeling framework, which is described in Figure 15 below.

Pathways is an economy-wide energy and GHG emissions accounting model developed by E3 to compare future energy demand and emissions based on potential climate policies (1 in Figure 15). Outputs from the Pathways model include annual technology adoption, energy demand, and GHG emissions. The electric resource expansion model, PLEXOS, was used to identify the least-cost, reliable electricity mix needed to meet electricity demand and climate goals in New England (2). Results from both Pathways and PLEXOS were then used in utility cost-of-service models to project total gas and electric system costs and potential future utility rates (3). Those rates, plus technology upfront costs, were then passed to the customer affordability model to estimate upfront cost and utility bill impacts for individual households (4). Changes in fossil fuel consumption in Rhode Island from Pathways and PLEXOS were also passed to the health impacts model, COBRA, to quantify public health benefits from improved air quality (5). Finally, energy system investments were analyzed through input-output employment models, IMPLAN and JEDI, to estimate job creation impacts from decarbonization efforts (6).

Figure 15: Rhode Island Climate Action Strategy Modeling Framework



Scenario Design

The scenarios included in RI’s 2025 Climate Action Plan represent potential futures for technology adoption, energy demand, and GHG emissions between now and 2050. The project team analyzed two primary scenarios – one examined the estimated impact of current climate policies in Rhode Island (“Current Policy Scenario”), and the other examined the level of economy-wide transformation that would be required to meet the state climate targets as mandated by the Act on Climate (“Act on Climate Scenario”).³⁴

The **Current Policy scenario** was designed to show the potential carbon reductions of Rhode Island’s state policies and programs, such as the Renewable Energy Standard and existing heat pump incentives. These estimates demonstrate the quantity of GHG emissions that can be reduced through current efforts and highlight the remaining gap the state must close to meet future climate targets. Most federal climate and energy policies, such as vehicle and appliance efficiency standards have been rolled back by the Trump administration. As such, those policies were not included in the Current Policy scenario.

The **Act on Climate Scenario** was designed to examine the level of additional action needed across all sectors of the economy to comply with Rhode Island’s Act on Climate, which requires a net

³⁴ The current Congress has attempted to revoke California’s waivers and ability to set emissions standards, which is what has enabled the passage of Advanced Clean Cars II and Advanced Clean Trucks. These actions are being actively challenged in federal court by CA and other states. Given the uncertainties around the future of Advanced Clean Cars II and Advanced Clean Trucks, the project team did explore a sensitivity on the Current Policy scenario that examined the impact of current policies if Advanced Clean Cars II and Advanced Clean Trucks are not able to go forward. The detailed results of this sensitivity can be found in the appendix.

emissions reduction of 45% below 1990 levels by 2030, 80% below 1990 levels by 2040, and net zero by 2050.

The Act on Climate Scenario does not represent a forecast of what will happen in Rhode Island; instead, it is modeled through a “back-casting” approach. This means that the project team determined what changes in energy demand and technology adoption – e.g., how many heat pumps purchased, how many EVs adopted – would have to occur in order to meet Act on Climate GHG reduction targets in 2030, 2040, 2050. The modeled Act on Climate scenario is just one representative scenario that achieves the state’s GHG targets, but this does not mean it is the only path to meeting these targets, nor does it necessarily represent the optimal or least-cost path to decarbonization for all sectors of the economy. The Pathways model does not optimize consumer technology adoption based on least cost solutions to reduce emissions. Instead, the scenario modeling is based on a detailed set of input assumptions, including population trends, building and equipment characteristics, vehicle types and average miles traveled, current energy demand, and existing programs and policies. As mentioned in the chapters above, these input assumptions were publicly shared and underwent multiple rounds of feedback and iteration with state agencies and stakeholders. The final spreadsheet with input assumptions was posted online by RIDEM on the [Rhode Island 2025 Climate Action Strategy webpage](#).

Table 5 below shows the differences for key scenario assumptions by category for the Current Policy and Act on Climate scenarios.

Table 5: Scenario Assumptions by Category

Category	Current Policy	Act on Climate
Electricity Generation	Both scenarios achieve the state’s RES target of 100% of retail sales coming from renewable energy by 2033. New England states continues to develop renewable energy projects and make progress toward their clean energy and climate goals, allowing the ISO-NE grid to continue to decarbonize.	
Building Envelope Upgrades	~5,500 homes are weatherized and 800 homes receive pre-weatherization upgrades each year based on draft 2026 Annual Energy Efficiency Plan	Around 11,000 homes are weatherized and 2,400 homes receive pre-weatherization upgrades each year
Building Energy Efficiency	Annual electricity savings of ~72 GWh and annual gas savings of ~144 MMBtu in residential, commercial, and industrial buildings based on Third Draft of the 2026 Annual Energy Efficiency Plan (incremental to savings from weatherization measures)	
Building Heating Electrification	Heat pump market share reaches 24% of new sales by 2030 due to state incentive programs	Heat pump market share reaches 100% of new sales by 2035, and all homes have a heat pump by 2050 In 2050, around a third of all homes retain a furnace/boiler to provide backup heat during coldest hours of the year

Category	Current Policy	Act on Climate
		Commercial buildings electrify at similar rate to residential
Industry Electrification and Efficiency	N/A	All fossil fuel use for heat demand below 200 degrees Celsius electrified by 2050 ³⁵ , all manufacturing facilities achieve state-of-the-art efficiency levels identified by American Council for an Energy-Efficient Economy (ACEEE) ³⁶ and DOE ³⁷
Light Duty EVs	EV sales comply with ACCII regulation, reaching 68% by 2030 and 100% by 2035 Technology within EV market is 80% battery electric vehicles (BEVs) and 20% plug-in hybrid (PHEVs)	Same total EV sales as Current Policy scenario Technology within EV market shifts to 100% BEV by 2040
Medium and Heavy Duty Zero Emissions Vehicles (ZEVs)	ZEV sales comply with ACT regulation, reaching 40-75% by 2035 depending on vehicle weight class Vehicle sales within ZEV market are 100% electric vehicles for medium and short-haul heavy duty vehicles, 75% electric vehicles and 25% hydrogen fuel cell vehicles for long-haul heavy-duty vehicles	ZEV sales comply with ACT regulation through 2035, then increase to 100% by 2040 for all weight classes Vehicle sales within ZEV market are 100% electric for medium-duty vehicles, 50% electric vehicles and 50% hydrogen fuel cell vehicles for both short- and long-haul heavy-duty vehicles
Low Carbon Fuels	Only increased low carbon fuel use from bio/renewable diesel 50% blending requirement by 2030 for home heating fuel, results in ~7 TBtu of biofuel use by 2050	All remaining natural gas, diesel, and jet fuel use remaining after electrification and/or efficiency measures met with renewable fuels by 2050

³⁵ National Renewable Energy Laboratory (NREL). (n.d.). Dataset 118; <https://data.nrel.gov/submissions/118> <https://data.nrel.gov/submissions/118> (used to estimate share of fossil fuel demand used to provide heat below temperature threshold)

³⁶ American Council for an Energy-Efficient Economy (ACEEE). (n.d.). <https://www.aceee.org/sites/default/files/publications/researchreports/u1907.pdf>

³⁷ U.S. Department of Energy. (n.d.). Manufacturing Energy Bandwidth Studies; <https://www.energy.gov/eere/iedo/manufacturing-energy-bandwidth-studies>

Category	Current Policy	Act on Climate
		2050, results in ~11 TBtu of biofuel use by 2050 ³⁸
Agriculture and Wastewater	Baseline trend from EPA State-level Non-CO2 GHG Mitigation Report	Abatement potential available under \$100/tCO2e identified by EPA State-level Non-CO2 GHG Mitigation Report
Solid Waste	Waste disposal continues at recent levels through 2046, when Central Landfill is expected to reach capacity ³⁹	An increasing share of organic waste is diverted each year, reaching 75% diversion by 2045
Natural and Working Lands	Land sink is maintained at current levels (.75 MMT CO2e carbon sequestration per year)	

Where Rhode Island Stands Today

Emissions Accounting Framework

Rhode Island produces a GHG inventory each year. The inventory represents an estimate of all emissions sources and sinks based on available data. It calculates the emissions impact of GHGs based on the global warming potential from the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (see <https://www.ipcc.ch/report/ar5/syr/>). Additional details about RI’s annual GHG inventory can be found at [Rhode Island Greenhouse Gas Inventory](#). At the time of the analysis for the RI Climate Action Strategy, the RI 2022 GHG Inventory was the latest published inventory. As of late November 2025, RIDEM has published the 2023 GHG Inventory.⁴⁰

It's worth noting that the Act on Climate established Rhode Island’s 2050 GHG reduction targets as a “net” target. For the purposes of this study, it was assumed that 2030 and 2040 are also net targets. Net emissions targets measure Rhode Island’s GHG emissions after accounting for the total emissions released minus the emissions reduced or removed through carbon removal or sequestration. Unlike gross emissions accounting, which looks only at total emissions produced, net accounting reflects the overall balance after those reductions and removals. A key component of carbon sequestration in Rhode Island comes from the state’s natural land sink, such as forests that absorb carbon from the atmosphere. Rhode Island will continue to prioritize protecting the health and integrity of its natural ecosystems and enhancing their carbon sequestration and storage

³⁸ Biofuel technical potential was limited to Rhode Island’s population-weighted share of national waste and residue feedstocks from the Department of Energy 2023 Billion-Ton Report, no dedicated energy crops were eligible for use

³⁹ ecoRI News. (2025 March 27). Rhode Island’s Last Landfill Is Running Out of Room; <https://ecori.org/rhode-islands-last-landfill-is-running-out-of-room/>

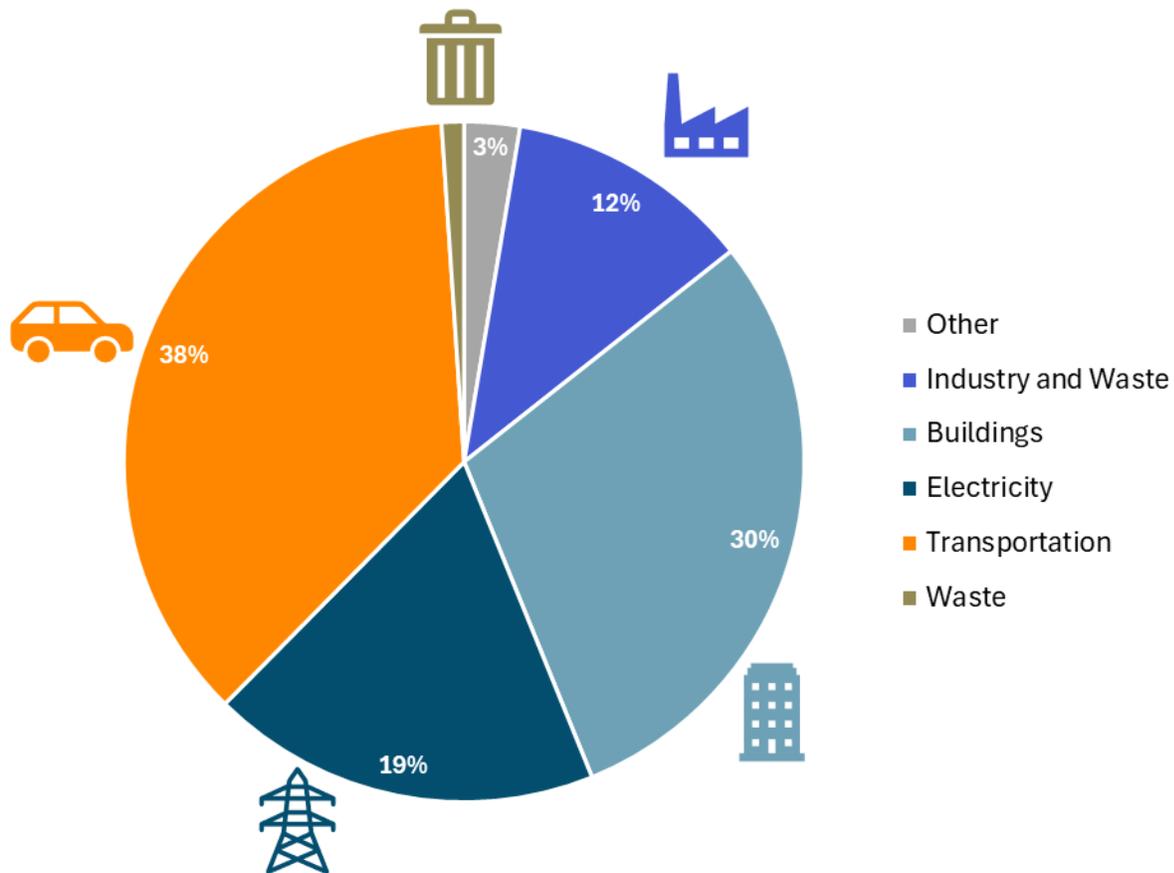
⁴⁰ The 2022 GHG Inventory was released in December 2024. GHG inventories are often released 2-3 years after the covered year due to lags in data reporting. The 2022 GHG Inventory data used for this analysis also included recent methodology updates from RIDEM for estimating emissions from solid waste and electricity consumption.

through natural climate solutions. Further details on natural climate solutions can be found in the Appendix.

Rhode Island's Current Emissions

The first step to evaluating pathways to decarbonization is to assess baseline emissions. Based on the state's latest GHG inventory (2022), **Rhode Island's net emissions are 9.60 MMT CO₂e**, a 18.3% reduction below 1990 levels, and the state has met the 2020 mandate of 10% reduction from 1990 levels as set by the Act on Climate.^{41,42} Emissions stem from every major sector of the economy, with the majority from transportation, buildings, and electricity consumption, as outlined in Figure 16 below.

Figure 16: Gross Economy-wide GHG Emissions in Rhode Island in 2022 (%)



⁴¹ Rhode Island Department of Environmental Management. (n.d.). Rhode Island Greenhouse Gas Inventory — Air Resources; <https://dem.ri.gov/environmental-protection-bureau/air-resources/rhode-island-greenhouse-gas-inventory>

⁴² After 2022, all future year emissions are modeled rather than directly benchmarked to historical data given the time lag in reporting.

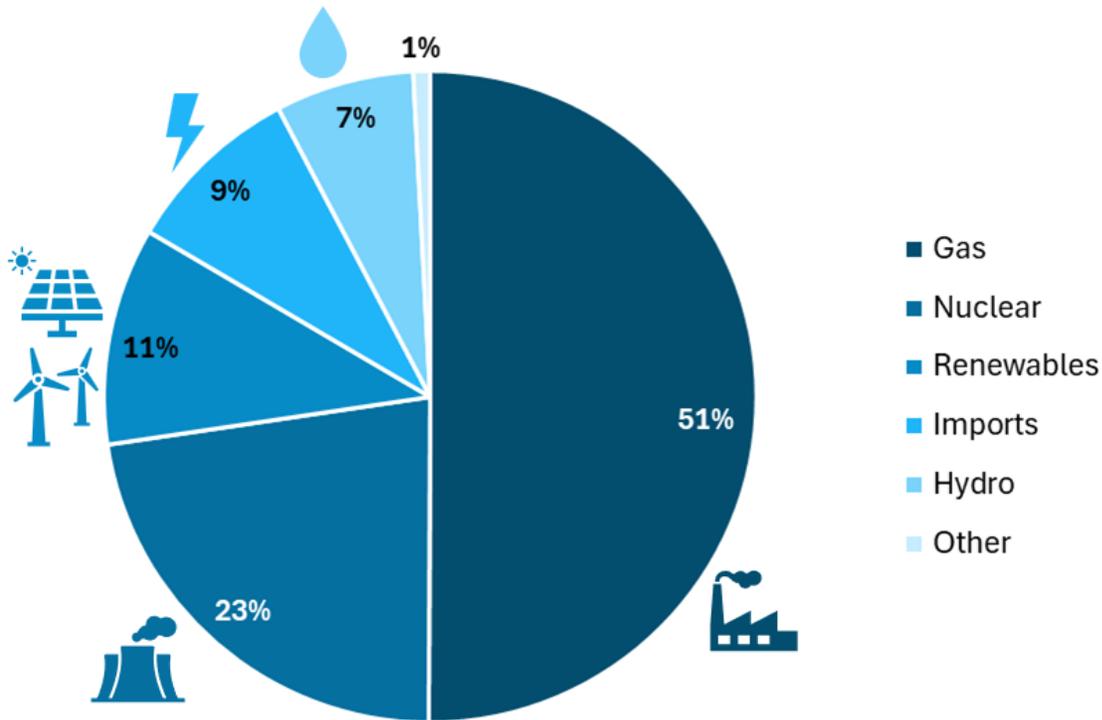
Transportation is the highest emitting sector of the economy, with GHG emissions primarily stemming from fossil fuel combustion to power passenger cars, light-duty trucks, and heavy-duty trucks and buses. As of 2022, 98% of passenger vehicles in Rhode Island were gasoline-powered, 1% diesel-powered, and 1% battery electric. As of 2020, 80% of Rhode Islanders drove alone to work, 8.6% carpooled, and 7.7% walked or worked from home.⁴³ It is clear from these figures that single occupancy vehicle trips in Rhode Island are a major contributor to transportation emissions in Rhode Island.

The next highest emitting sector in Rhode Island is buildings, including single-family, multifamily, and commercial buildings. The majority of building emissions – about 84% of the total – come from fossil fuel combustion from space and water heating devices that use natural gas and heating oil (e.g., gas furnace, oil furnace, gas water heater, etc.). Specifically, the combustion of natural gas is a significant contributor to building emissions in RI, since 50% of dwellings in the state are connected to the natural gas distribution system for end uses such as space heating, water heating, and cooking. Heating oil is another large contributor to building emissions in Rhode Island, with 25% of dwellings in Rhode Island using heating oil for space and water heating. Outside of space and water heating emissions, the remainder are primarily from industrial fossil fuel combustion (16% of total).

Electricity consumption is another major source of GHG emissions in Rhode Island, contributing nearly 20% of the total. Emissions from electricity stem primarily from the combustion of fossil fuels at power plants. Rhode Island is part of the larger ISO New England (ISO-NE) grid. ISO-NE's grid mix is currently made up of 55% natural gas, 24% nuclear, 12% renewables, and 8% hydro power (Figure 18). Renewable energy includes resources such as land-based wind, offshore wind, and solar power. Rhode Island has passed a Renewable Energy Standard (RES), which requires an increasing portion of electricity sales to come from renewable sources, reaching 100% by 2033. The grid mix shown in Figure 17 represents the resource mix as of 2024 – this grid mix will change over time, especially as more renewable energy is acquired. Revolution Wind is an offshore wind project that is currently anticipated to come online in late 2026 – approximately 20% of RI's electricity could be powered by RI's 400 MW share of this project.

⁴³ Rhode Island Department of Transportation. (2020). Rhode Island Long Range Transportation Plan; <https://planning.ri.gov/sites/g/files/xkgbur826/files/documents/trans/2020/Final-LRTP-December-2020.pdf>

Figure 17: ISO-NE Electricity Resource Mix in 2024 (%)



Industry and waste contribute to approximately 13% of emissions in Rhode Island as of 2022. The industry sector accounts for all direct emissions from fossil fuel use for manufacturing and non-manufacturing (e.g., construction, agriculture) industries in the state. Most of the industry sector emissions in Rhode Island are from natural gas combusted during the manufacturing of plastics, food products, fabricated metal products, and other miscellaneous products according to the National Renewable Energy Laboratory (NREL) Industrial Energy Data Book⁴⁴. In the waste sector, around 80% of emissions come from landfills, where the breakdown of organic matter creates methane, some of which leaks to the atmosphere. The remainder of waste sector emissions come from wastewater treatment facilities, where methane and a small amount of nitrous oxide are also generated from organic matter present in wastewater streams. Progress Under Current Policies

⁴⁴ National Renewable Energy Laboratory (NREL). (2019). 2018 Industrial Energy Data Book; <https://data.nrel.gov/submissions/122>

After establishing current emissions levels in RI, the next step is to explore what level of emissions reductions can be achieved under current policies. Rhode Island has a number of strong climate policies and programs already in place. The policies included in this scenario include:⁴⁵

- + The **Renewable Energy Standard (RES)**, which requires that 100% of retail electricity sales are met with renewable sources by 2033
- + Existing **State Energy Efficiency Programs**, which encourage weatherization and appliance efficiency upgrades in buildings
- + Existing state heat pump incentive programs like **Clean Heat RI**, which encourages heat pump adoption in buildings
- + Existing state electric vehicle and electric bicycle incentives such as through the **DRIVE EV program**
- + High levels of zero emission vehicle (ZEV) adoption in line with the **Advanced Clean Cars II (ACCII) and Advanced Clean Trucks (ACT) rules**⁴⁶, which are requirements for automakers to sell a growing percentage of new zero-emission vehicles over time
- + Maintenance of the natural land sink to sustain continued carbon sequestration at 0.75 MMT CO₂e per year



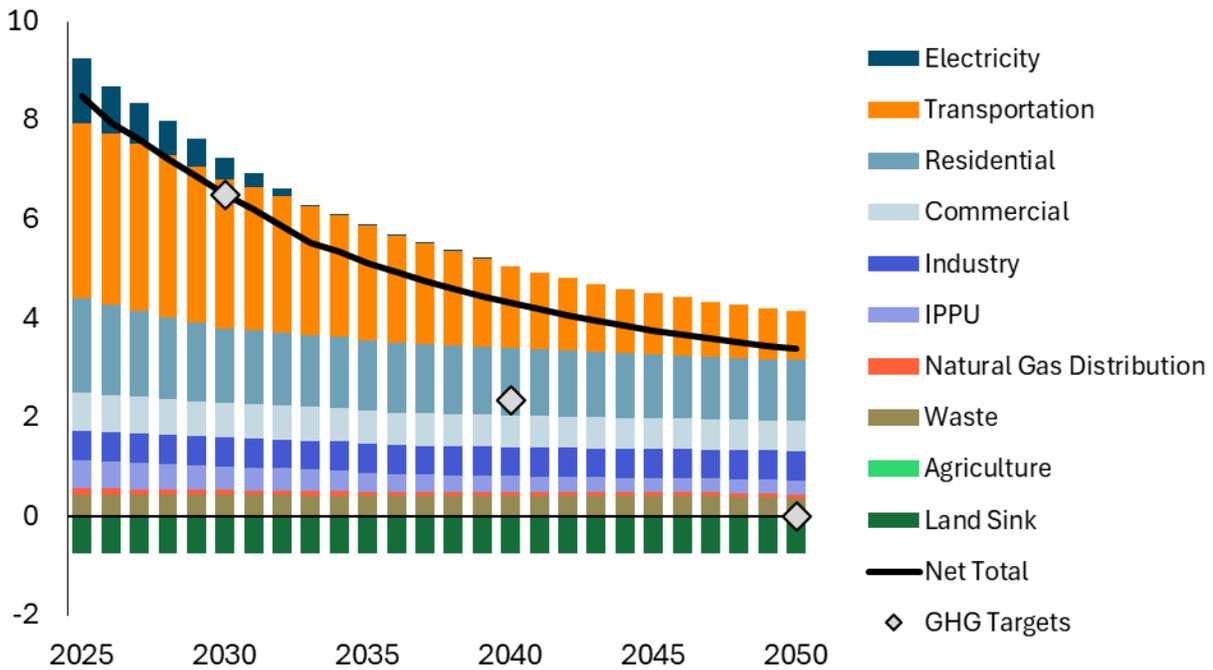
Overall, the analysis found that Rhode Island’s 2030 emissions target of 45% reduction is within reach if the policies are complied with. However, there is significant uncertainty about the next four years, and additional action will be required to reach the longer-term emissions reduction targets of 80% by 2040 and net zero by 2050. The analysis found that in the Current Policy scenario, emissions in Rhode Island reach a 63% reduction by 2040 and a 71% reduction by 2050 (Figure 18), falling short of the mandated targets of 80% below 1990 levels by 2040 and net-zero by 2050.

⁴⁵ Prior to 2025, there were also many federal regulations and funding sources to further bolster the state’s climate progress. These included appliance and vehicle efficiency standards and federal tax credits for all-electric heat pumps and EVs. However, the current federal administration has terminated many of the climate and clean energy programs that were supporting Rhode Island’s efforts to reduce GHG emissions. For that reason, the Current Policy scenario was modeled to exclude all previous federal climate and clean energy programs and incentives that have now been rolled back. The only exception to this is ACCII and ACT, which was included in the Current Policy scenario because they are rules that Rhode Island has actively adopted.

⁴⁶ It’s worth noting that while the ACCII and ACT regulations will contribute to progress toward RI’s 2030 emissions targets, their greatest impact on GHG reductions will occur in the longer term – by 2040 and 2050. This is because it takes time for higher EV sales shares to translate into significant changes in the overall vehicle fleet. Even if all new vehicle sales were EVs, these sales only replace retiring gasoline and diesel vehicles, meaning the full benefits of the transition will unfold gradually as the existing fleet turns over. This dynamic reflects the lag between increased EV sales and the actual growth of EVs on the road.

Figure 18: Emissions by Sector in Current Policy Scenario

GHG Emissions (MMT CO₂e)



Shifting Federal Landscape

Rhode Island has a strong foundation of existing climate and clean energy policies, but ongoing changes at the federal level create many unknowns that could influence how these state policies move forward and how climate action will progress in the years ahead. The Trump administration, through HR14⁴⁷ and associated regulatory actions, has reduced federal funding for states and local energy programs by tens of millions of dollars, repealed multiple clean energy tax credits incentives and initiated the rollback of federal clean car standards. Federal actions outside Rhode Island’s control have introduced significant uncertainty into the climate planning process. A Rhode Island report issued in October 2025 by Governor McKee’s Office of Management and Budget estimates that HR1 terminated or froze over \$75 million in federal funding support for Rhode Island energy investments, scientific research, and critical infrastructure. Similarly, it ended the Inflation Reduction Act’s (IRA) clean-energy tax credits, cutting clean-energy investment and froze over \$80 million in grants, while pausing vehicle-emissions standards, threatening Rhode Island’s ability to meet its climate goals.

These recent federal policy changes have direct implications for Rhode Island's decarbonization requirements, starting with the RES. The rollback and loss of federal support for offshore wind and

⁴⁷ U.S. Congress. (2025–2026). *H.R. 1 — One Big Beautiful Bill Act (119th Congress)*; <https://www.congress.gov/bill/119th-congress/house-bill/1>

other renewable projects, along with reduced federal incentives, makes it harder and more expensive for developers to bring new clean energy online. These shifts are already affecting the regional renewable pipeline, including reductions in the interconnection queue.⁴⁸ Similarly, the phaseout of federal energy efficiency and heat pump incentives raise the cost of weatherization and electrification for households and businesses, which reduces the reach and effectiveness of Rhode Island's existing energy efficiency and state-level heat pump incentives such as Clean Heat RI.

Federal transportation policies have also shifted in ways that affect Rhode Island's climate goals. The rollback of vehicle tax credits and weaker federal fuel economy standards make EVs comparatively more expensive than internal combustion engine vehicles in the near-term, slowing sales and making it harder for state EV incentive programs, like DRIVE EV, to achieve strong market uptake. Specifically, the federal EV tax credit of \$7,500 ended after September 30, 2025. The effects of this are already being felt across the country, with the Cox Automotive EV Market Monitor reporting a nearly 50% drop in EV sales between September and October nationally. Additionally, revoking California's waiver could prevent Rhode Island from enforcing the ACCII and ACT rules, which rely on that federal authority. Without these rules, automakers may no longer be required to deliver an increasing share of ZEVs to the state, leading to lower EV availability and slower progress toward Rhode Island's transportation-sector GHG reductions. A deeper discussion of the uncertainty around ACCII and ACT is discussed in the sections below and the Technical Appendix.

Rhode Island will forge ahead in the face of this shifting landscape and continue to collaborate across all agencies in 2026 and beyond.

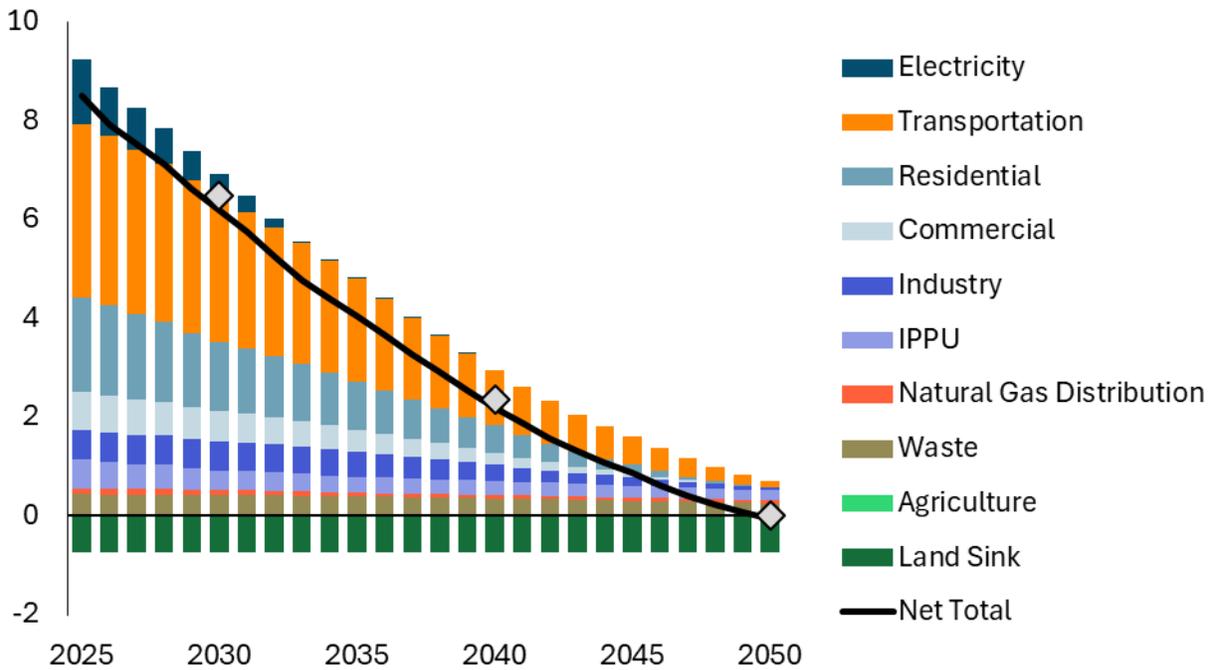
The Path to Net-Zero

While current policies, if successfully implemented, can help Rhode Island stay on track to reach the 2030 GHG reduction target, **additional action will be needed across all sectors to reach 80% below 1990 levels by 2040 and net zero by 2050** (Figure 19).

⁴⁸ For example, Table 3 of https://www.potomaceconomics.com/wp-content/uploads/2025/06/ISO-NE-2024-EMM-Annual-Report_Final.pdf describes 4.9 GW of solar and solar + battery projects in the queue at the end of May 2025. As of December 2025, only 1.4 GW of solar projects are listed as "Active" in the queue: <https://irtt.iso-ne.com/reports/external>

Figure 19: Emissions by Sector in Act on Climate Scenario

GHG Emissions (MMT CO₂e)



In addition to the policies and programs included in the Current Policy scenario, the Act on Climate scenario includes:

- + **Transportation:** The transportation sector under the Act on Climate scenario reaches a 33% reduction by 2030, 74% by 2040, and 97% by 2050. Similar to the Current Policy scenario, reductions are primarily driven by Advanced Clean Cars II and Advanced Clean Trucks, but the Act on Climate scenario goes further than ACCII by assuming a faster transition to all-electric BEVs rather than PHEVs. It also assumes the ZEV sales share continues increasing past the last year of ACT requirements (2035) and reaches 100% by 2040 for medium-and heavy-duty vehicles (MHDVs). Finally, all remaining diesel and jet fuel demand is assumed to be met with renewable fuels by 2050.
- + **Buildings:** The buildings sector under the Act on Climate scenario reach a 42% reduction by 2030, 77% by 2040, and 100% by 2050. Reductions are primarily driven by widespread adoption of electric heat pumps, with all buildings in Rhode Island having a heat pump installed by 2050. Electric heat pumps provide all heating needs in around two-thirds of homes, while the remaining third use electric heat pumps as their primary heating source but retain their existing furnaces or boilers to provide backup heat during the coldest hours of the year. By 2050, all the gas and fuel oil consumed by these backup heaters is assumed to be met with renewable fuels.
- + **Electricity:** Similar to the Current Policy scenario, the RES drives electricity sector emissions to near zero in the Act on Climate scenario by 2033, although even more clean

electricity resources are needed due to the higher electricity demands from buildings, transportation, and industry due to electrification.

- + **Industry:** The industrial sector under the Act on Climate scenario reaches a 1% reduction by 2030, 45% by 2040, and 92% by 2050. These reductions are primarily driven energy efficiency and electrification for manufacturing, with state-of-the-art energy efficiency reductions identified by ACEEE and the DOE achieved by 2050 along with electrification of all low temperature heat (<200C) supply.
- + **Other Sectors:** Beyond emissions from fuel combustion in buildings, transportation, industry, and electricity generation, additional reductions are needed to close the gap to the state’s climate targets. These reductions mostly come from the waste and natural gas distribution sectors. In the waste sector, emissions reduce 48% by 2050 due to diversion of organic waste away from landfills, while in the natural gas distribution sector, emissions reduce 80% by 2050 due to a decline in the number of buildings connected to the gas system and increased focus on mitigation fugitive emission leaks.
- + **Natural and Working Lands:** Similar to the Current Policy scenario, the Act on Climate scenario assumes the maintenance of Rhode Island’s current land sink – sustaining levels of 0.75 MMT CO₂e carbon sequestration per year.

Exploring Innovative & Emerging Technologies to Support RI's Climate Goals

The importance of having the right tools in your toolbox to install a rooftop solar system or upgrade to an efficient heat pump for a home or business is a concept most individuals can grasp. Expand that concept to the broader issue of how technology can be used to address climate change and the toolbox grows in size exponentially and encompasses technologies being researched, developed and tested worldwide. To position Rhode Island as a forward-thinking leader in emission reductions and climate innovation, future updates to this Strategy can consider emerging technologies and ways they could be deployed to reduce emissions.

These technologies go beyond traditional renewable energy and efficiency measures, offering new ways to decarbonize energy, industry, buildings, and atmospheric emissions. Some are more developed and ready for deployment than others. Opportunities to support promising technologies should not be overlooked. A large percentage of the emissions reductions needed to reach net-zero targets will rely on technologies that are either early-stage or not yet scaled. Not intended to be a comprehensive list, here are a few examples being developed regionally and internationally:

- Thermal Energy Storage (TES) stores thermal energy for later use by taking oversupply from wind or solar and converting it into thermal energy where it is stored until it needs to be used. These batteries allow heating demand to shift to off-peak hours and are especially useful when paired with rooftop solar and/or heat pump systems.
- Carbon recycling technology presents an opportunity to reduce emissions from industries such as steelmaking, chemical production, and fuel production. This process supports the development of a circular carbon economy, where carbon is repurposed rather than released.
- Biochar-driven carbon removal involves converting organic biomass into a stable form of carbon through pyrolysis. When applied to soils, biochar sequesters carbon while improving fertility and water retention.
- Micro-hydroelectric devices that generate clean power from the natural flow of water without the needs for dams or impoundments.

Impact of Decarbonization on Technology Adoption

Achieving the emissions reductions goals as required by the Act on Climate will require a transformation in the technologies that Rhode Islanders use daily for heating their homes, heating their water, cooking, and commuting. Fossil fuel-powered space and water heaters will need to transition from gas furnaces and gas water heaters to heat pumps. Gas stoves will need to transition

to electric and induction stoves. Gasoline and diesel-powered vehicles will need to transition to EVs and PHEVs.

Transportation Sector

Transportation is currently Rhode Island’s highest emitting sector, contributing 3.65 MMT CO₂e in 2022, around 38% of total gross GHG emissions. Over 66% of transportation sector emissions come from passenger vehicles like cars, crossovers, SUVs, vans, and pickup trucks. Medium- and heavy-duty vehicles and buses contribute another 22%, and aviation and other off-road fuel use account for the remaining 12% of transportation emissions. **Transitioning from internal combustion engine vehicles powered by gasoline or diesel to ZEVs is fundamental to reaching the state’s climate goals.**

To accelerate the uptake of light duty EVs in the state, Rhode Island has adopted ACCII, a program developed by the California Air Resources Board (CARB) to steadily increase the EV market share for light duty vehicles. Because Rhode Island has already adopted ACCII, it is included in the Current Policy scenario, in addition to the Act on Climate scenario.

Rhode Island can adopt ACCII— which is more rigorous than federal standards—under Section 177 of the Clean Air Act, which authorizes California to set its own vehicle-emissions standards (with an EPA waiver) and allows other states to adopt those standards. As stated above, the federal government is currently seeking to revoke the waiver previously granted to California for ACCII through actions by the new EPA administrator and Congressional Review Act resolutions, and California and other states are contesting these actions in federal court.^{49,50}

The ACCII program regulates automakers and requires them to increase the share of EVs in the vehicles they deliver for sale to dealerships in participating states. The required EV market share in 2027 (the first year) is 43%, and this grows to 100% by 2035 (PHEVs can account for at most 20% of total EV sales in each year).⁵¹ It is important to note that the ACCII regulation only directly applies to vehicles delivered for sale in Rhode Island and does not prohibit the registering of gasoline vehicles purchased out-of-state (referred to as “leakage”), even after 2035. For this analysis, because the potential leakage impacts of ACCII are unknown, it was assumed that the manufacturer EV sales share requirements apply to all new vehicle registrations in the state.

To reach the ACCII requirements and the state’s emissions targets, the number of electric vehicles sold in Rhode Island each year will need to increase from recent levels. Starting in 2026, annual sales will need to be about 13,000 EVs, climbing to nearly 36,000 per year by 2030 (Figure 20).

⁴⁹ U.S. Environmental Protection Agency (EPA). (n.d.). Vehicle Emissions — California Waivers and Authorizations; <https://www.epa.gov/state-and-local-transportation/vehicle-emissions-california-waivers-and-authorizations>

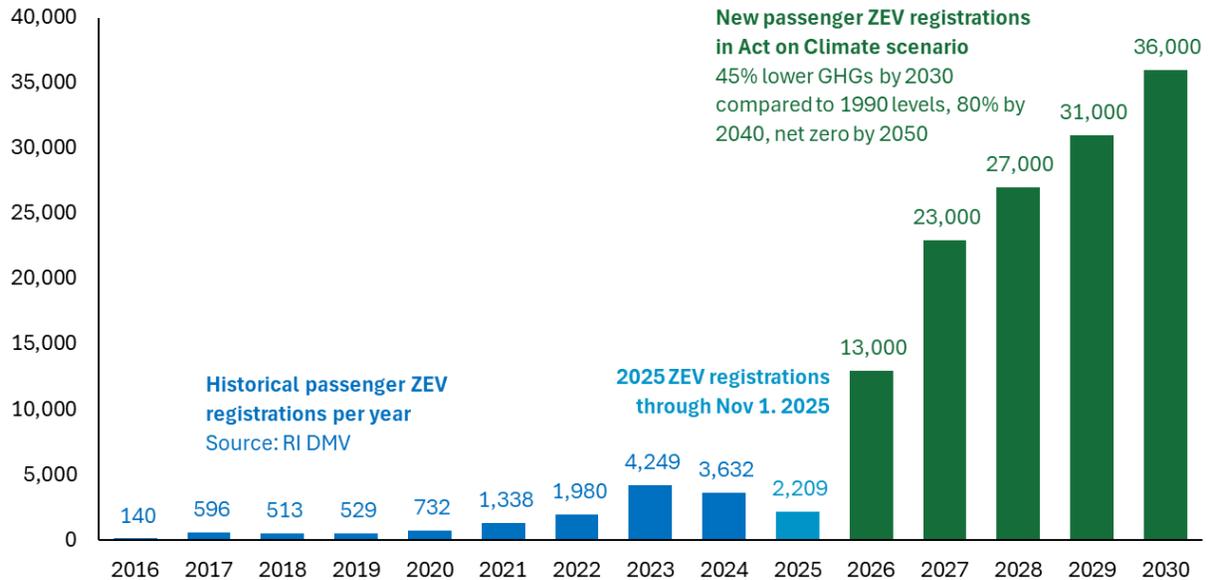
⁵⁰ The current Congress has attempted to revoke CA’s waivers and ability to set emissions standards – these actions are being challenged in federal court by CA and other states

⁵¹ This could allow for plug-in hybrids and hydrogen fuel cell vehicles

Figure 20: Annual EV Registrations Needed in Act on Climate Scenario

Passenger EV Registrations in Act on Climate Scenario

Annual Passenger ZEV Registrations



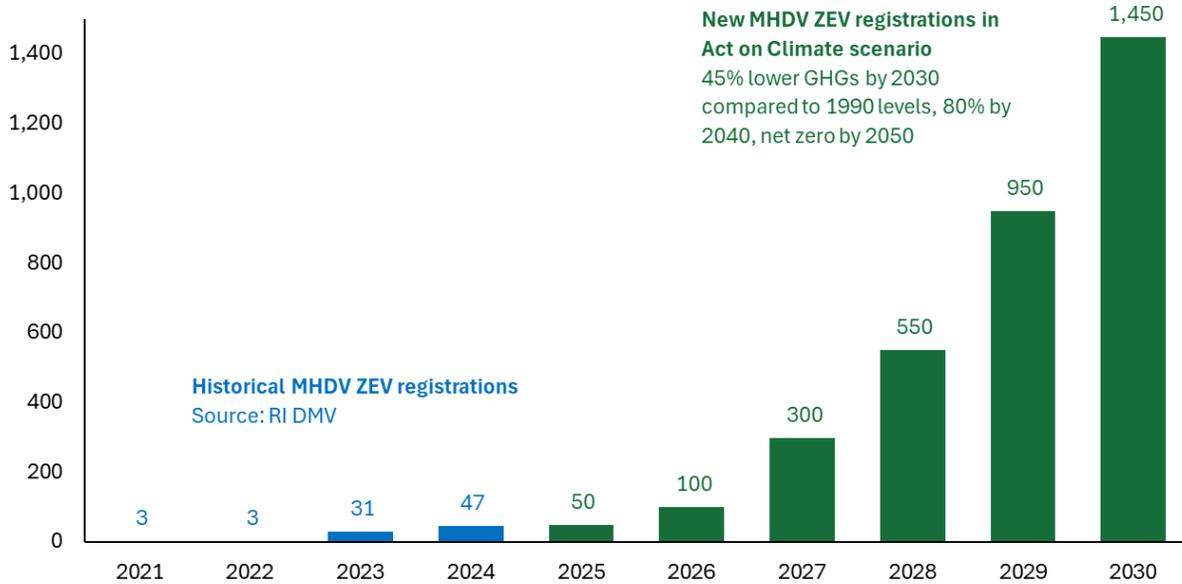
For MHDVs, Rhode Island has adopted the ACT program, which similarly sets progressively stricter ZEV sales requirements for automakers. Because ACT has already been adopted, it is included in the Current Policy scenario in addition to the Act on Climate scenario. Under ACT, the percentage of new trucks that must be ZEVs varies by weight class, starting at 15% for Class 2b-3/Class 7-8 tractors and 20% for Class 4-8 single unit trucks in 2027, and increasing to 55% for Class 2-b3, 40% for Class 7-8 tractors, and 75% for Class 4-8 single unit trucks in 2035. Like ACCII, California’s ability to set the ACT standards and Rhode Island’s ability to adopt them is enabled by the waiver previously granted by the EPA under the Clean Air Act. The ZEV sales requirements do not increase past 2035 under the finalized version of ACT, and in the Act on Climate scenario, ZEV sales share for all vehicle types continues to increase until it reaches 100% by 2040.

To reach the ACT requirements and the state’s emissions targets, the number of MHDV ZEVs sold in Rhode Island each year will need to increase from recent levels. Starting in 2026, annual sales will need to be about 100 MHDV ZEVs, climbing to about 1,450 per year by 2030 (Figure 21).

Figure 21: Annual MHDV ZEV Registrations Needed in Act on Climate Scenario

MHDV ZEV Registrations in Act on Climate Scenario

Annual MHDV ZEV Registrations



To support these high levels of vehicle electrification, it will be important for Rhode Island to continue expanding its charging infrastructure. The state has already made significant progress in growing its charging network over the past several years – with over 800 charging ports available for charging, many installed via programs such as Electrify RI and the National EV Infrastructure (NEVI) program.⁵² Rhode Island is committed to further expansion to meet future EV charging demand as adoption grows. NEVI Phase 2A relaunched in July 2025 with \$8 million available in competitive grants for municipalities, schools, and businesses to apply for charging infrastructure funding. NEVI Phase 2B will launch in early 2026 expanding applicant eligibility to include RI residents and community-based organizations. NREL estimates that by 2030, Rhode Island will need almost 5,000 charging ports to support estimated EV charging needs.⁵³

Building Sector

Achieving Rhode Island’s emissions reduction targets as mandated by the Act on Climate will require efforts in both building energy efficiency and electrification. **Building energy efficiency is a longstanding pillar of decarbonization**, as it can mitigate energy consumption, reduce utility bills,

⁵² U.S. Department of Energy, Alternative Fuels Data Center (2025). Alternative Fueling Station Locator – Rhode Island (Electric). <https://afdc.energy.gov/stations#/analyze?region=US-RI&tab=fuel&fuel=ELEC>

⁵³ To support these high levels of vehicle electrification, it will be important for Rhode Island to continue expanding its charging infrastructure. The state has already made significant progress in growing its charging network over the past several years – with over 1,000 charging ports available for charging,⁹ many installed via programs such as Electrify RI¹⁰ and the National EV Infrastructure (NEVI) program.¹¹ Rhode Island is committed to further expansion to meet future EV charging demand as adoption grows. For example, NREL estimates that by 2030, Rhode Island will need almost 5,000 charging ports to support projected EV charging needs.

and manage peak electricity demand and system costs. Energy efficiency includes measures such as air sealing, insulation, improved windows, and increased appliance efficiency. In the analysis, building envelope upgrades (i.e., weatherization through air sealing and insulation) were modeled as the primary driver of energy efficiency. By 2050, around 7% of the housing stock in the Act on Climate scenario is new construction built to the latest statewide building code, and another 62% of the housing stock built before 2025 have received building envelope upgrades. The aggregate impact of these measures is that total annual heating demand for homes is 10% lower than it otherwise would be based on current heating demand per home in Rhode Island. **Reaching Act on Climate targets will also require a transition of all building end uses away from fossil fuel-based equipment and toward decarbonized technologies.** The main end uses that use fossil fuels in buildings are space heating, water heating, cooking, and clothes drying. While space heating represents the largest source of building sector emissions and therefore the most significant opportunity for reductions, progress across all end-uses will be necessary to meet the state’s climate goals.

Under the Current Policy Scenario, technology adoption will be driven by existing state programs and incentives. For example, for space heating, the Clean Heat RI program incentivizes heat pumps and other available electric technologies, leading to steady but moderate market growth. By 2050, current policies and programs are estimated to result in 16% of homes having heat pumps, up from around 5% in 2025. Many homes continue to rely on natural gas and distillate systems as their primary heating source in this scenario, although the share does gradually decline as customers purchase heat pumps.

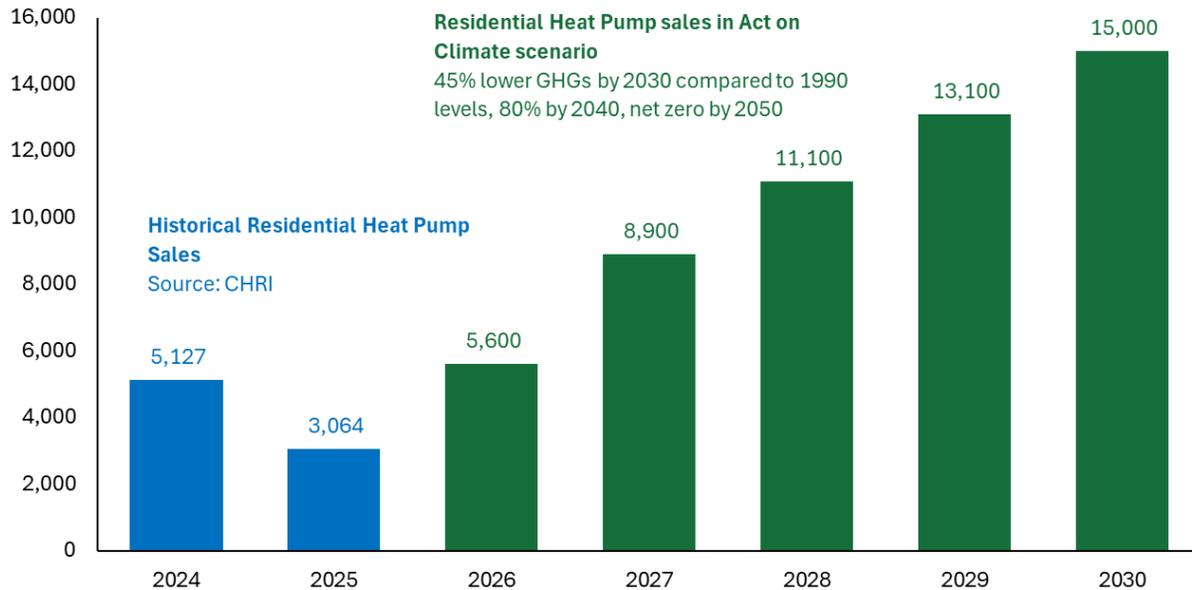
The Act on Climate Scenario assumes a complete transformation of building heating technologies by 2050, representing one possible pathway that relies heavily on a mix of all-electric and hybrid heat pumps. In this pathway, nearly 100% of buildings adopt heat pumps by 2050, with approximately 36% installed as hybrid systems that retain existing fossil fuel equipment for use on the coldest days of the year. This represents one potential mix of all-electric and hybrid heat pump technologies; however, other heating solutions, market developments, or future policies may influence the availability, cost-effectiveness, or adoption of alternative building technologies.

Figure 22 shows the required ramp up for heat pump installations needed in the near term in the Act on Climate scenario. The modeled pathway in the Act on Climate scenario results in roughly 70,000 total heat pumps installed by 2030. Achieving this requires annual residential installations to rise rapidly, from about 3,000 heat pumps sold in 2025 to roughly 15,000 sold per year by 2030 – approximately three times the number completed in Rhode Island in 2024, based on estimates using U.S. Energy Information Administration (EIA) and Clean Heat Rhode Island data. These near-term installation levels are necessary to keep Rhode Island on track for near-100% heat pump adoption by 2050, as assumed in the Act on Climate scenario.

Figure 22: Annual Heat Pump Sales Required to Reach Act on Climate

HP Sales in Act on Climate scenario

Annual Heat Pump Sales



Industrial Sector

The industrial sector is a much smaller source of emissions in Rhode Island than transportation and buildings, only accounting for around 5% of the state’s gross GHG emissions in 2022. While transportation and buildings have seen increasing adoption of decarbonization technologies like EVs and heat pumps in Rhode Island and throughout the country, industrial decarbonization has been slower. There are no state or federal policy impacts on industrial emissions assumed in the Current Policy scenario. In the Act on Climate scenario, all the fossil fuel use, primarily natural gas, used to provide low temperature heat (<200C) for manufacturing processes, is assumed to electrify by 2050. Based on a county-level estimate of industrial energy use from the National Renewable Energy Laboratory (NREL), it was estimated that around two-thirds of fossil fuel demand for manufacturing in Rhode Island is used to provide heat below this threshold. About half of this heat is below 140C, which puts it in the temperature range achievable by industrial heat pumps, while the remaining half between 140-200C would require alternative technologies that can reach higher temperatures like electric resistance heat. In addition, the Act on Climate scenario assumes manufacturing facilities improve the efficiency of their production in line with state-of-the-art efficiency levels estimated by the Department of Energy and ACEEE.

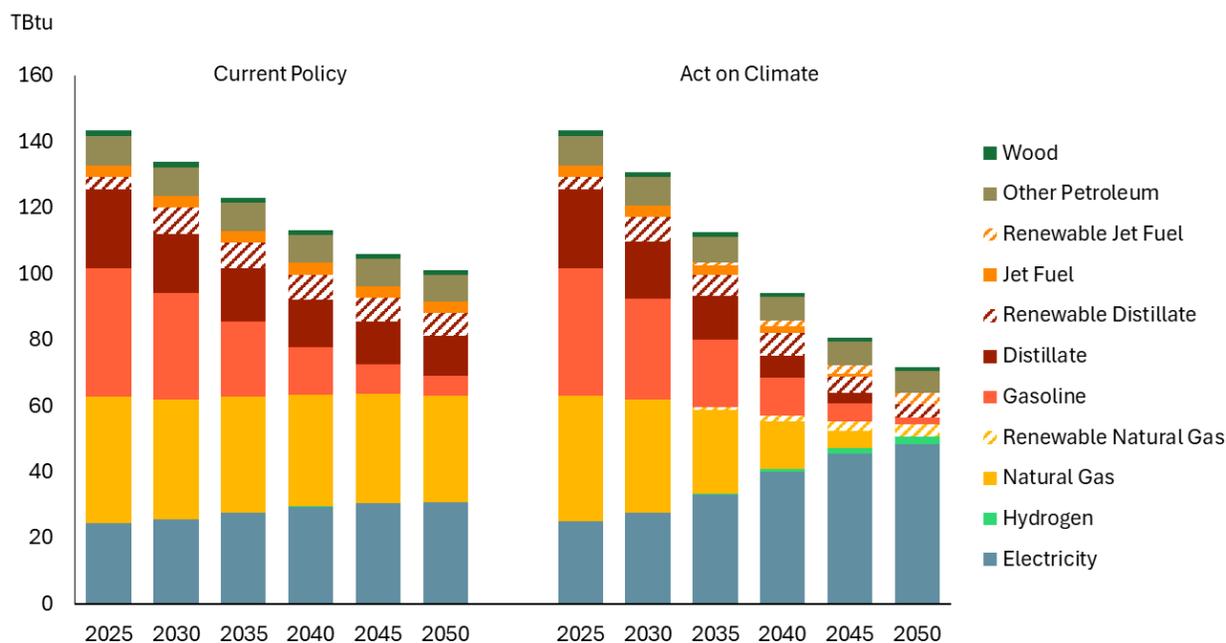
Changes in How Rhode Islanders Use Energy

As Rhode Island continues to reduce GHG emissions, the state’s energy system will experience key changes. Under both the Current Policy and Act on Climate scenarios, Rhode Island shifts away from fossil fuels toward a cleaner, more electrified economy as homes, businesses, and vehicles

increasingly rely on electricity rather than oil, propane, and gasoline. This transition will be supported by continued improvements in energy efficiency, resulting in an overall decline in final energy demand even as the population and economy grow.

Economy-wide energy demand – the total energy consumed by end users – declines in both the Current Policy scenario (32% reduction) and Act on Climate scenario (51% reduction) as shown in Figure 23 below. In both buildings and on-road transportation, switching to electric technologies—like heat pumps and EVs—naturally reduces energy use because these devices are much more efficient than traditional boilers or gas-powered cars. High efficiency heat pumps and EVs can be 3-4 times more efficient than conventional fossil fuel-powered equipment like furnaces and gasoline-powered cars. This means electrification works like an energy-saving measure: less energy is needed to heat homes or travel while providing the same level of comfort and service.

Figure 23: Final Energy Demand by Fuel Type and Scenario

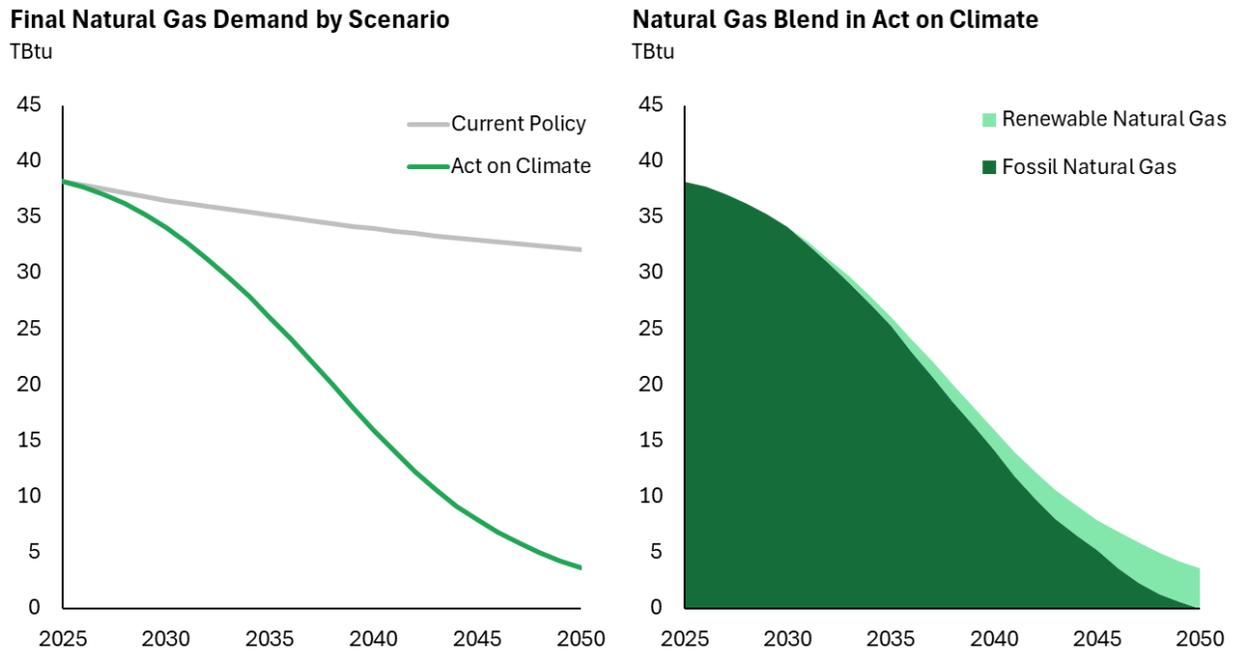


In the Current Policy scenario, the largest reduction in demand comes from decreased gasoline use due to the rapid adoption of ZEVs required by ACCII and ACT. In the Act on Climate scenario, widespread building and industry electrification leads to natural gas throughput (i.e., volume) declining by about 90% between 2025 and 2050, with all remaining gas demand in 2050 being supplied by biogenic renewable natural gas (Figure 24).⁵⁴ Natural gas throughput, in this context, refers to the total amount of natural gas delivered for use within Rhode Island’s homes, businesses, and industries — that is, the gas burned directly for heating, hot water, cooking, and industrial processes. Gas throughput in this context does not include natural gas used to produce electricity;

⁵⁴ The RI Future of Gas proceeding investigates the impact of the Act on Climate on the future of the distributed gas system in greater detail. The RI Future of Gas Technical Analysis was released in April 2024, and the policy report is forthcoming.

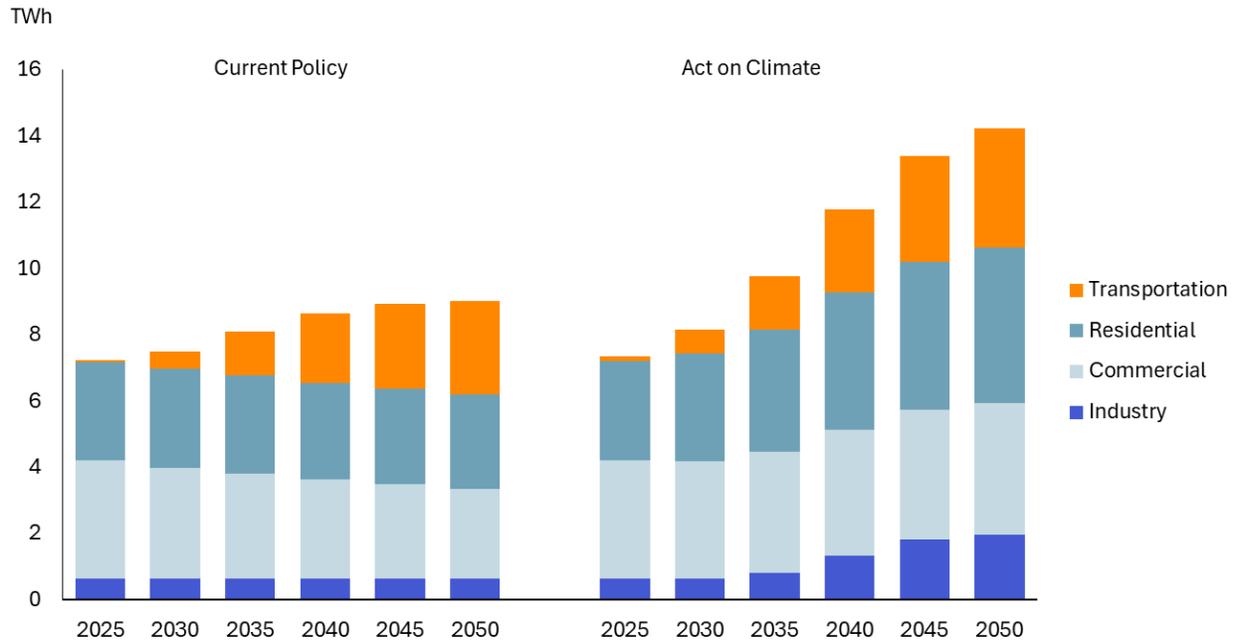
it only covers gas consumed directly in the residential, commercial, and industrial sectors. Again, the Act on Climate scenario represents one potential pathway for building decarbonization that relies heavily on all-electric and hybrid heat pump adoption. The RI Future of Gas Docket 22-01-NG Technical Analysis analyzed multiple decarbonization pathways for the building and heating sectors. That study’s results showed a wide range of potential natural gas throughput outcomes over time, depending on each specific pathway modeled.

Figure 24: Natural Gas Throughput and Composition in Act on Climate Scenario



While overall energy demand and fossil fuel demand is estimated to decrease in both scenarios, electricity demand is estimated to increase. Figure 25 below shows how electricity demand grows in both scenarios. In the Current Policy scenario, total electricity demand increases between 2025 and 2050 by 36%, with essentially all the net increase coming from electric vehicles. The Act on Climate scenario entails more widespread electrification across buildings and industry specifically, so electricity use in those sectors increases compared to Current Policy. In the Act on Climate scenario, total electricity demand more than doubles (a 112% increase), with around 42% of this growth coming from EVs, 42% from building electrification, and the remaining 16% from industry electrification.

Figure 25: Electricity Demand by Sector and Scenario



Emissions from the Electric System

As described in the sections above, meeting the mandates of the Act on Climate relies heavily on the adoption of all-electric technologies, like heat pumps and EVs. This shift to EVs, heat pumps, and other clean technologies will only succeed in providing carbon reductions if the electric grid is clean, dependable, and able to support growing demand. As more households and businesses switch to technologies like electric vehicles and heat pumps, electricity will play an increasingly central role in how Rhode Islanders power their daily lives.

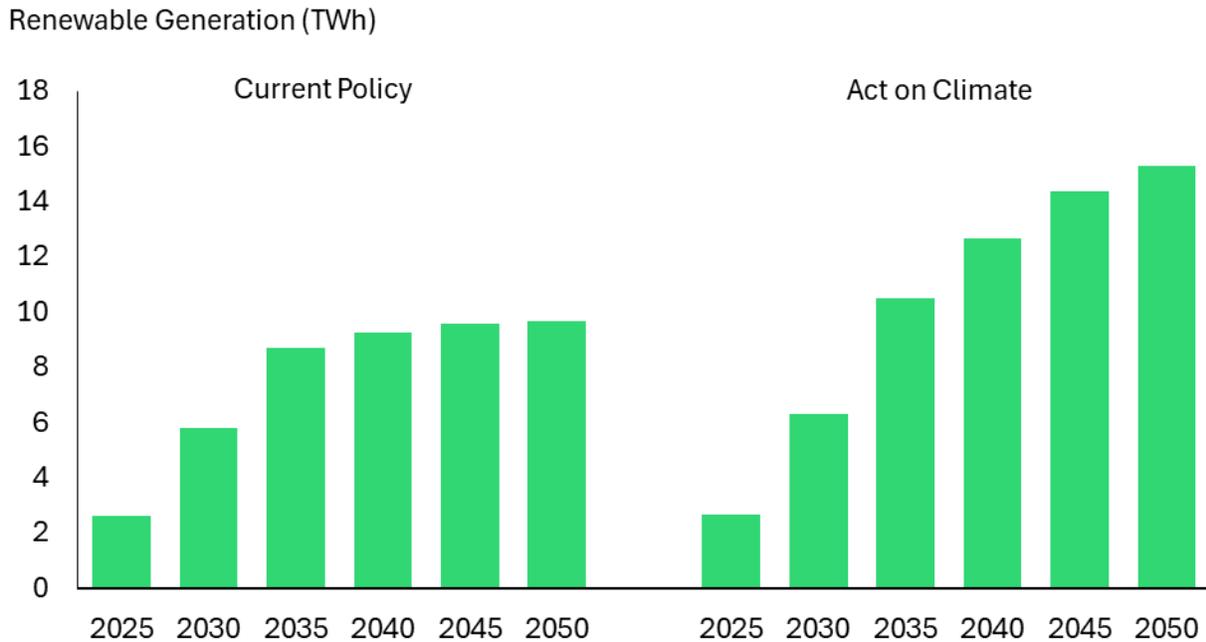
Rhode Island's RES requires that electricity sold to Rhode Island end-use customers come from a minimum percentage of renewable energy.⁵⁵ That percentage increases each year until it reaches 100% in 2033. Rhode Island's electric grid is part of the larger New England grid, which links six states into one regional electricity market. Renewable electricity used to comply with the RES does not need to be generated within Rhode Island's borders; Rhode Island complies with the RES by retiring Renewable Energy Certificates (RECs), which can be generated from anywhere in New England or imported from outside of New England. Retiring RECs typically creates the need for new renewable energy supply, and that new renewable supply decreases GHG emissions by lowering generation from thermal resources across the New England electricity system.

It's important to note that this analysis assumes Rhode Island fully meets its RES. The feasibility of achieving the RES and the associated uncertainties are being examined in other studies and are outside the scope of this report. For the purposes of this analysis, Rhode Island is assumed to successfully comply with the RES targets.

When combined with rising electricity demand, the increasing RES requirements lead to a significant increase in total renewable electricity that must be procured for Rhode Island. Figure 26 below shows this increase in both scenarios, with the total amount of renewable electricity that must be procured increasing from around 2 terawatt-hours (TWh) in 2025 to 9-11 TWh by 2035 and eventually reaching 15 TWh by 2050.

⁵⁵ Further detail on the RES is available here: <https://rhodeislandres.com/wp-content/uploads/2025/11/2023-RES-Annual-Compliance-Report.pdf>

Figure 26: Renewable Electricity Generation Needed to Meet RES by Scenario



The carbon emissions associated with electricity used in Rhode Island depends on the overall generation mix across New England.⁵⁶ RI’s GHG accounting methodology dictates how electricity emissions are attributed to Rhode Island. Any electricity that is not covered by the RES policy is assumed to come from a mix of system power in New England. Emissions attributed to Rhode Island’s electric demand steadily decrease as the RES increases, dropping to near-zero when the RES reaches 100% in 2033 (a small fraction of load in Rhode Island will likely not be subject to the full 100% RES requirement in 2033 based on forecasts from the Rhode Island Public Utility Commission).⁵⁷ Future emissions from the New England grid that are attributable to Rhode Island will be influenced by many factors including the growth of renewable energy, changes in imports, state renewable and clean energy policies, and voluntary demand for clean energy outside of state policies.

Key Uncertainties That Could Affect Rhode Island’s Progress

As stated above, the analysis found that current policies can help Rhode Island stay on track to reach the 2030 Act on Climate GHG reduction target of 45% below 1990 levels. To achieve this target, reductions will need to come from:

⁵⁶ Rhode Island Department of Environmental Management. (2025). 2023 Greenhouse Gas Inventory; <https://dem.ri.gov/sites/g/files/xkgbur861/files/2025-11/RIDEM-ghg-inventory-2023.pdf>

⁵⁷ Rhode Island Energy Resources. (2025). 2023 RES Annual Compliance Report; <https://rhodeislandres.com/wp-content/uploads/2025/11/2023-RES-Annual-Compliance-Report.pdf>

- + **Decarbonization of the electric grid**, driven by Rhode Island and other state renewable and clean electricity policies.
- + **Transportation electrification** in line with ACCII and ACT rules and supported by incentives to lower upfront costs
- + **Building electrification and efficiency** driven by heat pump incentives and market transformation
- + **Carbon sequestration** from maintaining Rhode Island's natural land sinks

However, it is important to note the uncertainty regarding whether these achievements will be fully realized in time to meet the 2030 target and how effectively they will deliver the expected emissions reductions for Rhode Island. Key uncertainties are highlighted below and described in more detail in the main body of the report.

Decarbonization of the Electric Grid

Decarbonization of the electric grid in Rhode Island depends both on Rhode Island’s compliance with its RES and on the New England electric system transitioning to a cleaner grid mix over time. Because Rhode Island is part of a regional grid and meets a portion of its RES through purchasing RECs from projects in neighboring states, progress across the broader region is essential to achieving the state’s decarbonization goals. Compliance with the RES can be met through the procurement of renewable energy projects, purchase of renewable energy certificates (RECs) from renewable generation across New England, or through making alternative compliance payments. As outlined in the Rhode Island Public Utilities Commission’s RES Compliance report, Rhode Island is expected to be able to meet its RES targets in the coming years, but the cost of compliance with the RES is uncertain.⁵⁸ The total cost of complying with the RES will depend on several factors – including market-based REC prices and the cost of renewable energy procured.

New England faces several federal headwinds that could slow progress toward a clean electricity future. Growing federal pushback on offshore wind, including permitting delays, litigation, and shifting political support, has introduced uncertainty for projects that were expected to contribute to the regional renewable portfolio. Termination of Inflation Reduction Act (IRA) clean electricity tax credits further threaten project economics. Additionally, a broader cooling of the renewables market is evident across the region: financing conditions have tightened, supply-chain risks are elevated, and notably, there is now less solar capacity in the interconnection queue than earlier in 2025. Together, these pressures could slow New England’s pace toward its clean electricity goals.

At the same time, there will be an increasing demand for renewables across New England due to states' rising renewable targets and electricity loads. Given this and the headwinds described above, monitoring of the regional renewables market will be needed over the coming years to ensure Rhode Island is on track to meet the RES.

⁵⁸ Rhode Island Energy Resources (2025). 2023 RES Annual Compliance Report; <https://rhodeislandres.com/wp-content/uploads/2025/11/2023-RES-Annual-Compliance-Report.pdf>

The GHG emissions intensity of the New England electric grid will also impact the ability of the electric sector to decarbonize, especially in years before RI's RES target grows to 100% in 2033. While emissions from electricity generation in New England are expected to decline in the upcoming years, the rate of decline will depend in part on whether hydro imports from Quebec on existing transmission lines recover to historical levels. Higher grid emissions increase the chance that additional emissions reduction measures may be required to hit the 2030 target.

Transportation Electrification

Under current policies, transportation decarbonization in the transportation sector over the next decade is largely driven by compliance with ACCII and ACT rules. These rules both follow California's emissions standards, which are more stringent than federal regulations due to a previously-granted EPA waiver. As of fall 2025, the current Congress has attempted to revoke California's waivers and ability to set emissions standards, but these actions are currently being challenged in federal court by California and other states. While these actions are being actively litigated, whether or not ACCII and ACT will be implemented starting in 2027 is unclear.

Due to the uncertainty of the implementation of ACCII and ACT, the project team modeled a Current Policy Scenario without ZEV Waivers as a sensitivity to understand the emissions impact if Rhode Island is unable to achieve compliance with these rules. The analysis shows that without ACCII and ACT, the Current Policy scenario would reduce GHG emissions by 43% below 1990 levels by 2030—falling short of the 45% target. In later years, the state would continue to miss Act on Climate requirements without substantial vehicle electrification, reaching only a 53% reduction by 2040 and a 58% reduction by 2050. The detailed results of this sensitivity analysis can be found in the Appendix.

Additionally, the Trump administration recently terminated the \$7,500 EV tax credits that were previously established under the Inflation Reduction Act (IRA). Without these tax credits, incentivizing widespread EV adoption will be even more challenging.

Building Electrification and Efficiency

In the Current Policy scenario, most building sector emissions reductions come from increased heat pump adoption and energy efficiency upgrades in Rhode Island homes between now and 2030. These measures reduce fossil fuel combustion and overall energy demand, driving down GHG emissions. Because heat pumps typically have higher upfront costs than fossil fuel systems, the Clean Heat Rhode Island (CHRI) program provides incentives that help encourage households to adopt these cleaner technologies.

The Current Policy scenario assumes that CHRI incentives are the primary driver of heat pump adoption over the next four years. Although the program exhausted \$25 million of its initial funding

in early 2025, an additional \$10 million was announced in July 2025.⁵⁹ The Current Policy trajectory assumes this new funding will be distributed between 2026 and 2030. Any changes to the program’s timing or funding levels, however, could influence the pace and scale of heat pump adoption – and, in turn, Rhode Island’s ability to achieve 2030 building sector GHG reduction targets.

Additional heat pump adoption above what was assumed in the Current Policy scenario could occur through the New England Heat Pump Accelerator program, which received a \$450 million grant from the EPA Climate Pollution Reduction Grant Program.⁶⁰ Heat pump adoption incentivized through the Accelerator was not included in the Current Policy scenario due to uncertainty around final program design and expected impacts. However, estimates of potential impact of this program are included in the near-term carbon reduction strategies section of the report.

Energy efficiency measures, in addition to heat pump adoption, are a key contributor to reducing emissions in buildings. In the Current Policy scenario, efficiency levels for the residential, commercial, and industrial sectors are modeled using the annual measures and energy savings outlined in the Third Draft of the 2026 Annual Energy Efficiency Plan.⁶¹ Actual savings in future years may be higher or lower depending on the final 2026 plan and subsequent plans. Any changes to achieved efficiency levels could influence Rhode Island’s progress toward meeting the 2030 emissions target.

Natural and Working Lands

The Current Policy scenario assumes Rhode Island's natural carbon sink will be maintained to continue sequestering .75 MMT CO₂e per year from now until 2050. This will require efforts in conservation of forests, farms and wetlands; sustainable management of forests and farms; and expansion of urban greenery. If the natural carbon sink in Rhode Island is not able to be maintained at the same level as today, additional emissions reductions measures in other sectors may be required.

Costs and Benefits of Decarbonization

Economy-Wide Costs and Benefits

As described in earlier sections, decarbonization will involve installing new technologies—such as heat pumps in homes and businesses and EVs on the road—as well as upgrading infrastructure like the electric grid and expanding supportive systems such as EV charging stations. These changes

⁵⁹ Office of the Governor – Rhode Island. (n.d.). Governor McKee and Rhode Island Office of Energy Resources Announce \$10 Million; <https://governor.ri.gov/press-releases/governor-mckee-and-rhode-island-office-energy-resources-announce-10-million-next>

⁶⁰ Connecticut Department of Energy and Environmental Protection. (n.d.). New England Heat Pump Accelerator; <https://portal.ct.gov/deep/energy/new-england-heat-pump-accelerator>

⁶¹ Rhode Island Office of Energy Resources. (2025). 2026 Efficiency Plan – Main Text Outline; <https://eec.ri.gov/wp-content/uploads/2025/09/00-2026-Efficiency-Plan-Main-Text-Outline-9-5-2025.pdf>

come with upfront costs, but they also create long-term benefits for society by reducing air pollution, improving public health, and avoiding economic damages associated with climate change.

To understand these cost impacts, total resource costs were modeled for both the Current Policy and Act on Climate scenarios. Total resource costs capture the direct costs for each scenario. These direct costs account for supply-side spending on electricity (for production and delivery) and fuels, as well as demand-side costs for building equipment, energy efficiency retrofits, vehicles, EV charging infrastructure, and non-combustion emission abatement. Total resource costs also capture the societal benefits of decarbonization. Societal benefits are calculated using the monetized value of improved air quality and the avoided damages from climate change, including impacts from extreme weather and heat waves.

These costs and benefits are calculated relative to a business-as-usual (BAU), or “do-nothing”, scenario. The BAU scenario reflects conditions under population growth alone in Rhode Island – it does not assume the adoption of any climate policies. This comparison shows the additional, or incremental, investments needed to meet existing state climate policies and fully comply with the Act on Climate.

Figure 27 shows the total annual incremental costs and benefits of the Current Policy and Act on Climate scenarios compared to BAU. Under both the Current Policy and Act on Climate scenarios Rhode Island is expected to reduce its reliance on fossil fuels and transition to electricity use across all sectors. As electrification increases, spending on conventional fuels like natural gas and gasoline will decline, and spending on electricity will increase. Cost savings are estimated in the transportation sector because EVs are expected to be lower cost than internal combustion engine vehicles in the long term, even when accounting for charging infrastructure investments. Direct costs for the building sector are expected to increase because decarbonized building appliances, like heat pump space and water heaters, cost more than conventional fossil fuel equipment. Other spending categories (shown as “Other” on chart), such as industrial electrification and abatement of non-combustion emissions, make up a smaller portion of direct costs in Rhode Island.

In the Current Policy scenario, the total incremental costs of electricity, building equipment, and other spending categories are estimated to reach \$1.4B annually by 2050. However, lower spending on conventional fuels and vehicles is estimated to lead to cost savings of about \$1.3B annually by 2050, nearly offsetting all incremental direct costs. In addition, the monetized benefits of avoided climate damages and improved air quality reach about \$1.2B annually by 2050. When considering all direct costs, cost savings, and societal benefits together, the Current Policy scenario is expected to yield net benefits of about \$1.1B annually by 2050. This is represented in the chart below as negative net total costs.

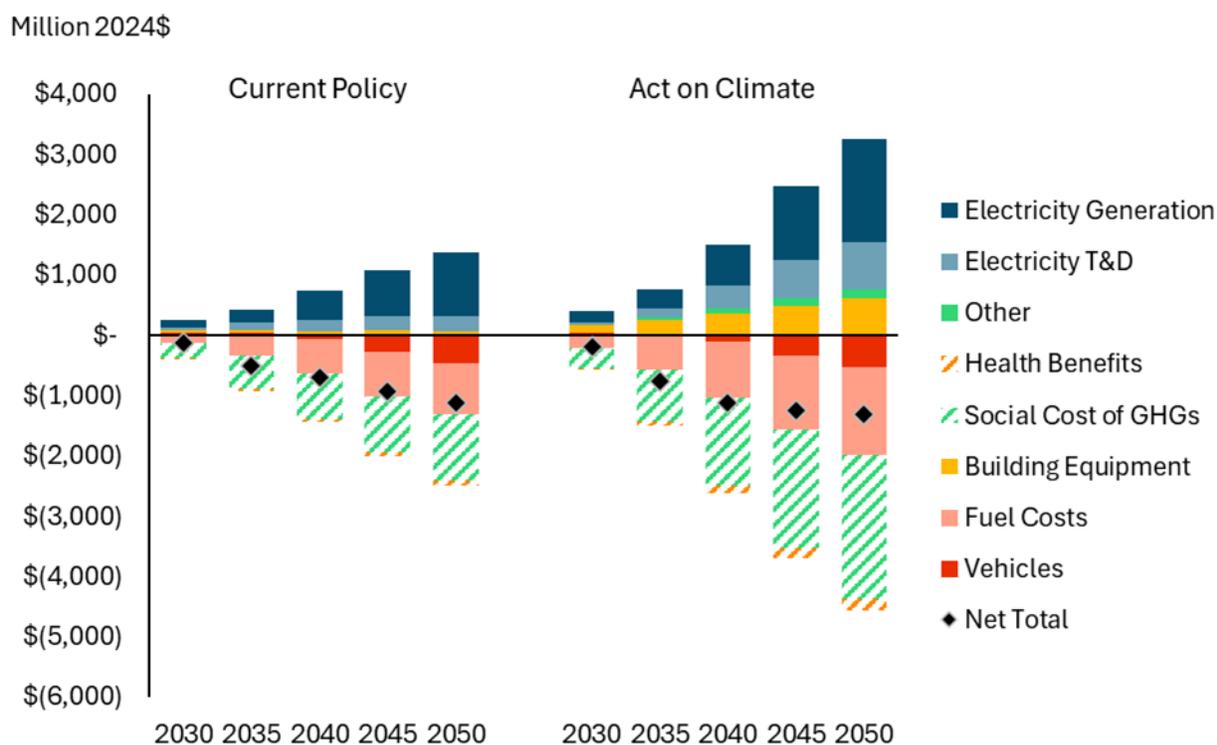
In the Act on Climate Scenario, incremental costs are estimated to reach \$3.3B annually by 2050. Spending on electricity and building equipment is higher than the Current Policy scenario due to increased electricity demand and higher adoption of electrified building equipment. However, cost savings from avoided spending on fuels and vehicles are also higher – these savings are estimated to reach \$2B annually by 2050, leading to net direct cost savings in the Act on Climate scenario of about \$1.3B annually in 2050. The monetized benefits of reduced air pollution and avoided climate damages are also significant in the Act on Climate scenario, reaching \$2.6B in benefits annually by

2050. As a result, the Act on Climate scenario is expected to achieve net benefits for Rhode Island of about \$1.3B annually by 2050.

It's important to note that while the Current Policy scenario also is estimated to lead to net benefits for Rhode Island, this scenario does not reach the state's Act on Climate mandates in future years, and the total climate and health benefits are smaller than the Act on Climate scenario.

Further details on the methodology for calculating societal costs of decarbonization can be found in the Technical Appendix.

Figure 27: Societal Costs and Benefits vs. BAU



Customer Costs

While both the Current Policy and Act on Climate scenarios are estimated to lead to net benefits for society overall, it is also important to consider the impacts of decarbonization on individual customer costs and household expenses. Decarbonization cost impacts for individuals can include upfront costs (e.g., the price of electric equipment compared to fossil fuel equipment, maintenance cost impacts), and changes to household energy bills.

Upfront Costs

In many cases, electric technologies are more expensive than equipment powered by fossil fuels.⁶² This leads to a **cost gap between fossil fuel technologies and decarbonized equipment** (Figure 28). An average EV (assuming a sedan) is about \$13.5k more expensive than an internal combustion engine vehicle (assuming a sedan), and average cold-climate air source heat pump (ccASHP) is about \$19k more expensive than a gas furnace.⁶³ These cost variances represent averages for a single-family home – the exact upfront cost for technologies will depend on the type of equipment and site specifications.

Cost gaps can be mitigated through existing state rebate programs, such as DRIVE EV for electric vehicles, and Clean Heat RI for heat pump rebates.⁶⁴ Federal incentives can also help mitigate costs, such as the tax credits offered through the Inflation Reduction Act (IRA). The IRA tax credits expired at the end of September 2025 but are shown in Figure 28 to demonstrate the impact that these incentives had on reducing the upfront cost of decarbonized equipment. With the addition of state incentives, the **cost gap between an internal combustion engine vehicle and EV decreases, on average, from \$13.5k to \$12k.**⁶⁵ With the addition of state and utility heat pump incentives, the **cost gap between a standard gas furnace and ccASHP decreases from \$19k to \$7k.**⁶⁶ Additional incentives, such as those considered in the GHG reduction strategies, can help to further reduce the cost gap between fossil fuel technologies and electric equipment.

It's worth noting that Figure 28 represents average upfront cost differences for a single-family home comparing gas equipment to electric. The upfront costs could vary depending on vehicle type, home type (single-family vs. multifamily), age of home, and baseline fuel use (e.g., a fuel oil customer rather than natural gas).

⁶² Under present day prices. Over time, it is expected that this dynamic will change. For example, it's expected that the cost gap between internal combustion engine vehicles and EVs will close, as more models come to market.

⁶³ Northeast States for Coordinated Air Use Management (NESCAUM). (2024). Heat Pumps in the Northeast and Mid-Atlantic: Costs and Market Trends; <https://www.nescaum.org/documents/Heat-Pumps-in-the-Northeast-and-Mid-Atlantic---Costs-and-Market-Trends.pdf>

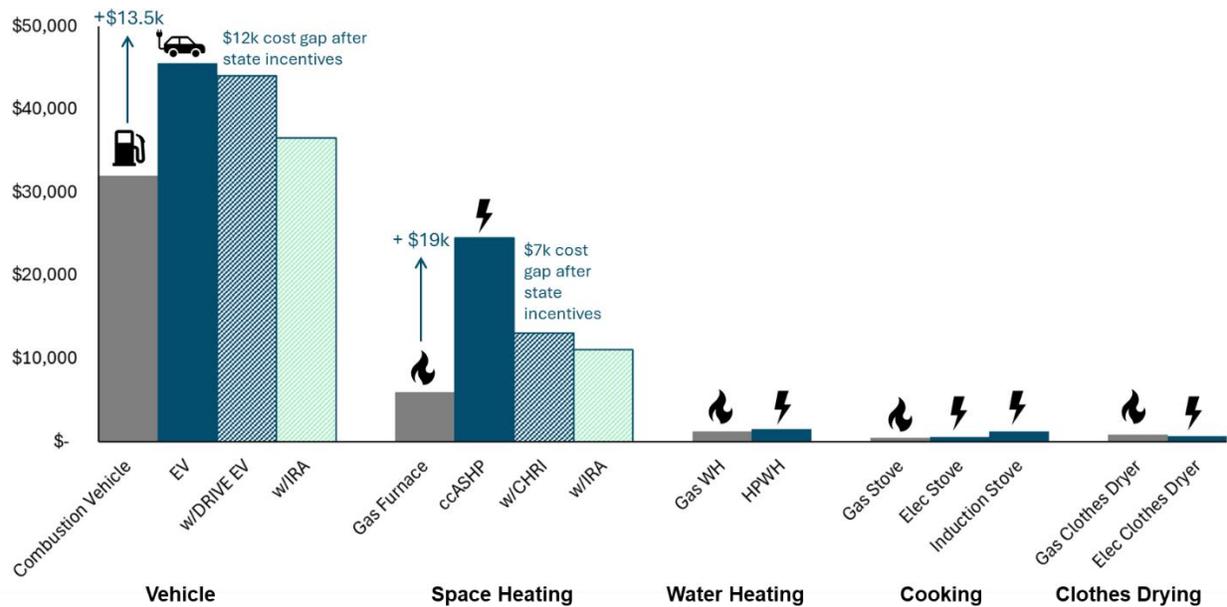
See also: Clean Heat Rhode Island — Program Statistics (March 2025).

⁶⁴ Results in upfront cost chart assume income-eligible CHRI incentive.

⁶⁵ Assuming standard \$1,500 vehicle incentive from [DRIVE EV](#)

⁶⁶ Clean Heat Rhode Island. (n.d.). Clean Heat RI; <https://cleanheatri.com/>

Figure 28: Upfront Equipment Costs for Single Family Home in 2025 (2024\$)^{67,68}



Energy Bills

In addition to upfront costs of decarbonization, it is also important to consider the energy bill impact on households. The analysis included 5 key customer types for the energy bills analysis, but these do not represent the only customer types in Rhode Island.

- + **Reference Gas:** Customer with a standard-efficiency gas furnace, gas water heater, gas clothes dryer, gas stove, and central air conditioner (AC)
- + **Reference Oil:** Customer with a standard-efficiency oil furnace, oil water heater, electric clothes dryer, electric stove, and central AC
- + **Hybrid + Gas Backup:** Customer with a heat pump and gas furnace backup, heat pump water heater (HPWH), electric clothes dryer, electric stove, and air sealing/insulation
- + **Hybrid + Oil Backup:** Customer with a heat pump and oil furnace backup, HPOWH, electric clothes dryer, electric stove, and air sealing/insulation (“light shell retrofit”)
- + **All-Electric:** Customer with an all-electric ccASHP, HPWH, electric clothes dryer, electric stove, and air sealing/insulation

Figure 29 shows example monthly energy bills for gas vs. electric customers in 2025 and 2030 for a single-family home. These results illustrate that under current electric and gas rate structures, gas customers adopting a hybrid or all-electric heat pump could experience bill increases. The actual

⁶⁷ Acronym definitions: ICEV – internal combustion engine vehicle, IRA – Inflation Reduction Act, ccASHP – cold-climate air source heat pump, CHRI – Clean Heat RI, WH – water heater

⁶⁸ Results are shown for 2025, in 2024 real dollars. In future years, as more models come to market and prices decline, it is assumed that the upfront cost gap between internal combustion engine vehicles and EVs will close.

impacts for each customer will vary by building age, existing new efficiency measures, and other site factors. There are several tools to help mitigate the bill increases with electrification, such as:

- + **Weatherization and energy efficiency retrofits** such as those offered through existing Rhode Island Energy programs, with upgrades including air sealing, insulation, and triple-pane windows.⁶⁹ Figure 30 below demonstrates how weatherization can mitigate monthly bill increases for customers adopting heat pumps.
- + **Alternative electric rate structures** that are more friendly for heat pump adoption, such as seasonal heating rates or increased fixed charges. Current electric rate structures in Rhode Island are misaligned with climate mitigation goals because they rely heavily on high volumetric charges – customers pay a relatively high cost per kilowatt-hour even when their winter heating loads do not contribute to system peak demand or increase overall system costs. Maine⁷⁰ and Massachusetts⁷¹ have already reformed their rate structure to encourage heat pump adoption by using seasonal heating rates. California has enacted a “flat rate” bill component that increases the fixed charges but decreases the variable usage rates.⁷²
- + **Advanced meters**, which are electric meters equipped with modern digital technology that enables two-way communication between the utility and the customer’s meter. Rhode Island Energy is currently rolling out its advanced meter program under what is called the Advanced Metering Functionality (AMF) initiative.⁷³ The rollout began in 2024, and key benefits include automated outage detection, improved reliability, and access to detailed usage data and online tools to manage consumption.
- + **Smart thermostats**, which are Wi-Fi enabled devices that control heating, ventilating and air conditioning (HVAC) systems, but with advanced features to help reduce energy use. Rhode Island Energy has a smart thermostat program as part of the ConnectedSolutions initiative.⁷⁴

⁶⁹ Rhode Island Energy. (n.d.). Ways to Save — Rebates & Incentives; <https://www.rienergy.com/site/ways-to-save/save-money-with-rebates-and-incentives>

⁷⁰ CMP Utility. (n.d.). New Seasonal Heat Pump Rate — Understand Your Bill; <https://www.cmpco.com/account/understandyourbill/newseasonalheatpumprate>

⁷¹ Commonwealth of Massachusetts. (2025). *All-electric utility customers will soon be eligible for heat pump discount rates*; <https://www.mass.gov/news/all-electric-utility-customers-will-soon-be-eligible-for-heat-pump-discount-rates>

⁷² California Public Utilities Commission. “AB 205 Fact Sheet.” CPUC, May 8, 2024. [CA Public Utilities Commission "Flat Rate" Decision](#)

⁷³ Rhode Island Energy. “Advanced Meters: Frequently Asked Questions.” *Rhode Island Energy*, [Rhode Island Energy Advanced Meters](#)

⁷⁴ Rhode Island Energy. (n.d.). ConnectedSolutions Thermostat Program — Ways to Save / Rebates & Incentives; <https://www.rienergy.com/site/ways-to-save/save-money-with-rebates-and-incentives/connectedsolutions/thermostat-program>

Figure 29: Example Monthly Energy Bills for Single Family Gas vs. Electric Customers in 2025 and 2030 (2024\$)⁷⁵

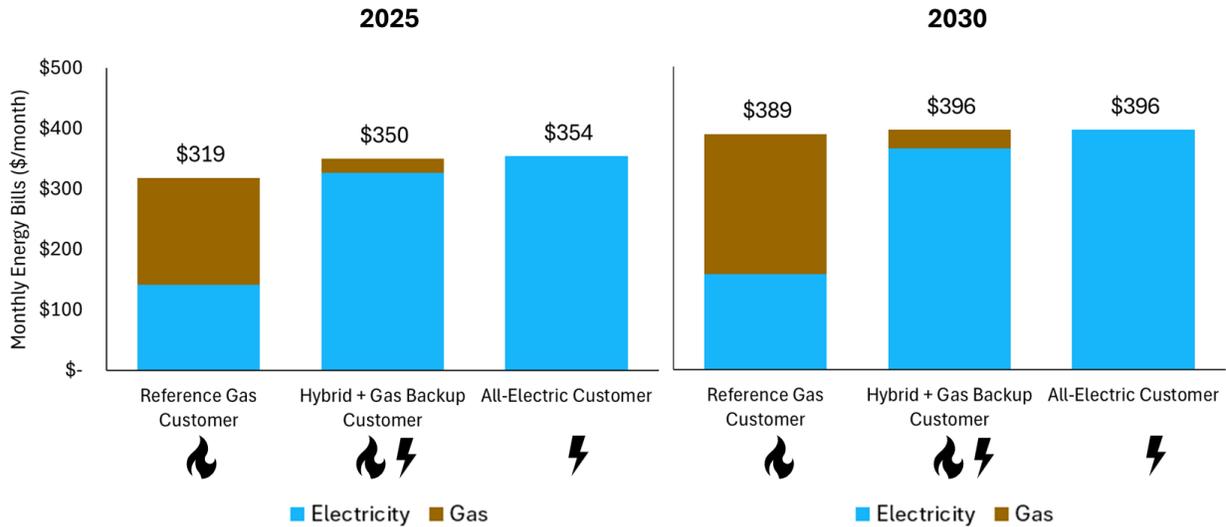
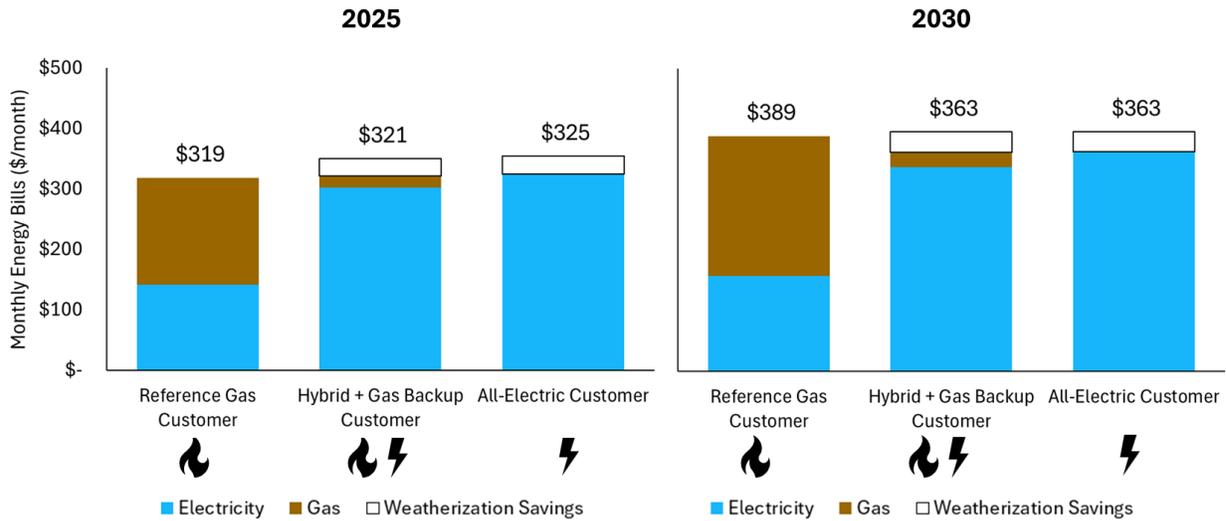


Figure 30: Example Monthly Energy Bills for Single Family Gas vs. Electric Customers with Weatherization in 2025 and 2030 (2024\$)



The electricity rates used in Figure 29 and Figure 30 were estimated using scenario modeling of New England electricity demand and resource portfolios (see Technical Appendix for additional cost details). Gas rates used were calculated using estimates of future natural gas demand under the Act on Climate scenario and estimated system costs from E3’s gas revenue requirement model (see Technical Appendix for cost details).

⁷⁵ Results shown for a single-family home with electric/gas rates under the Act on Climate scenario

It's worth noting that the Rhode Island Public Utilities Commission (RIPUC) *Docket No. 22-01-NG Investigation into the Future of the Regulated Gas Distribution Business in Rhode Island* Technical Analysis and policy report will take a deeper dive on bill impacts of building decarbonization and specific next steps regarding the impact on the regulated gas distribution system in RI.⁷⁶

Figure 31 shows example monthly energy bills for oil vs. electric customers in 2025 and 2030 for a single-family home. These results demonstrate that given the high price of oil, bill savings are likely for customers transitioning from oil to electric heating.⁷⁷ This is an outcome that is aligned with climate and affordability goals and indicates that fuel oil customers could be good candidates for electrification.

Figure 31: Example Monthly Energy Bills for Single Family Oil vs. Electric Customers in 2025 and 2030 (2024\$)

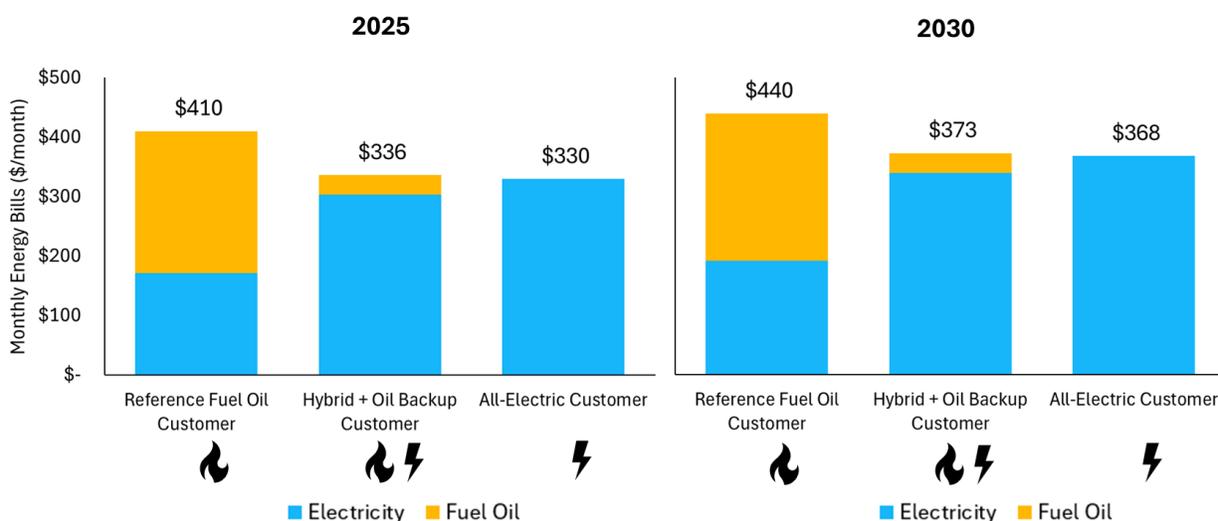


Figure 32 shows example monthly vehicle energy costs for a gasoline powered vehicle vs. an EV in 2025. Since electricity is generally less expensive than gasoline and EVs are more efficient than internal combustion engine vehicles, the fueling costs for an EV are estimated to be lower than an internal combustion engine vehicle in both 2025.^{78,79} There is also an additional ~360/year savings from avoided operations and maintenance (O&M) costs for an EV owner. This is another outcome that is aligned with climate and affordability goals, given the decarbonized technology would lead to operational cost savings for an individual. It's worth noting that while EV charging can often offer savings compared to gasoline-powered vehicles, actual benefits will depend on factors like vehicle

⁷⁶ Rhode Island Public Utilities Commission (RIPUC). (n.d.). Docket No. 22-01-NG – Investigation Into the Future of the Regulated Gas Distribution Business in Rhode Island in Light of the Act on Climate; <https://ripuc.ri.gov/Docket-22-01-NG>

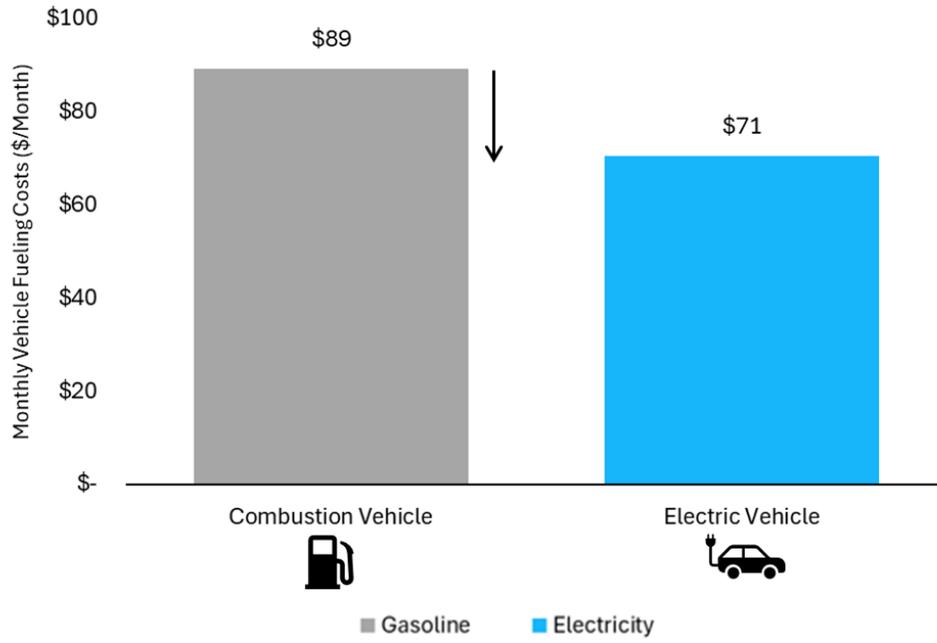
⁷⁷ Results assume oil prices of \$26.97/MMBtu in 2025 and \$28.05/MMBtu in 2030 (real 2024\$). Residential heating oil prices in 2025 and 2030 are taken from U.S. Energy Information Administration (EIA) Weekly Heating Oil and Propane Prices and Annual Energy Outlook (AEO), respectively.

⁷⁸ This analysis assumes gasoline prices of \$2.88/gallon in 2025 and \$3.36/gallon in 2030 (real 2024\$) and internal combustion engine efficiency of 27.10 miles per gallon

⁷⁹ Vehicle efficiencies from the E3 Pathways model are incorporated into energy cost calculations.

type, vehicle efficiency, driving patterns, charging behavior, EV charging rates (e.g., home, workplace, fast chargers), and future availability of off-peak rates.

Figure 32: Example Monthly Vehicle Energy Costs for Gasoline vs. Electric Vehicle in 2025 (2024\$)



4. Near-Term Carbon Reduction Strategies

The previous section details the scale of emissions reductions needed across the economy for Rhode Island to meet its Act on Climate targets. While Rhode Island’s current policies have already driven meaningful progress toward reducing GHG emissions, additional action is needed to keep the state on track for its 2030 goal and to close the remaining gap to meet the 2040 and 2050 Act on Climate targets. To help chart a path forward, the state has identified **18 potential GHG reduction strategies** that could accelerate progress in the decades ahead. Beginning to advance these strategies in the near term would not only strengthen Rhode Island’s ability to meet its longer-term climate mandates, but could also help sustain momentum toward 2030, especially in the face of shifting federal policies and broader market uncertainties.

These carbon reduction strategies were developed in coordination with multiple state agencies and informed by several rounds of stakeholder feedback. Each carbon reduction strategy represents a policy, program, or project aimed at reducing GHG emissions from a key sector – such as transportation, buildings, and industry – and could be initiated within the next five years to advance decarbonization and reinforce Rhode Island’s climate leadership.

This analysis is distinct from the long-term pathways scenarios described above, which outline how much further Rhode Island must go to meet its future climate targets. While the pathways modeling illustrates the interconnected measures needed for economy-wide decarbonization, the specific carbon reduction strategies presented here focus on near-term policies, programs, and projects that can be implemented within the next four years. These strategies aim to drive near- and long-term emission reductions across key sectors such as transportation, buildings, and industry, while reinforcing Rhode Island’s leadership in climate action.

These near-term GHG reduction strategies form a central focus of the Climate Action Strategy because Rhode Islanders repeatedly underscored the importance of an actionable plan emphasizing immediate implementation over long-term planning. Moreover, Rhode Island faces an urgent mandate to achieve a 45% reduction in carbon emissions below 1990 levels by 2030, and the EPA’s CCAP, which was developed in parallel to this plan, required the quantification of specific carbon reduction measures. While these strategies represent potential pathways rather than commitments, they serve as a menu of ideas for Rhode Island to consider as it advances toward its climate goals. Overall, this analysis of near-term strategies complements, but remains separate from, the broader *Pathways to Decarbonization* modeling, providing a focused examination of discrete actions the state could take to make meaningful progress by 2030.

Electricity

Renewable Electricity Standard (RES)

The core strategy for decarbonizing the electric sector in Rhode Island is the state’s Renewable Electricity Standard (RES). The RES sets a goal for 100 percent of the state’s electricity retail sales to

come from renewable sources by 2033. Achieving the RES will involve a combination of utility-scale renewable energy procurements, the expansion of distributed generation such as rooftop solar, and the acquisition of renewable energy certificates (RECs). These efforts may be complemented by state and federal programs designed to lower barriers to renewable energy adoption for households, businesses, and communities.

In Rhode Island, renewable energy incentive programs continue to stimulate the deployment of solar, wind, anaerobic digestion, and hydropower projects throughout the state. As of December 2025, Rhode Island's Clean Energy Portfolio of distributed generation resources included 11 Megawatts (MW) of hydropower, 35 MW of anaerobic digestion, 148 MW of onshore wind, 430 of offshore wind, and 755 MW of solar. Two programs available in the state are net-metering and the Renewable Energy Growth (REG) Program.

Net-metering allows customers with eligible renewable energy systems to receive bill credits for all power generated up to 125 percent of the on-site consumption during a billing period. To participate in net metering, a renewable energy system must be sited on the customer's premises. Eligible customer-sited net metering systems must be sized to meet on-site loads, based on a three-year average of electricity consumption at the property. Virtual Net Metering (VNM) allows eligible customers to connect their electric load regardless of whether the renewable system is located on their premises. VNM therefore makes it possible for eligible entities to offset their electrical load even if the property is not deemed suitable for a renewable energy project. It also allows entities with large electrical loads to offset 100% of their energy use across multiple projects in different areas around the state, where the electrical load would otherwise be impossible to offset on-site. Eligible Virtual Net Metering customers include state agencies, quasi-state agencies, municipalities, public housing authorities, public schools, private schools, non-profits, federal government, and hospitals.

The REG Program was launched to support the deployment of locally based wind, solar, anaerobic digestion and small-scale hydropower projects using a production-based incentive (PBI). Rhode Island Energy customers can apply monetary bill credits to their electricity bills by selling renewable generation back to the grid. The REG Program, administered by Rhode Island Energy, with oversight by OER and the Distributed Generation Board, provides 15-20-year tariff payments to RI Energy customers. The payments are applied to a customer's energy bill, and any excess generation past their on-site usage is compensated in the form of a direct deposit.

The Renewable Energy Fund (REF) in partnership with OER provide grants for renewable energy projects that have the potential to produce electricity in a cleaner, more sustainable manner, while stimulating job growth in the green technology and energy sectors. Programs include the commercial and small-scale solar PV program, community renewables program, brownfields Solar PV Program, and the Affordable Solar Access Pathways Program. These grant programs are funded through the "system benefit charge" on electric bills, alternative compliance payments received from retail electricity providers, and the Regional Greenhouse Gas Initiative (RGGI) auction proceeds. The Affordable Solar Access Pathways program is currently on pause while REF and OER are exploring next steps.

The Story of Block Island & Renewable Power

As of November 1, 2025, Block Island power has been supplied by 100% renewable sources. This milestone is the result of Block Island Utility District (BIUD) committing to source all of its power through renewable power supply contracts.⁸⁰ BIUD is a member-owner, member governed, not-for-profit quasi-municipal entity, responsible for serving Block Islanders with safe and reliable energy. Like Rhode Island Energy and Clear River Electric and Water, BIUD is responsible for keeping the lights on and heat flowing for Rhode Islanders.

To procure the 16,000,000 kWh needed to meet Block Island's annual energy demand from renewable sources, ratepayers contributed \$160,000 and an anonymous donor provided an additional \$45,000. Broken down by kWh, ratepayers are paying an additional \$0.01 per kWh in the first year and \$0.005 per year until 2033.⁸¹

Prior to May 2017, Block Island's electricity was generated by diesel generators, burning roughly one million gallons of diesel a year. Emissions from the generators exceeded 22,000,000 tons of CO₂ annually.⁸² Transporting the fuel to the island took 100 tractor-trailer tankers each year.⁸³ Once on island, the diesel was stored in underground storage tanks that posed a risk of leaks and local environmental contamination.

The construction and connection of the Block Island Wind Farm was a turning point for Block Island. In 2017, the wind farm enabled the installation of a submarine transmission cable that connected Block Island to the mainland power grid. This transition stabilized electricity prices, reduced carbon emissions and noise pollution, and gave BIUD access to renewable power supply available in the ISO-NE wholesale power supply markets.⁸⁴ It is this grid connection that enables BIUD to procure 100% renewable energy in 2025.

Block Island provides a glimpse of what the rest of Rhode Island will look like in 2033, when the state's Renewable Energy Standard reaches 100% implementation.

⁸⁰ Block Island Utility District d/b/a Block Island Power Company Annual Recalculation of Last Resort and Transmission Charges [24-49-EL BIUD Annual Reconciliation Filing Nov 2024.pdf](#)

⁸¹ Block Island Power Company (2025). LifeLong Learning Lecture – April 2025.

<https://blockislandpowercompany.com/wp-content/uploads/2025/04/LifeLongLearning-Lecture-April-2025.pdf>

⁸² Block Island Power Company (2025). LifeLong Learning Lecture – April 2025.

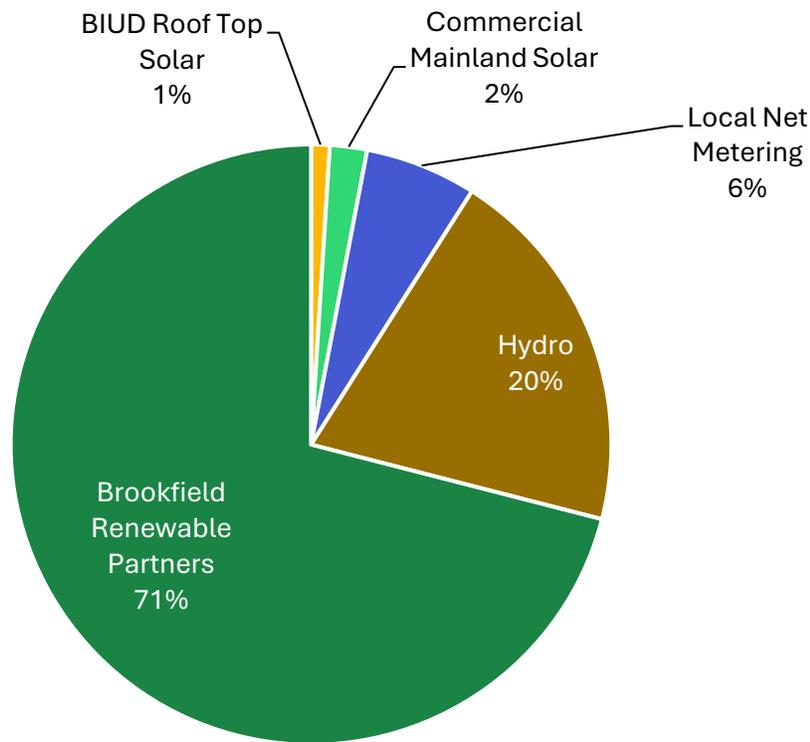
<https://blockislandpowercompany.com/wp-content/uploads/2025/04/LifeLongLearning-Lecture-April-2025.pdf>

⁸³ The New York Times (2025). Block Island, Rhode Island Wind Turbines.

<https://www.nytimes.com/2025/09/22/climate/block-island-rhode-wind-turbines.html>

⁸⁴ Block Island Power Company (2025). Block Island Power Company Website. <https://blockislandpowercompany.com/>

Figure 33: BIUD 100% Renewable Energy Sources 2024-2033 (%)



Transportation

GHG Impacts of Transportation Strategies

The most significant opportunities to reduce transportation emissions in Rhode Island involve decreasing overall driving and shifting the remaining vehicle fleet toward zero-emission technologies. Expanding mode shift and transit investments – including enhancements to public transit, active transportation infrastructure, and micromobility options – were all specifically modeled in the carbon reduction strategy analysis, with estimated GHG impacts based on reductions in vehicle miles traveled (VMT). At the same time, Rhode Island has already adopted the ACCII and ACT rules to accelerate the transition to zero-emission vehicles (ZEVs) across all vehicle classes.⁸⁵ However, uncertainty around implementation and enforcement underscores the importance of complementary policies and programs that continue to make EVs more affordable, lower upfront costs, and build the charging infrastructure needed to support widespread adoption. Maintaining

⁸⁵ While most strategies represent new or enhanced initiatives, the analysis also included the individual impacts of the ACCII and ACT programs, both of which have already been adopted, but are included due to uncertainties surrounding their implementation.

and expanding existing initiatives, such as the state-led DRIVE EV rebate program, National Electric Vehicle Infrastructure (NEVI)-funded charger network, and public fleet and bus electrification, were also modeled in the analysis and remain essential components of a clean, equitable, and accessible transportation system for Rhode Island.

Overall, the state explored eight potential carbon reduction strategies in the transportation sector. Each strategy differs in its equity focus, level of stakeholder interest, and effectiveness in reducing GHG emissions, as illustrated in the metrics within Table 6. These differences highlight how each strategy could contribute uniquely to the state’s transportation and climate goals.

Figure 34 shows transportation sector emissions in Rhode Island under the implementation of each strategy. Note that each line on this chart shows the individual impact of each strategy, not the impact of multiple GHG reduction strategies added together. While Rhode Island has already adopted ACCII and Advanced Clean Trucks, there is uncertainty about future implementation given federal efforts to revoke California’s ZEV waiver, which are currently being litigated. To reflect this uncertainty, the team modeled two current-policy scenarios for transportation emissions—one with and one without the CA ZEV waiver—shown as the gray dashed and black dashed lines on the chart, respectively.

Table 6: Transportation-Focused Near-Term Strategies

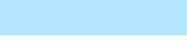
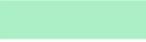
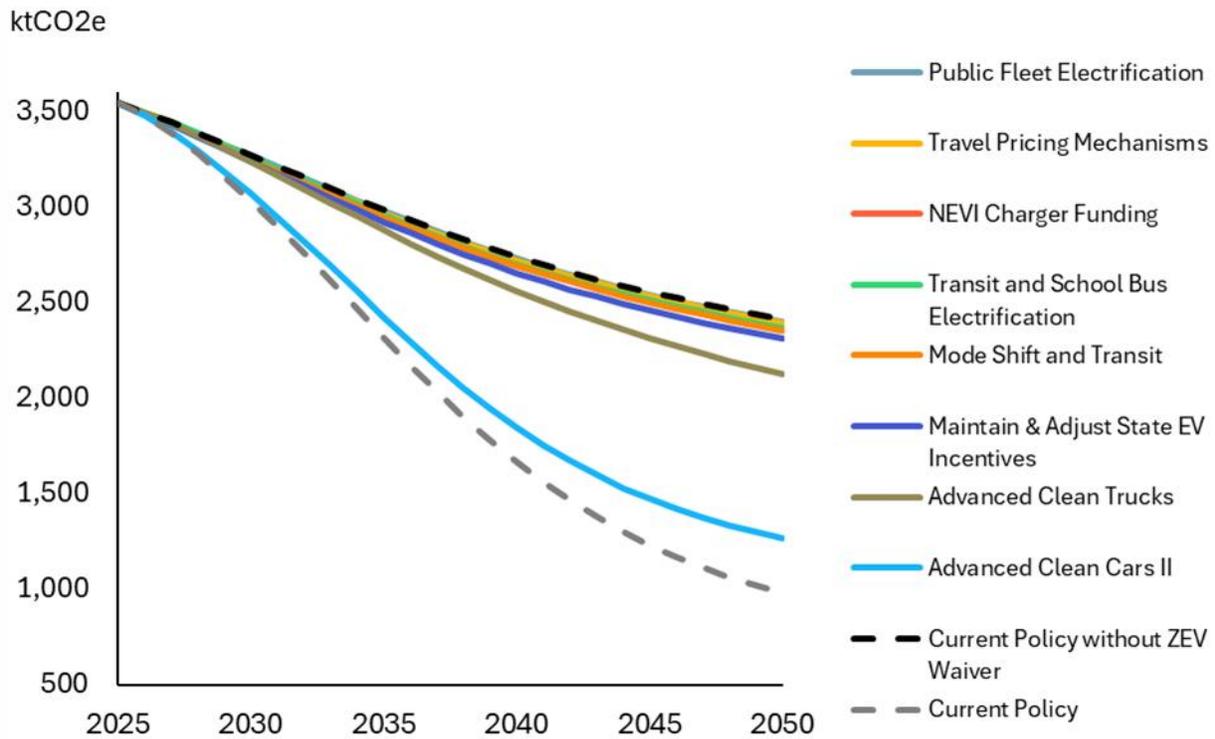
Strategy 	Equity Focus 	Stakeholder Priority 	GHG Reduction Impact 	2025-2050 GHG Reductions (ktCO2e)
Public Fleet Electrification				200
Travel Pricing Mechanisms				500
NEVI Charger Funding				900
Transit and School Bus Electrification				700
Mode Shifting and Transit				1,000
Maintain and Adjust State EV Incentives				1,700
Advanced Clean Trucks (ACT)				3,700
Advanced Clean Cars II (ACCII)				17,200

Figure 34: Transportation Sector Emissions by Strategy (ktCO₂e)



Description of Transportation Strategies

Public Fleet Electrification

The electrification of public fleets operated by municipalities, school districts, and other public entities is a potential strategy to support Rhode Island’s climate and clean transportation goals. These fleets are often well-positioned for early adoption of zero-emission vehicles (ZEVs), such as BEVs due to their predictable routes, centralized operations, and strong visibility in local communities. Making this transition could help reduce greenhouse gas emissions, improve local air quality, and support long-term cost savings for public agencies. This strategy has the potential to reduce emissions by approximately **200 ktCO₂e cumulatively through 2050**. Detailed strategy modeling for public fleet electrification was conducted by RIDOT and Cambridge Systematics (CamSys), and results can be found on the RI Climate website.

Moving this work forward would likely require a collaborative approach involving the Office of Energy Resources (OER), the Rhode Island Department of Transportation (RIDOT), and local governments. Technical assistance and planning support could help municipalities assess their fleet needs, navigate procurement processes, and identify suitable funding opportunities. As seen in other states, ensuring that electrification efforts are inclusive and equitable will be important. This may include supporting frontline municipalities, exploring opportunities for workforce development, and considering long-term planning to maintain the benefits of clean fleet investments. Currently, this

strategy is not funded and would require the development of a coordinated plan and identification of potential funding sources to move forward.

Travel Pricing Mechanisms

As Rhode Island continues advancing toward a more sustainable, equitable transportation system, travel pricing mechanisms may offer a valuable tool to support long-term climate and infrastructure goals. This policy explores three approaches: mileage-based user fees, congestion pricing, and cap-and-invest for transportation. Each could help reduce vehicle miles traveled, generate funding for clean mobility investments, and send price signals that encourage more climate aligned travel behavior. **Collectively, travel pricing mechanisms are estimated to reduce emissions by 500 ktCO₂e cumulatively through 2050.**

Mileage-based user fees can provide a sustainable replacement for declining fuel tax revenues, particularly as electric vehicle adoption increases. Congestion pricing may help manage peak period travel demand and reduce traffic in high volume corridors, while creating new opportunities to reinvest in public transit. A cap-and-invest program could allow Rhode Island to participate in a broader emissions trading system, setting up a declining cap on transportation emissions while generating revenue for decarbonization.

Each option would require careful program design, public education, and equity centered implementation to ensure that benefits are distributed fairly. If pursued thoughtfully, travel pricing mechanisms could strengthen Rhode Island's climate strategy while supporting a more resilient and accessible transportation system for all communities. Detailed sub-strategy modeling for these approaches was conducted by RIDOT and Cambridge Systematics (CamSys), and results can be found on the RI climate change website.⁸⁶ NEVI Charger Funding

Supportive charging infrastructure is an important component of encouraging EV adoption. EV charging infrastructure refers to the equipment and systems necessary to recharge electric vehicles. The infrastructure includes the electric grid itself, charging stations, and software for payment and management. A potential strategy for increasing EV adoption in Rhode Island is to continue building out the supportive charging network.

To model the impacts of this strategy, the modeling team assumed that Rhode Island would fully implement the proposed Rhode Island funding from the National Electric Vehicle Infrastructure (NEVI) program, a federal initiative to build an interconnected network of chargers across the nation.^{87,88} **The cumulative GHG reduction impacts estimated from the continuation of the NEVI program is Rhode Island is 900 kt CO₂e through 2050.** Note that the detailed modeling for this

⁸⁶ Available on the RI Climate Change website at <https://climatechange.ri.gov/act-climate/2025-climate-update> under Technical Documentation & Materials.

⁸⁷ U.S. Department of Energy, Alternative Fuels Data Center. (n.d.). Regulations & Laws — Clean Cities Program; <https://afdc.energy.gov/laws/12744>

⁸⁸ The current administration has canceled the NEVI program, but this strategy assumes its continuation and the GHG impacts under that assumption.

strategy was conducted by the Rhode Island Department of Transportation (RIDOT) and Cambridge Systematics; additional information can be found on the RI climate change website.⁸⁹

OER has already begun implementation of NEVI and is leading the buildout of Rhode Island’s EV charging network. NEVI Phase 2A relaunched in July 2025 with \$8 million available in competitive grants for municipalities, schools, and businesses to apply for charging infrastructure funding. NEVI Phase 2B is launching in early 2026 expanding the eligible applicants to include Rhode Island residents and community-based organizations. OER remains committed to working with state agencies, stakeholders, and communities to ensure an equitable, accessible, and reliable charging infrastructure—especially in historically underserved areas.

Transit and School Bus Electrification

Another potential strategy to reduce emissions in the transportation sector is the phased electrification of transit and school buses. Replacing diesel powered vehicles with zero-emission alternatives, such as battery electric buses, alongside supporting infrastructure and workforce development. **This strategy is estimated to reduce emissions by 700 ktCO₂e cumulatively through 2050.**

This approach generally includes vehicle procurement planning, charging infrastructure development, and efforts to train and prepare the transit workforce for a shift in technologies. If this strategy were to be adopted in Rhode Island, key partners could include the Rhode Island Public Transit Authority (RIPTA), and the Office of Energy Resources (OER), working in collaboration with school districts, municipalities, utilities, and other stakeholders. There are not currently existing funding sources for bus electrification—specific implementation plans and funding sources will need to be identified if this strategy is pursued.

Equity and environmental justice considerations may include prioritizing deployment in communities with higher exposure to diesel pollution, ensuring workforce opportunities are accessible across all demographics, and engaging affected communities in decision-making.

Mode Shift and Transit

As Rhode Island advances toward its greenhouse gas (GHG) reduction goals and seeks to enhance equitable access to clean, efficient mobility, encouraging a shift in transportation modes represents another strategy to advance climate goals. Mode shifting is transitioning daily travel from single occupancy vehicles to alternatives such as public transit, biking walking, and shared mobility, which can reduce emissions, improve public health, and support accessibility. A variety of complementary strategies may support this transition, including investments in active transportation infrastructure, expansion of public transit services, and land use changes that promote transit-oriented development. **Collectively, mode shift and vehicle miles traveled (VMT) reduction strategies are estimated to reduce emissions by 1,000 ktCO₂e cumulatively by 2050.** Note that the detailed

⁸⁹ Available on the RI Climate Change website at <https://climatechange.ri.gov/act-climate/2025-climate-update> under Technical Documentation & Materials.

modeling for this strategy was conducted by the Rhode Island Department of Transportation (RIDOT) and Cambridge Systematics; additional information can be found on the RI climate change website.⁹⁰

Although some components of mode shift efforts such as walk/bike infrastructure are already supported through state programs, other strategies, including large scale transit service expansion, remain largely unfunded currently. Public transit improvements, micromobility programs, travel demand management (TDM) strategies, and efficient land use planning may each play a role in enabling mode shift and require additional support to advance. Lead agencies such as RIDOT, RIPTA, RIDSP, and local municipalities would likely be the partners in implementing these strategies.

Mode shift and transit offer multiple co-benefits for historically underserved communities, including improved accessibility, reduced transportation cost burdens, and better air quality outcomes.

Maintain and Adjust State EV Incentives

With federal EV purchase incentives under the Inflation Reduction Act (IRA) having recently expired at the end of September 2025, states across the country are reassessing how to continue supporting equitable EV adoption. One option is to provide customers with similar levels of incentives that they would have previously received from the federal government. Modeling from a 2025 Harvard study on federal EV policies suggests that well-designed incentives remain one of the most effective tools to accelerate consumer adoption of electric vehicles, even in a post-IRA environment.⁹¹ Rhode Island already has the DRIVE EV program in place, so this strategy would be focused on maintaining and potentially adjusting that existing program. Adjustments could include increasing the size of incentives, shifting to point-of-sale rebates, or targeting funds toward lower income households and underserved communities. **By considering programmatic adjustments that increase accessibility, scale, and impact, the state could help sustain EV market growth and continue reducing transportation related greenhouse gas emissions by 1,700 ktCO₂e cumulatively by 2050.**

Currently, Rhode Island's DRIVE EV program, administered by the Office of Energy Resources (OER), offers up to \$1,500 per eligible vehicle or up to \$3,000 per eligible vehicle for LMI applicants, with an annual funding level of approximately \$2 million. This funding level would likely need to increase to accommodate adjusted incentives.

Advanced Clean Trucks (ACT)

One transportation strategy already adopted in Rhode Island is the Advance Clean Trucks (ACT) regulation, which aims to reduce transportation related emissions by increasing the availability of zero emission medium- and heavy-duty vehicles (MHDVs). Adopted by the Department of

⁹⁰ Available on the RI Climate Change website at <https://climatechange.ri.gov/act-climate/2025-climate-update> under Technical Documentation & Materials.

⁹¹ Salata Institute (Harvard University). (n.d.). Quantifying Trump's Impacts on EV Adoption; <https://salatainstitute.harvard.edu/quantifying-trumps-impacts-on-ev-adoption/>

Environmental Management (RIDEM) in 2023, the ACT rule requires manufacturers to deliver an increasing share of zero emission trucks to Rhode Island, starting in model year 2027.

Generally, ACT regulations are designed to accelerate the availability of electric and hydrogen fuel cell trucks, with the goal of reducing emissions from the commercial freight sector. **Emission reduction estimates for Rhode Island under this policy are calculated to be about 3,700 ktCO₂e cumulatively by 2050, with additional benefits such as improved air quality.** Diesel trucks emit harmful air pollutants at a higher rate than passenger vehicles, often in low-income or disadvantaged communities, so shifting these trucks to ZEVs would likely benefit these communities in particular.

While ACT establishes manufacturer requirements and does not require direct funding, additional support may be needed to realize full benefits. This could include investment in charging and fueling infrastructure, vehicle purchase incentives, and programs to assist small fleet operators. These additional support mechanisms could require additional funding to achieve the programs' goals.

Implementation of the ACT rule in Rhode Island is being led by RIDEM, with potential coordination from OER, RIDOT, utility providers, and other stakeholders. Environmental justice considerations include targeting vehicle deployment in overburdened communities, minimizing negative impacts on small fleets, and ensuring an equitable transition for small fleet operators.

Advanced Clean Cars II (ACCII)

In December 2023, Rhode Island adopted the Advanced Clean Cars II (ACCII) regulation, aligning with California's zero-emission vehicle (ZEV) standards for light-duty vehicles (LDVs). Similar to ACT, this rule requires automakers to deliver an increasing share of new EVs to Rhode Island dealerships – beginning in model year 2027 and reaching 100% of new LDV sales by 2035. The ACCII regulation does not mandate consumer behavior; residents may continue registering internal combustion engine (ICE) vehicles, including used models, after 2035. The primary effect of the rule is on vehicle availability in the new car market.

Rhode Island's participation in the ACCII program is authorized under Section 177 of the Clean Air Act, which allows states to adopt California's more stringent vehicle emissions standards. As noted above, the current Congress has attempted to revoke California's waivers and ability to set emissions standards. These actions are currently being challenged in federal court by California and other states.

Estimated benefits of the ACCII program include cumulative GHG emission reductions of over 17,300 ktCO₂e cumulatively by 2050. However, realizing these outcomes will depend on supporting measures such as consumer incentives, expanded charging infrastructure, and public education.

If fully implemented in Rhode Island, agencies that may be involved include RIDEM (as the lead regulator), OER (through programs like DRIVE EV), and other partners such as local governments and utility providers.

Equity and environmental justice considerations for ACCII implementation include addressing disparities in EV access, ensuring widespread availability of charging infrastructure (especially in multifamily buildings and rural areas), and engaging communities in program design and outreach.

Impact of ZEV Sales Requirements

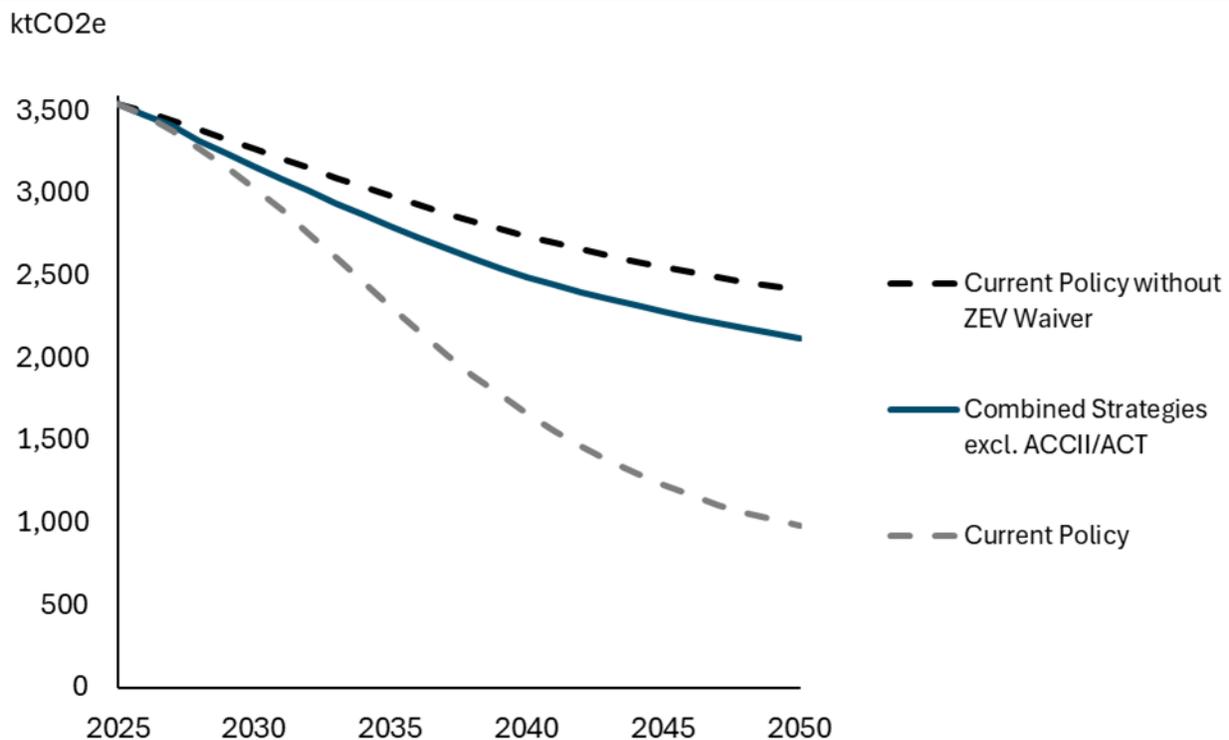
As seen in the sections above, the ACCII and ACT programs are forecasted to have the greatest potential impact on ZEV adoption. Excluding these programs, the combined impact of other modeled strategies, like increased customer incentives, public fleet electrification, and vehicle miles traveled (VMT) reductions, can achieve a portion, but not all, of their emissions reductions (Figure 35).

In response to the federal rollbacks of policy supporting transportation electrification, Rhode Island and 12 other states have joined the [U.S. Climate Alliance's Affordable Clean Cars Coalition](#). This coalition will explore policy options to increase EV adoption outside of emissions standards that require federal approval (like ACCII and ACT), and these could include policies that were not explored in this analysis, such as:

Clean fuel standards, such as those adopted in CA1, OR1, and WA1

“Feebate” programs, which are systems where higher fees put on more polluting vehicles are used to provide subsidies for cleaner vehicles

Figure 35: Transportation Sector Emissions by Strategy



Buildings

GHG Impacts of Buildings Strategies

Decarbonizing RI’s building sector will require a combination of expanded incentive programs and new policy frameworks to drive widespread electrification and efficiency. The state’s long-standing energy efficiency programs and the Clean Heat RI heat pump incentive program remain the foundation of this transition, providing critical support for weatherization, equipment upgrades, and energy cost savings. The carbon reduction strategy analysis specifically modeled the GHG impacts of maintaining and adjusting these existing programs, as well as introducing new initiatives such as a potential Building Performance Standard (BPS) and Clean Heat Standard (CHS), which would establish long-term performance and emissions targets for building owners and fuel suppliers. The analysis also modeled complementary strategies like the New England Heat Pump Accelerator and Pre-Weatherization and Whole Home Electrification programs, which expand access to incentives, support workforce training, and promote equitable participation in the clean energy transition. Together, maintaining and strengthening existing programs while exploring new strategies could position Rhode Island to achieve meaningful, equitable emissions reductions in the buildings sector.

Overall, the state explored seven buildings-focused strategies. As with transportation, each strategy differs in its equity focus, level of stakeholder interest, and effectiveness in reducing GHG emissions, as illustrated in the metrics within Table 7. These differences highlight how each strategy could contribute uniquely to the state’s building decarbonization and climate goals.

Table 7: Buildings-Focused Near-Term Strategies

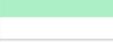
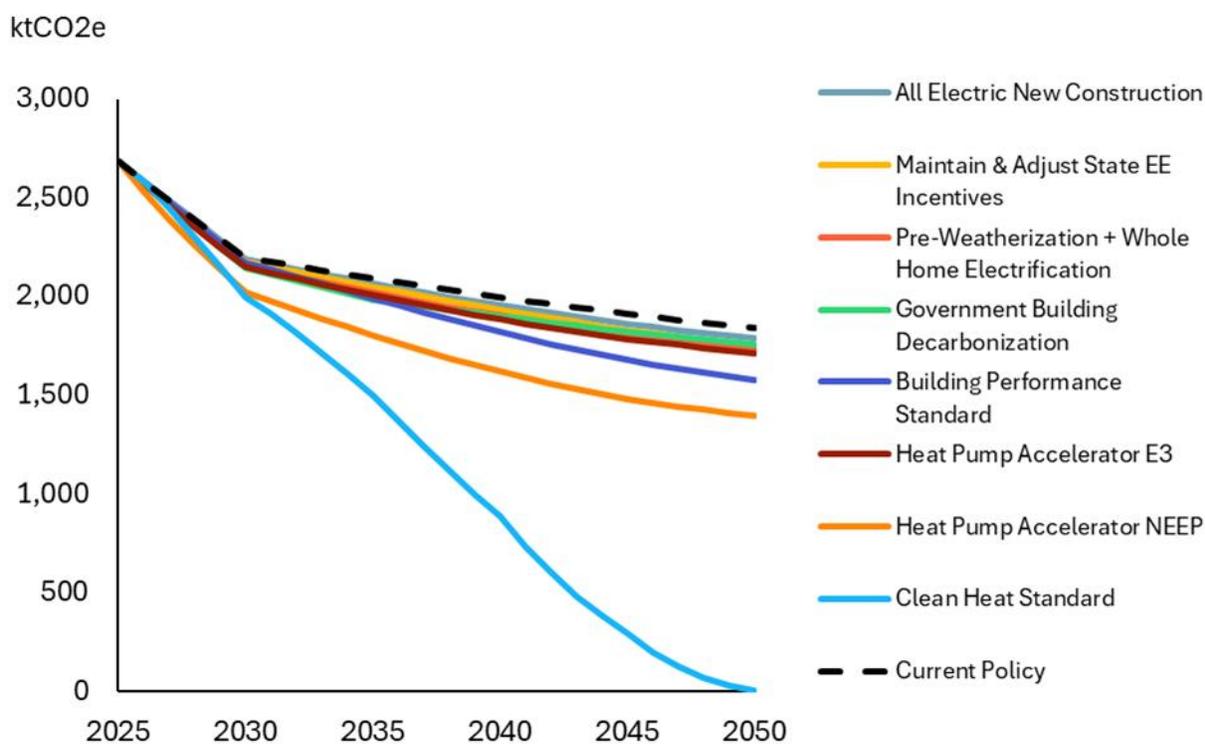
Strategy 	Equity Focus 	Stakeholder Priority 	GHG Reduction Impact 	2025-2050 GHG Reductions (ktCO2e)
All Electric New Construction				800
Maintain & Adjust State EE Incentives				1,400
Increased Pre-Weatherization + Whole Home Electrification Incentives				1,900
Government Building Decarbonization				2,000
New England Heat Pump Accelerator				7,800
Building Performance Standard				3,500
Clean Heat Standard				23,300

Figure 36 shows building sector emissions in Rhode Island under the implementation of each strategy. Note that each line on this chart shows the individual impact of each strategy, not the impact of multiple GHG reduction strategies added together. The black dashed line represents building emissions under current policies. Under current policies, building sector emissions are modeled to decrease between now and 2030 due to compliance with the Biodiesel Heating Oil Act that requires that 50% of fuel oil delivered to homes be biodiesel by 2030. Under modeling assumptions, the carbon reduction strategies in the buildings sector that are estimated to have the largest impact on GHG emissions are the Heat Pump Accelerator program, a potential Building Performance Standard, and a potential Clean Heat Standard. However, other strategies, such as Pre-weatherization + Whole Home Electrification, could have deeper impact in terms of advancing equity.

Figure 36: Building Sector Emissions by Strategy (ktCO₂e)



Description of Buildings Strategies

All Electric New Construction

One potential strategy to reduce emissions in the building sector is to adopt an all-electric new construction policy, which would require new residential buildings to use only electric systems for heating, hot water, cooking, and clothes drying. All-electric new construction policies are designed to avoid long-term fossil fuel lock-in by ensuring that new homes are built to operate without natural gas or other on-site combustion fuels. This approach can help reduce greenhouse gas emissions, improve indoor air quality, and simplify the path to a fully decarbonized building sector. **Analysis of**

this strategy suggests that requiring new homes to be all-electric could reduce emissions in Rhode Island by more than 800 ktCO₂e cumulatively by 2050.

If this strategy were to be pursued in Rhode Island, the Rhode Island Building Code Commission would likely play a central role in developing and adopting code updates, with enforcement conducted by local building departments. Implementation support could come from a combination of federal funding sources, Rhode Island's Clean Energy Fund, and public-private partnerships, including utility coordination to ensure infrastructure readiness and affordability.

Equity and environmental justice considerations would be essential in the design of any such policy. Low-income and frontline communities often face higher energy burdens and may have limited access to clean energy technologies. Options to help ensure equitable outcomes may include targeted incentives for developers of affordable housing, appliance rebate programs, and workforce development initiatives aimed at creating high-quality jobs in building electrification and clean energy construction.

Maintain and Adjust Existing State Energy Efficiency Program Incentives

Another potential strategy to decarbonize the buildings sector is to maintain and adjust existing energy efficiency (EE) programs to accelerate progress towards statewide decarbonization and affordability goals. The state already operates a suite of successful, ratepayer-funded EE initiatives that help households and businesses reduce energy consumption and costs. Building on this strong foundation, Rhode Island could enhance incentives for building envelope improvements such as insulation, air sealing, and high-performance windows across both residential and commercial sectors. These upgrades reduce heating and cooling needs, lower energy bills, and improve occupant comfort year-round. They also complement the efficient operation of heat pumps, supporting Rhode Island's long-term climate and energy goals.

The proposed approach could increase the number of homes receiving envelope improvements from about 5,500 annually today to 16,000 per year, aiming to reach more than 90% of homes by 2050. On average, upgraded homes may see approximately a 17% reduction in heating demand and modest reductions in cooling demand. **These savings help ease grid stress and lower greenhouse gas emissions by an estimate 1,400 ktCO₂e cumulatively by 2050.**

To advance equity, implementation could prioritize older, less efficient buildings and offer enhanced incentives for income-eligible households. Potential funding sources include a mix of state and federal programs (as applicable), along with existing energy efficiency programs.

Increased Pre-Weatherization + Whole Home Electrification Incentives

Another potential strategy to support an equitable transition to clean energy in Rhode Island is the development of a Pre-Weatherization and Whole Home Electrification program. Pre-weatherization helps households access energy efficiency and electrification upgrades by first addressing common health and safety barriers such as mold, asbestos, outdated wiring, and roof leaks. These conditions often prevent participation in existing energy programs. Whole home electrification refers to the electrification of all end uses, such as space heating, water heating, cooking, and clothes drying.

Rhode Island Energy (RIE) already offers funding to remediate some pre-weatherization barriers.⁹² The Green & Healthy Homes Initiative (GHHI) in partnership with OER and other partners is piloting a forthcoming Whole Home + Electrification Pilot in up to 45 units that have been deferred from the Weatherization Assistance Program for preexisting health and safety barriers. The goal of this pilot is to create an integrated energy, housing and health services delivery model that reduces long term energy consumption and costs while improving health outcomes. The pilot is designed to create more synchronization and effective coordination among existing Rhode Island based housing programs, with a focus on supported energy efficiency services, existing hazard reduction, healthy homes, and home repair programs for low-income households, while also leveraging appliance electrification programs offered by OER such as the Home Electrification and Appliance Program (HEAR) and Clean Heat RI . This strategy would likely be an expansion of this pilot and the existing RIE existing incentives to encompass more homes.

If implemented, the program could aim to expand the number of homes receiving pre-weatherization services (from approximately 800 homes annually today to as many as 2,400 per year) and potentially reach around 60,000 homes by 2050.⁹³ Participating households might then be eligible for full electrification of heating, hot water, and cooking systems, resulting in safer, healthier, and more energy efficient living environments. **With an estimated reduction of greenhouse gas emissions by 1,900 ktCO₂e cumulatively by 2050.**

This integrated approach could support both climate and public health objectives while helping to reduce household energy costs over time. While existing pre-weatherization funding sources to support this program could include the Weatherization Assistance Program (WAP) and Low-Income Home Energy Assistance Program (LIHEAP), there is a demonstrated gap in funding in Rhode Island when it comes to pre-weatherization barriers.⁹⁴ To support the electrification component of the program, potential funding sources include the Home Electrification and Appliance Rebate Program, Clean Heat RI, and the Home Electrification Program. This potential strategy would require coordination among state agencies, state Community Action Programs (CAPs), and utilities. If pursued, implementation would likely be led by the Office of Energy Resources in collaboration with the implementor of the WAP and LIHEAP, and local CAP agencies.

This policy actively advances equity objectives by retrofitting homes with health and safety issues, prioritizing support for communities facing the highest energy burdens, seniors, households with young children, and residents with health concerns linked to poor indoor air quality. By combining energy, health, and safety interventions into a single, comprehensive offering, this strategy helps ensure that more Rhode Islanders, regardless of their home's condition can fully participate in and benefit from the state's clean energy transition.

⁹² The Narragansett Electric Company d/b/a Rhode Island Energy. (2023 October 2). 2024-2026 Energy Efficiency Three-Year Plan and 2024 Energy Efficiency Plan — Pre-Filed Direct Testimony of Brett Feldman, Michael O'Brien Crayne, Mark Siegal, Toby Ast, and Spencer Lawrence. Submitted to: Rhode Island Public Utilities Commission, RIPUC Docket No. 23-35-EE; Submitted by Andrew S. Marcaccio, PPL Services Corporation.

⁹³ Based on upgrading all 60,000 of knob-and-rube homes in Rhode Island by 2050.

⁹⁴ The state is actively monitoring the availability of these federal funding sources.

Narragansett Indian Tribe – Climate Pollution Reduction Grant Implementation Project

The Narragansett Indian Tribe (NIT) was awarded \$6,627,691 in grant funding from the Environmental Protection Agency’s (EPA) Climate Pollution Reduction Implementation Grants (CPRG) program. These funds will support NIT’s decarbonization and climate pollution reduction initiatives. With this grant, the Tribe will conduct energy audits of NIT-owned and operated buildings, identify and implement priority energy efficiency measures, install solar and battery storage systems to replace propane and diesel generators, and reduce the Tribe’s monthly utility costs

The NIT is Federally Recognized and Acknowledged Tribe (1983). The Chief Sachem and Tribal Council are the Governing Body. As the governing body of a sovereign nation, the Chief Sachem and Tribal Council have the responsibility of providing for the health, education, safety, and welfare of the NIT community. Archaeological evidence and oral history establish the Tribe’s existence in what is now known as Rhode Island more than 30,000 years ago. Today, the NIT has approximately 3,500 members and holds about 2,480 acres of land, much of which is environmentally protected wetlands in and around the Towns of Charlestown and Westerly.

Similar to the Climate Action Strategy developed by the State of Rhode Island, the Tribe completed its own planning process, producing both a Priority Climate Action Plan and a Comprehensive Climate Action Plan for EPA. The \$6.6 million awarded for implementation will be used to advance the key measures the Tribe identified in those plans.

The chosen measures were strategically selected as priority actions. Energy audits represent a critical first step, producing important data on existing building conditions and offering a roadmap for maximizing building efficiency through a variety of energy efficiency measures.

Solar and battery storage installations were chosen due to their potential to mitigate emissions associated with the NIT’s consumption of grid-purchased electricity, which comprised 27% of its total emissions in 2023. The proposed solar installations included in this project have the potential to generate more than 1,000 MWh of renewable electricity annually.

The NIT is currently working with VHB, a civil engineering consulting and design firm, to develop the grant work plan and begin the energy audits.

Government Building Decarbonization

Another potential strategy for reducing GHG emissions in the building sector in Rhode Island is the decarbonization of municipal buildings – including schools, libraries, town halls, and other public facilities.

This strategy involves providing funding, technical assistance, and performance tracking to help municipalities implement energy upgrades and electrification measures. Potential improvements

include installing high efficiency electric heating and hot water systems, solar panels, building envelope enhancements, and EV charging infrastructure.

Upgrading municipal facilities can reduce long-term operating costs, improve comfort and reliability, and lower environmental impacts. **With an estimated reduction in emissions of 2,000 ktCO₂e cumulatively by 2050.** Equity considerations would focus on prioritizing projects in high need or environmental justice communities, ensuring all residents benefit from healthier, more efficient public spaces.

The Office of Energy Resources (OER), in partnership with other state agencies, would likely support implementation through technical assistance and coordination with local governments. By assisting municipalities in leading by example, Rhode Island could demonstrate climate leadership, strengthen local infrastructure, and build momentum toward broader clean energy adoption.

New England Heat Pump Accelerator

As a member of the New England Heat Pump Accelerator Program^{95,96}, Rhode Island will receive funds from the EPA’s Climate Pollution Reduction Grant (CPRG) program to support:

- + A **Market Hub** for midstream heat pump incentives, which provide a stipend to equipment distributors and a pass-through incentive to contractors and/or customers. This approach engages local supply chains, contractors, and utilities to encourage the adoption of heat pumps.
- + An **Innovation Hub** for low-and moderate-income (LMI) heat pump incentives
- + A **Resource Hub** to share resources for contractors and customers

The implementation of this program is led by the Connecticut Department of Energy and Environmental Protection (DEEP), in partnership with other New England state agencies, including the Office of Energy Resources implementing the RI-awarded federal funding.

Equity is a central component of the New England Heat Pump Accelerator Program, as the Innovation Hub is designed specifically to support heat pumps for LMI households, ensuring that the families with the highest energy burden can benefit from cleaner, more efficient energy systems. The program also commits to providing funding for community grants going to local organizations and to partnering with manufacturers and distributors to give contractors better access to training and resources.

The analysis includes two estimates of the Heat Pump Accelerator Program’s impact on emissions. For the first estimate, it was assumed that Rhode Island would receive around \$20 million of the total \$270 million in funding from the Market Hub based on the state’s population and that this amount would incentivize the installation of over 18,000 heat pumps between 2026 and 2030. For the second

⁹⁵ Connecticut Department of Energy and Environmental Protection. (n.d.). New England Heat Pump Accelerator; <https://portal.ct.gov/deep/energy/new-england-heat-pump-accelerator>

⁹⁶ Connecticut Department of Energy and Environmental Protection. (2025 January 7). Request for Information and Notice of Technical Conference to Support Program Design of the New England Heat Pump Accelerator Program; Technical Conference (virtual) held January 24, 2025; RFI responses due January 29, 2025.

estimate, NEEP provided draft outputs of internal modeling that resulted in over 67,000 heat pumps installed between 2026 and 2030 due to the combined impacts of the Market Hub and Innovation Hub.⁹⁷ To represent the desired long-lasting effects of the Heat Pump Accelerator Program, the final market share reached in 2030 is assumed to continue at a relatively steady pace through 2050, which leads to greater reductions in the long-term.

The program is estimated to reduce greenhouse gas emissions between 2,300 to 7,800 ktCO₂e by 2050 when including the long-term market transformation effects of the program. Rhode Island would leverage federal funding and existing utility efficiency programs to support implementation, while focusing on accountability, cost-effectiveness, and community impact.

Building Performance Standard

As Rhode Island continues exploring options to reduce greenhouse gas (GHG) emissions in the building sector, Building Performance Standards (BPS) represent another potential strategy under consideration. BPS policies typically establish energy or emissions performance targets for large buildings, often based on square footage, and aim to reduce emissions gradually over time through improvements in energy efficiency and building systems. **Preliminary modeling suggests that a BPS policy could support cumulative emissions reductions of approximately 3,500 ktCO₂e by 2050, contributing meaningfully to the state’s Act on Climate targets.**

BPS usually focus on commercial and large multifamily buildings. Property owners could meet performance targets through a range of strategies, including energy-efficient appliances, weatherization, heat pump installation, or the targeted use of low-carbon fuels. Supportive programs and funding mechanisms, such as federal Energy Efficiency and Conservation Block Grants or state energy efficiency initiatives, could help reduce the cost of compliance, particularly for buildings serving low-income or historically underserved communities.

To ensure equitable implementation, a BPS approach could be shaped through a collaborative process with input from building owners, tenants, municipalities, and other stakeholders. Implementation could include compliance assistance, tenant protections, and coordination among agencies such as the Rhode Island Office of Energy Resources (OER), utilities, and the Building Code Commission. While no BPS policy has been adopted in Rhode Island to date, this strategy is one of several being considered as part of the state’s broader climate planning efforts. It may offer a pathway to support long-term decarbonization goals while also improving building performance, affordability, and public health.

Clean Heat Standard

Rhode Island could also consider the development of a Clean Heat Standard (CHS), a regulation that would require natural gas and heating fuel providers to reduce emissions from the energy they deliver over time. Utilities would meet emissions targets through a combination of measures – such

⁹⁷ Provided via email correspondence on September 9, 2025.

as energy efficiency, electrification, and potentially low-carbon fuels (e.g., renewable natural gas, biodiesel, etc.).

The primary financial responsibility for implementing a CHS would fall on energy providers, with some costs potentially shared by ratepayers. Cleaner energy, such as electricity or low carbon fuels, can produce clean heat credits. The implementation authority for a potential CHS is yet to be determined, but would likely include the Office of Energy Resources, Public Utilities Commission, and utilities.

The GHG reduction impact for a potential CHS was based on the Massachusetts Draft Framework for a CHS⁹⁸, which requires 100% clean heat by 2050. **Under these assumptions, a potential CHS was modeled to reduce emissions by over 23,300 ktCO₂e by 2050 in RI, while aiding utilities in planning long-term clean heat investments.**

A CHS could be complementary to many of the other strategies modeled. For example, increased incentives for electrification and energy efficiency would be important in the achievement of a Clean Heat Standard and support customers through the transition. Program design can include additional support and incentives for low- and moderate-income households to minimize the potential equipment cost and bill impacts.

Industry and Waste

In RI's industrial and waste sectors, the modeled GHG reduction strategies focus on a combination of targeted standards and sustainable fuel and materials management policies. Establishing large facility emissions standards and renewable fuel blending requirements for off-road equipment can drive near-term reductions in hard-to-abate industrial activities. The team also modeled organic waste diversion strategies, including composting and anaerobic digestion, which reduce methane emissions while generating beneficial byproducts such as compost and biogas.

Overall, the state explored two potential carbon reduction strategies in the industrial sector and one strategy in the waste sector. The full list of industry and waste strategies the state is exploring for potential implementation is presented in Table 8 below. Each strategy differs in its equity focus, level of stakeholder interest, and effectiveness in reducing GHG emissions, as illustrated in the accompanying metrics within the table. These differences highlight how each strategy could contribute uniquely to the state's pollution reduction and climate goals.

⁹⁸ Commonwealth of Massachusetts. (n.d.). Massachusetts Clean Heat Standard; <https://www.mass.gov/massachusetts-clean-heat-standard>

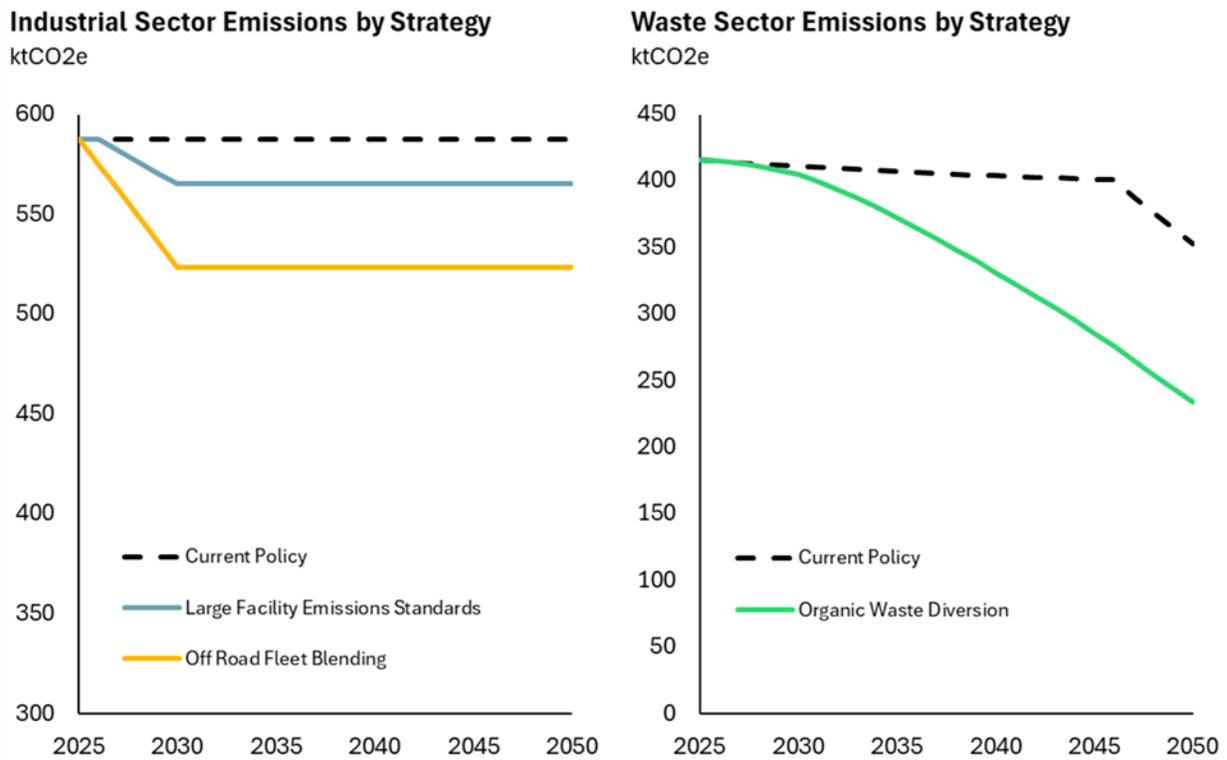
Table 8: Industry and Waste-Focused Near-Term Strategies

Strategy 	Equity Focus 	Stakeholder Priority 	GHG Reduction Impact 	2025-2050 GHG Reductions (ktCO2e)
Large Facility Emissions Standards				500
Off Road Fleet Renewable Fuel Blending Requirements				1,400
Organic Waste Diversion				1,500

Figure 37 shows industry sector emissions in Rhode Island under the implementation of each strategy (left) and waste emissions in Rhode Island under the implementation of the Organic Waste Diversion strategy (right). Note that each line on these charts shows the individual impact of each strategy, not the impact of multiple GHG reduction strategies added together.

GHG Impacts of Industry and Waste Strategies

Figure 37: Industrial Sector Emissions by Strategy (left) and Waste Sector Emissions by Strategy (right)



Description of Industry and Waste Strategies

Industrial Facility Standards

One potential strategy to reduce industrial sector emissions in Rhode Island is the establishment of enforceable GHG emissions standards for large industrial facilities. This approach would set annual emissions targets for facilities that exceed a defined emissions threshold. Facilities could meet these targets through a combination of electrification, efficiency, or fuel-switching.

The GHG impacts of this potential strategy were modeled based on Colorado's industrial facility emissions standard, which is the first in the national and requires a 20% reduction in GHG emissions by 2030 for all manufacturing facilities that emit more than 25,000 metric tons of GHGs per year.⁹⁹

The estimated GHG reductions based on these assumptions is 500 ktCO₂e by 2050.¹⁰⁰

If pursued in Rhode Island, such a policy would likely be led by the Department of Environmental Management (RIDEM). The compliance cost for facility emissions standards would be largely borne by facility owners, although a portion of these costs could be passed on to consumers.

Industrial pollution and negative air quality impacts are often highest in disadvantaged communities. Reducing air pollution from industrial fuel use at these large facilities through an emissions standard could be beneficial for nearby communities, improving air quality and health impacts.

Off-Road Fleet Renewable Fuel Blending Requirements

As part of Rhode Island's strategy to reduce GHG emissions in industry, this policy option explores the potential for implementing renewable fuel blending requirements for off-road vehicle fleets, particularly in construction, agriculture, and other industrial applications, **with estimated reductions of 1,400 ktCO₂e metric tons cumulatively by 2050.** Given the current limitations of zero-emission vehicle (ZEV) alternatives in the off-road space, requiring a transition to renewable diesel presents a near-term, actionable path toward decarbonization for this type of equipment. Modeled after California's renewable diesel mandate for off-road engines over 25 horsepower, this policy would establish renewable fuel use requirements for eligible fleets operating in Rhode Island.

While implementation would involve compliance costs for fleet operators, these could be partially offset through program design, subsidies for smaller operators, and potential federal support. Likely administered by the Rhode Island Department of Environmental Management (RIDEM), this policy could offer an opportunity to reduce emissions from a traditionally hard-to-abate sector, while exploring mechanisms to reduce cost impacts.

⁹⁹ Colorado Department of Public Health & Environment. (n.d.). GEMM Phase 2 Rule; <https://cdphe.colorado.gov/apcd/GEMM-phase-2-rule>

¹⁰⁰ The modeled policy is based on the CO program, and because most industrial emissions in RI occur at smaller facilities that fall below the threshold, there is only a 4% reduction in annual emissions, but a future policy could use a lower threshold to include smaller facilities.

Organic Waste Diversion

In the waste sector, a potential strategy to reduce landfill emissions in Rhode Island is an organic waste diversion program. This strategy explores opportunities to support local governments in diverting food waste from the Central Landfill by investing in composting, anaerobic digestion, and related infrastructure. **Food waste is a source of methane emissions, and increasing diversion rates could help extend the landfills' lifespan while generating beneficial byproducts like compost and biogas, with GHG reduction estimates of 10,400 ktCO₂e metric tons cumulatively by 2050.**

If implemented in Rhode Island, this policy would likely be overseen by the Department of Environmental Management (RIDEM), in coordination with local governments and the Rhode Island Resource Recovery Corporation (RIRRC). Potential funding streams include EPA's Solid Waste Infrastructure for Recycling (SWIFR) grants, USDA programs, green bonds, and partnerships with private organics processors. Market-based tools such as pay-as-you-throw pricing or tipping fee adjustments may also provide incentives.

Key equity and environmental justice considerations include reducing landfill-related pollution in frontline communities, ensuring equitable access to diversion services, supporting inclusive education and outreach, and creating local green jobs. This strategy may also be informed by best practices from states like Vermont¹⁰¹, Massachusetts¹⁰², and California¹⁰³, which have demonstrated effective models for statewide food waste diversion and inclusive program design.

Natural and Working Lands

Maintaining Natural Carbon Sinks

Another potential strategy to advance Rhode Island's climate goals involves maintaining the state's natural carbon sinks. This approach builds on the 2020 Rhode Island State Forest Action Plan (SFAP), which outlines strategies to conserve working forest landscapes, support forest management, and increase public benefits from natural lands. Rhode Island's forests, though relatively modest in scale, play a meaningful role in meeting Act on Climate targets, and the continued protection and restoration of these lands remains an important area of exploration for long-term climate resilience and mitigation.

¹⁰¹ Vermont Agency of Agriculture, Food & Markets. (n.d.). Organic Waste Management Guidance — Non-Sewage Waste, Water Quality; <https://agriculture.vermont.gov/water-quality/non-sewage-waste/organic-waste-management-guidance>

¹⁰² Commonwealth of Massachusetts. (n.d.). Massachusetts Solid Waste Master Plan; <https://www.mass.gov/guides/solid-waste-master-plan>

¹⁰³ CalRecycle. (n.d.). Short-Lived Climate Pollutant (SLCP) Reduction — SB 1383 (Lara, 2016); [https://calrecycle.ca.gov/organics/slcp/electedofficials/#:~:text=SB%201383%20\(Lara%2C%202016\)%20is%20part%20of,pollution%20from%20landfills%20that%20heats%20our%20planet](https://calrecycle.ca.gov/organics/slcp/electedofficials/#:~:text=SB%201383%20(Lara%2C%202016)%20is%20part%20of,pollution%20from%20landfills%20that%20heats%20our%20planet)

Natural ecosystems are both sinks and sources of greenhouse gas emissions. Healthy forests, for example, absorb and store carbon dioxide (CO₂) through photosynthesis, locking carbon in biomass and soils. In contrast, degraded or decaying forests release CO₂ back into the atmosphere through decomposition. Globally, natural systems act as a net carbon sink, removing approximately half of the CO₂ emitted by human activities.¹⁰⁴

This policy option prioritizes protecting the health and integrity of Rhode Island’s natural ecosystems and enhancing their carbon sequestration and storage through natural climate solutions (NCS). NCS, such as the conservation, sustainable management, restoration, and expansion of forests, wetlands, and agricultural lands, have the potential to significantly contribute to climate mitigation efforts in Rhode Island. NCS uniquely offer a wide range of co-benefits beyond carbon mitigation, such as improved air and water quality, enhanced recreational opportunities, biodiversity conservation, green job creation, support for sustainable local economies, and increased community resilience to climate impacts.

This policy assumes a stable natural carbon sink through 2050, meaning that Rhode Island’s natural and working lands will continue to store and sequester approximately the same amount of carbon as in recent years.

At the core of this policy is a commitment to maintaining—at minimum—the current level of carbon storage and sequestration provided by its natural and working lands through 2050, with a goal to enhance this capacity wherever feasible. This policy estimates a stable sequestration of carbon at 0.75 million metric tons of CO₂ annually through 2050. This “no net loss” approach to carbon sink capacity can be advanced through three core functions:

- + **Conserve** forests, farms, and wetlands
- + **Sustainably manage** forests and farms
- + **Expand** greenery in cities and beyond

In 2022, Rhode Island’s natural and working lands—its forests, wetlands, farms, and urban green spaces—sequestered 0.75 million metric tons of CO₂, offsetting 7.2% of the state’s gross greenhouse gas emissions (as measured by RI’s 2022 GHG Inventory). Most of Rhode Island’s natural carbon sequestration comes from its forests and urban trees. When considering the carbon impact of intact forest ecosystems, we consider both forests’ ongoing ability to absorb CO₂, as well as the amount of carbon already stored in the forest, which increases incrementally each year due to ongoing sequestration. The average acre of forest in Rhode Island is estimated to remove 1.3 metric tons of carbon every year and stores between 75 and 91 metric tons of carbon.¹⁰⁵

Rhode Island assumes a stable natural carbon sink through 2050, meaning that Rhode Island’s natural and working lands will continue to store and sequester approximately the same amount of

¹⁰⁴ Copernicus Publications. (2023). Earth System Science Data — “Global Carbon Budget 2023”; <https://essd.copernicus.org/articles/15/5301/2023/>

¹⁰⁵ Note: These estimates and assumptions were not modeled specifically for this analysis and instead come from RI’s 2022 GHG Inventory analysis of annual sequestration rates for RI. The 2022 Inventory available at https://dem.ri.gov/sites/g/files/xkgbur861/files/2024-12/ghg-inventory-2022-f_1.pdf provides further technical details on how this estimate was produced.

carbon as in recent years. This assumption is based on historical data showing a decline in total forest acreage—a loss of approximately 30,000 acres since 1990—alongside an apparent increase in annual carbon removals. This increase is attributed to carbon being temporarily transferred into other transient biomass pools, such as deadwood from invasive species outbreaks. However, Rhode Island’s ability to sequester carbon will decline over time as forest land is converted to developed land. When an intact forest is converted to development, a substantial portion of the carbon stored in trees and soils is released into the atmosphere, and the land’s future potential to sequester carbon is largely—and often permanently—lost.¹⁰⁶

When considering land use protection and conservation, understanding who uses the land and for what purpose is key. As RI establishes strategies to protect natural and working lands, it is of utmost importance to have people and Rhode Island communities in mind – holding equity and thoughtfulness at the forefront. Partnerships with Rhode Island community-based organizations allow for the incorporation of community priorities.

Maintaining or expanding sequestration, especially in our urban core (Providence, Pawtucket, Central Falls and Woonsocket), remains a priority for the state. Rhode Island’s continued work in urban forestry will prioritize participation by and benefits to these communities. Similarly, avoiding potential displacement or additional issues that may harm our most vulnerable populations needs to be prioritized.

¹⁰⁶ Rhode Island Department of Environmental Management. (2019). The Value of Rhode Island Forests Report; <https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/bnatres/forest/pdf/forest-value.pdf>

Emphasizing Education

Education has long been considered an essential tool for addressing climate change. Critical to conversations about reducing emissions and supporting resilience in communities, schools are not only centers of learning—they are the heart of Rhode Island’s communities. Beyond their educational mission, they serve as critical public infrastructure during both normal operations and emergency scenarios. In the face of climate-related events, schools routinely serve as evacuation centers, shelters, distribution points for essential goods, and locations for emergency health services. Their role as trusted, familiar, and accessible institutions makes them essential to safeguarding community well-being before, during, and after climate disruptions.

Showcasing energy efficiency equipment and renewable energy projects is becoming more widespread across schools in Rhode Island as are the number of Green Ribbon schools. Green Ribbon Schools is a federal award recognizing schools that promote cost-saving, health, and performance-enhancing sustainability practices. Rhode Island remains the top state in New England for Green Ribbon Schools and is the top state in the nation for Green Ribbon Schools per 1,000 schools (Dec. 2024).

Core concepts that can continue to be discussed across EC4 agencies relative to the importance of education both in and out of schools in RI’s broader climate conversation include:

- Integrating climate education across curricula
- Emphasizing the importance of an energy-efficient school infrastructure
- Recognizing the role of educational institutions in the development of RI’s green workforce development programs
- Promoting sustainable transportation initiatives for students
- Recognizing the role of higher education in climate action research
- Utilizing school communities to promote student conversations about reducing carbon footprints and enhancing resilience
- Encouraging teacher and community training opportunities on climate and sustainability
- Recognizing the importance of community-led education and engaging community members outside of educational institutions as part of broader climate discussions

Utilizing the power of education in its many forms to advance the priorities outlined in the Act on Climate can help the state advance meaningful greenhouse gas reductions.

5. Societal Impacts of Decarbonization

Decarbonizing Rhode Island’s economy will bring changes that reach beyond energy systems—it will also shape the daily lives, opportunities, and well-being of Rhode Islanders. This chapter explores the broader societal impacts of the transition, such as how clean energy investments influence employment, wages, and the state’s workforce; ongoing energy affordability considerations in Rhode Island; equitable access to decarbonization benefits; and how reductions in pollution improve public health. Together, these factors provide a more complete picture of what decarbonization means for communities, households, workers, and businesses across the state.

Economic Impacts

The above chapters discuss how reaching the Act on Climate targets in Rhode Island will require a shift in technologies that are used for heating and commuting, a transition from fossil fuel reliance to electricity, and the estimated direct costs and monetized societal benefits of those changes. Besides direct costs, this transformation will also have impacts on the entire economic ecosystem of Rhode Island, including employment levels, employees’ wages, Rhode Island businesses, and broader energy affordability considerations.

Employment Outcomes and Wage Levels

Decarbonization in Rhode Island will drive demand for new technologies – such as heat pumps and EVs – that must be manufactured, installed, and supported at scale. The increasing reliance on electricity to power the daily lives of Rhode Islanders’ will require the expansion and modernization of the electric grid. What’s more, Rhode Island’s growing utilization of renewable energy to produce electricity means that more renewable projects need to be built and integrated into the grid. Together, all these shifts point to substantial future employment needs across the clean energy supply chain and supporting industries. It’s clear that achieving the goals of Rhode Island’s Act on Climate will require a workforce transition to meet the state’s decarbonization targets.

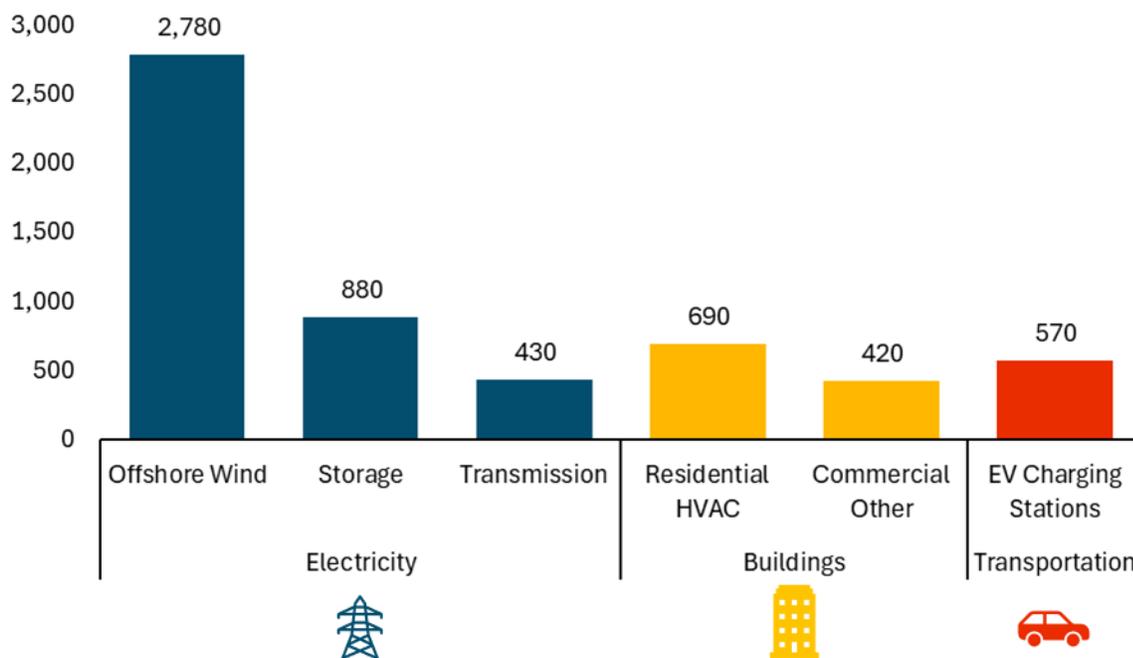
To better understand this shift, EC4 worked with BW Research to conduct an analysis to assess how decarbonization will affect employment and workforce needs across key economic sectors. Utilizing the investment patterns and direct costs of achieving the Act on Climate (as outlined in the *Costs and Benefits of Decarbonization* chapter), **it is projected that there will be a net gain of over 6,600 new jobs in Rhode Island through 2035.** More than half of total job growth is estimated to occur in the offshore wind industry (Figure 38 **Error! Reference source not found.**), propelled by significant expansion of offshore wind.¹⁰⁷ Construction and maintenance occupations would experience the

¹⁰⁷ Offshore wind capacity values reflect modeling assumptions that the current federal leasing and permitting restrictions would be resolved within the next several years. Under this assumption, new OSW project timelines were shifted approximately five years later than initially planned, rather than eliminated entirely. This approach assumes continued progress toward lifting the federal ban, as well as recent developments such as Ørsted’s successful legal challenge allowing work on the Revolution Wind project to proceed.

most significant growth, adding 4,380 workers between 2023 and 2035 (Figure 39 **Error! Reference source not found.**).¹⁰⁸ While most segments show strong expansion, employment in other supply chain occupations is expected to decline by 840 positions. Given both the short-term and long-term nature of climate jobs, the net gain from today to 2050 is less than the estimate out to 2035, at 3,800 new jobs.

Detailed employment outcome results and modeling methodology can be found in BW Research’s Workforce Appendix.

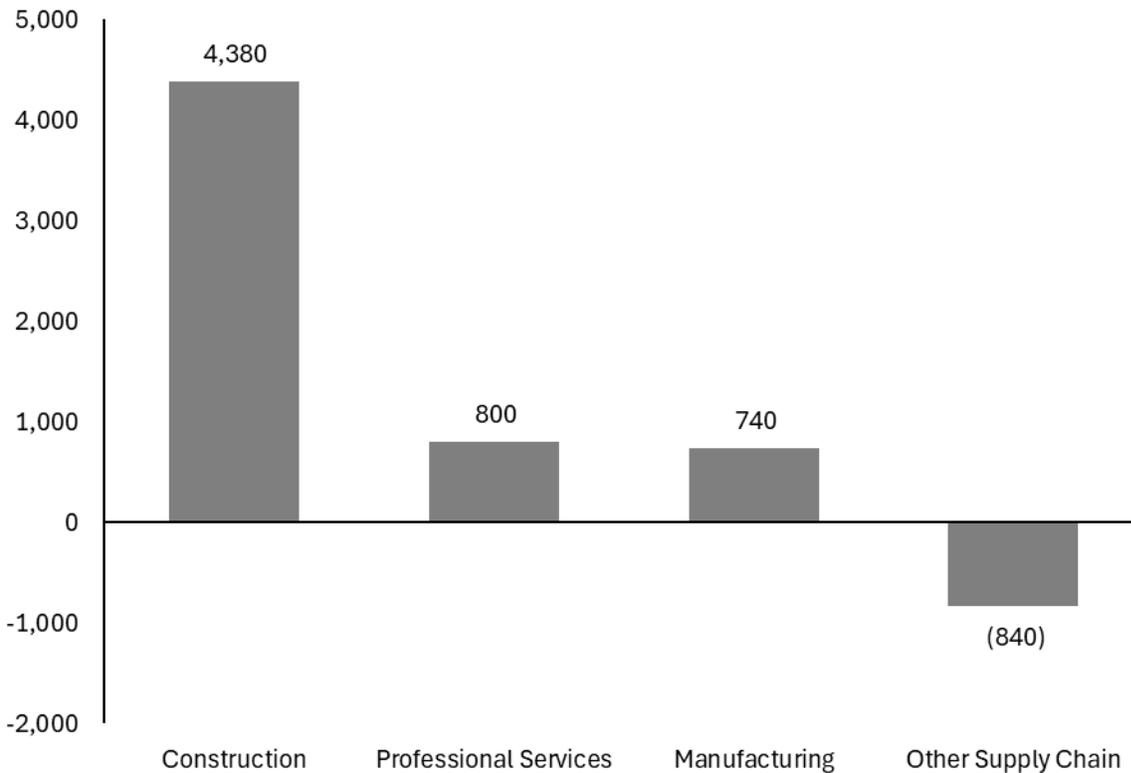
Figure 38: Largest Employment Growth within Sub-Sectors of Rhode Island’s Energy Economy, 2023-2035



Note: Offshore wind capacity values reflect modeling assumptions that the current federal leasing and permitting restrictions would be resolved within the next several years. Under this assumption, new OSW project timelines were shifted approximately five years later than initially planned, rather than eliminated entirely. This approach assumes continued progress toward lifting the federal ban, as well as recent developments such as Ørsted’s successful legal challenge allowing work on the Revolution Wind project to proceed.

¹⁰⁸ Given the large gender divide for construction occupations, this projection may widen the gender gap in the clean energy workforce without targeted recruitment and development of female workers.

Figure 39: Energy Employment Projections in Rhode Island, 2023-2035 ¹⁰⁹



Because Rhode Island is committed to a just transition for all workers and fostering family-sustaining wages for clean energy jobs, it is essential to understand the wages that these emerging roles are likely to provide. Assessing wage expectations helps to ensure that the jobs created through decarbonization under the Act on Climate deliver fair pay, stability, and broad economic opportunity.

Using the MIT Living Wage Calculator,¹¹⁰ occupations are categorized as having Tier 1, 2, or 3 wages by their average hourly wage. **Tier 1** occupations have an average wage above \$46 per hour—more than half a standard deviation higher than the average living wage across family sizes (\$38.92). **Tier 2** occupations fall within half a standard deviation above or below the average living wage, while **Tier 3** occupations earn less than half a standard deviation below the average living wage (Table 9).

¹⁰⁹ Figure does not include induced employment and therefore will not sum to the 6,600 figure in the narrative.

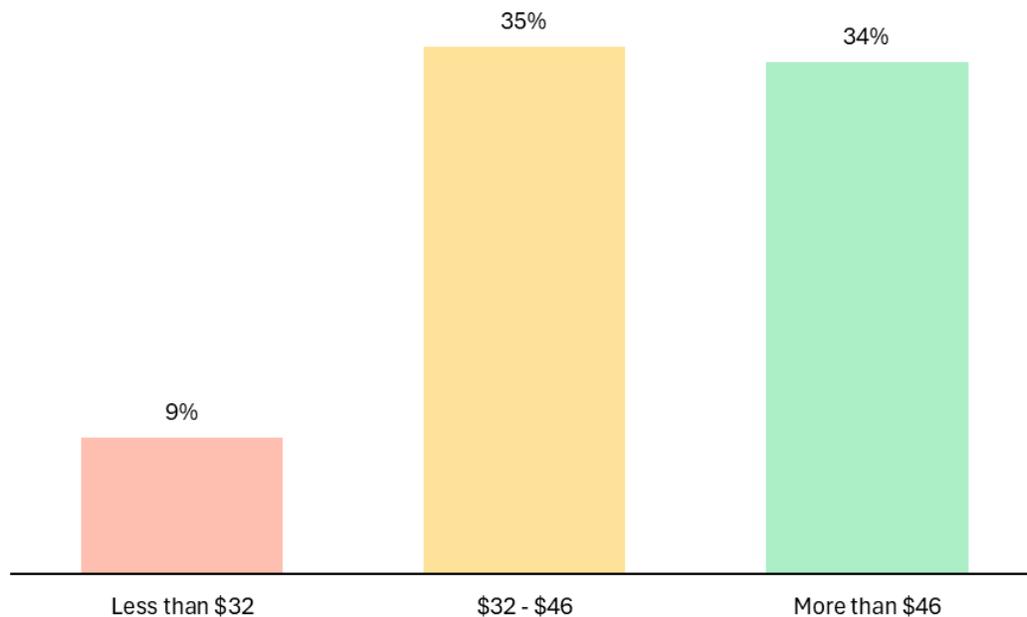
¹¹⁰ Massachusetts Institute of Technology (MIT), Living Wage Calculator. (n.d.). livingwage.mit.edu;
<https://livingwage.mit.edu/>

Table 9. Wages Tiers Based on Rhode Island Living Wages

Tier	Hourly Wage
Tier 1	Greater than \$46
Tier 2	\$32 - \$46
Tier 3	Less than \$32

Between 2023 and 2035, the Act on Climate scenario is estimated to generate significantly more employment growth in jobs earning Tier 1 and Tier 2 wages than Tier 3 wages.¹¹¹ This is driven primarily by employment growth in the Electricity and Buildings sectors. Jobs earning Tier 3 wages still experience employment growth, albeit at a slower pace, growing by 9% from 2023 to 2035 compared to 35% in Tier 2 and 34% in Tier 1 (Figure 40).

Figure 40. Total Employment Growth by Wage Tier, 2023-2035



Considerations for Rhode Island Businesses

As stated earlier, climate change and decarbonization efforts affect everyone – including Rhode Island businesses. Businesses across Rhode Island increasingly recognize the financial and operational risks posed by climate change, but stakeholders emphasized that companies need greater policy certainty, predictable incentives, and accessible technical support to confidently invest in low-carbon technologies. Many businesses remain hesitant to adopt new equipment or

¹¹¹ Massachusetts Institute of Technology (MIT), Living Wage Calculator. (n.d.). livingwage.mit.edu;
<https://livingwage.mit.edu/>

retrofit buildings without clear, long-term guidance on state climate policy, stable funding mechanisms, and assurance that the electric grid and related infrastructure can support the transition.

To address these needs, state and quasi-public agencies offer financing and incentive programs that help reduce costs. Programs such as C-PACE allow businesses to pursue energy upgrades with no upfront payment, creating immediate cash-flow benefits, while the Renewable Energy Fund and Qualified Jobs Incentive Program provide grants and tax credits that lower the cost of clean energy adoption and workforce expansion. These supports, along with municipal and public-sector initiatives like the Efficient Buildings Fund, Lead by Example, and targeted school facility upgrades, can help backstop a more stable and predictable marketplace for private-sector investment.

However, businesses have indicated that funding alone is not sufficient. Businesses also highlight the need for clear timelines, consistent regulatory signals, and hands-on guidance to navigate the technical and financial complexities of electrification, energy efficiency, and renewable energy deployment. Without this clarity, companies may delay or scale back investments—particularly as federal funding becomes less reliable and infrastructure constraints, such as grid capacity, increase risk.

A structured and phased transition is widely supported by the business community, as well as workers. Predictable implementation schedules enable companies to plan capital upgrades, align workforce recruitment and training, and avoid sudden cost increases. This approach is especially beneficial for sectors poised for rapid transformation where steady demand, clear policy direction, and reliable incentives are essential for sustainable growth.

Energy Affordability

Earlier chapters showed how decarbonization may affect household energy costs. It is important to note that these costs exist within a broader context of ongoing energy affordability challenges in Rhode Island and across all of New England. Ensuring that energy remains affordable – especially for low-income households – is a priority for the state. There are active and ongoing discussions about how to ease the burden of energy costs on Rhode Island families.

Today, a network of state agencies, nonprofits, and community action programs supports a broad range of initiatives and funding opportunities designed to assist households across Rhode Island. These programs provide critical financial and technical resources through the Weatherization Assistance Program (WAP), the Low-Income Home Energy Assistance Program (LIHEAP), and the Appliance Management Program (AMP). LIHEAP offers direct support during the winter heating season by providing grants paid directly to utility or fuel companies, while WAP complements this assistance by delivering whole-home energy efficiency improvements such as insulation upgrades, ventilation enhancements, and the installation of smoke and carbon monoxide detectors. AMP further expands access by offering in-home energy audits conducted by trained Energy Managers who assess appliance use, recommend personalized strategies to reduce electricity consumption,

and provide no-cost energy-saving products—including LED lighting, Energy Star appliances, and water-saving fixtures.

Although these programs help reduce energy burdens, the upfront costs of electrification, efficiency retrofits, and clean energy upgrades remain a significant barrier for many households. While long-term savings from efficiency improvements and clean energy adoption can substantially reduce utility bills, these benefits are often inaccessible without financial support to offset initial investment costs. **As a result, effective policy design must ensure adequate funding and targeted incentives that help energy-burdened communities participate fully in Rhode Island’s clean energy transition.** Together, these initiatives and policy supports can work in concert to reduce energy burdens, improve home safety, and expand equitable access to energy efficiency solutions for the state’s most vulnerable residents.

Equity and Ability to Access Benefits

Throughout the stakeholder engagement process, local Rhode Island community members emphasized that equity must be central to the energy transition under the Act on Climate. While the state offers a growing set of programs, community members noted that many households continue to face barriers to participation, including limited access to clear information, language challenges, lack of trust in outside organizations, and constraints related to childcare, work schedules, or transportation. Without intentional design, the benefits of clean energy, such as lower utility bills, healthier homes, and modernized systems, will flow primarily to those with greater resources and capacity.

Community organizations can play an important role in bridging these gaps. Stakeholders highlighted groups such as Man Up, Amos House, Health Equity Zones, and local libraries, as trusted messengers who help residents understand available programs and navigate complex application processes. These partners are especially important in environmental justice communities, where residents may be hesitant to engage with unfamiliar agencies or programs requiring home visits or personal information. Community-embedded outreach, multilingual materials, and culturally relevant communication were repeatedly identified as essential to ensuring residents feel informed, respected, and supported.

Targeted incentives are essential for reducing financial and structural barriers for renters, low-income households, and residents of multifamily housing. These groups often struggle to access weatherization, heat pumps, or rooftop solar because they cannot make property-level decisions or afford upfront expenses. Expanding access to community solar, shared solar subscriptions, and low-income solar incentives were all highlighted as key strategies for ensuring that households who cannot install systems on their own homes still benefit from renewable energy savings. In addition, providing in-language assistance, neighborhood-based enrollment help, and small stipends to compensate residents for time spent navigating upgrade processes were cited as effective tools to support participation.

In addition to incentives, stakeholders emphasized that the expansion and electrification of public transportation, would not only reduce total transportation emissions, but would also address the

Act on Climate’s equity goals. Additionally, stakeholders noted that an annual bus pass costs \$840, which is significantly lower than the cost to buy, operate, and maintain a vehicle, whether electric or gas-powered.

Strong community partnerships and inclusive outreach approaches were also seen as helpful for equitable outcomes. Several stakeholders underscored the value of “train-the-trainer” models for workforce development, where trusted community members receive education and resources to share information within their networks. This approach not only builds local leadership capacity but also ensures program information is delivered by individuals who are already known and trusted by residents.

Overall, stakeholders stressed that **equity requires more than simply offering programs—it requires targeted incentives, inclusive outreach, and proactive engagement with community partners**. Ensuring that all Rhode Islanders can meaningfully participate in and benefit from clean energy initiatives is fundamental to achieving a just and effective transition.

Workforce

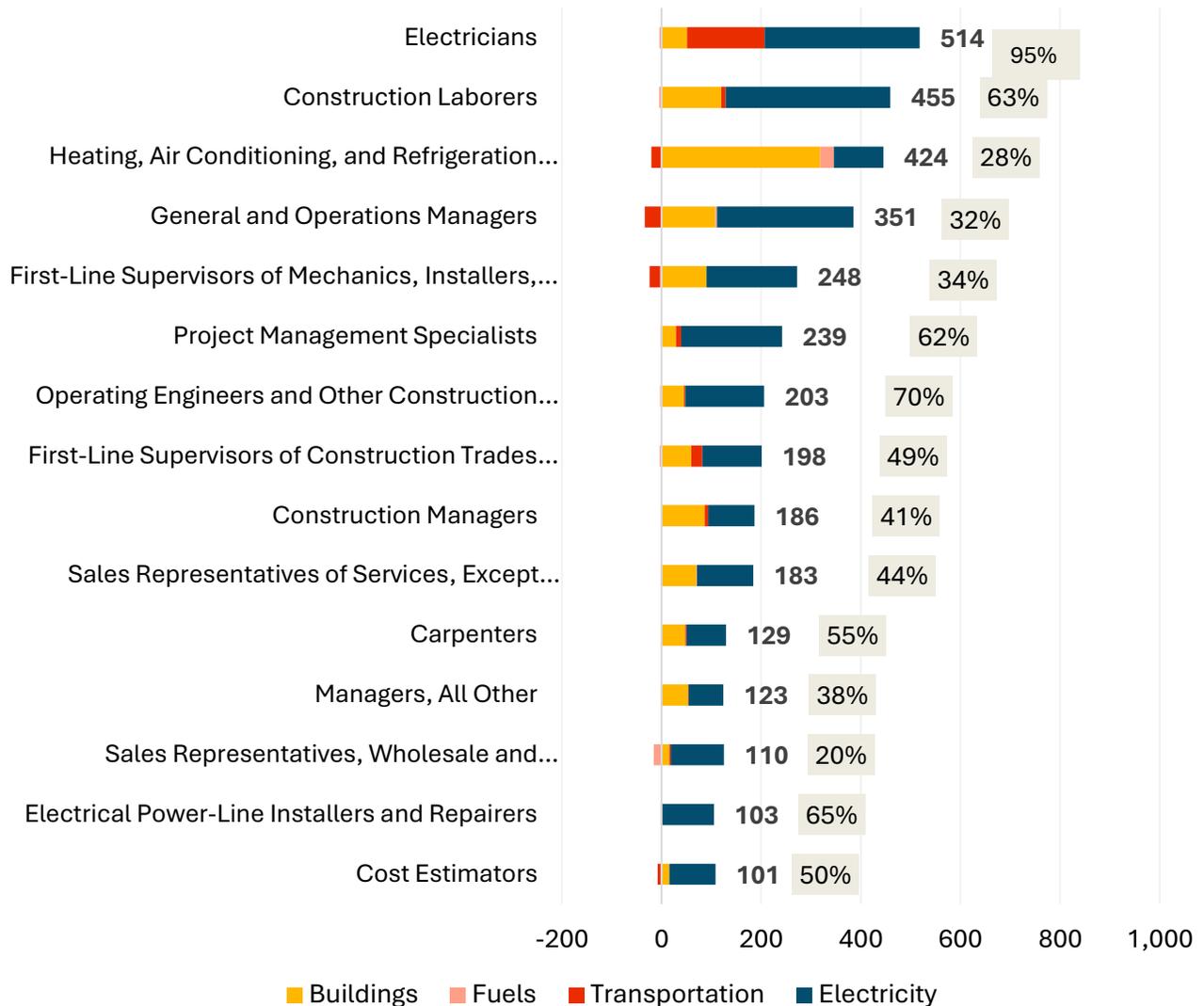
The *Employment Outcomes and Wage Levels* section above outlined overall employment projections and expected wages. This section examines employment through a workforce development perspective. It looks more closely at where those jobs are likely to emerge – both in terms of specific occupation types and the skills they require. It also examines the training, education, and re-skilling needed to prepare workers and ensure Rhode Island’s clean energy transition is both achievable and equitable.

*Occupations Projections*¹¹²

Overall, electricians are projected to see the most occupational job growth by 2035, adding over 500 new jobs and increasing by 95% from energy sector employment of electricians in 2023. This growth is led by the electricity sector with 311 new jobs, followed by transportation at 156 new jobs and buildings at 51 new jobs – as shown in Figure 41 below. Also projected to see significant increases are Construction Laborers, adding 455 jobs, and HVAC/R Mechanics and Installers with 424 new jobs.

¹¹² The Rhode Island Secondary Employment Outputs (SEO) provide a more detailed view of modeling outputs, using staffing pattern analyses to identify the types and quantities of occupational employment generated across the state. The Modeling Methodology Appendix section provides a detailed description of the methodology used for these projections.

Figure 41. Top 15 Occupations by Growth 2023-2025



Transitioning Displacement Workers

While many occupations are projected to see growth as a result of achieving Rhode Island’s Act on Climate, there are some occupations that are projected to experience a decline in jobs – such as automotive attendants. Many of the occupations that are expected to decline have closely related occupations in the clean energy economy that are fast-growing under decarbonization (Table 10). While workers in declining occupations are unlikely to move into many of these new roles without additional reskilling, the identified transition opportunities highlight occupations where existing knowledge, skills, and interests are most transferable. This overlap highlights where transitions could be most feasible, both in terms of training investment and worker adaptability.

Many pairings link traditional trades and mechanical roles to occupations critical to the clean energy economy, such as Electricians, HVAC/R Mechanics and Installers, and Construction Laborers.

Some of these roles require comparable educational backgrounds and similar on-the-job training, suggesting that well-targeted upskilling initiatives could help offset job losses while advancing workforce readiness for the state’s growth industries. Additionally, all the transition opportunities provide higher wages for workers than the declining occupations from which they are transitioning.

Table 10. Most Relevant Transition Opportunities for Most Declining Occupations¹¹³

SOC	Occupation Title	Job Change by 2035	Average Wage ¹¹⁴	Education ¹¹⁵	Training
49-3021	Automotive Body and Related Repairers	-85	\$62,330	High school diploma	Few months to one year
47-2111	Electricians	514	\$70,760	Vocational school, related on-the-job experience, or an associate's degree.	One to two years
47-2061	Construction Laborers	455	\$62,670	High school diploma	Few months to one year
41-1011	First-Line Supervisors of Retail Sales Workers	-60	\$60,270	High school diploma	Few months to one year
41-3091	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	183	\$80,180	High school diploma	Few months to one year
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	248	\$84,830	Vocational school, related on-the-job experience, or an associate's degree.	One to two years
53-7061	Cleaners of Vehicles and Equipment	-44	\$36,040	High school diploma	Few months to one year
47-2061	Construction Laborers	455	\$62,670	High school diploma	Few months to one year
53-6031	Automotive and Watercraft Service Attendants	-17	\$42,280	High school diploma	Few months to one year
47-2061	Construction Laborers	455	\$62,670	High school diploma	Few months to one year
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	424	\$63,330	Vocational school, related on-the-job experience, or an associate's degree.	One to two years

¹¹³ O*NET Center. (n.d.). Related Occupations Database – Transition Occupations; https://www.onetcenter.org/dictionary/26.3/excel/related_occupations.html

¹¹⁴ U.S. Bureau of Labor Statistics. (2024 May). Occupational Employment and Wages Statistics (OEWS); <https://www.bls.gov/oes/tables.htm>

¹¹⁵ ONET Center. (n.d.). Education and Training — based on ONET Job Zones; <https://www.onetcenter.org/database.html#individual-files>

SOC	Occupation Title	Job Change by 2035	Average Wage ¹¹⁴	Education ¹¹⁵	Training
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	-13	\$50,560	High school diploma	Few months to one year
47-2141	Painters, Construction and Maintenance	28	\$57,200	High school diploma	Few months to one year
47-2061	Construction Laborers	455	\$62,670	High school diploma	Few months to one year
49-3022	Automotive Glass Installers and Repairers	-11	\$61,100	High school diploma	Few months to one year
47-2061	Construction Laborers	455	\$62,670	High school diploma	Few months to one year
51-8092	Gas Plant Operators	-7	\$88,400	High school diploma	Few months to one year
51-8013	Power Plant Operators	7	\$99,260	High school diploma	Few months to one year
51-8091	Chemical Plant and System Operators	-6	\$79,000	High school diploma	Few months to one year
51-8013	Power Plant Operators	7	\$99,260	High school diploma	Few months to one year

Four declining occupations show limited alignment with growing roles in the energy industry: Cashiers; Chemical Equipment Operators and Tenders; Retail Salespersons; and Counter and Rental Clerks. For the sales-related positions, workers may find continued employment in other sectors, but these roles are expected to face overall declines across the broader economy. In contrast, Chemical Equipment Operators and Tenders represent a more specialized workforce with skills less easily transferable to other occupations. However, their technical experience aligns most closely with processes in the biomass segment of the clean energy economy, where operational and equipment-handling expertise could be relevant.

Skills Gaps

Many of the key skills needed for occupations projected to have high demand in 2035 are similar to those found in occupations predicted to have declining employment.¹¹⁶ The top skills are primarily foundational soft skills, such as active listening, critical thinking, and speaking. Both growing and

¹¹⁶ The 15 occupations modeled to see the most job declines include: Cashiers; Automotive Service Technicians and Mechanics; Automotive Body and Related Repairers; First-Line Supervisors of Retail Sales Workers; Cleaners of Vehicles and Equipment; Chemical Equipment Operators and Tenders; Retail Salespersons; Fast Food and Counter Workers; Automotive and Watercraft Service Attendants; Coating, Painting, and Spraying Machine Setters, Operators, and Tenders; Automotive Glass Installers and Repairers; Counter and Rental Clerks; Food Preparation Workers; Gas Plant Operators; Chemical Plant and System Operators. Fast Food and Counter Workers, along with Food Preparation Workers, were excluded from this and subsequent analysis due to their minimal relation to the energy economy; the workers who are included in the “energy industry” are likely there due to employment at a gas station or other fuel provider.

declining occupations affected by the energy transition in Rhode Island share these same three core skills. This suggests that the need for training in these foundational abilities, like communication and critical thinking, is already well understood across these occupations. As a result, upskilling and retraining efforts for workers moving into growing clean energy occupations should focus particularly on developing **technical** competencies rather than general transferable skills.

Table 11. Top 10 Key Skills in Most Growing and Declining Occupations¹¹⁷

Top Skills in Most Growing Occupations	Top Skills in Most Declining Occupations
Active Listening	Active Listening
Critical Thinking	Speaking
Speaking	Critical Thinking
Coordination	Monitoring
Reading Comprehension	Operation and Control
Monitoring	Service Orientation
Operations Monitoring	Operations Monitoring
Management of Personnel Resources	Quality Control Analysis
Troubleshooting	Reading Comprehension
Operation and Control	Social Perceptiveness

Retraining is particularly important for workers whose industries may be affected by the clean energy transition – such as fossil fuel workers. Rhode Island stakeholders highlighted the need for transitional support, trust-building, and public recognition of these workers' role in the shift to a clean energy economy. Wraparound services may be especially relevant for these types of workers, who are likely coming from stable, family-supporting wages. Paying new clean energy entrants for their time spent retraining will further support equitable and sustainable training models for transitioning workers.

Training providers should also directly integrate renewable energy and climate technologies into traditional trades programs. Industry associations and training providers discussed how integration of climate and clean technology training needs to be part of standard, established training programs for tradespeople. For example, IBEW 999 offers in-house training for electric vehicle work, along with electrical principles related to offshore wind and solar technologies. In addition to this in-house training, the union will send workers to learn additional skills and certifications for offshore wind. The industry can adopt this type of training as a common standard across workforce pathways, so that all skilled trades people are equipped to install, maintain, and repair clean energy technologies. Some training providers have started this work.

Additionally, Rhode Island's "Ocean State" identity plays an integral role in shaping its climate and clean energy workforce, and the skills associated with ocean activities can be leveraged in the clean energy workforce. The state's economy and culture are deeply tied to the ocean, with strong industries in fisheries, eco-tourism, and oceanography. Across the state's four-year universities, faculty have noted growing student interest in environmental studies, sustainability management, and green business initiatives, reflecting a generational shift toward environmentally focused careers. The University of Rhode Island has cultivated a long-standing reputation as a business

¹¹⁷ Skills identified using the O*NET 30.0 Skills Database: <https://www.onetcenter.org/database.html#individual-files>

school committed to sustainability, helping to build a pipeline of talent for clean energy and climate-related occupations.

This ocean-based foundation provides Rhode Island with a unique advantage in the clean energy transition. Many workers and businesses already possess transferable skills relevant to offshore wind, marine energy technology, and other blue economy sectors. The state's existing expertise in maritime safety, ocean operations, and coastal management—skills embedded across multiple points of the value chain—positions Rhode Island ahead of many other states in preparing its workforce for offshore wind and ocean-based clean energy industries.

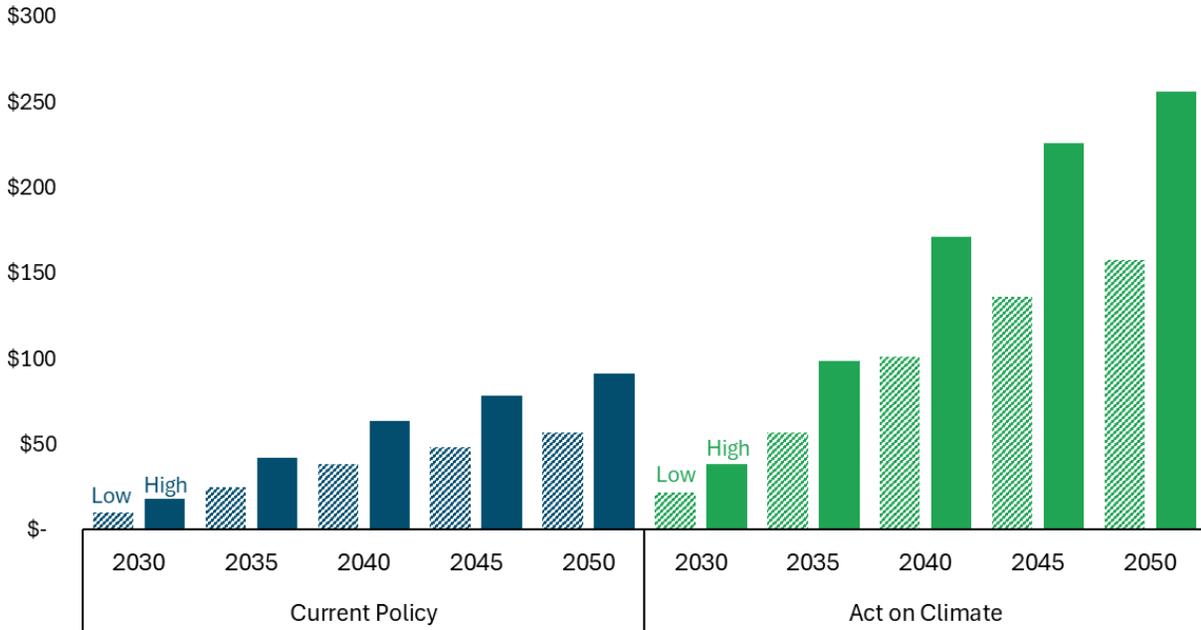
Public Health Benefits

Beyond economic and workforce impacts, decarbonization also leads to positive public health outcomes. Burning fossil fuels produces criteria air pollutants, such as fine particulate matter (PM_{2.5}) and ozone (O₃), that are known to harm human health. These pollutants contribute to premature death, cardiovascular illnesses, and respiratory diseases like asthma. Their impacts are felt most strongly in low-income and disadvantaged communities (LIDACs), where exposure levels are often higher and underlying health vulnerabilities may be greater. By reducing fossil fuel combustion through decarbonization, pollutant levels in Rhode Island are expected to decrease, leading to meaningful improvements in public health.

To quantify these benefits, the state used the U.S. EPA's COBRA (CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool) V5.2 tool, which estimates how changes in emissions affect air quality and health outcomes. The analysis found that under both the Current Policy and Act on Climate scenarios, Rhode Island can expect reductions in air pollutants that translate into real health improvements. These benefits grow over time as emissions decline more deeply. By 2050, both scenarios show notable drops in pollutant concentrations, resulting in measurable decreases in adverse health outcomes statewide.

Because the Act on Climate scenario includes deeper reductions in fuel combustion and co-pollutants, it provides the largest health benefits. By 2050, over 10 premature deaths could be avoided each year under this scenario. Reductions in respiratory illnesses are also significant: annual asthma cases could fall by roughly 2,000 in the Current Policy scenario and 5,000 in the Act on Climate scenario. When these avoided illnesses and deaths are monetized using COBRA's valuation framework, the economic value of improved health is substantial—high estimates show nearly \$100 million per year in 2050 in the Current Policy scenario and over \$250 million in the Act on Climate scenario.

Figure 42: Annual Health Benefits by Year and Scenario (2024 \$M)



Importantly, about one-third of these health benefits are expected to occur in environmental justice communities, helping reduce the disproportionate pollution burdens these neighborhoods have faced for decades.

Policy Design for Equitable Outcomes

To fully realize the economic, health, and workforce benefits of decarbonization—and to ensure they reach all Rhode Islanders—thoughtful and equitable policy design will be essential. The impacts described in the previous sections show that decarbonization can create jobs, support businesses, and improve public health. But these positive outcomes are not guaranteed for everyone without intentional action. The following section outlines key considerations to ensure the transition is fair, inclusive, and supportive of communities that have historically faced disproportionate burdens of climate change.

A key component of equitable policy design is close coordination with local communities and trusted leaders in those communities. Meaningful community engagement ensures residents and local organizations have a voice in shaping the clean energy transition. A thriving example of this level of coordination is the Rhode Island's Health Equity Zones (HEZ) initiative, a statewide network of local collaboratives where Rhode Islanders are working together to drive community-led solutions in areas like housing, education, food access, resilience and other neighborhood conditions that shape people's lives.

Communities need clear avenues to contribute to their experiences, priorities, and concerns. Inclusive engagement, such as offering meetings in multiple formats and languages, holding sessions at varied times, and partnering with trusted local organizations, helps ensure that programs reflect real community needs and reduce barriers to participation. Online surveys, neighborhood-based outreach, and extended comment periods can also expand participation, especially for residents who cannot attend in person.

Engaging community voices is also essential for shaping equitable program design. Input from renters, low-income households, and residents of multifamily housing can help tailor incentives, refine outreach strategies, and remove structural barriers to participation. Ensuring that program development includes community-led decision-making helps align policies with lived realities and strengthens trust—an important factor for households hesitant to engage with unfamiliar agencies or programs.

The state offers several initiatives that promote equity in economic opportunity and clean energy participation. Requirements that a portion of state-funded projects be directed to minority- and women-owned businesses, along with ongoing reporting and disparity studies, help expand access to contracting opportunities. Organizations such as the Rhode Island Black Business Association provide additional business development support, while programs like the Innovate Rhode Island Small Business Fund offer resources that help small firms innovate and grow within the clean energy economy. Together, these efforts help ensure that the benefits of Rhode Island's climate and energy policies—economic opportunity, lower costs, and improved quality of life—are shared broadly across communities, businesses, and residents.

Case Study: Vineyard Power Cooperative

Vineyard Power is a community-based energy cooperative dedicated to leading the energy transition on Martha’s Vineyard.¹¹⁸ Representing all six municipalities on the island, the cooperative plays a critical role in advocating for responsible offshore wind development and strengthening local energy resilience.¹¹⁹ Its mission is to help the island achieve 100% renewable energy across electricity, transportation, and heating by 2040, a goal formally adopted by all six municipalities. **To support this vision, Vineyard Power engages the community through education, outreach, and personalized support.** A key part of this work is its network of Energy Coaches, local experts who work directly with community members to help them make informed decisions about home energy use, heating systems, and transportation options. The cooperative also supports policy change, advocating for legislation like the Community Empowerment Act, which would give municipalities greater authority to finance and develop local renewable energy projects.¹²⁰

Another component of Vineyard Power’s work is its partnership with Vineyard Wind, formalized in 2015 through the nation’s first offshore Wind Community Benefits Agreement (CBA). **This agreement ensures that the economic and environmental benefits of offshore wind development remain within the community.** Vineyard Power continues to collaborate with Vineyard Wind to maximize local engagement and community benefit.

These strong partnerships also extend to workforce development. **Vineyard Power has helped establish a comprehensive education pipeline that spans from elementary school to adult learning.** For children, this includes hands-on engaging programs like solar car building races and participation in national initiatives like the KidWind program, which introduces students to wind energy. Renewable energy topics are also being integrated into local school curricula, helping to build awareness and interest from an early age. At the adult level, Vineyard Power partners with organizations like Adult and Community Education Martha’s Vineyard and Bristol Community College to offer offshore wind technician certification and other technical training opportunities. These efforts are creating clean career pathways that benefit the local community while also advancing energy goals. Through its partnerships, advocacy, and community-driven approach, Vineyard Power Cooperative is making important progress toward its goal of a 100% renewable Martha’s Vineyard.

¹¹⁸ Vineyard Power Co-operative. “Vineyard Power.” <https://www.vineyardpower.org/>

¹¹⁹ Vineyard Power Co-operative. “Overview — Vineyard Power.” <https://www.vineyardpower.org/overview>

¹²⁰ Vineyard Power Co-operative. “Community Partnership — Vineyard Wind.” <https://www.vineyardwind.com/community-partnership>

Summary of Key Findings

The key findings below capture major takeaways from the 2025 Climate Action Strategy, outlining critical insights to inform Rhode Island's next steps toward achieving its climate goals.

- + If successfully implemented, current state laws and policies can help Rhode Island meet its 2030 GHG reduction target, but uncertainties remain. Stakeholders are calling for continued support and implementation of these programs despite loss of federal funding.
 - Under current state laws and policies, the RES, State Energy Efficiency Program, DRIVE EV Rebate Program, Clean Heat Rhode Island Program, and ACCII/ACT regulations are the largest drivers of emissions reductions.
- + Achieving the 2030 GHG reduction target will depend heavily on continued compliance with the Rhode Island RES and the ongoing decarbonization of the ISO-NE grid.
- + There are many additional near-term GHG reduction strategies Rhode Island can pursue to get a head start on the deeper reductions needed for 2040 and 2050. These strategies can also achieve further emissions reductions by 2030, which is especially important in the face of near-term uncertainty and federal headwinds.
- + Meeting climate goals will shift the way Rhode Islanders use technology and energy.
 - Reaching the Act on Climate targets will require an increase in efficiency, heat pump, and EV adoption over the next five years and beyond.
- + Rhode Island's energy system is expected to transition from direct fossil fuel use toward increased electricity demand, which will have a net social and health benefit.
- + Economy-wide decarbonization entails costs, but the estimated societal benefits of reducing GHG emissions are estimated to outweigh the costs.
- + Climate action is estimated to deliver substantial public health benefits for RI, especially in lower income communities.
- + Decarbonized technologies vary in both upfront costs and longer-term bill impacts. Some ongoing costs, like EV charging vs gasoline, are often cheaper, while some upfront costs like for electric trucks and other new technologies may require support to be competitive in the near future.
- + Rhode Island's clean energy economy will add thousands of new jobs by 2035.
 - Realizing the clean energy workforce potential will require targeted, short-term reskilling; clearer, more visible career pathways; and coordinated efforts to connect transferable skills to high-quality, accessible clean energy employment opportunities.
- + Implementing the Rhode Island Climate Action Strategy can advance equity if the barriers to adoption and participation are removed. Consideration should be given to how all residents can access the full range of climate benefits including air quality improvement, high-quality jobs, weatherized homes, and efficient technology.

6. Next Steps and Implementation

The Executive Climate Change Coordinating Council recognizes that future policy ought to strike a more deliberate balance—protecting utility affordability for Rhode Island families while furthering realistic, regionally aligned climate goals that reflect the new federal landscape that will directly impact states clean energy and climate change efforts.

Electric rate affordability and stability are essential for achieving the Act on Climate, because without confidence that electricity will remain affordable, households will not fully embrace the economy-wide electrification, like heat-pump usage during winter months, instead reverting to cheaper fossil fuel options, undermining emissions goals and slowing the broad consumer adoption needed for real progress.

State funding options and potential extensions or modifications to existing programs and policies that would support continued progress toward emissions-reduction targets while establishing a more affordable and sustainable pathway to decarbonization:

- + **Renewable Energy Standard (RES):** Recent federal policy changes and market disruptions are increasing the cost of RES compliance for Rhode Island ratepayers and warrant a reassessment of the program’s structure to ensure an affordable path to decarbonization. The State should consider updates (such as aligning the standards and REC eligibility rules with regional practice); however, modifications should be paired with sustainable investment in local and regional clean-energy resources to ensure continued progress toward emissions-reduction targets. Total RES compliance costs are projected to reach approximately \$125 million in 2026—funded entirely by ratepayers—and are expected to grow by more than \$20 million annually for the foreseeable future.
- + **Energy Efficiency and Renewable Energy Programs:** The State should continue its energy-efficiency and renewable-energy programs, while applying more sustainable investment levels to better align with regional peers. This approach can help moderate energy bills while sustaining emissions-reduction efforts, workforce development, and ongoing project activity.
- + **Codify in state law Governor McKee’s Lead by Example Executive Order** to: (1) ensure the continuation of the Office of Energy Resource’s energy-benchmarking of state properties that are greater than 25,000 square feet; (2) establish a voluntary opt-in pathway for municipalities to benchmark their own buildings greater than 25,000 square feet; and (3) authorize the Office Energy Resources to provide technical assistance to state agencies and participating municipalities, including annual reporting requirements to Governor McKee and the General Assembly on state and municipal energy benchmarking efforts.
- + **Maximize and deploy all remaining federal energy funds** to accelerate installation of EV charging infrastructure, municipal energy efficiency projects and expand access to heat pumps and electric stoves statewide.
- + Continue investing in the **Clean Heat RI** program to expand household access to heat-pump installations and support statewide clean-heat adoption.
- + Targeted focus on the integration of pre-weatherization energy and energy efficiency funds to **maximize energy efficiency savings in households and multi-family properties.**

- + Pursue a Clean Energy, Green Economy, Resilience **Bond** on the 2026 ballot.
- + **Continue investing in the state’s EV rebate program**, household EV-charging incentives, and electric-bicycle rebates to sustain clean-transportation progress in the absence of federal support.
- + **Capitalize the Rhode Island Infrastructure Bank’s Resilient Rhody Fund** to provide a stable, dedicated source of support for municipal resilience projects, including stormwater upgrades, floodproofing, watershed restoration, urban tree planting, and coastal protection, to help communities mitigate the escalating impacts of climate change.
- + A **commercial scale energy storage program** is developed and launched by the Office of Energy Resources.
- + **Ensure the Revolution Wind project comes online in 2026**, delivering power to more than 350,000 households and becoming Rhode Island’s second offshore wind installation.
- + Governor McKee appoints **Secretary of the Executive Office of Housing to EC4** (and formalize Department of Labor & Training and RI Department of Education membership).
- + Governor McKee extends voluntary **Climate Leadership Challenge to RI businesses**.
 - The Department of Environmental Management and the Office of Energy Resources develop notification and reporting structure.
 - Governor McKee organizes and presides over annual recognition ceremony.
- + The Department of Environmental Management and the Office of Energy Resources engage with **RI auto dealers and large fleet operators on increasing availability of EVs** and GHG reductions.
- + The Department of Environmental Management works with other states to develop **alternatives to EPA models and data sources for GHG inventory calculations**.
- + The Office of Energy Resources initiates a communication campaign **promoting RI leadership and progress in availability of EV charging infrastructure**.
- + RI Department of Education continues implementing **school readiness programs**.
- + RI Department of Transportation continues to calculate and consider **GHG impacts in STIP**.
- + RI Department of Labor & Training continues to support the **Green Energy Workforce Advisory Committee on workforce development**, job creation, and a just transition.
- + EC4 agencies continue to **support community conversations with environmental justice communities** to ensure programs benefit historically underserved neighborhoods.
- + The Departments of Environmental Management and Commerce work together to explore opportunities to expand **organic waste diversion**, anaerobic digestion, and the generation of renewable natural gas in Rhode Island.
- + The Department of Environmental Management works with the University of Rhode Island, farmers, and advocates to expand **regenerative agricultural** techniques across the state.
- + The RI Public Transit Authority continues **flex service, van pool, & “transit for visitors” initiatives**.
- + As funding allows, the Department of Environmental Management and the RI Public Transit Authority **continue transition of public transit and school bus fleets to hybrid and EV buses**.
- + The Department of Environmental Management pilots and extends **battery powered landscaping programs**.

- + The Department of Environmental Management, with the assistance of other EC4 agencies, publishes an **annual report highlighting progress on the policies and programs that are detailed in the strategy** along with new policies/programs that are enacted.

7. Conclusion

Rhode Island's 2025 Strategy provides options for reducing emissions while advancing equity, affordability, and a just transition for workers and environmental justice populations. Many actions, programs, laws and regulations have already been put in place to advance the state's climate goals including the Renewable Energy Standard, State Energy Efficiency Program, Advance Clean Cars II & Advanced Clean Trucks, Clean Heat Rhode Island, Electric Vehicle and Electric Bicycle Rebate Programs, Biodiesel Heating Oil Act, Regional Greenhouse Gas Initiative, and investments in offshore wind, all of which have been critical to advancing progress. Rhode Island has met the first GHG reduction targets set by the Act on Climate for 2020.

The federal government has spent much of 2025 eliminating climate programs, cutting clean energy and transportation funding, and proposing roll backs to environmental regulations and offshore wind project permits. The impacts of these federal policy changes have been widespread, especially on the affordability of clean energy and transition to a lower carbon economy. We expect that federal actions continuing into 2026 and beyond will likely result in additional uncertainty for Rhode Island. The abrupt pauses, cuts and terminations to federal grants, programs, policies (e.g. Solar for All, residential solar tax credits, EV tax credits) have led to interruptions and a great deal of uncertainty for numerous key initiatives in Rhode Island, many of which took place in the middle of the technical analysis and writing of this Strategy. Despite all of this, Rhode Island forges ahead.

In fact, modeling shows that Rhode Island would be on track to meet its second target for 2030 if existing state efforts can continue as initially developed. The uncertainties while omnipresent, reinforce the need for continued action and innovative thinking. The 2025 Climate Action Strategy will guide the state's next steps to ensure Rhode Island continues to meet the Act on Climate targets.

As was highlighted in the Rhode Island 2022 Climate Update, discussions of identifying and allocating resources to support ongoing and new decarbonization efforts will continue. The decarbonization and transition of Rhode Island's economy must be done carefully, and deliberately with affordability in mind, to meet the goals set forth in the Act on Climate. This will require both internal and external expertise and support for action across all of government. However, it is important to emphasize that acting on climate change cannot be championed by state government alone. Businesses, municipalities, non-profit leaders and residents will continue to be called up to prioritize action towards the goals of the Act on Climate. The EC4 looks forward to working with the Governor's Office and state legislative leaders beginning in 2026 to advance the priorities identified in this Strategy.