



REBATES, INCENTIVES, & GRANTS

New federal incentives announced for qualifying new and used electric vehicles. Read more on page 2.

FUTURE OF GAS HIGHLIGHTS

New input compendium and draft results from E3 were reviewed in FoG and TWG meetings.

Read more on page 5.

EC4 HIGHLIGHTS

Climate action strategy for 2025, Priority Climate Action Plan highlights Read more on page 6.

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UPCOMING EVENTS

DEM <u>First Rhode Island</u> <u>State Offices Community</u> <u>Fair</u> - April 13

EBC <u>The Challenge of Net</u> <u>Zero at IRA +1 Webina</u>r -April 24

GECA Save Money On An Electric Car In Rhode Island- April 25

DOE National Energy Codes <u>Conference 2024</u> -May 6-8

MEETINGS COVERED

Future of Gas Stakeholder Committee

Technical Working Group

Executive Climate Change Coordinating Council

<u>www.rieermc.ri.gov</u>

Issue 4, March 2024



Tax Credits for New EVs

The following vehicles are eligible for tax credits under the Inflation Reduction Act based on the latest guidance from the Treasury Department. The credits are for new vehicles placed in service during 2024.

U.S. FEDERAL TAX CREDITS FOR NEW PLUG-IN VEHICLES

MODEL	MODEL YEAR(S)	CREDIT AMOUNT
Chevrolet Bolt EUV	2022-2023	\$7,500
Chevrolet Bolt EV	2022-2023	\$7,500
Chrysler Pacifica PHEV	2022-2024	\$7,500
Ford Escape Plug-in Hybrid	2022-2024	\$3,750
Ford F-150 Lightning (extended range batter)	y) 2022-2024	\$7,500
Ford F-150 Lightning (standard range batter)	y) 2022-2024	\$7,500
Jeep Grand Cherokee PHEV 4xe	2022-2024	\$3,750
Jeep Wrangler PHEV 4xe	2022-2024	\$3,750
Lincoln Corsair Grand Touring	2022-2024	\$3,750
Rivian R1S Dual Large	2023-2024	\$3,750
Rivian R1S Quad Large	2023-2024	\$3,750
Rivian R1T Dual Large	2023-2024	\$3,750
Rivian R1T Dual Max	2023-2024	\$3,750
Rivian R1T Quad Large	2023-2024	\$3,750
Tesla Model 3 Performance	2023-2024	\$7,500
Tesla Model X Long Range	2023-2024	\$7,500
Tesla Model Y All-Wheel Drive	2023-2024	\$7,500
Tesla Model Y Performance	2023-2024	\$7,500
Tesla Model Y Rear-Wheel Drive	2024	\$7,500

SOURCE: FuelEconomy.gov

PAUL HORN / Inside Climate News

New federal EV incentives allow consumers to instantly receive up to \$7500 on select vehicles

The federal government <u>publishes a list of electric vehicles</u> that qualify for \$7,500 and \$3,750 incentives. Electric Vehicles (EVs) Just Became More Affordable with Upfront Federal Rebates, in a significant move to make electric vehicles (EVs) more accessible. The new federal incentives allow buyers to <u>instantly access up to \$7,500 toward a new EV</u> and \$4,000 toward a used one instead of waiting for a tax refund. This adjustment aims to extend the benefits of electric mobility to low and middle-income families previously deterred by high costs.

The revised federal incentive now allows buyers to receive up to \$7,500 off new electric, hydrogen fuel cell, or plug-in hybrid vehicles, and up to \$4,000 off used ones right at the point of sale at certified dealerships. Previously, the benefit was only accessible when filing annual taxes, limiting its immediate impact for many.

The shift comes at a pivotal moment, as EV sales topped one million units in the United States in 2023, despite the average price of new EVs being significantly higher than conventional vehicles. The Inflation Reduction Act underpins this initiative, setting income and vehicle price caps to ensure the credit's broad accessibility.

Prospective EV buyers are encouraged to visit IRS-registered dealerships to avail of the rebate, which will be applied directly to the purchase price or handed to the buyer as cash, with dealers receiving reimbursement from the IRS. This move is expected to energize sales and make EV ownership a tangible reality for more Americans.



RHODE ISLAND

The Port of Virginia becomes the East Coast's first seaport to run entirely on clean energy

On New Years' Day, the Port of Virginia became the first seaport on the U.S. East Coast (and one of a handful in the world) to run all of its operations on 100 percent clean power. The port had planned to arrive at this landmark by 2032, but it has achieved its goal early. The switch nearly cuts carbon emissions per container move in half. The port operates 116 electric stacking cranes, four electric rail cranes and 27 electric ship to shore cranes. As the port finishes up work at the North Berth at Norfolk International Terminals, these numbers will increase to 152, 7 and 31, respectively. A partnership with Dominion Energy, a key utility and proponent of offshore wind energy, facilitated this green energy transition through a power purchase agreement.

DOE finalizes new efficiency standards for home refrigerators and freezers, estimate \$36 billion savings

The U.S. Department of Energy (DOE) has updated its energy efficiency standards for residential refrigerators and projected to save nearly \$36 billion over the next 30 years. Last revised in 2011, these standards are set to be enforced starting either in 2029 or 2030, based on the appliance's design. The DOE's efforts aim to cut down nearly 101 million metric tons of C02 over decades. emissions anticipated enhancements in refrigerator and freezer technology are expected to reduce energy consumption by 10-15%, varying by product type. DOE also announced proposed rules for improving the energy efficiency of commercial fans and blowers, which could lower annual energy costs for U.S. businesses by \$3.3 billion, to be effective in 2029.



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Nine states pledge to boost heat pumps to 90% of home equipment sales by 2040

Nine states have united to increase the sales of electric heat pumps, setting a goal to represent 90% of all new residential heating, cooling, and water heating unit sales by 2040. This collaborative effort, orchestrated by the Northeast States for Coordinated Air Use Management (NESCAUM), involves California, Colorado, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, and Rhode Island.

The initiative, although not legally binding and without specified funding, aims to transition the majority of new home HVAC systems to electric heat pumps as part of a broader strategy to cut carbon emissions. An interim target has been set to achieve 65% sales by 2030.

This commitment is seen as a crucial step towards reducing greenhouse gas emissions from residential buildings, which are among the largest sources of such emissions in many of these states. The agreement also focuses on market transformation, indicating a strong move towards electrification in residential heating and cooling, and it outlines plans for collaborative efforts in market data collection, action planning, and workforce development to support this shift.

Moreover, the states have pledged to direct significant portions of energy efficiency and electrification investments towards communities disproportionately affected by high energy costs and pollution. This initiative aligns with federal efforts to ensure environmental justice and equitable access to clean energy technologies.

By setting clear goals and collaborating on strategies, these states aim to drive market demand for heat pumps, encourage industry investment, and ensure the workforce is prepared to meet these new demands, all while prioritizing affordability and access for all communities.

2023: A Record-Breaking Hottest Year on record, Signaling Even Hotter Future Climate Trends

A hot new normal!

2023 has concluded as the hottest year on record in over 125,000 years, with signs pointing towards further warming. This past year's extreme temperatures have turned climate change into a front-page issue. The warmth of 2023 aligns with ongoing climate projections, suggesting that what is currently exceptional could soon be considered average. As the world braces for potentially even hotter years ahead, including 2024, the urgency for addressing climate change is more apparent than ever. International scientific agencies are set to provide more detailed analyses, but the overarching message is clear: immediate and concerted action is needed to mitigate future warming.

ACEEE requests nominations for recognizing excellence in Energy Efficiency Programs by April 1, 2024

The American Council for an Energy-Efficient Economy (ACEEE) is currently seeking nominations for its prestigious "Leaders of the Pack" awards. These awards celebrate outstanding achievements in efficiency programs, highlighting initiatives have demonstrated that significant accomplishments in areas such as high participation rates, utility bill reductions, improved indoor air quality, job creation, among other benefits. The programs may be electric, gas, or dual-fuel programs. ACEEE will award programs in the following categories: Residential Weatherization, Non-Residential, and Special Topics (home electrification, zeroenergy-ready new construction).

To nominate a program, this form needs to be filled out by 5 p.m. PT on April 1, 2024.



\$200,000 in Grant Awards for Community Engagement on Climate Change

In a landmark move for environmental progress and justice, Governor Dan McKee and the Department of Environmental Management (DEM), allocated \$218,931 in grants to empower community-led climate action across Rhode Island. This funding is a crucial component of the state's ambitious drive towards a carbon-neutral future by 2025, aligning with Rhode Island's broader Climate Action Strategy.

The effort emphasizes Environmental Justice, ensuring that low-income and minority communities, who are disproportionately affected by climate change, have the resources to cope with its impacts. This movement is a part of Rhode Island's commitment under the Act on Climate to reduce greenhouse gas emissions to net-zero by 2050, funded by the Inflation Reduction Act through an EPA grant. This strategy is not only about meeting the state's environmental goals but also about enhancing the quality of life for all Rhode Islanders by making sustainable and equitable progress.

The grant recipients represent a diverse group of organizations dedicated to environmental justice and climate resilience, including:

- The African Alliance of Rhode Island, focusing on empowering African immigrants and refugees in climate and economic justice initiatives.
- Youth in Action/Movement Education Outdoors, aiming to engage urban youth and families in climate action discussions.
- Green Energy Consumers Alliance, Inc., and Roots 2 Empower, hosting educational events, including bilingual sessions, to raise awareness and foster community collaboration.
- Building Futures and East Bay Community Action, engaging apprentices, industry stakeholders, and community partners in climate resilience programming and events across Rhode Island.

Governor McKee envisions these grants as catalysts for a collaborative and comprehensive climate planning process.

This financial infusion from the EPA, courtesy of the Inflation Reduction Act, positions the Executive Climate Change Coordinating Council (EC4) to develop a detailed climate action plan. This plan will outline strategies for achieving the state's greenhouse gas reduction goals, as mandated by the Act on Climate.



RHODE ISLAND

Heat Pump Sales Declined in Most Markets in 2023 – What were the Reasons and How to Reverse the Trend?

The International Energy Agency's (IEA) Clean Energy Market Monitor, released on March 1st, reports a 3% decrease in global heat pump capacity additions in 2023 compared to the previous year. China was the exception, witnessing a 12% increase, while sales dropped by 15% in the United States, 5% in the European Union, and 10% in Japan. This downturn poses a challenge to climate goals, as heat pump sales need to surge by 20% annually this decade to align with the IEA's Net Zero Emissions by 2050 scenario. After nearly achieving this growth rate in 2021 and 2022, the decline in 2023 signals a critical need to rejuvenate market momentum, given heat pumps' pivotal role in transitioning to clean heating.

Reversing this trend demands a stable policy framework to encourage manufacturing expansion and market growth. Clear incentives for electrification and fossil fuel transition are essential. It is important to adjust the energy tariffs and taxes to favor electricity, enabling cleaner consumer choices.

The European Heat Pump Association highlights that the EU's delayed Heat Pump Action Plan exacerbates investor consumer uncertainty, compounded by high interest rates and fluctuating national policies. Enhancing awareness about heat pumps' efficiency, even in cold climates and both new and existing buildings, and their role in cutting emissions and often energy costs is crucial. Support for low-income households may be necessary to overcome the initial cost barrier.

The IEA report notes that heat pumps installed worldwide since 2019 have already reduced CO2 emissions by approximately 50 million tonnes annually, underscoring their significance in achieving emission reduction targets.



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UPDATES FROM Future of Gas Docket

The Public Utilities Commission's Future of Gas Docket provides summary of stakeholder committee meetings, technical working group, decarbonization modeling scenarios, Rhode Island reference scenario, and revised proposal on Biofuels Emissions Accounting, Fuel Availability, and Costing Methodology.

The 8th Stakeholder Committee meeting was held on January 24th, 2024. The committee discussed Evolution of the Gas System in RI, Supply & Procurement, and Distribution, Technical working group updates and next steps for analysis.

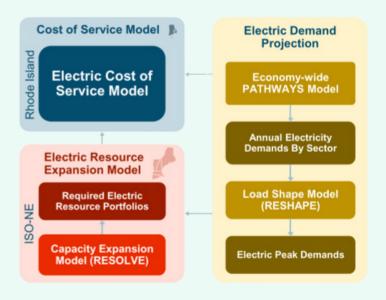
The 9th Stakeholder Committee meeting was held on February 13th, 2024. The draft results from E3 analysis were presented and findings were discussed, followed by a discussion of next steps on policy development.

Technical Working Group

The technical working group (TWG) met for the 6th meeting on December 5th, 2023, to discuss Electric Sector Modeling and Economy-wide Resource Cost Modeling.

The electric sector model consists of Cost of Service Model, Electric Demand Projection, and Electric Resource Expansion Model. The framework and approach to each model was discussed in the meeting.

Electric Sector Modeling Framework



The Economy-wide Resource Costing approach was discussed and it was established that heat pump and building shell costs are the important parameters.



RHODE ISLAND MAR 2024

TWG meeting 7 was held on December 19th, 2023, to discuss Managed Transition and Evaluation Criteria. Given the complexity of analyzing avoided gas system costs associated with a managed transition, RIE recommended E3 to base managed transition assumptions on a literature review. E3 proposes to assume a maximum of 50% avoided gas system capital expenditures, varying by scenario. TWG decided on the types of metrics and quantitative/ qualitative analysis to assess evaluation criteria.

TWG met for the 8th time on January 9th, 2024. E3 received feedback from TWG on detailed input assumptions compendium circulated in December 2023. Adjustments were primarily made with regard to heat pump sizing criteria and costs. E3 shared a detailed draft report outline with the TWG for feedback.

RI's Priority Climate Action Plan

RI's Priority Climate Action Plan (PCAP) was submitted to the United States Environmental Protection Agency (EPA) on March 1, 2024.

A listening session was held on January 4th which detailed the climate pollution reduction grant (CPRG) process and invited public comments and discussion. The meeting was aimed to help interested stakeholders understand the elements of CPRG as well as gather input from public about what Rhode Island should include in key CPRG deliverables.

Rhode Island's PCAP includes a focused list of near-term, high-priority, implementation ready projects to reduce GHG emissions and an analysis of GHG emissions reductions to be achieved through implementation.

EPA identified these sectors as eligible sectors for inclusion in RI's CPRG application. 1) Transportation Sector; 2) Electric Power Sector; 3) Buildings Sector (Commercial & Residential); 4) Industrial Sector; 5) Waste, Water, and Sustainable Materials Management Sector; 6) Agricultural Sector; and 7) Carbon Removal.

The plan included Transportation, Buildings, Electricity, and Waste and Working Lands as sectors for priority measures.

The plan included benefits analysis for each measure. A low-income and disadvantaged community analysis, and climate change vulnerability analysis was also presented. PCAP is first step towards CPRG grant process and is developed for climate action strategy for implementation of the Act on Climate.



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EC4 STRATEGY 2025

3 reports needed for CPRG:

March 2024 Priority

Climate Action Plan (PCAP)

November 2025

Comprehensive Climate

Action Plan

October 2027 Status

Report

PCAP

Estimate GHG reduction 2025-2030 (MTCO2e)

TOP PRIORITY MEASURES



122,532

ELECTRIFY RHODE ISLAND

TRANSPORTATION

1,634



DEMAND RESPONSE FOR GRID

ELECTRICITY



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MTCO2E FOOD WASTE DIVERSION

WASTE AND WORKING LANDS

RI Climate Vulnerability

ANALYSIS AND IMPACT PCAP

Quick Facts

- Rhode Island has warmed by more than 4°F in the past century
- Sea level rise of more than 9 inches since 1930 in Newport, RI, exceeds the global average
- A population density second only to New Jersey of the 50 states, and a 384-mile shoreline along its 40-mile coast, makes the residents, economy, and environment vulnerable to climate impacts

Extreme Temperature Impacts

 NOAA predicts average temperatures 10°F warmer than the hottest year in the historical record, under higher emissions scenario

Air Quality Impacts

 EPA estimates that in Northeastern region, increased air pollution exposures associated with global warming of 2C will cause 400 additional premature deaths in people aged 65 and above, and 450 additional asthma diagnoses in children each year

Coastal and Inland Flooding

- Both mean and extreme precipitation have increased during the last century, with the highest number of extreme events in recent years
- NOAA projects continued increases in frequency and intensity of extreme precipitation events and an additional rise sea level rise of 1 to 4 feet by 2100

