RI Climate Action Strategy and Comprehensive Climate Action Plan

Pathways to Decarbonization Public Webinar

10/31/2025

DRAFT

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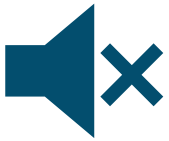
Ground Rules and Guidelines to Participation

+ **This workshop is being recorded so we can accurately capture your comments. We do not intend to post this recording publicly.**



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+ **Make space and take space. Be mindful of how much airtime you take, but we encourage you to voice your support and concern.**

+ **There are multiple ways to participate:**
  - Raise your hand to be called on
  - Use the chat feature
  - Utilize the Survey Monkey Form, so that we capture all you have to say.

+ **Thank you in advance for your participation.**

Agenda

- **Introductions**
- **Webinar context**
- **Modeling methodology**
- **Pathways to decarbonization**
  - Key findings
  - Emissions reductions by sector
  - Impacts on technology adoption
  - Impacts on energy demand
  - Impacts on electric sector
  - Impacts on cost
- **Discussion and breakout activity**
- **Wrap up and next steps**

Consultant Team Introductions

Energy and Environmental Economics (E3)

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Project Lead

Molly Bertolacini
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Rawley Loken
Technical Lead

Jimmy Nelson
PLEXOS Lead

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Sr. Associate Facilitator

Context for this webinar

The overarching goal of this study is to create the RI Comprehensive Climate Action Plan (CCAP) for the Climate Pollution Reduction Grant (CPRG) program and the RI 2025 Climate Action Strategy as part of RI's Act on Climate

The results of the study will be shared with stakeholders through several engagements:

Carbon Reduction Strategies

10/16/2025

- Near-term carbon reduction strategies RI can pursue to reduce greenhouse gas (GHG) emissions and stay on track to meet its 2030 climate goals

Pathways to Decarbonization

10/31/2025

- Economywide GHG reduction trajectories under multiple scenarios
- Technology adoption and changes to energy demand.
- Implications for the electric sector
- Projection of household energy bills

Focus of Today's Session

Workforce and the Green Economy

11/17/2025

- Assessment of Rhode Island's current labor supply, existing skill gaps, and training needs to meet the state's near- and long-term climate goals.
- Estimates of job growth driven by clean energy investments.
- Strategies and partnerships required to equitably build a skilled workforce for emerging employment opportunities

Final 2025 Climate Action Strategy

December 2025

- Presentation of the final 2025 Climate Action Strategy and CCAP in December 2025

Acknowledging RI's Current Fiscal Climate

- There is a shift in both policy and funding priorities at the federal level related to climate change and clean energy; there are many uncertainties.
- The state has a projected structural deficit (approximately $304 million in FY27, not yet adjusted for OBBBA impacts).
- As a result of this federal shift, the state faces cuts to key safety net programs (e.g., SNAP and Medicaid) resulting from OBBBA, which will continue to further compound the state's fiscal challenges (this fiscal year and into the near future).

Act on Climate Law

Requirements of the Climate Strategy Report

RI General Law § 42-6.2-2.(a)(2)

(2)(i) No later than December 31, 2025, and every five (5) years thereafter, submit to the governor and general assembly an updated plan, following an opportunity for public comment, that includes strategies, programs, and actions to meet economy-wide enforceable targets for greenhouse gas emissions reductions as follows:

(A) Ten percent (10%) below 1990 levels by 2020;

(B) Forty-five percent (45%) below 1990 levels by 2030;

(C) Eighty percent (80%) below 1990 levels by 2040;

(D) Net-zero emissions by 2050.

No action shall be brought pursuant to: subsection (a)(2)(i)(B) of this section before 2031, pursuant to subsection (a)(2)(i)(C) of this section before 2041, and pursuant to subsection (a)(2)(i)(D) of this section before 2051.

(ii) The plan shall also include procedures and public metrics for periodic measurement, not less frequently than once every five (5) years, of progress necessary to meet these targets and for evaluating the possibility of meeting higher targets through cost-effective measures.

(iii) The plan shall address in writing the annual input that is provided to the council by its advisory board, as set forth in § 42-6.2-4, and its science and technical advisory board, as set forth in § 42-6.2-5, in their reports to the council.

(iv) If a plan directs an agency to promulgate regulations, then the agency must do so by either issuing an advance notice of proposed rulemaking, as set forth in § 42-35-2.5, no later than six (6) months after the plan is released or by issuing a notice of proposed rulemaking, as set forth in § 42-35-2.7, no later than one year after the plan is released, unless the plan specifies another timeframe for an advance notice of rulemaking or a notice of rulemaking.

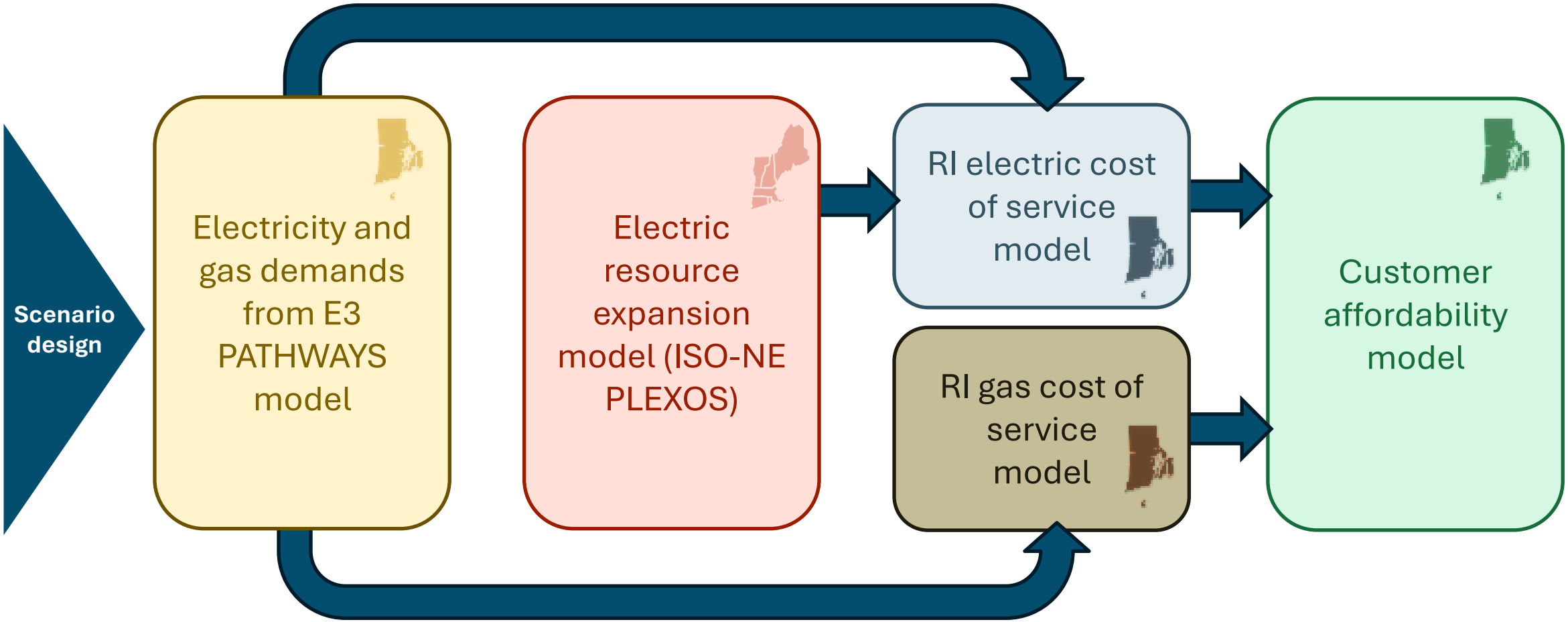
(v) The plan shall include an equitable transition to climate compliance for environmental justice populations, redress past environmental and public health inequities, and include a process where the interests of and people from populations most vulnerable to the effects of climate change and at risk of pollution, displacement, energy burden, and cost influence such plan.

(vi) The plan shall identify support for workers during this equitable transition to address inequity in the state by creating quality and family-sustaining clean energy jobs that pay wages and benefits consistent with or that exceed area wage and labor standards. The plan shall provide for the development of programs that directly recruit, train, and retain those underrepresented in the workforce, including women, people of color, indigenous people, veterans, formerly incarcerated people, and people living with disabilities.

(vii) The requirements under this subsection shall be subject to the enforcement provisions of § 42-6.2-10 effective in 2026.

Modeling Methodology

Review of Modeling Methodology



Scenario Definitions

A scenario represents a potential future for technology adoption, energy demand, and GHG emissions between now and 2050

+ The Rhode Island Climate Action Strategy explored 2 key scenarios:

1. **Current Policy**
   - Designed to show emissions projections under current RI-specific policies, such as Clean Heat RI heat pump incentives, renewable energy standard, state energy efficiency program investments, EV rebate incentives, biodiesel blending, Advanced Clean Cars II, etc.
2. **Act on Climate**
   - Designed to examine the level of transformation needed across all sectors of the economy in order to achieve Rhode Island's 2030, 2040, and 2050 GHG reduction targets as mandated by the Act on Climate
   - This scenario does not model the impact of individual policies, but rather back-casts the necessary ambition needed to reach climate goals
   - The project team developed a single representative scenario that achieves Act on Climate goals, but this scenario does not represent the only pathway to reaching the Act on Climate, nor does it represent a forecast or prediction of the future

The modeling team also conducted sensitivity analyses on the scenarios to assess key uncertainties, including the potential impacts if the Advanced Clean Cars II (ACC II) and Advanced Clean Trucks (ACT) programs could not be enacted, as well as uncertainty surrounding the timing and scale of future offshore wind development projects.

RI Policies Included in Current Policy Scenario

Sector	Strategy
Electricity	Renewable Energy Standard (RES)
Transportation	Advanced Clean Cars II (ACCII) and Advanced Clean Trucks (ACT)
	Existing DRIVE EV Incentives
Buildings	Existing Clean Heat Rhode Island Heat Pump Incentives
	Existing State Energy Efficiency Program Incentives
	Biodiesel Heating Oil Act
Natural and Working Lands	Maintained Carbon Sinks

Results

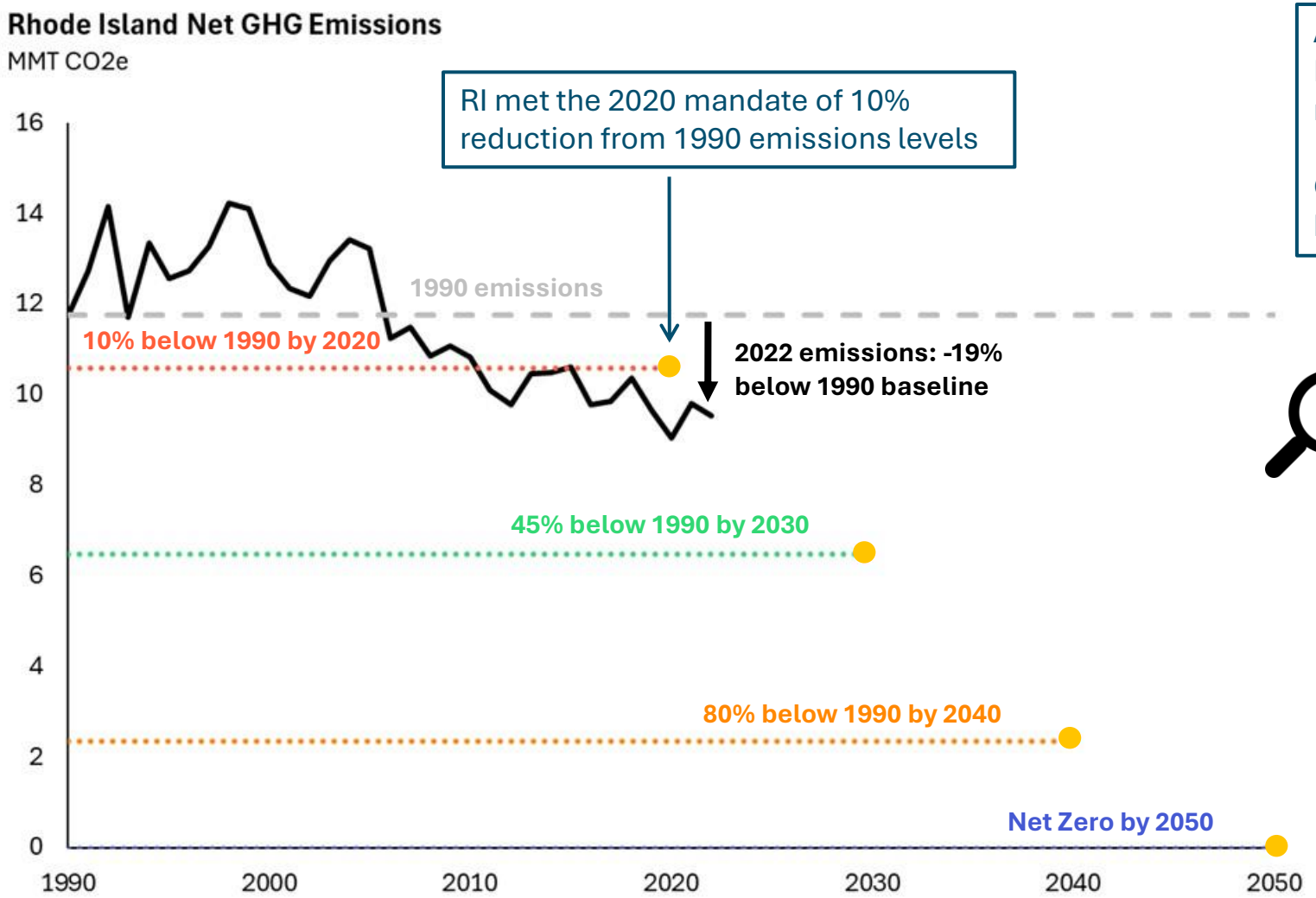
Key Findings

- **Current policies are projected to meet RI's 2030 target, but significant uncertainties remain, and additional actions will be needed to achieve the 2040 and 2050 climate goals**
  - Under current policies, largest drivers of GHG reductions are Renewable Energy Standard, Advanced Clean Cars II/Advanced Clean Trucks
  - To reach Act on Climate in 2040 and 2050, additional measures will be necessary, particularly in the buildings sector
- **Meeting climate goals will require a shift in the way Rhode Islanders use technology and energy**
  - Reaching the Act on Climate targets will require an increase in EV and heat pump sales over the next 5 years
  - Under both current policies and the Act on Climate, a reliance on fossil fuel is expected to shift to higher electricity demand
  - The electric sector is expected to undergo a transformation – driven by an increase in electric load from electrification, and a shift to renewable energy sources, as directed by the Renewable Energy Standard
- **Economywide decarbonization entails costs, but the projected societal benefits of reducing GHG emissions outweigh the projected costs**
  - Avoided impacts of climate change and fossil fuel savings result in cumulative net societal benefits, i.e., the benefits outweigh costs
- **Decarbonized technologies vary in cost—some, like EV charging, are often cheaper, while others may require support to be competitive**
  - Decarbonized technologies (EVs, heat pumps, heat pump water heaters) are currently more expensive than fossil fuel-powered equipment
  - Depending on the customer type, using a heat pump for heating may be more expensive than natural gas, but there are tools to align technology costs with climate objectives.
  - In many cases, charging an EV in Rhode Island is cheaper than fueling a vehicle with gasoline.

Pathways to Decarbonization

Emissions Reductions by Sector

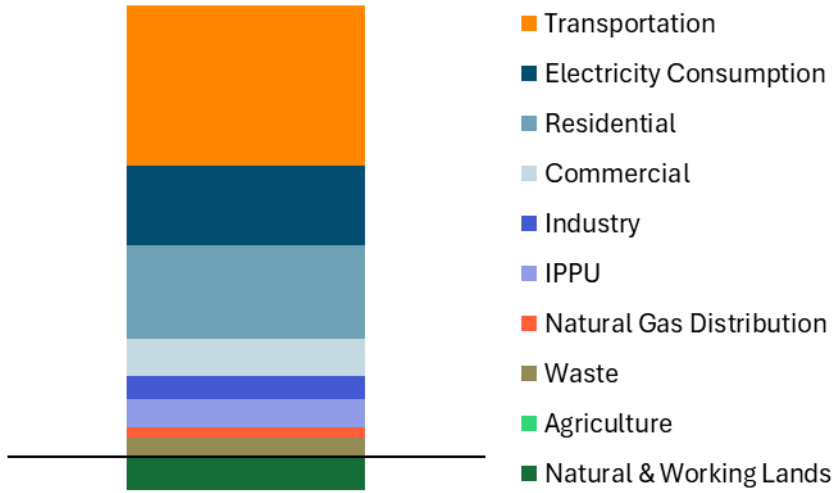
Rhode Island met its 2020 emissions reduction target of 10% below 1990 and had reached 19% emissions reductions by 2022



As of 2022, **transportation** was the largest source of Rhode Island's GHG emissions (nearly 40%) with the majority caused by passenger vehicles.

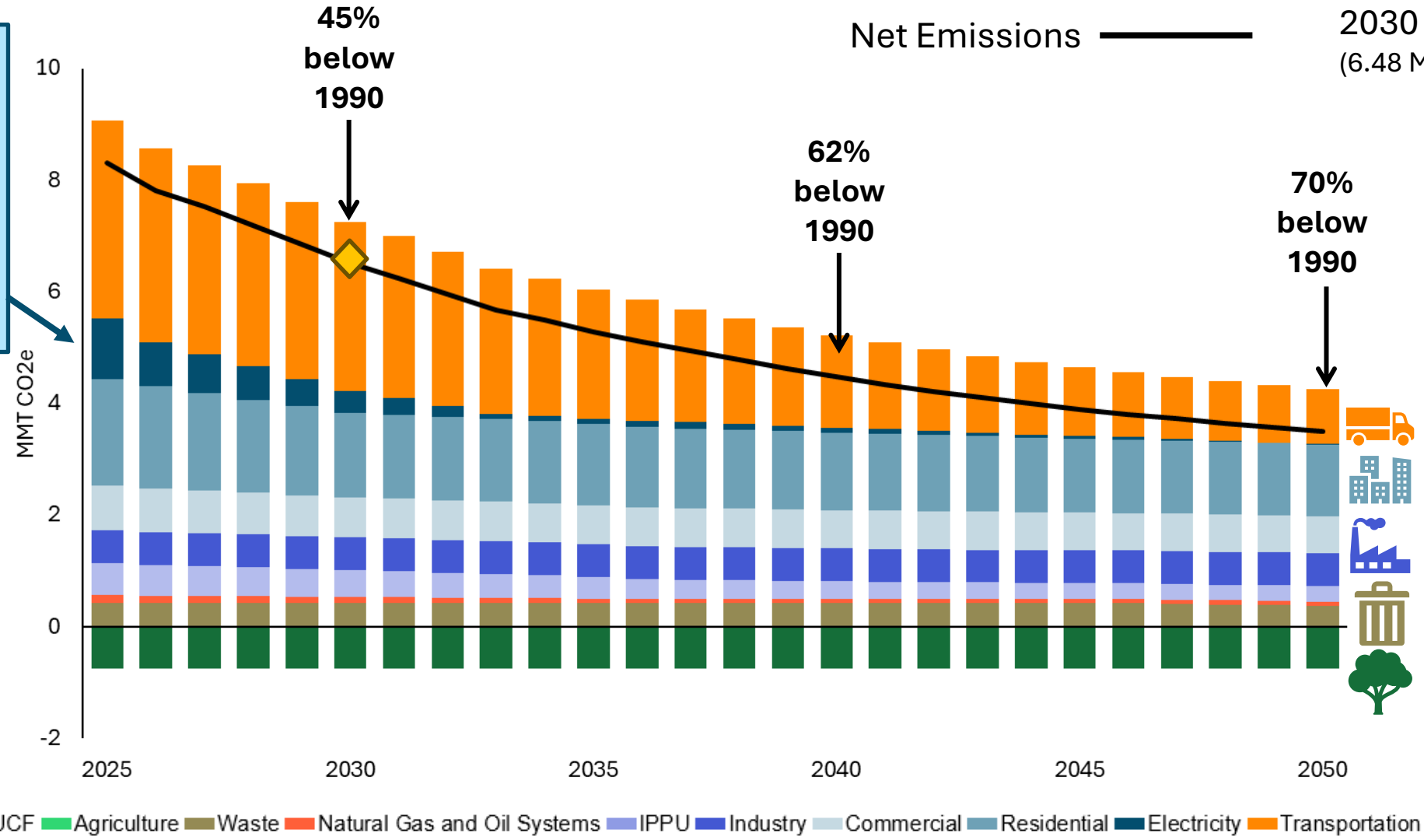
Other major contributors include residential buildings (22%) and electricity consumption (20%)

Breakdown of RI emissions by sector in 2022 (MMT CO2e)



2030 target is within reach—current policies achieve 45% below 1990 emissions

Reductions are primarily driven by the RI Renewable Energy Standard (100% renewable electricity sales by 2033), and EV adoption in line with Advanced Clean Cars/Trucks



Transportation, buildings, industry, and waste sectors produce the most emissions by 2050

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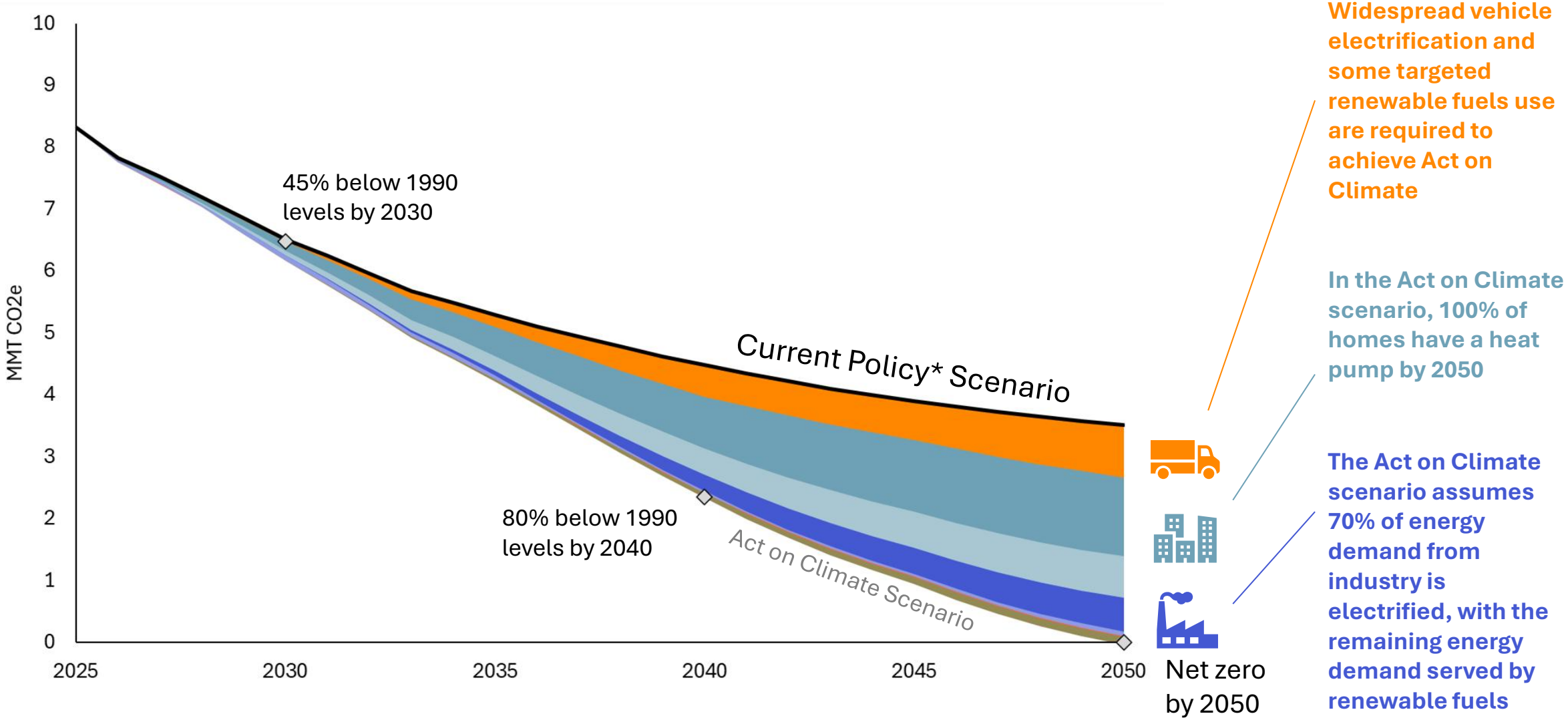
Notes:
- *Current Policies include ZEV Waivers*
- *2025 is a modeled year, not based on actuals*
- *Emissions projections use AR5 100-year GWP*

To reach long-term Act on Climate targets, additional action will be needed in transportation, buildings, and industry



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Notes:
- *Current Policies include ZEV Waivers*
- *Emissions projections use AR5 100-year GWP*

Questions?

Pathways to Decarbonization

Impacts on Technology Adoption

In the Act on Climate Scenario, all homes have heat pumps by 2050, with 36% being hybrid systems

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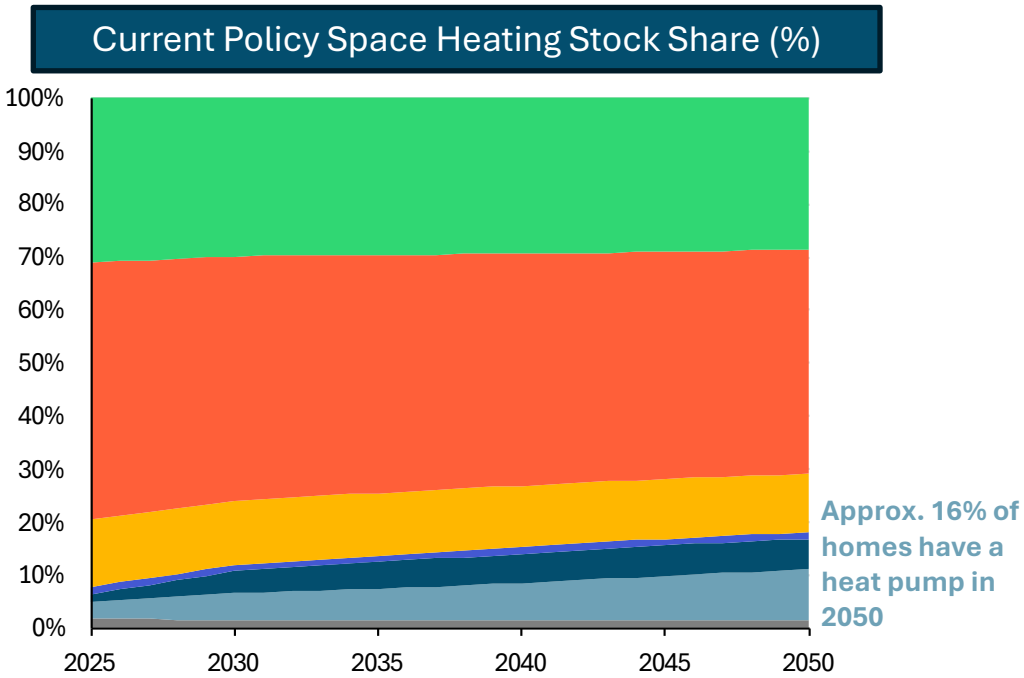
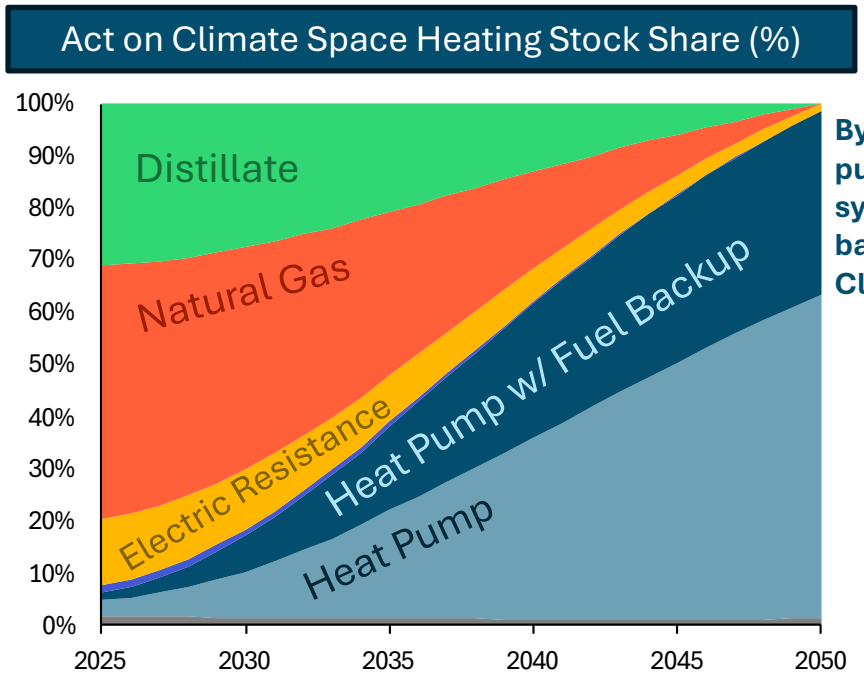
- Current heat pump adoption levels in RI are based on Clean Heat Rhode Island program data
- The Current Policy scenario sees moderate heat pump adoption, with about 16% of households adopting heat pumps (hybrid or electric) by 2050
- In the Act on Climate Scenario, virtually all homes have a heat pump as their primary source of space heating by 2050, with 36% of those being hybrid systems with fuel backup

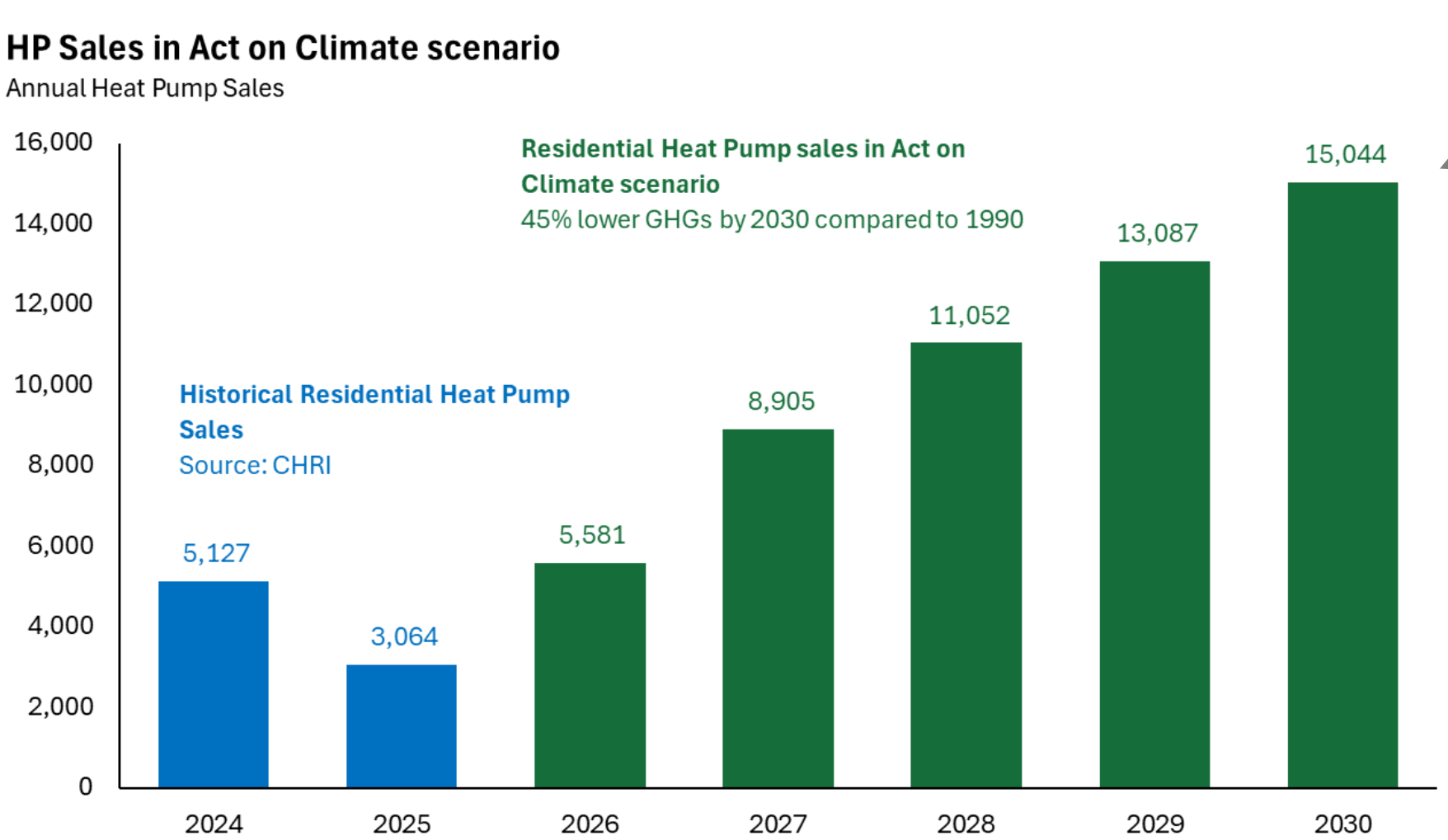




By 2050, 36% of heat pumps are hybrid systems w/ fuel backup in the Act on Climate Scenario

Distillate Natural Gas Electric Resistance LPG Heat Pump w/ Fuel Backup Heat Pump Wood

Heat pump sales need to increase between now and 2030 to stay on track for Act on Climate targets



An increase in annual heat pump sales between now and 2030 is required to reach GHG mandates as set out in the Act on Climate

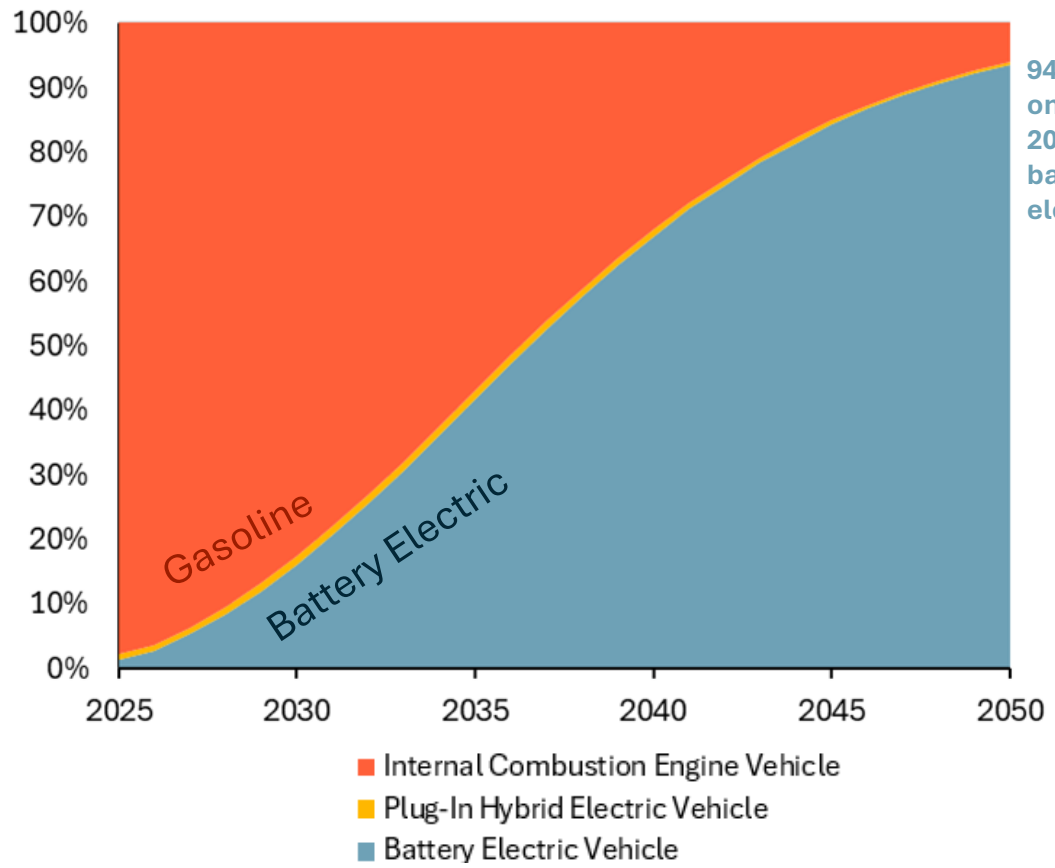
Heat pump sales over the next five years are expected to be bolstered by incentives from Clean Heat Rhode Island Program, Home Efficiency Rebate Program, and the New England Heat Pump Accelerator Program, but additional programs/regulations may be needed to achieve sales levels modeled in the Act on Climate scenario

Note: historical heat pump sales are based on Clean Heat RI program data and may not capture every heat pump adopted in the state.

In the Act on Climate scenario, almost all light-duty vehicles (LDVs) on the road are battery electric by 2050

- **Today, 65% of transportation emissions in RI come from passenger vehicles and light-duty trucks**
  - As of 2022, 98% of passenger cars in RI were powered by gasoline
- **Transportation decarbonization in the Act on Climate is primarily driven by zero-emission passenger vehicle requirements under Advanced Clean Cars II (ACC II)**
- **ACC II requires automakers to steadily increase the share of EVs for the vehicles they deliver to dealerships in RI – increasing to 100% by 2035**
- **Vehicle incentives, such as those offered by OER DRIVE EV Rebate Program can help reduce the upfront costs of EVs**

Act on Climate Light-Duty Vehicle Stock Share (%)



94% of LDVs on road in 2050 are battery electric

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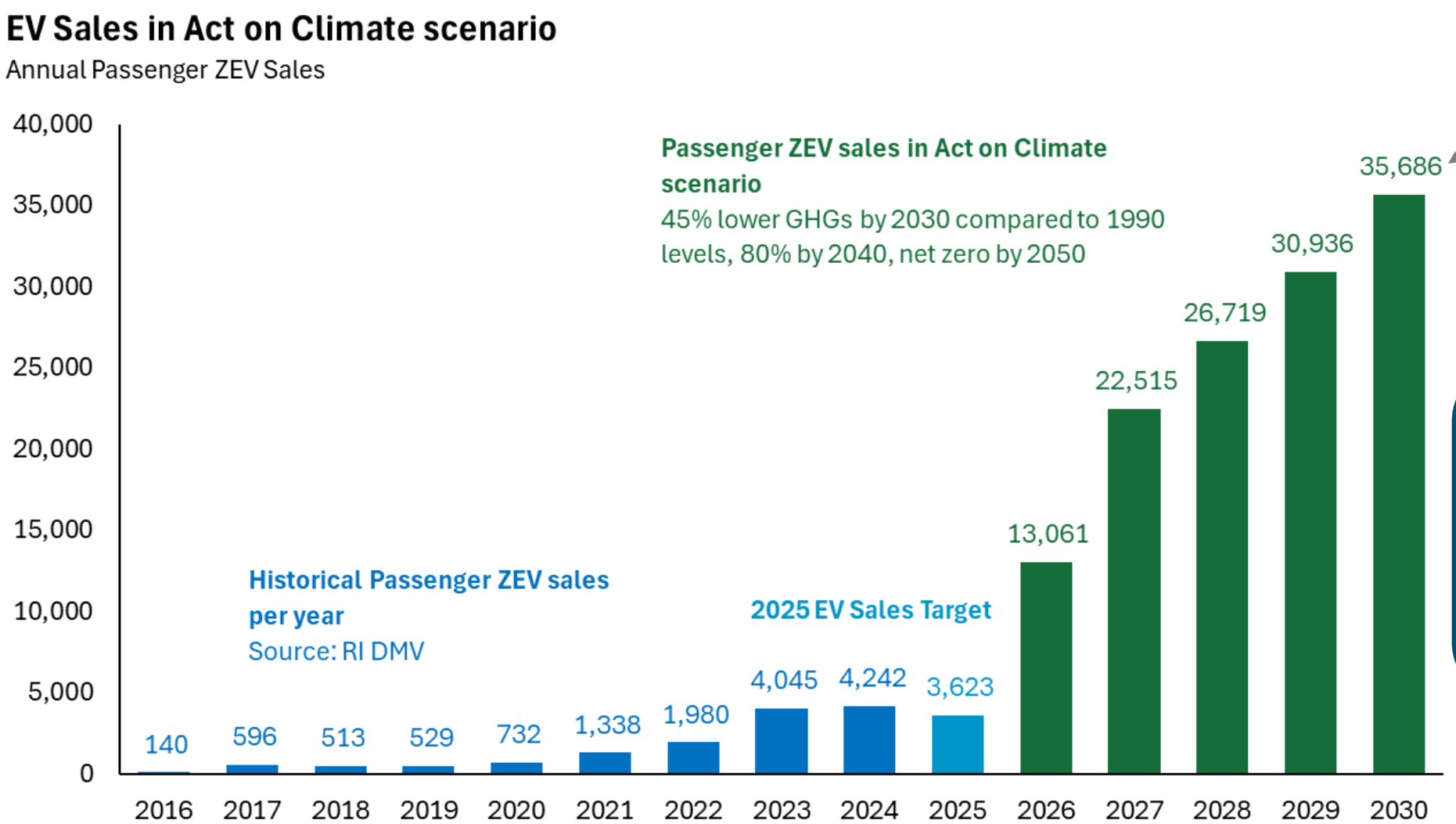
Note: ACC II is assumed to be implemented in the Current Policy scenario as well

EV sales need to increase between now and 2030 to stay on track for Act on Climate targets



An increase in annual ZEV sales between now and 2030 is required to reach the next Act on Climate mandated GHG reduction target

The OBBB terminates the $7,500 EV tax credit at the end of September 2025.

Despite lack of Federal funding, RI offers EV incentives, and extending and increasing those incentives is a suggested strategy for meeting climate targets.

Pathways to Decarbonization

Impacts on Energy Demand

In the Act on Climate Scenario, fossil fuel use declines and clean electricity use increases

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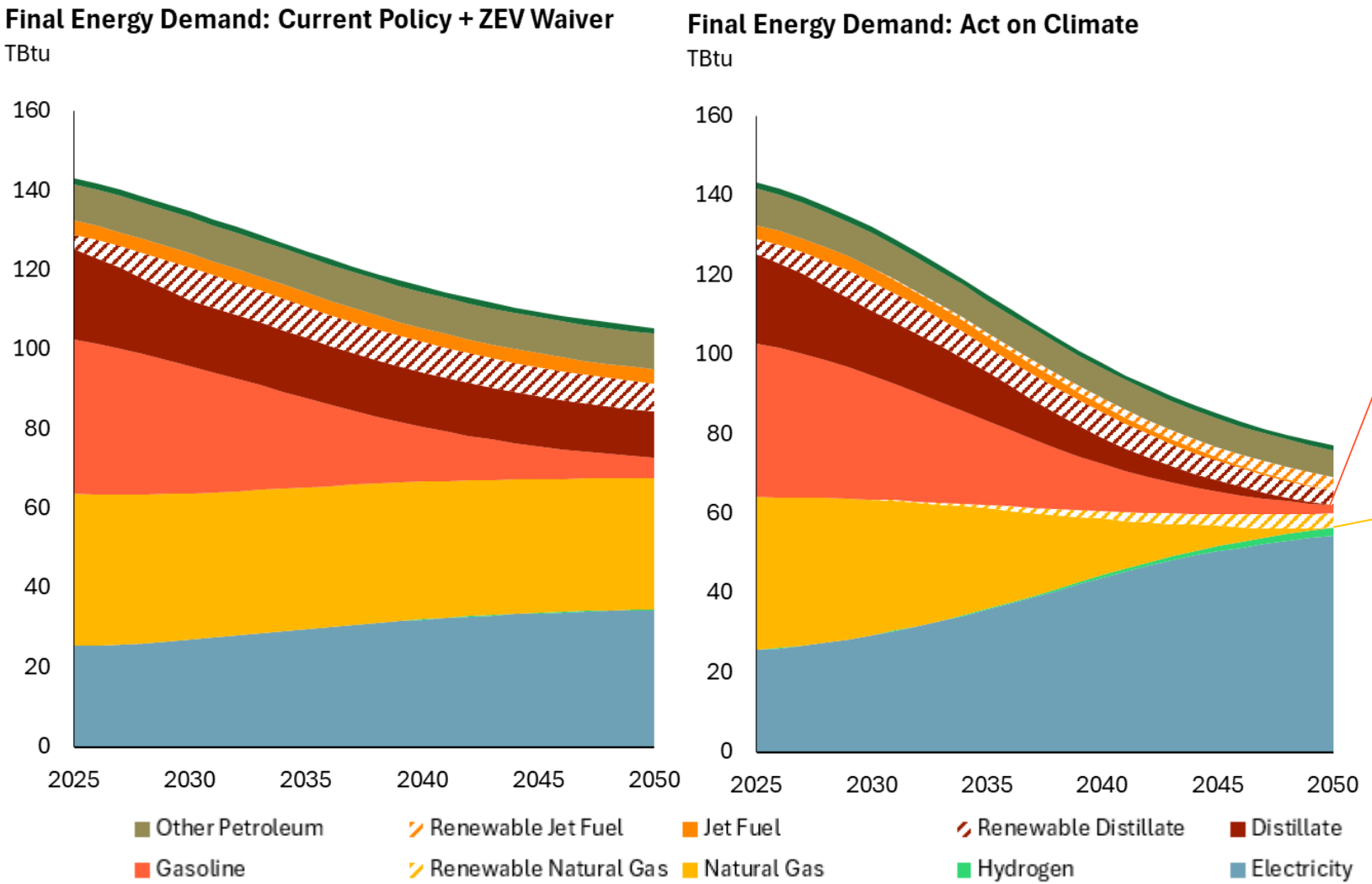

The combustion of petroleum-based fuels, such as gasoline and distillate, decreases in the Act on Climate Scenario due to building and vehicle electrification

The combustion of natural gas, primarily used in buildings and industry, decreases in the Act on Climate Scenario

Note: Air quality analysis is in progress (led by BW Research) but not yet completed. The results will be included in the final plan.

In the Act on Climate Scenario, residential distributed gas customers decrease by 54% by 2050

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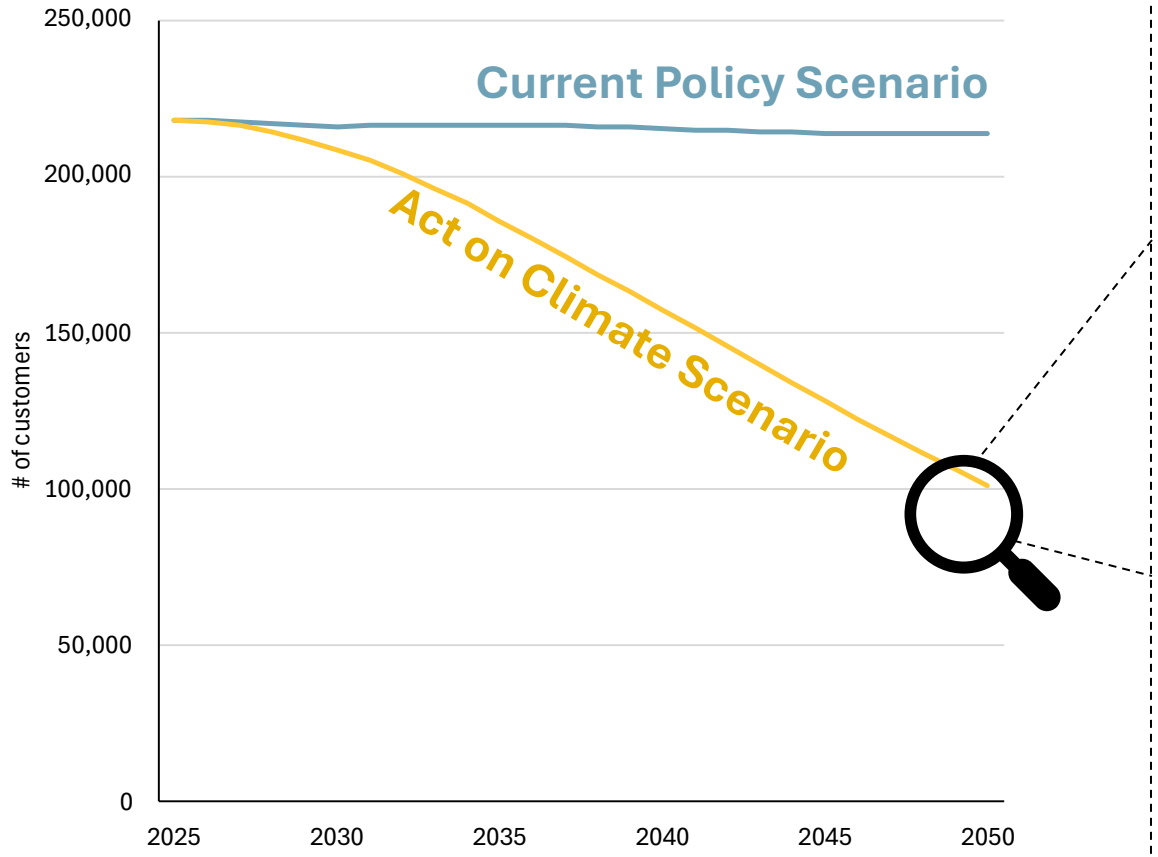
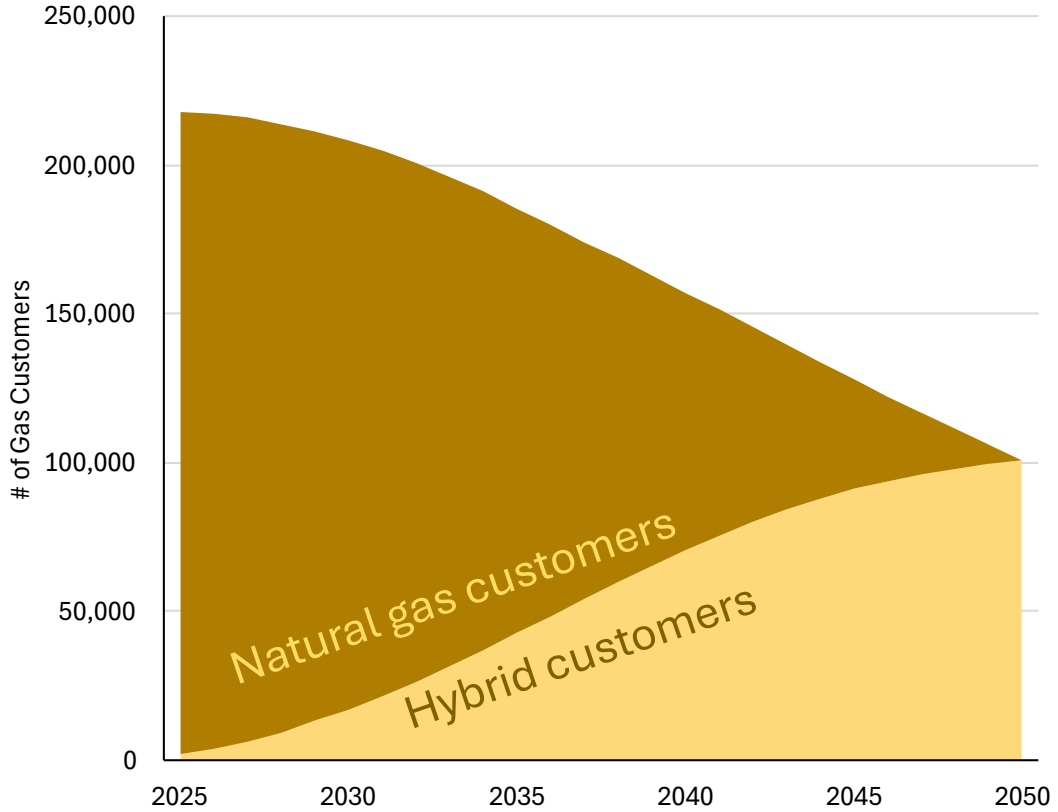
Residential Gas Customer Count by Scenario



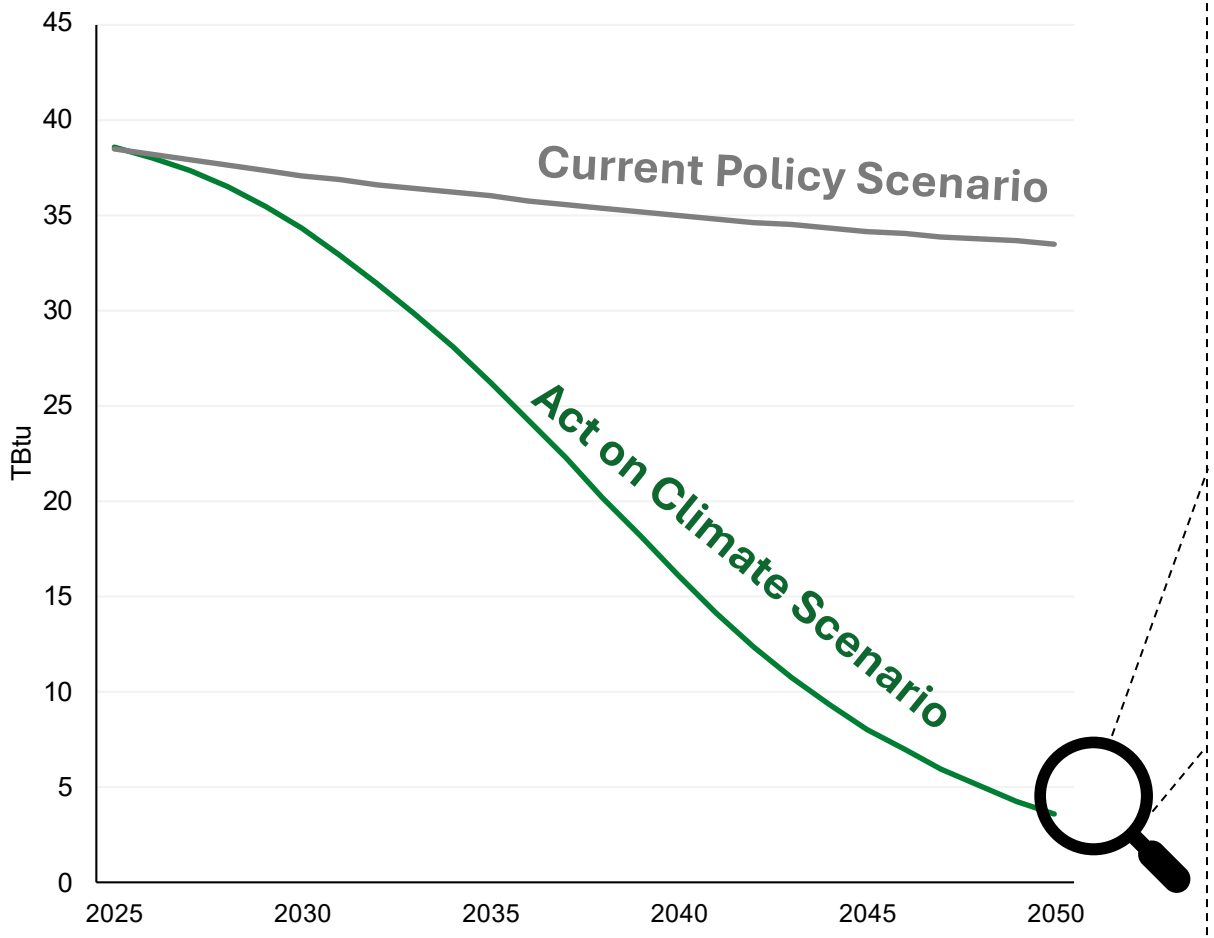
Residential Gas Customer Type in Act on Climate



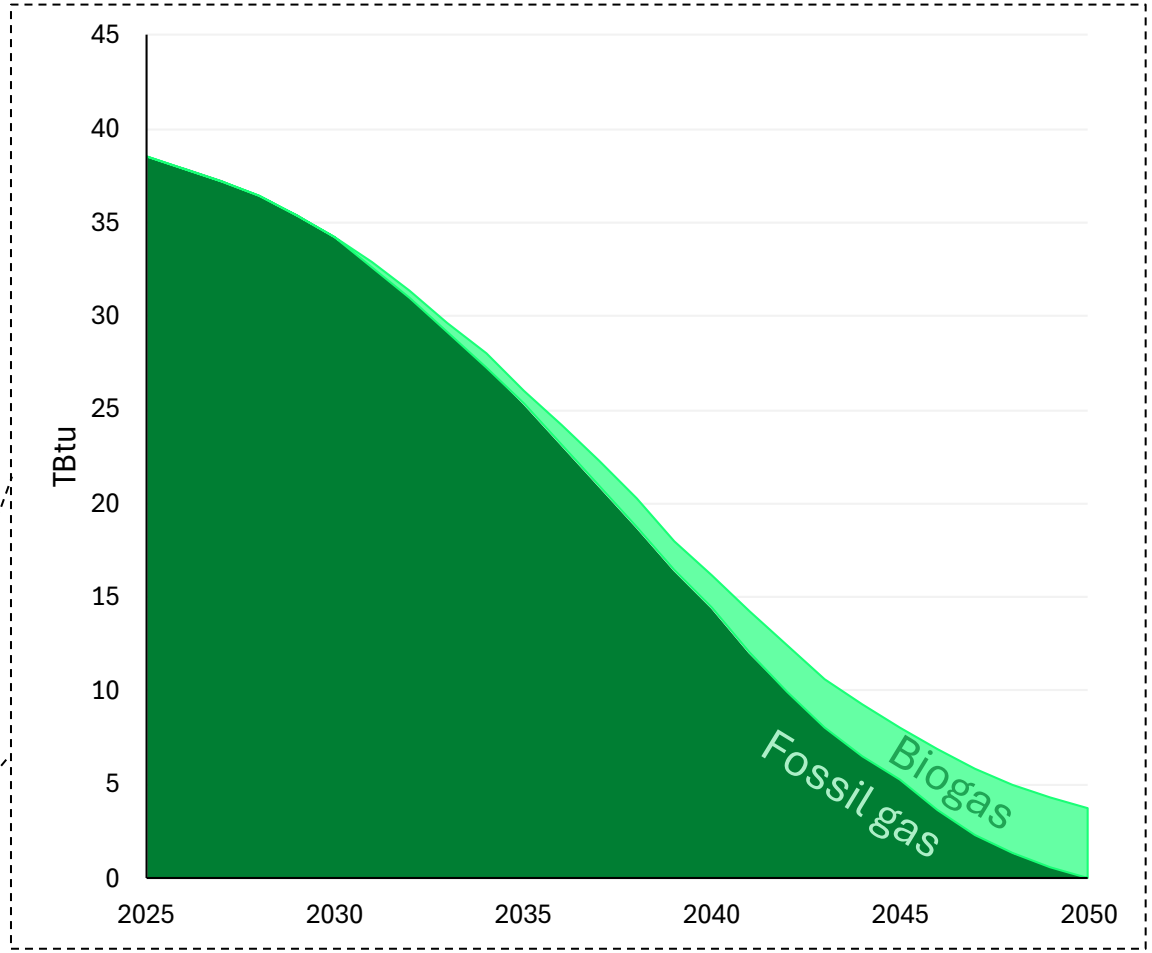
Notes:
- *Because Pathways models equipment stock rollover by end-use rather than modeling individual buildings, gas-powered space heating equipment counts are used as a proxy for residential customer counts. This approach would not capture customers who fully electrify space heating but retain other gas appliances (e.g., cooking).*
- *The Future of Gas Proceeding will further explore the impact of declining gas customers on the gas system and energy costs*

In the Act on Climate Scenario, total gas throughput decreases by about 90% by 2050

Natural Gas Throughput by Scenario



Natural Gas Throughput in Act on Climate



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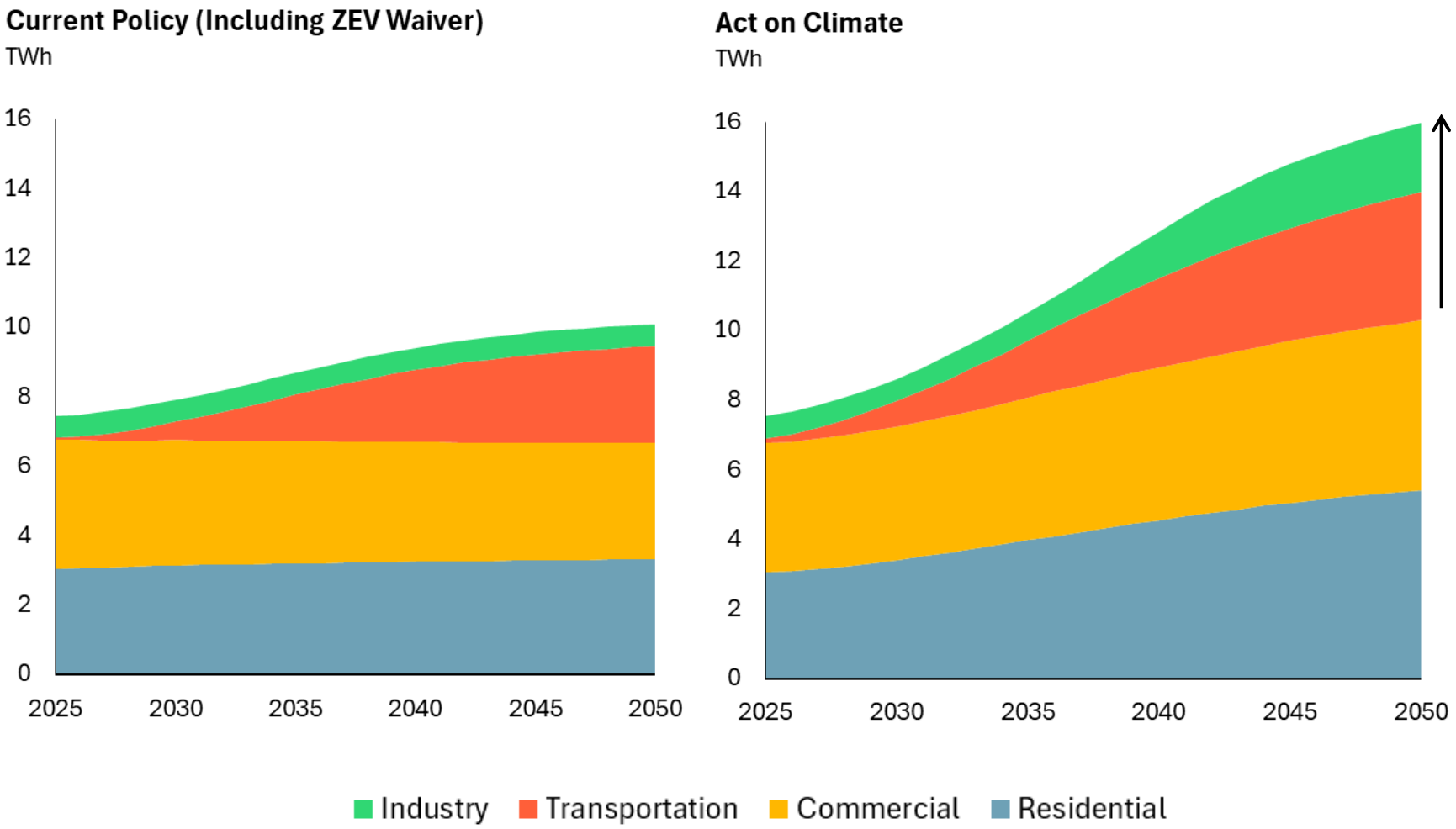
Note: Natural gas throughput refers to the volume of natural gas that passes through the system

Electrification could lead to electric demand increase of 58% by 2050 compared to Current Policy Scenario



- In Current Policy, load growth is anticipated in the transportation sector due to widespread vehicle electrification from ACCII/ACT
- In the Act on Climate scenario, building and industrial electrification leads to further increasing electricity demand, reaching 15.3 TWh by 2050

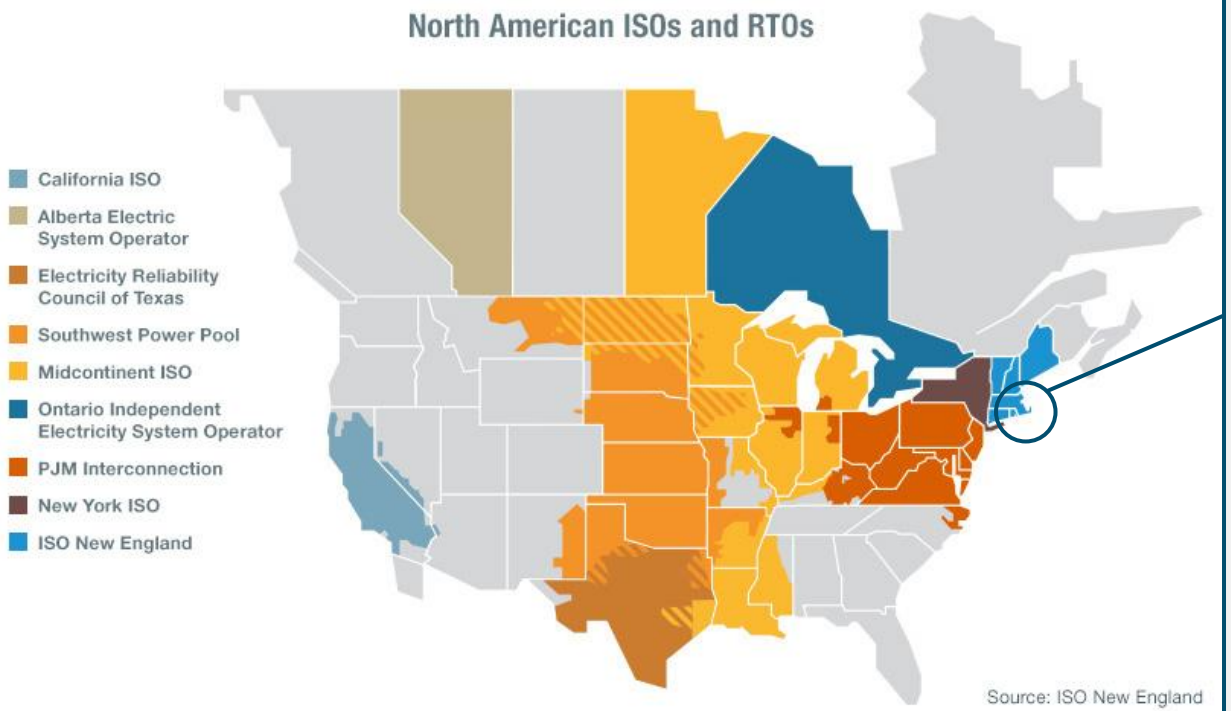
Questions?

Pathways to Decarbonization

Impacts on Electric Sector

Rhode Island's Role in the New England Power Grid

North American ISOs and RTOs



There are nine Independent System Operators (ISOs) and Regional Transmission Organizations (RTOs) in North America.

RI is part of **ISO New England** and shares electricity with other New England states.

ISO New England maintains the region's power grid and wholesale power markets. ISO New England is responsible for ensuring reliable electricity, planning for future energy needs, upgrading grid infrastructure, and supporting the transition to cleaner energy.

Because RI is part of a larger energy system, decisions that affect the broader electric grid – such as those about energy infrastructure upgrades or resource needs – are made at the regional level and require regional coordination.

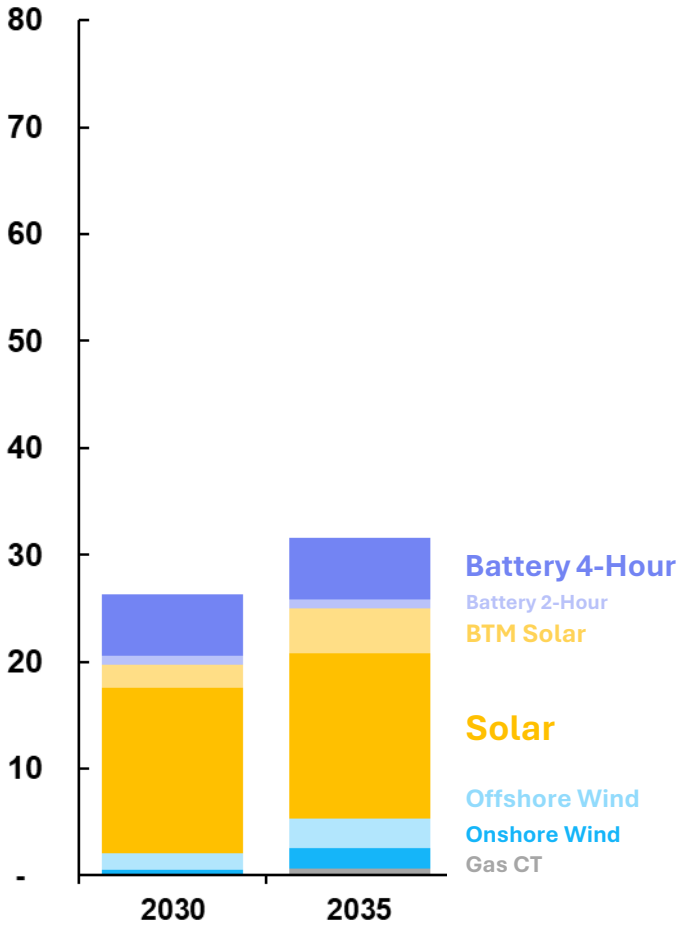
Growth in variable renewable generation will make the role of imports and exports more important due to weather-driven changes in generation.

Electric Sector Modeling Methodology

- E3 performed capacity expansion modeling using the commercial software PLEXOS to identify a least-cost electricity generation portfolio that achieves Rhode Island and New England's renewable and decarbonization goals while maintaining reliability
- E3 started from the existing ISO-NE capacity expansion model for which inputs have undergone benchmarking and stakeholder review
- The costs from PLEXOS were used to inform electricity rates for the affordability analysis, the emissions were used in the long-term emissions projection modeling, and outputs were also passed to BW Research for jobs and air quality modeling

Resource additions through 2035

New build & planned capacity across ISO-NE (GW)



Through 2035, the primary driver of investments is adding renewable energy to keep up with increasing state targets

Short duration batteries help to integrate solar via energy shifting.

Behind the Meter (BTM) Solar deployment reflects the ISO NE photovoltaic (PV) forecast. Additional BTM PV is not selectable by the capacity expansion model.

Utility-Scale Solar is built early in the planning horizon. Except for planned offshore wind, solar is the only renewable resource the model can build through 2029 to meet rising Renewable Portfolio Standard (RPS) requirements. Achieving rapid solar deployment is a risk to meeting New England state-based renewable targets.

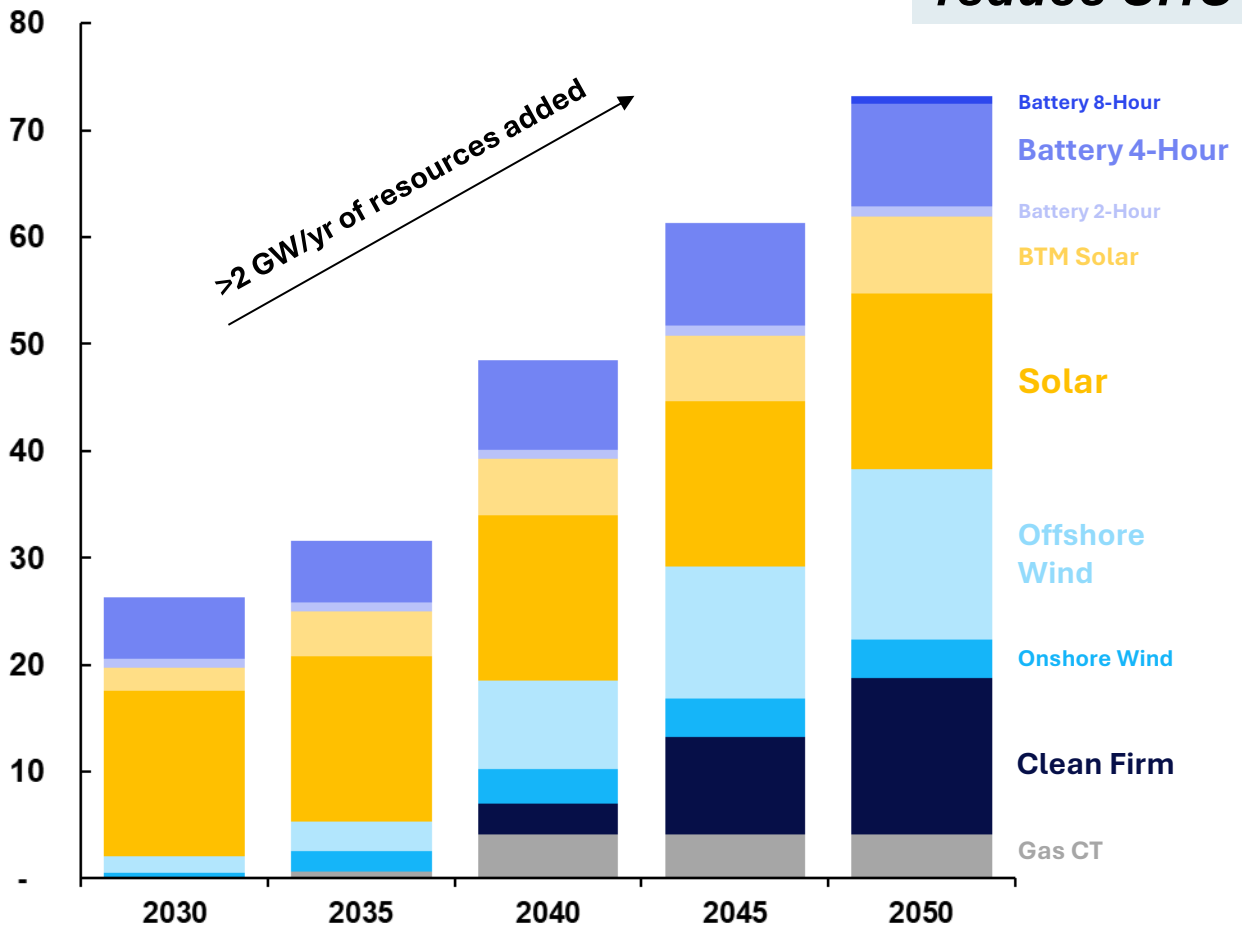
Planned **Offshore Wind** includes Vineyard (842 MW) and Revolution (749 MW) in 2026 and South Coast (1200 MW) in 2033. Additional offshore wind is not available for selection before 2035 due to expected delays in development.

The favorable economics of **Onshore Wind** in Maine results in selection as soon as it is available (2030).

Small quantities of **Gas Combustion Turbine (CT)** built starting in 2035 to maintain reliability

Resource additions after 2035

New Build & Planned Capacity across ISO-NE (GW)



After 2035, resource investments are necessary to reduce GHG emissions and to reliably meet higher loads

Additional short duration batteries are added to provide resource adequacy and to integrate renewable energy

Behind the Meter (BTM) Solar deployment continues post-2035 per the ISO NE PV Forecast

Utility-Scale Solar deployment slows once wind can be selected in the 2030s

New Offshore Wind is built starting in 2035 and grows rapidly to meet GHG reduction targets. Additional Onshore Wind is built as well but the resource potential is limited.

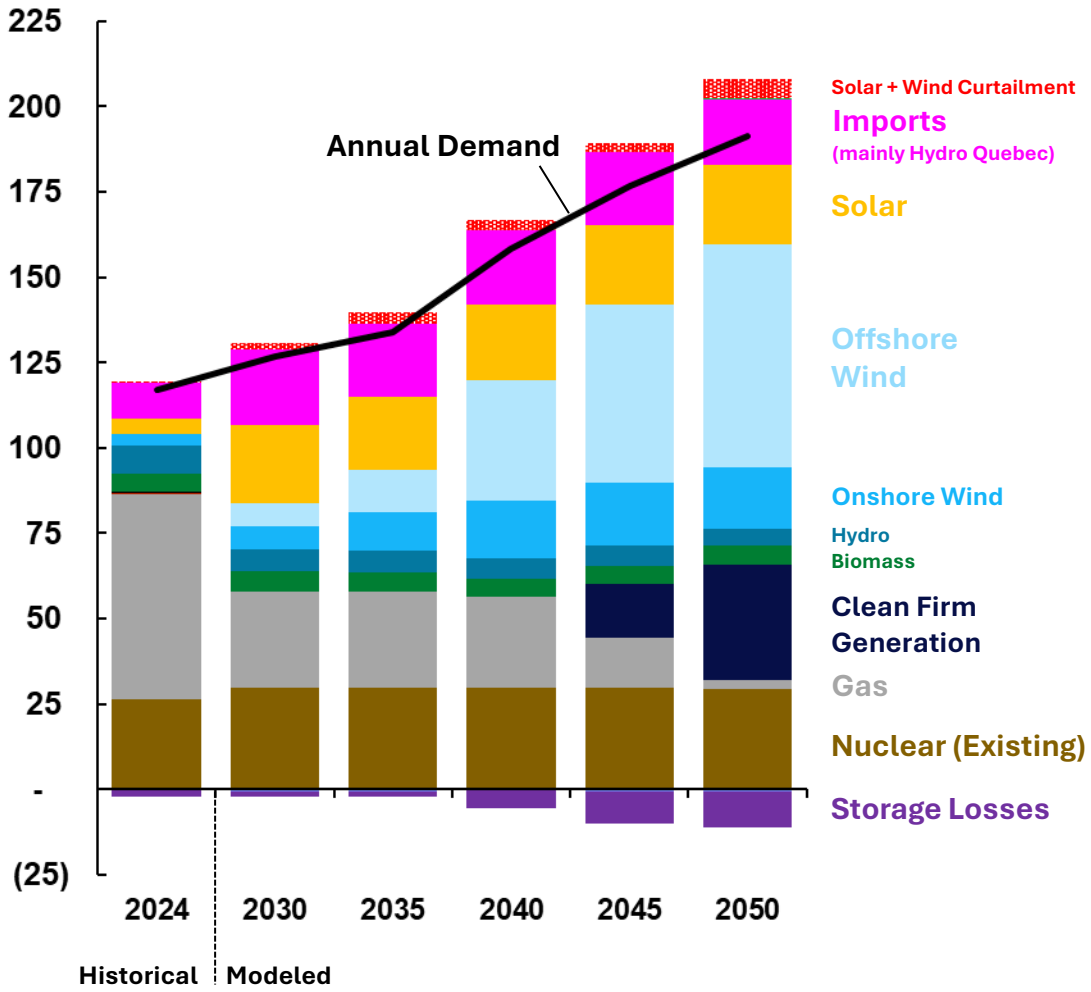
Clean Firm resources are built starting in the late 2030s as dispatchable zero carbon energy is increasingly needed to meet more stringent GHG reduction targets, and additional capacity is needed to reliably meet increasing loads.

New Gas CTs are built in the mid 2030s to maintain reliability. The model cannot select new gas in Rhode Island.

Note: In this study, the clean firm resources included are Small Modular Reactor (SMR) nuclear and 100-hour batteries. Both resources are not candidates in Rhode Island.

ISO-NE generation mix evolves over time

Annual generation across ISO-NE (TWh)



Renewable generation grows over time, driven by both load growth and higher renewable requirements.
By the mid-2040s, clean firm generation begins to replace natural gas as GHG targets become more stringent

Consistent with ISO NE assumptions, Hydro Quebec imports are assumed to be available throughout the modeling horizon, including an additional ~1 GW of baseload generation on the New England Clean Energy Connect line.

Wind and solar generation increase over time. Solar is primarily added through the early 2030s, whereas longer-term additions are predominantly wind.

As gas generation is reduced in the 2040s in response to GHG emissions limits, clean firm resources increasingly follow the load during periods of low renewable output.

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Note: There is significant uncertainty on the future of offshore wind projects. If offshore wind projects are unable to be realized at the pace included here, their generation will need to be replaced with other renewables, such as solar or onshore wind, to meet renewable and GHG targets.

Questions?

Pathways to Decarbonization

Impacts on Cost

Relative Societal Costs & Benefits by Scenario

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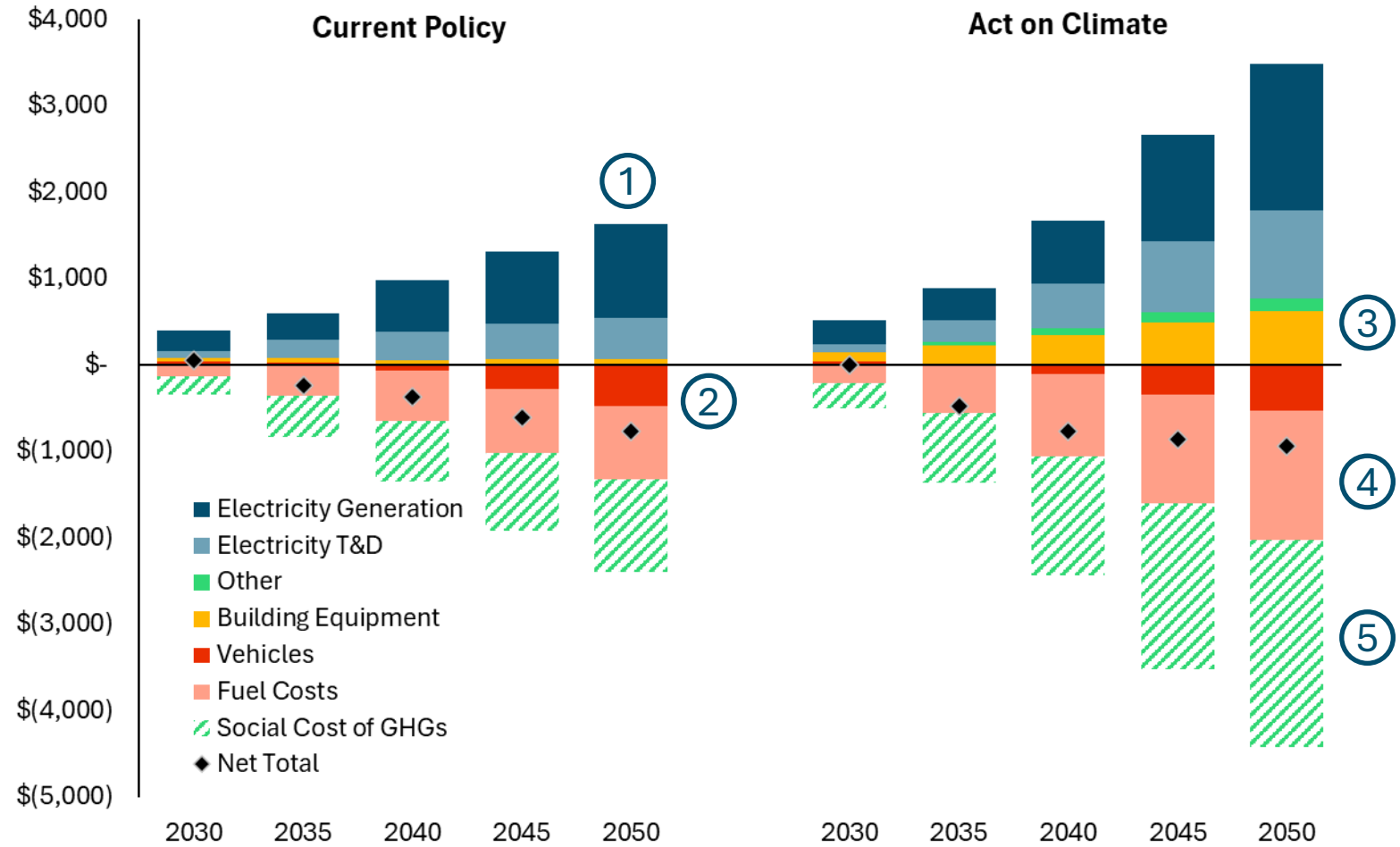
Societal Costs & Benefits vs Business-as-Usual

Million 2024$



Key Takeaways:

1. All scenarios see **increased spending on electricity** generation and transmission and distribution (T&D)
2. The vehicle price forecasts from the International Council on Clean Transportation used for this analysis **show EVs becoming cheaper than combustion vehicles by the late 2030s**, and this combined with lower maintenance costs leads to net savings on vehicle spending
3. The increased cost of heat pumps vs fossil equipment means **scenarios with high building electrification require higher spending on building equipment**
4. All scenarios have **lower spending on conventional fuels due to electrification**
5. **Decarbonizing RI's economy shows net benefits when the societal cost of GHGs is included**

Notes:

- *The "Vehicles" category includes the cost of EVs, chargers, and the avoided costs of not buying/maintaining combustion vehicles*
- *Social cost of carbon discount rate used is: 2%*

Upfront Costs for Vehicles and Appliances

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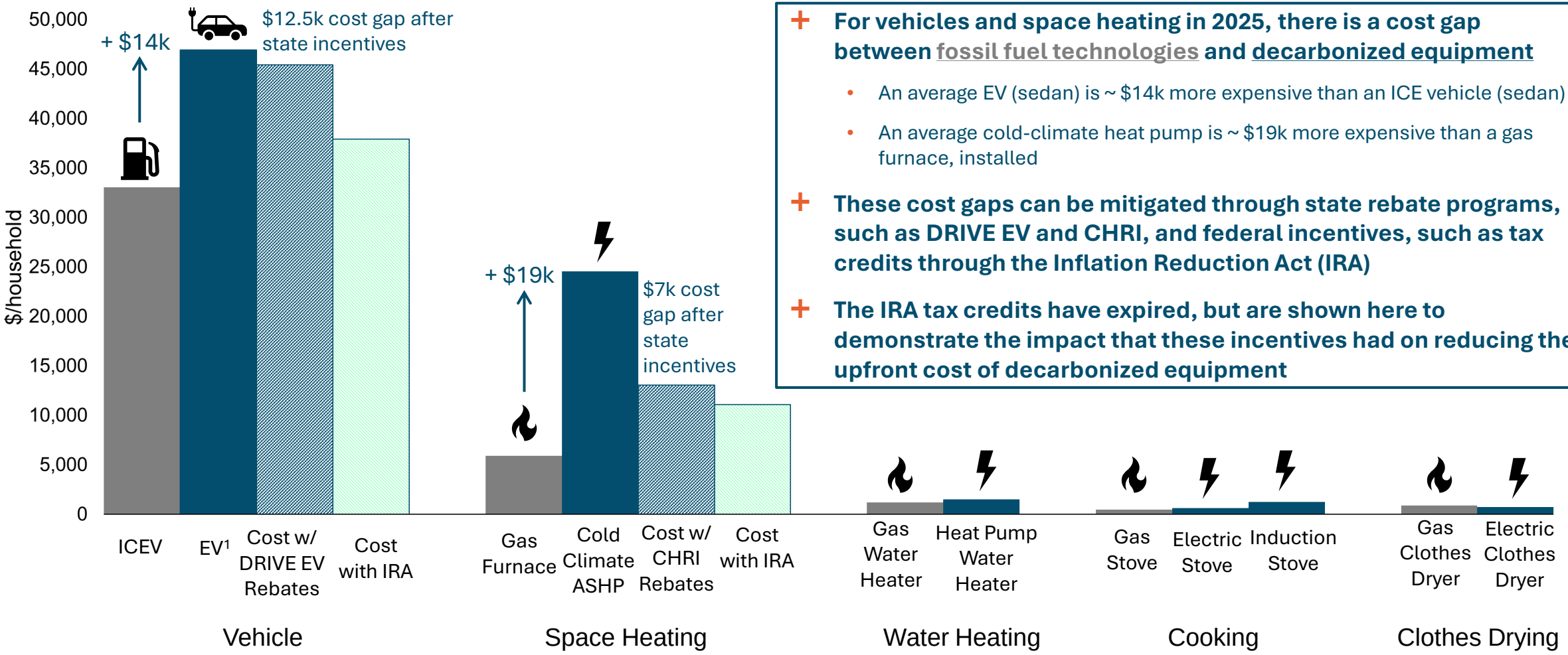
Upfront Equipment Costs for Single Family Home in 2025



+ **For vehicles and space heating in 2025, there is a cost gap between fossil fuel technologies and decarbonized equipment**
  - An average EV (sedan) is ~ $14k more expensive than an ICE vehicle (sedan)
  - An average cold-climate heat pump is ~ $19k more expensive than a gas furnace, installed
+ **These cost gaps can be mitigated through state rebate programs, such as DRIVE EV and CHRI, and federal incentives, such as tax credits through the Inflation Reduction Act (IRA)**
+ **The IRA tax credits have expired, but are shown here to demonstrate the impact that these incentives had on reducing the upfront cost of decarbonized equipment**

Notes:
- *Results shown for Single Family home and assumes income-eligible CHRI incentive*
- *Vehicle results assume a sedan for both ICEV and EV*
- *Results are shown for 2025. In future years, as more models come to market and prices decline, it's assumed the cost gap between ICEV and EVs will close*

Customer Types Explored in Energy Bills Analysis

Reference Gas

Standard efficiency gas furnace, gas water heater, gas clothes dryer, gas stove, central AC

Reference Oil

Standard efficiency oil furnace, oil water heater, electric clothes dryer, electric stove, central AC

Hybrid + Gas Backup

Heat pump with gas furnace backup, heat pump water heater, electric clothes dryer, electric stove, air sealing/insulation

Hybrid + Oil Backup

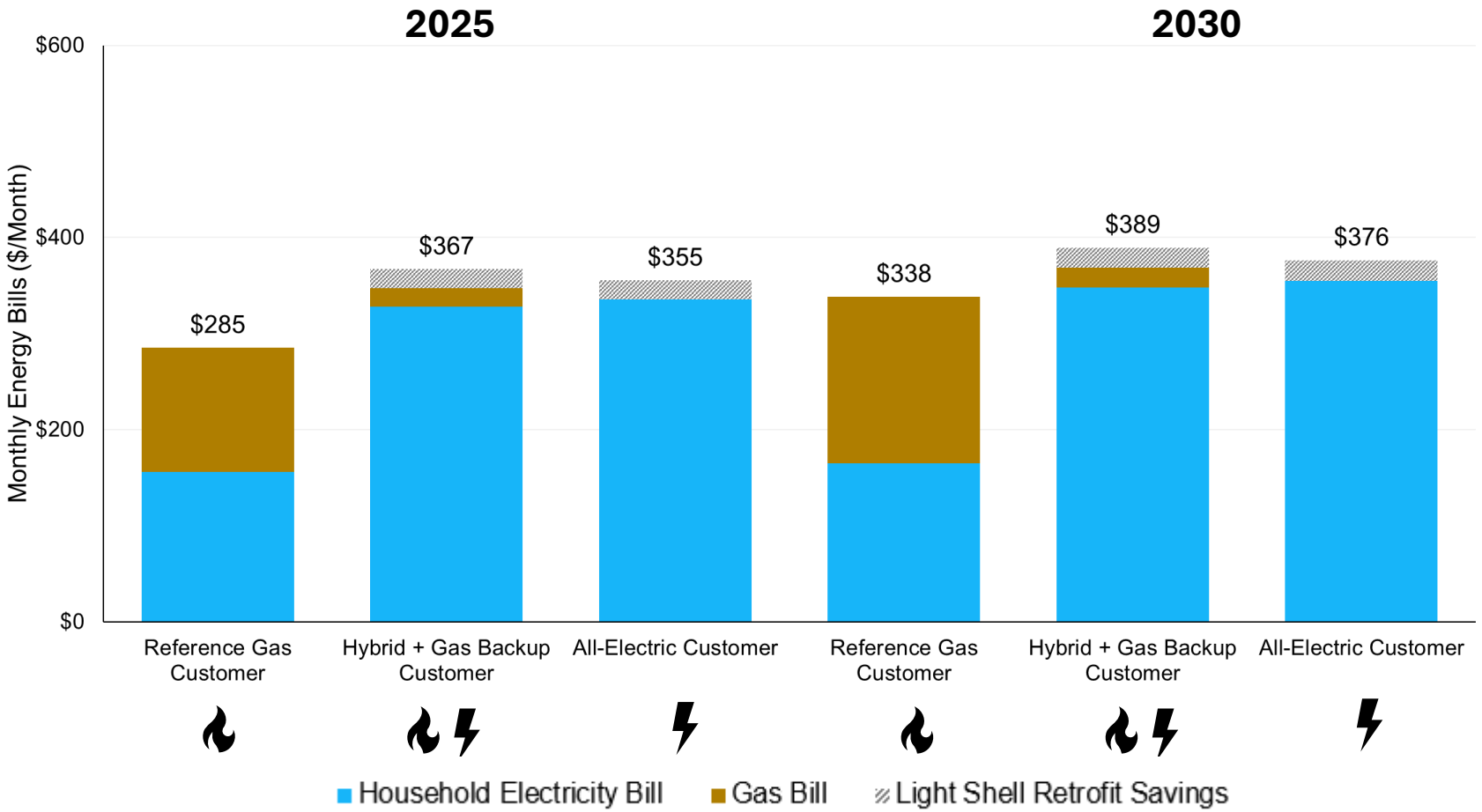
Heat pump with oil furnace backup, heat pump water heater, electric clothes dryer, electric stove, air sealing/insulation

All-Electric

All-electric heat pump, heat pump water heater, electric clothes dryer, electric stove, air sealing/insulation

The following slides are not representative of all customers in RI. Results for individual customers will depend on the specifics of the site, building vintage, energy efficiency measures, and more.

Example Monthly Energy Bills for Gas vs. Electric Customers in 2025 and 2030 – Pre 1960s Home

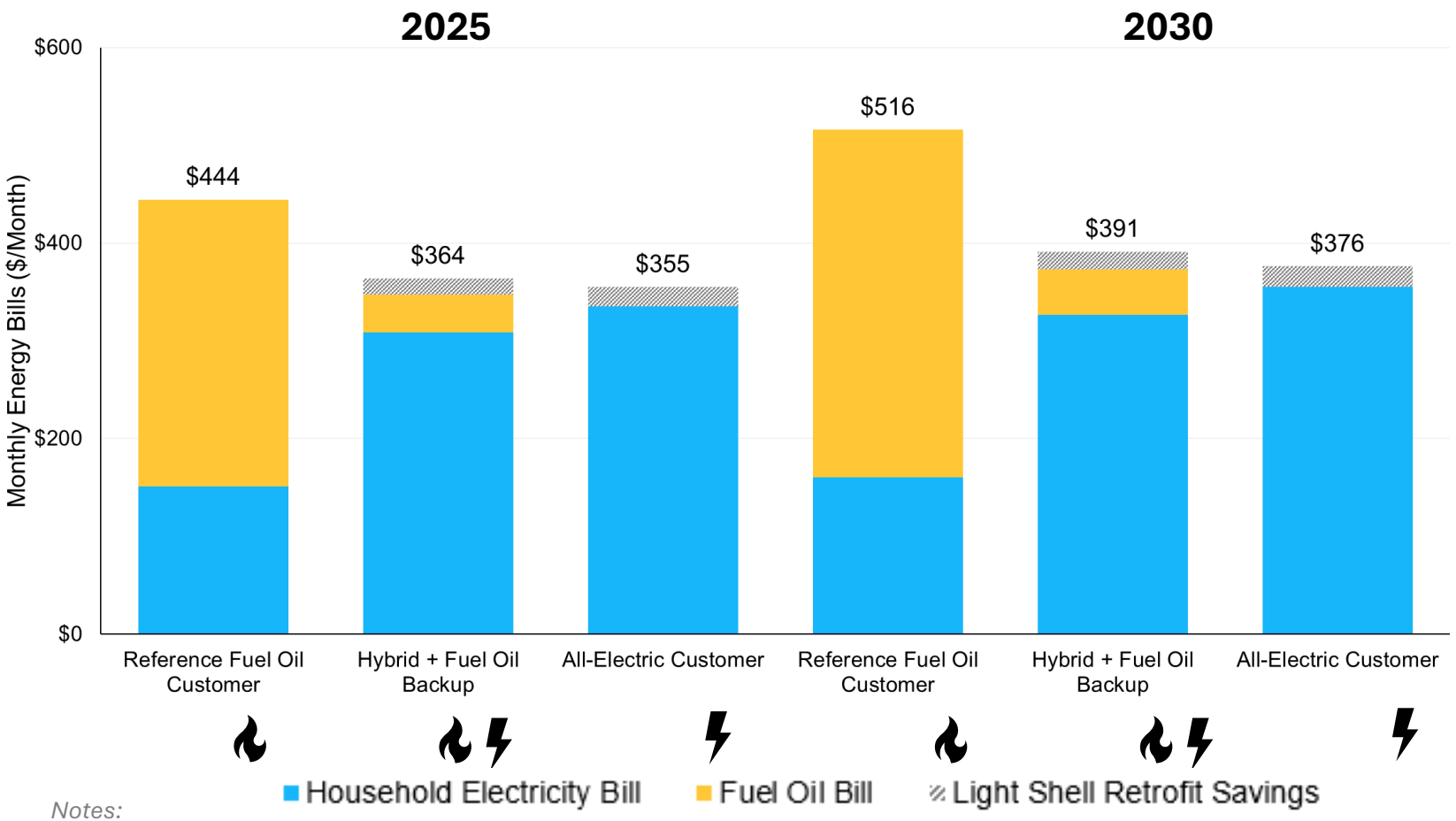


+ **The forthcoming PUC RI Future of Gas Policy Report and existing Technical Analysis take a deeper dive into bill impacts**
+ **Current rates may lead to bill increases for gas customers adopting a heat pump; actual impacts will vary by building age, efficiency, and other site factors**
+ **Strategies such as alternative electric rate structures, energy efficiency retrofits, advanced meters, and smart thermostats can help mitigate the bill increases after electrification**
+ **Several states are already exploring heat pump-friendly rates to reduce operating costs for electrifying customers**
  - Maine and Massachusetts have established seasonal heating rates
  - California has shifted some costs into a monthly fixed charge and reducing variable rates

Notes:

- *These results are not representative of all customers in RI. Results for individual customers will depend on the specifics of the site, building vintage, energy efficiency measures, and more.*
- *Electricity rates were calculated based on projections of future electricity demand and resource portfolios from PLEXOS*
- *Light Shell Retrofit refers to air sealing and insulation upgrades*
- *Results shown for Single Family pre-1960 home (also shown in RI Future of Gas Technical Analysis affordability results), moderate income, with rates in the Act on Climate scenario*

Example Monthly Energy Bills for Oil vs. Electric Customers in 2025 and 2030 – Pre 1960s Home



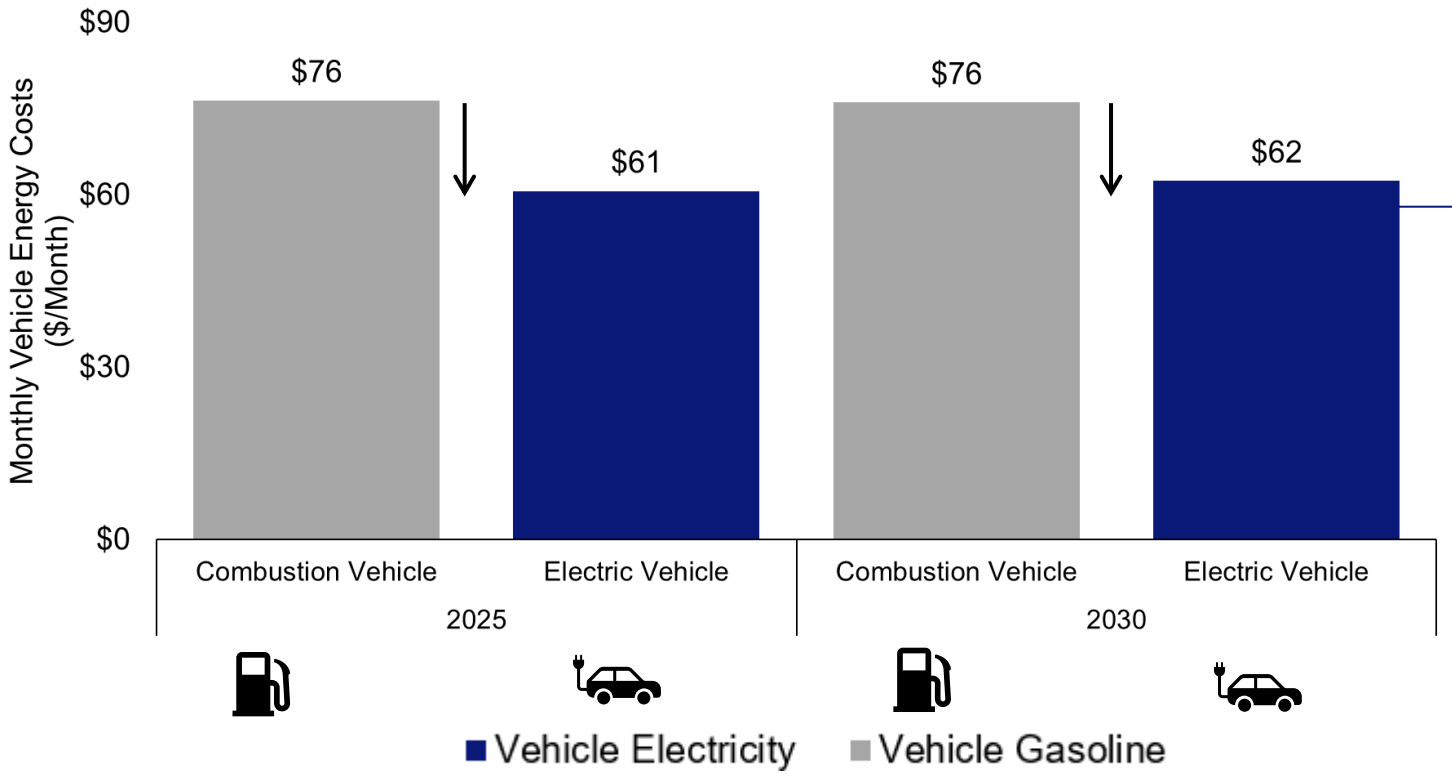
+ **The high price of oil leads to bill savings for customers transitioning from oil to electric heating. This leads to an outcome that is aligned with climate and affordability goals**
  - Transitioning from an oil furnace to a heat pump is projected to save $66-$73 per month in 2025
  - In 2030, transitioning from an oil furnace to a heat pump is projected to save $107-$120 per month

Notes:
- *These results are not representative of all customers in RI. Results for individual customers will depend on the specifics of the site, building vintage, energy efficiency measures, and more.*
- *Electricity rates were calculated based on projections of future electricity demand and resource portfolios from PLEXOS*
- *Light Shell Retrofit refers to air sealing and insulation upgrades*
- *Results shown for Single Family pre-1960 home (also shown in RI Future of Gas Technical Analysis affordability results), moderate income, with rates in the Act on Climate scenario*
- *Assumes oil prices of $29.15/MMBtu in 2025 and $33.96/MMBtu in 2030. Prices assume 21% biofuel blending in 2025 and 50% in 2030. Cost of fossil distillate from EIA STEO and AEO23.*

Example Monthly Vehicle Energy Costs for Gasoline vs. Electric Vehicle in 2025 and 2030

+ The *fueling costs* for an electric vehicle are lower than a combustion vehicle in 2025 and 2030 due to the higher costs of gasoline (there are also ~$360/year additional savings from avoided operations & maintenance)

Monthly Vehicle Energy Costs in 2025 and 2030 ($/Month)



Monthly energy costs are lower for customers with an EV as opposed to a combustion vehicle, since electricity is less expensive than gasoline

Notes:

- *EV charging can offer savings compared to gasoline vehicles, but actual benefits will depend on factors like vehicle efficiency, driving patterns, and charging behavior.*
- *Assumes gasoline prices of $2.96/gallon in 2025 and $3.14/gallon in 2030 (real 2025$).*
- *Vehicle efficiencies from the E3 PATHWAYS model are incorporated into energy cost calculations*
- *Results shown for Single Family pre-1960 home, moderate income, with rates in the Act on Climate scenario*

Questions?

Key Findings

- **Current policies are projected to meet RI's 2030 target, but significant uncertainties remain, and additional actions will be needed to achieve the 2040 and 2050 climate goals**
  - Under current policies, largest drivers of GHG reductions are Renewable Energy Standard, Advanced Clean Cars II/Advanced Clean Trucks
  - To reach Act on Climate in 2040 and 2050, additional measures will be necessary, particularly in the buildings sector
- **Meeting climate goals will require a shift in the way Rhode Islanders use technology and energy**
  - Reaching the Act on Climate targets will require an increase in EV and heat pump sales over the next 5 years
  - Under both current policies and the Act on Climate, a reliance on fossil fuel is expected to shift to higher electricity demand
  - The electric sector is expected to undergo a transformation – driven by an increase in electric load from electrification, and a shift to renewable energy sources, as directed by the Renewable Energy Standard
- **Economywide decarbonization entails costs, but the projected societal benefits of reducing GHG emissions outweigh the projected costs**
  - Avoided impacts of climate change and fossil fuel savings result in cumulative net societal benefits, i.e., the benefits outweigh costs
- **Decarbonized technologies vary in cost—some, like EV charging, are often cheaper, while others may require support to be competitive**
  - Decarbonized technologies (EVs, heat pumps, heat pump water heaters) are currently more expensive than fossil fuel-powered equipment
  - Depending on the customer type, using a heat pump for heating may be more expensive than natural gas, but there are tools to align technology costs with climate objectives.
  - In many cases, charging an EV in Rhode Island is cheaper than fueling a vehicle with gasoline.

Discussion and Breakout Activity

Breakout Session Activity

- **Join breakout groups** with assigned facilitator.
- Facilitator will keep notes for your group.
- Feel free to participate by **raising your hand or utilizing the chat**.
- Two breakout group sessions and general plenary report-outs with key questions.
- Assign a reporter in your group to provide a **2-minute summary** of what you talked about.

Discussion Questions

Breakout Session 1: Understanding and Interpreting the Results

- General feedback on the modeling results?
- What aspects of the results stood out to you the most? Were there any results or trends that surprised you?
- Which technologies (e.g., heat pumps, hybrid heat pumps, EVs, etc.) do you see as most critical or most challenging for RI to scale up?
- What opportunities or challenges do you see as Rhode Islanders use more electricity and less fossil fuel over time?

Report Out

Discussion Questions

Breakout Session 2: Priorities and Communication

- Are there areas from this presentation that you want to see emphasized more in the final plan?
- What kinds of additional visuals or explanations would make these findings easier to interpret for a broader audience?
- Is there anything you'd like to see addressed in future phases of RI's climate planning that we didn't cover here?
- How can the state best communicate progress as it moves toward these goals?

Report Out

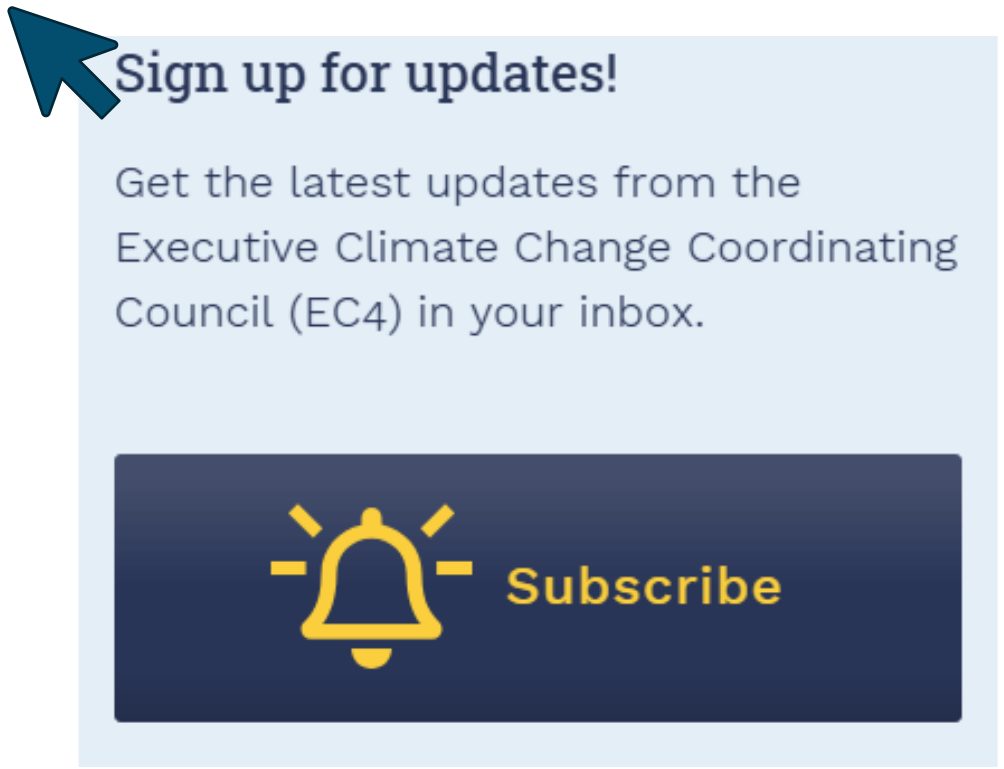
Wrap Up and Next Steps

Next Steps

1. Hold one remaining public webinars to share results and collect feedback
   - Workforce and the Green Economy: November 17th, 1-3pm
2. Modify draft report to reflect stakeholder input (November)
3. Hold final public webinar and publish the Climate Action Strategy and CCAP (December)

Staying in the Loop on the 2025 Strategy

Sign up to receive ongoing announcements about engagement on the RI 2025 Climate Action Strategy HERE



Comments Welcome!

Comments after today's session are welcome! Please submit feedback via SmartComment at https://ri.commentinput.com/?id=em4auDNSK

Thank You