



Acadia
Center

Advancing the Clean Energy Future

Let's Talk Energy Efficiency (EE) and Energy Cost Drivers

Legislative Briefing
December 2025

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Boston, MA • Hartford, CT • New York, NY • Providence, RI • Rockport, ME



WHO IS ACADIA CENTER?



MISSION

Acadia Center's mission is to advance bold, effective, and equitable clean energy solutions for a livable climate and a stronger, more equitable economy.

PROGRAMS

Acadia Center focuses on six areas of climate and clean energy, within which we prioritize consumer benefits, public health, economic growth, and equitable distribution of benefits:

- **Next Generation Energy Efficiency: Make Our Buildings Healthy, Efficient, and Climate Safe**
- **Beyond Gas: Phasing Out Our Dependence on Fossil Fuels**
- **Utility Innovation: Reform Utilities and Energy Systems**
- **Transportation Climate and Equity Investments**
- **Clean Energy and Climate Pathways**
- **Public Engagement and Communications**

SUPPORT

Acadia Center is funded by foundation grants and individual donations. It does not accept corporate or government funding.

Who is the Energy Efficiency Council?



Mission

The EEC *monitors the state's energy efficiency programs* to maximize cost-effective energy savings for all Rhode Islanders through comprehensive stakeholder representation and expert technical evaluation.

About

The EEC was established by statute in 2006 and consists of fifteen Governor appointed members that *represent the interests of all Rhode Islanders* – homeowners, renters, businesses, municipalities – and the environment.

The Council is committed to responsible oversight of ratepayer funds.

eec.ri.gov

A hand is shown typing on a laptop keyboard. The laptop screen displays a 3D pie chart with three segments in red, blue, and light blue. The background is a dark blue gradient.

Key Takeaways

- **Energy efficiency is cost effective and delivers benefits to all Rhode Islanders**
 - Tool to address rising costs
 - Seeing reductions to EE in 2026 Plan
 - Blaming EE and clean energy for rising costs is misleading
- **Gas volatility is a primary driver of high costs, the solution is local clean energy**
- **Focus on solutions for rising transmission and distribution costs**
- **Investor-owned utilities are incentivized to raise *infrastructure* costs to maximize profits for shareholders**

What is energy efficiency?



Energy efficiency is using less energy to achieve the same result.



INSULATION



HEAT PUMPS



APPLIANCES

Other examples: lighting, air sealing, thermostats, water heating, windows, electronics

Energy efficiency programs in RI



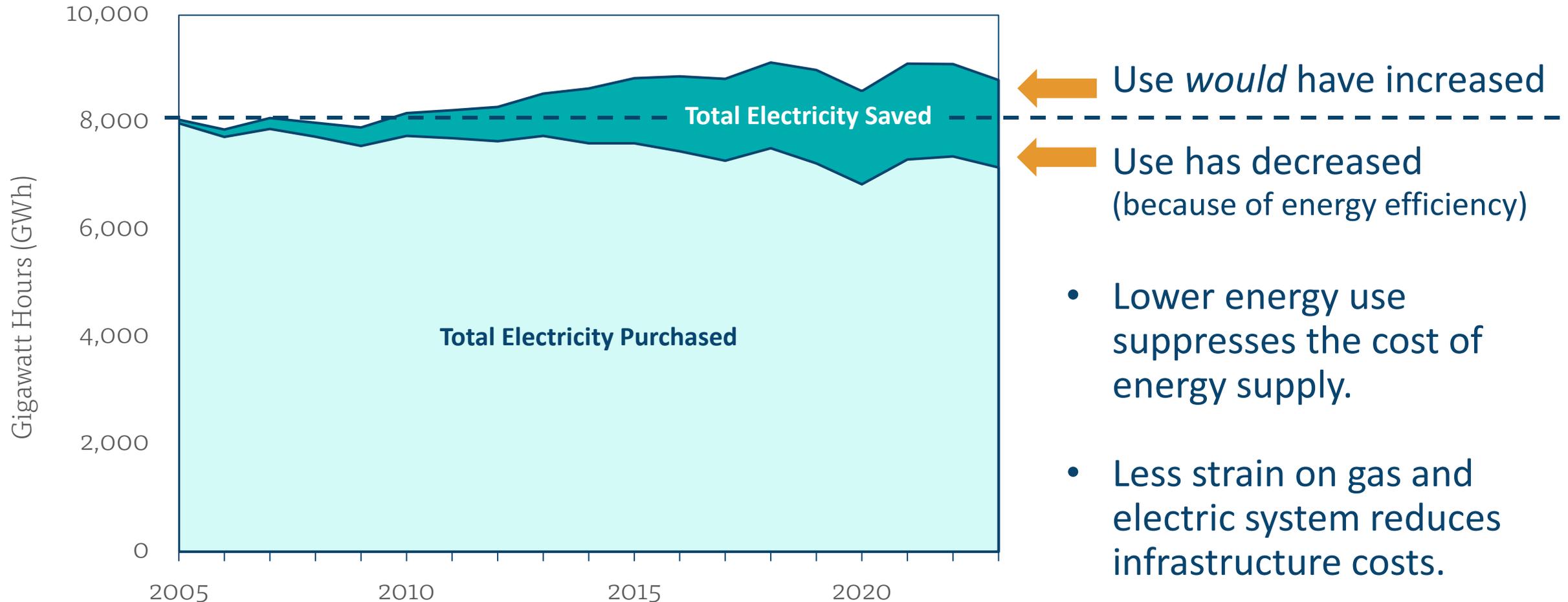
Home Energy Assessment Blower Door Test

- Administered by Rhode Island Energy
- Funded through electric and gas utility bills
- Serve residential, commercial, industrial
 - Financial incentives & rebates
 - Financing, loans, grants
 - Technical assistance
- Save Rhode Islanders money
 - Reduces bills due to energy saving measures
- Have significant oversight & regulation
 - Programs must pass cost-effective test

Efficiency lowers energy costs for all



Cumulative Impact of Energy Efficiency on RI Electric Use

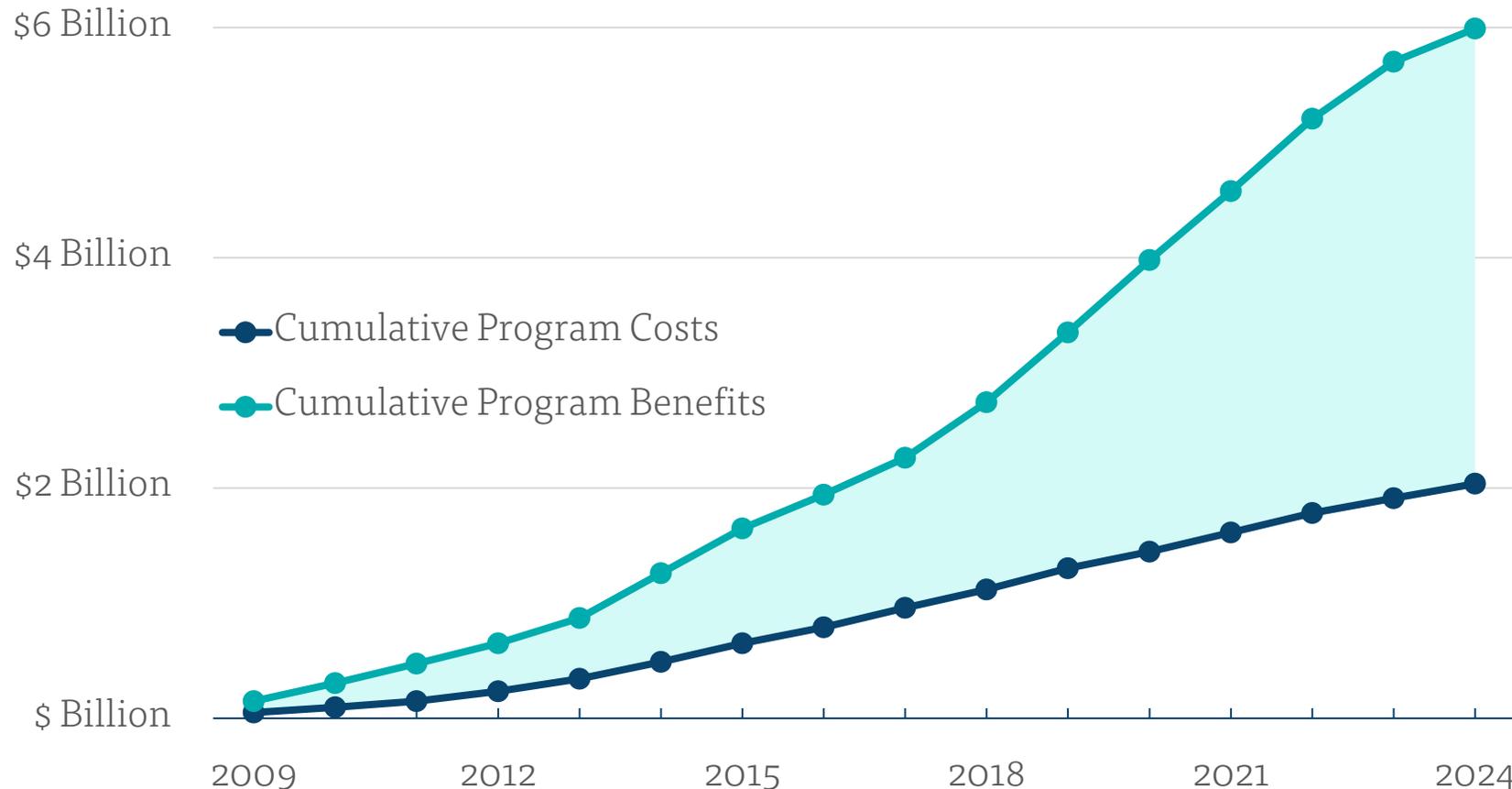


- Lower energy use suppresses the cost of energy supply.
- Less strain on gas and electric system reduces infrastructure costs.

Efficiency is cost effective



Value of Energy Efficiency Program Benefits Compared to Costs

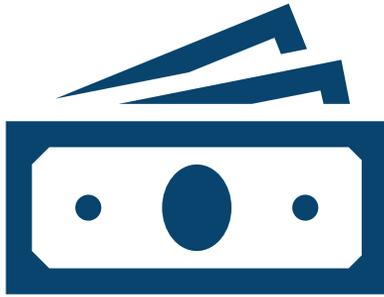


- Since 2009, every \$1 invested in energy efficiency has resulted in \$3 of benefits to Rhode Islanders.
- Benefit to cost ratio (BCR) for the 2026 Program:
 - Electric BCR = 2.01
 - Gas BCR = 1.64

Energy efficiency = jobs & economy



Benefits of energy efficiency for the most recent year of data available (2024).



Energy efficiency programs resulted in...

\$448 million

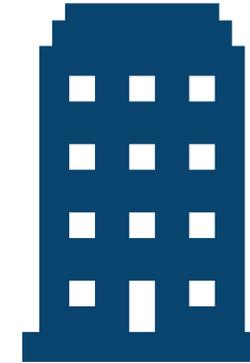
in total benefits to Rhode Islanders



Energy efficiency programs created...

740 jobs

(full-time equivalent)



789 companies

Delivered energy efficiency services

Energy efficiency is paying off for Rhode Islanders.

Efficiency is essential to Act on Climate



Energy efficiency is identified in multiple state analyses as foundational and required at levels far above today's.

*“While the utilities’ **efficiency programs** support a number of weatherization programs and appliance efficiency standards, these **should continue to be expanded**”*

– [EC4 Act on Climate 2022 Update \(p8\)](#)

<https://climatechange.ri.gov/media/1261/download?language=en>

*“To achieve the Act [on Climate], **all scenarios rely on significant energy efficiency measures**, such as building shell retrofits, that far exceed the state’s rate of adoption today”*

– [Technical Analysis in Future of Gas Docket \(p12\)](#)

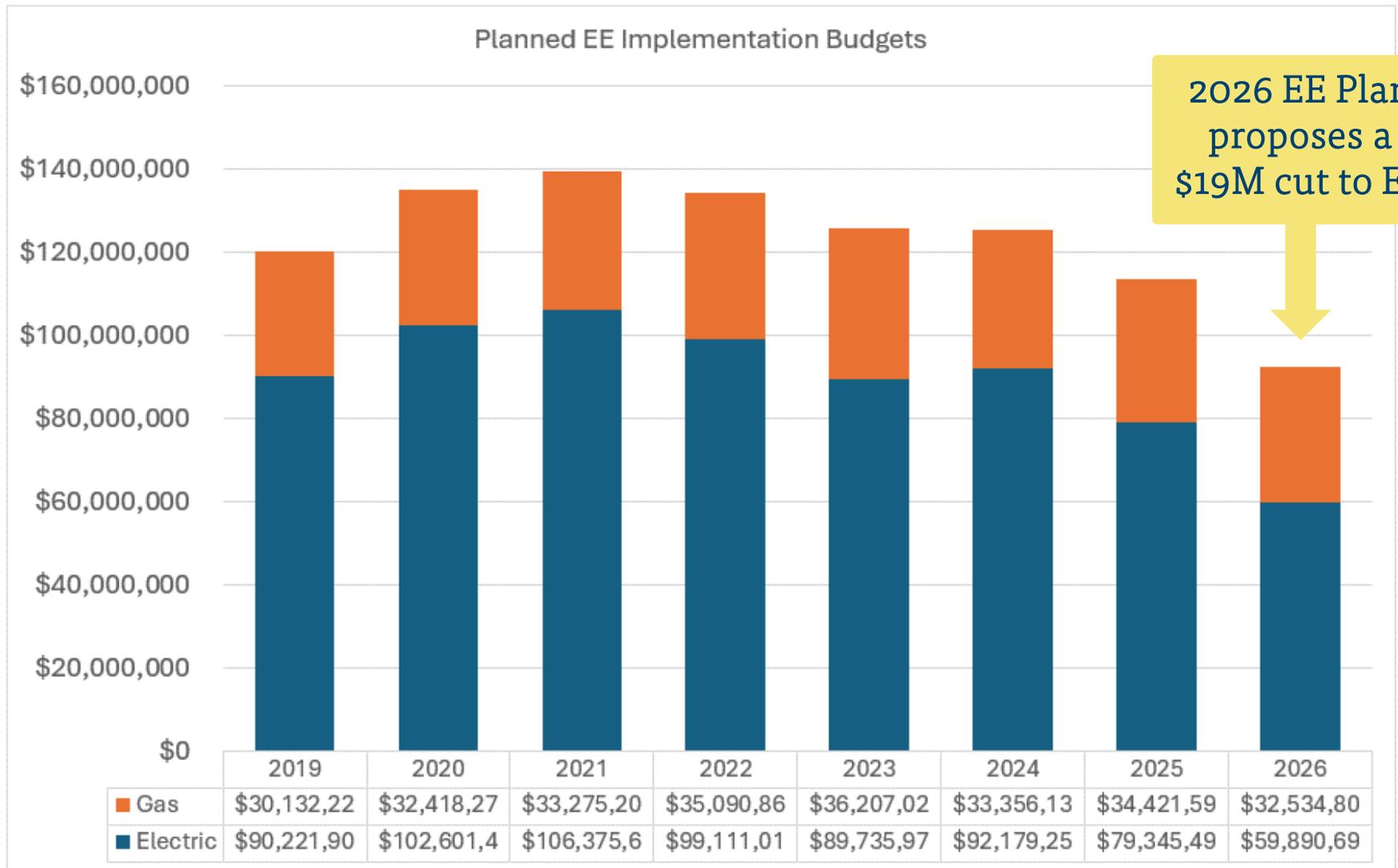
<https://apexanalytics.egnyte.com/fl/04TdzqfvbL#folder-link/Future%20of%20Gas%20Documents/Reports?p=46286d24-f7f2-4d79-a551-6be19cf4bfb5>

*“This transition will be supported by **continued improvements in energy efficiency** and transit, resulting in an overall decline in total energy demand even as the population and economy grow.”*

– [Rhode Island 2025 Climate Action Strategy Executive Summary \(p12\)](#)

<https://climatechange.ri.gov/media/2206/download?language=en>

Energy efficiency investments are decreasing



Energy efficiency cuts have detrimental impacts



50+ elected officials and many regional & national experts spoke out in opposition to these proposed cuts.

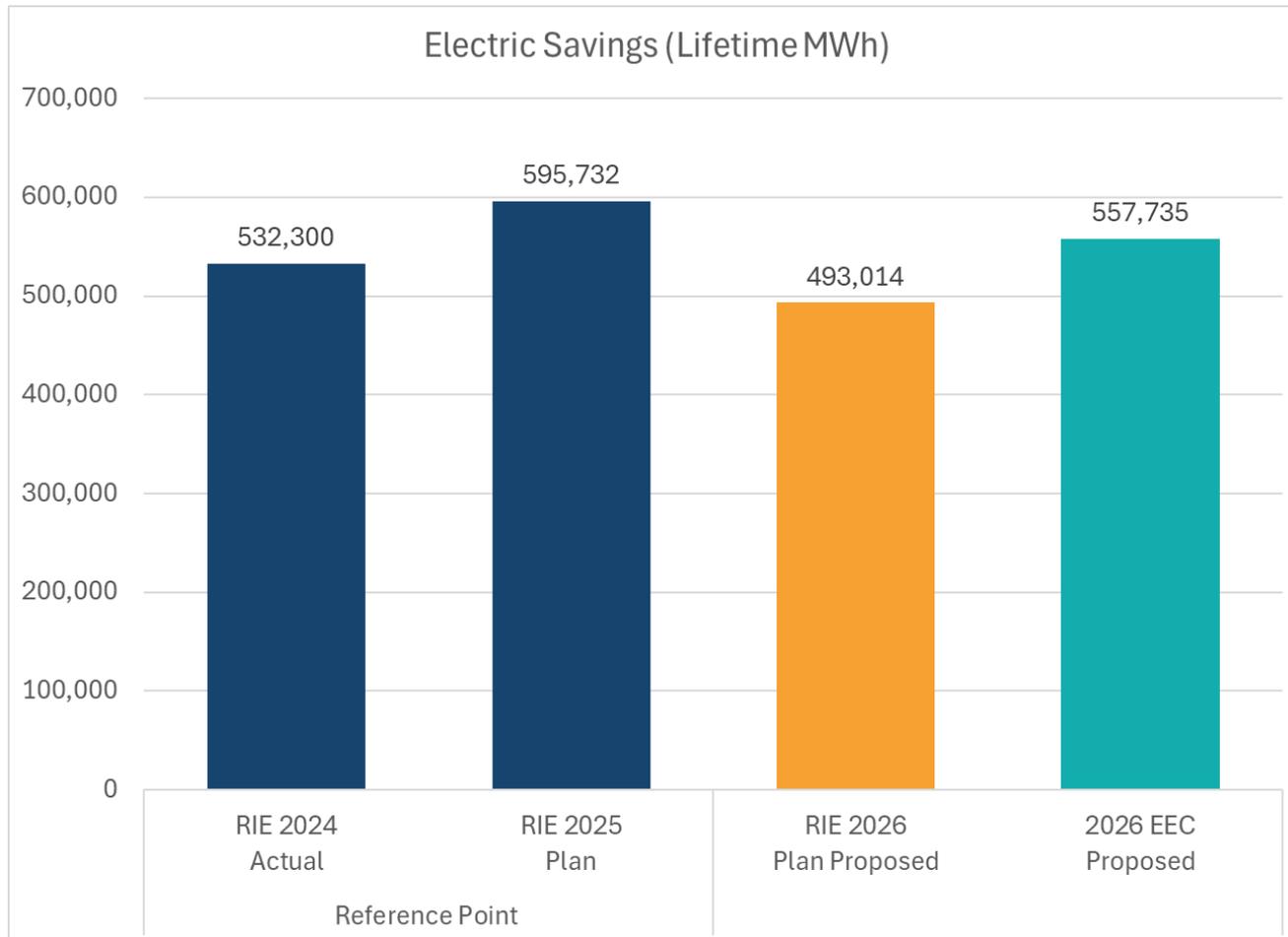
Decreased energy savings goals & dollar investments would mean:

- **Reduced value for ratepayers**
 - Fewer households & businesses able to access efficiency upgrades
 - Higher vulnerability to rising energy prices
 - Fewer tools to manage bills
 - Diminished returns on EE fund contributions
- **Inhibited progress on climate mandates**
 - Increased gap between where we are and what is needed
 - Slowed emissions reductions & associated benefits
- **Reduced societal benefits**
 - Lower economic benefits from avoided energy generation and delivery
 - Less contribution to reliability of our utility systems
- **Negative market signal**
 - Could shrink or stall local workforce development

EEC proposed higher energy savings



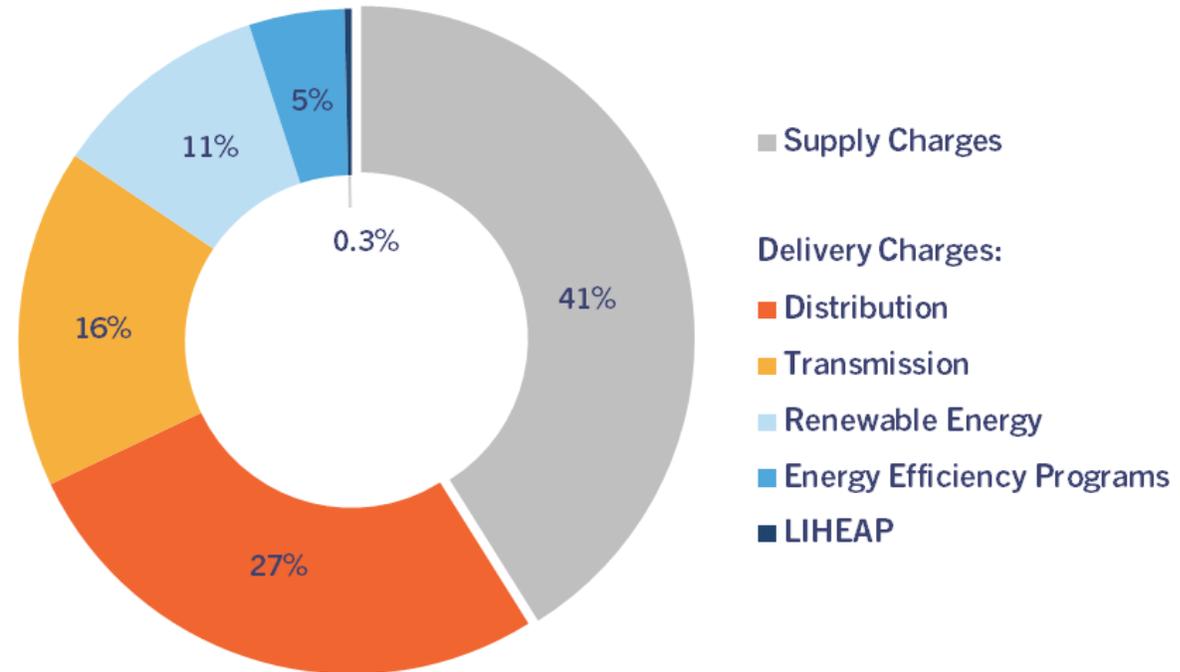
EEC voted to not endorse the 2026 Energy Efficiency Plan – and proposed an alternative.



- EEC proposed a 13% increase in electric energy savings
 - Compared to proposed 2026 EE Plan
 - Focus on cost-efficiency resulted in proportionally lower increase (8%) in additional budget
 - Proportional increase of benefits
- Impact on monthly bill
 - EE charge on customer's bill lower than current charge set for 2025

How does EE Relate to Energy Costs?

On an average bill, supply makes up 41%, and distribution makes up 27%.



Energy efficiency is not a major contributor to energy costs.

Source: Acadia Center analysis of Rhode Island Energy's Breaking Down Your Bill Guide.
Retrieved from <https://www.rienergy.com/site/-/media/rie-jss-app/home/more/frequent-questions/about-your-bill/help-reading-your-bill/Assets/RIE-Breaking-down-your-bill-Guide.ashx>



Energy costs are driven by many factors

- Fossil fuels and *volatile supply costs* – gas
- Rising *transmission & distribution* costs, and failure to adopt low-cost technologies
- Utility *business models* and oversight
- Storms, trees, and *aging infrastructure*



Reliance on gas drives price volatility

- Gas power plants account for *55% of total electricity* generation in New England
 - Over half of RI homes rely on gas as primary heating source
- In the winter, *dual use of gas* for both in-home heating and electric generation drives costs up
- Gas supply *market prices are very volatile*
 - Weather events, global market shifts, prevalence of LNG exports
 - New England is particularly vulnerable

A photograph of several offshore wind turbines in the ocean at sunset. The sky is a mix of orange, red, and blue, and the water is dark blue. The turbines are silhouetted against the bright sky.

Reduce dependence on volatile gas supply to help stabilize energy bills

- ***Move away from gas*** supply expansion as a cost-control strategy
 - Gas supply has increased in the region, but prices remain high due to global LNG markets
- Shift toward a ***more balanced generation mix*** to reduce exposure to fuel price volatility
- Invest in ***local clean energy*** to improve affordability, reliability, and resilience
- Leverage ***municipal aggregation*** to secure more stable and transparent energy pricing than third-party suppliers

Transmission and distribution costs are rising

- **Transmission *spending is growing* in New England**

- From \$58M in 2016 to nearly \$800M in 2023 on upgrades and rebuilds

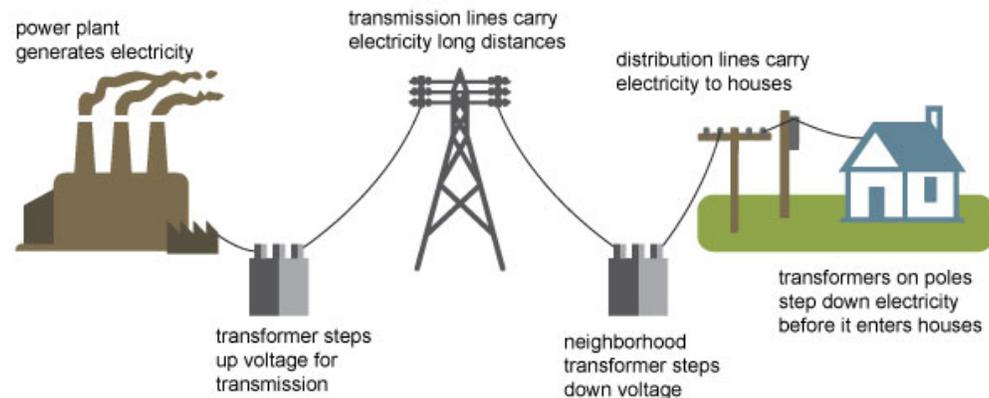
NESCOE asset conditions letter, 8 February 2023. https://www.iso-ne.com/static-assets/documents/2023/02/2023_02_08_nescocoe_asset_conditions_letter.pdf

- **Distribution is the largest source of *utility capital spending***

- Increased 50% between 2019-2023

Lawrence Berkeley National Laboratory. "Retail Electricity Price and Cost Trends, 2024 Update." 2024 December. https://eta-publications.lbl.gov/sites/default/files/2025-01/retail_price_and_cost_trends_2024_update_final_v3.pdf

Electricity generation, transmission, and distribution



Source: Adapted from National Energy Education Development Project (public domain)

Transmission — high voltage, from generation

Distribution — low voltage, to end users



Reign in Rising Transmission & Distribution (T&D) Costs

Average electric bill is 16% transmission and 27% distribution.

How T&D Costs are Set

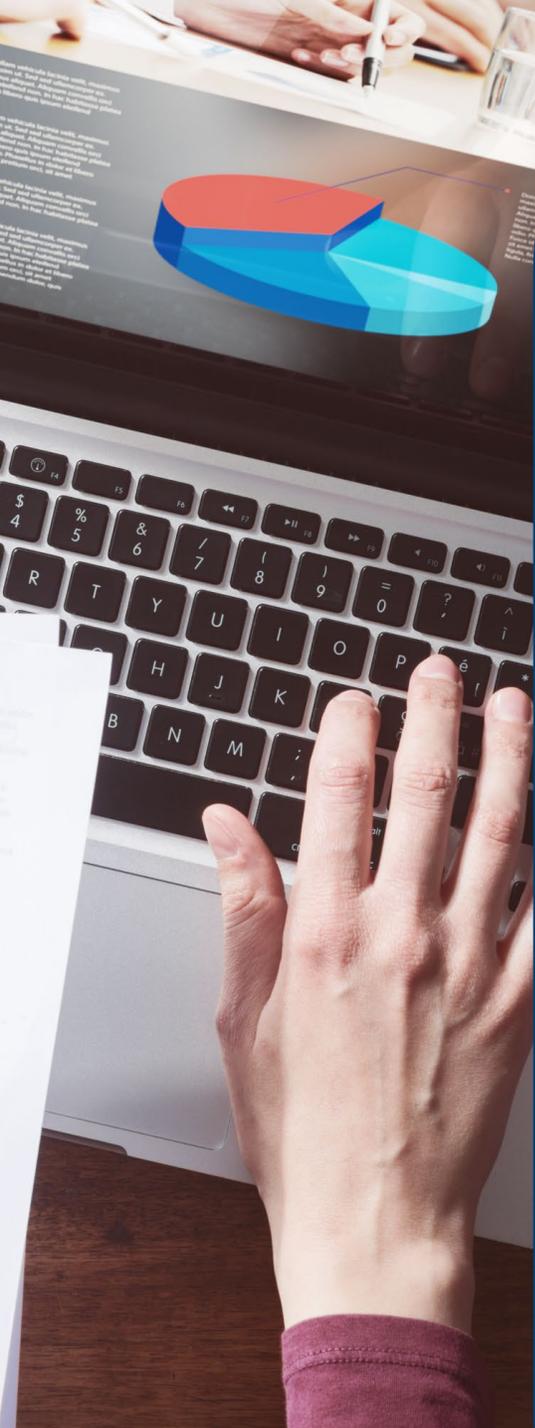
- *ISO-NE (FERC) approves transmission costs*
- *PUC oversees distribution costs*, what is prudent, allowed profits, and what is passed on to ratepayers
- *RIE controls cost data and narrative*

Ways to Influence T&D Costs

- *Enable state siting boards* to add scrutiny and suggest cost-saving measures of transmission upgrades and construction
- *Expand stakeholder participation* in regulatory proceedings
 - *Provide intervenor compensation* so organizations can hire experts and challenge RIE's assumptions

Other utility-based drivers of energy costs

- Investor-owned *utilities earn returns* on capital projects
 - Creates incentive to build expensive new infrastructure
 - Costs get passed on to ratepayers
- *Storm response* and grid repairs drive additional costs
 - Aging infrastructure increases maintenance needs and vulnerability
 - More frequent severe weather, including hurricanes and rainstorms, adds risk
 - New England's heavily forested landscape exposes lines to storm damage



Key Takeaways

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Questions & Discussion

Do you have any questions for us?

Did you learn anything new today?

Was this briefing helpful and/or
how can we improve it for the
future?



Appendix I: Acadia Center Resources

ACADIA CENTER EXPLAINS

Natural Gas Price Volatility in New England

Fall - 2025



WHAT IS NATURAL GAS, AND HOW IS IT USED IN NEW ENGLAND?

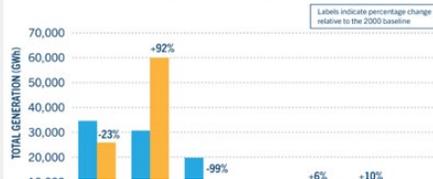
Natural gas is a fossil fuel that is heavily relied upon in New England both as a fuel in power plants to generate electricity and as a fuel in buildings for heating, water heating, and cooking. In 2024, natural gas power plants accounted for **55% of total electricity generation** in New England, and 37% of homes in the region **rely on natural gas** as their primary heating source. In Massachusetts and Rhode Island, more than half of homes rely on natural gas as their primary heating source. New England obtains most of its natural gas via interstate gas pipelines, plus small amounts imported in the form of Liquefied Natural Gas (LNG) via ship.



WHAT IS NATURAL GAS PRICE VOLATILITY, AND WHY IS NEW ENGLAND PARTICULARLY VULNERABLE TO IT?

Natural gas can vary significantly in price across any given season or any given year. These price swings are often volatile—fluctuating substantially even across short periods of time—and the price can be influenced heavily by unpredictable global events. As a result of the region's heavy reliance on natural gas, fluctuations in the cost of this fuel have significant impacts on both electricity costs and the costs of heating homes and businesses.

FIGURE 1
New England Shift in Total Annual Electricity Generation by Resource Type (2000 vs. 2024)



Over the past two decades, natural gas has taken over as the dominant fuel for producing electricity in New England. As the figure below shows, natural gas has steadily displaced other fuel sources in New England's power mix since 2000. The large growth in natural gas use has come at the expense of a more balanced energy generation mix, leaving the region overexposed to price swings. While some renewables like wind and solar are starting to grow, the figure below shows why much more investment in clean

FACT SHEET

Summary: Five Ways Natural Gas Is Driving Costs Up for Heating Consumers

Fall - 2025



In the Northeast, natural gas is both the primary source of in-home heating and the primary fuel for electric generation. Widespread reliance on gas means the cost of gas and related infrastructure is a strong driver of utility bill increases, both for gas and electricity. The gas infrastructure network is vast—Connecticut alone has more than 8,100 miles of pipe.¹

Gas supply, transmission, and distribution costs drive energy bills higher in related and distinct ways. Here are five leading causes for cost increases.

#1: GAS SUPPLY COSTS ARE VOLATILE

- **Market prices for gas supply are significantly volatile.** They can be driven higher by weather (as seen in January 2025) and international market conditions (as seen when Russia invaded Ukraine in 2022).
- Liquid Natural Gas (LNG) is exported from America, which impacts prices at home. Natural gas prices in Europe are over 3x more than in the US,² creating the incentive for American producers to ship more gas to the more expensive market – thereby raising prices at in the States. The amount of LNG exported abroad and not used in local markets has increased over 10x since 2016.³ The U.S. Energy Information Administration (EIA) expects **gas prices will increase 33% or more in 2026** for this reason.⁴
- Excepting trends in Connecticut, **although New England's gas consumption—including for electricity—has been trending down since 2018**, gas supply costs have not decreased because the market for American-produced gas is no longer only

FIGURE 1
Henry Hub natural Gas Price and NYMEX Futures Price



Coming Soon: Renewables and Cost Fact Sheet

Coming Soon: Energy Cost Drivers Fact Sheet

Appendix II: Rhode Island Energy Bill Explanation

Bill Explanation



Rhode Island Energy™

a PPL company

Contact details and the number to call for an electric emergency.

Pay before this date to avoid late charges.

FRONT

Covers the cost of electricity used. Prices change every April and October with no markup.

This is the default supply if you choose not to shop for a supplier.

Shop for an electricity supplier.

Compares last year's usage to this year's.

Total amount you owe.

Covers electricity delivery and mandated public policy charges.

Compares this month's energy use, cost and average temperature to last year.

Rhode Island Energy
a PPL company

RIE Customer Service: 1-855-743-1101
Monday-Friday: 8:00 AM - 7:00 PM
Electric Emergencies: 1-855-743-1101 (24 x 7)
Website: RIEnergy.com

Electric Service to:
Customer Name
0000 Main Street
Anytown, USA

Meter 00000000 Account 00000-00000 Page 1

Due Date **5/29/24** Amount Due **\$238.71**

Usage from Apr 1 - May 1

Supply \$94.33 **Delivery \$135.18**

Usage Charges \$229.51

WANT TO SAVE?
Close blinds and curtains on south- and west-facing windows to block out summer sunlight.

SHOP FOR ELECTRICITY
Visit www.ripuc.ri.gov
Account Number: 00000-00000
Rate: Basic Residential Rate X-XX
Billing Cycle: X Shopping ID: XXXX

Usage Summary

Month	Previous 12 Months (kWh)	Current 12 Months (kWh)	Current Month (kWh)
Jun	1000	1000	1000
Jul	1100	1100	1100
Aug	1200	1200	1200
Sep	1300	1300	1300
Oct	1400	1400	1400
Nov	1500	1500	1500
Dec	1600	1600	1600
Jan	1700	1700	1700
Feb	1800	1800	1800
Mar	1900	1900	1900
Apr	2000	2000	2000
May	2100	2100	2100

May

Category	2023	2024	% Change
Electricity Usage (kWh)	918	909	-1%
Avg. Temp	51°	48°	-3°
Avg. Monthly Cost	\$295.55	\$322.43	+9%

Questions/concerns? Contact us by 5/29/24
1-855-743-1101

Sign back of bill stub to enroll in auto bill pay.

Understanding Your Rhode Island Energy Bill (electricity)

A meter reading calculates energy use in kilowatt hours (kWh) for each billing cycle.

The supply charge is your energy usage (kWh) multiplied by the supplier's current rate.

Monthly messages that can inform and assist.

BACK

kWh Delivered (to Customer)			
Meter Number	Reading Dates	Meter Reading	Kilowatt-Hours
42355669	May 1	06187	909
	Apr 1	05278	
Days Billed: 30		Avg. kWh/Day: 30	Total Delivered: 909
Date Range	Annual Total Usage	Avg Monthly	
Jun 2023 - May 2024	13773 kWh	1148 kWh	

Next meter reading on or about: May 31, 2024 Billing Cycle: 4

Supply Details	
	Supply Charges for Apr 1 - May 1
	Energy Charge 909 kWh at 0.10377 94.33
	Total Supply Charges \$94.33

For questions on these charges, please contact this supplier at:



0-000-000-0000



SUPPLIER
CITY ADDRESS
STATE, ZIP

General Information

Save time and money! Sign up for paperless billing and receive a \$ 0.37 credit on your monthly bill. Enroll today at RIEnergy.com/PaperlessBill.

Will we be able to reach you during a power outage? During a power outage, phones with a direct link to a local phone line are able to operate. Phones that are not directly linked (for example, cordless phones with answering machines) need electricity to make and receive calls. If you would like to register another phone number, such as a cell phone, as your account's primary phone number, please go to RIEnergy.com/myaccount to update your information so that we may be able to reach you with important information.

Account 00000-00000 Page 2

Billing Summary	
Previous Balance	\$815.66
Payment Received - Thank You!	-\$816.03
Balance as of May 3, 2024	\$0.00
Total Supply Charges	\$94.33
Total Delivery Charges	\$135.18
Other Charges/Adjustments	
Gross Earnings Tax	\$9.57
\$229.51 at 0.041667	
Excess Credit	-\$0.37
Total Other Charges/Adjustments	\$9.20
Amount Due By 5/29/24	\$238.71
Account Balance	\$238.71

Delivery Details	
Rate: A-16 Residential-Std Ofr	
Customer Charge	6.00
RE Growth Program Chg	4.02
LIHEAP Enhancement Chg	0.79
Distribution Energy Chg	909 kWh at 0.06118 55.61
Renewable Energy Dist Chg	909 kWh at 0.02233 20.30
Energy Efficiency Programs	909 kWh at 0.01169 10.63
Transmission Charge	909 kWh at 0.04161 37.83
Total Delivery Charges	\$135.18

Understanding Your Bill

Customer Charge - The cost of providing customer related services such as metering, meter reading and billing. These fixed costs are unaffected by the actual amount of electricity you use.

Clear summary of last month's charges, payments, remaining balance and current bill amount.

The amount you owe for the month.

See explanation below.

Explanation of terms used on your bill.

Delivery Details (~60% of average bill)

Rhode Island Energy Delivery Charges Explanation

These charges cover costs associated with delivering electricity to your home safely and reliably, including the operation and maintenance of the grid as well as billing, metering and other customer services.

- **Customer Charge** – Fixed cost for metering, reading, and billing, unaffected by usage.
- **Distribution Energy Charge** – Cost of delivering electricity to your home or business.
- **Transmission Charge** – Cost of maintaining high-voltage lines, regulated by the Federal Energy Regulatory Commission.

Public Policy Charges

State-mandated fees supporting energy assistance, efficiency and renewable programs:

- **RE Growth Program Charge** – Helps customers who produce their own renewable energy, like solar power, by letting them sell extra electricity back to the grid at a set price.
- **LIHEAP Enhancement Charge** – Funds assistance for low-income households' energy and heating needs.
- **Renewable Energy Distribution Charge** – Covers the cost of net metering, which gives credits to solar and wind energy. It also helps pay for long-term renewable energy contracts.
- **Energy Efficiency Programs** – Funds programs that help customers reduce energy use and costs.