

2024 EEC Annual Report

FIRST DRAFT

April 2024

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**Rhode Island Energy Efficiency and Resource Management Council
One Capitol Hill, Providence, RI 02908
eec.ri.gov**

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EXECUTIVE SUMMARY

RI EERMC 2023 Annual Report EXECUTIVE SUMMARY

ENERGY EFFICIENCY IS PAYING OFF FOR RHODE ISLANDERS



In 2022, energy efficiency programs in Rhode Island created...

708 jobs
(full-time equivalent)



In 2022, energy efficiency programs resulted in...

\$489 million
in total benefits to Rhode Islanders



Over their lifetime, energy efficiency measures installed in 2022 will prevent more than...

698,000 metric tons of greenhouse gas emissions



980 companies
delivered energy efficiency services in 2022



Equivalent to taking over...
155,000 cars
off the road for one year

POLICY RECOMMENDATIONS

1

Fully leverage energy efficiency to meet Act on Climate mandates

5

Coordinate and Supplement Energy Efficiency Programming with Federal Funding

2

Support workforce development for clean energy and energy efficiency

6

Identify and Maximize Opportunities for Weatherization and Addressing Pre-Weatherization Barriers

3

Make Energy Efficiency Programs More Accessible and Equitable

7

Align Programming with Federal Justice40 Equity Guidelines

4

Embed Equity in Energy Programs

8

Evaluate the State's Energy Future

The **Rhode Island Energy Efficiency & Resource Management Council (EERMC)** is a group of Governor-appointed stakeholders that work to ensure all Rhode Islanders receive the maximum benefits of energy efficiency. Learn more at www.rieermc.ri.gov.

LETTER FROM THE CHAIR

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LETTER FROM THE EXECUTIVE DIRECTOR

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ABOUT THE EEC

COUNCIL MEMBERSHIP

The EEC consists of fourteen members appointed by the Governor with the advice and consent of the Senate. Ten members are voting members with knowledge of energy regulation and law, environmental issues pertaining to energy, energy design and codes, energy efficiency education and employment tracking, and energy users in the following sectors: large commercial and industrial, small commercial and industrial, large non-profit, residential, low income, and municipal. Four members are ex-officio, non-voting members including the Commissioner of the Office of Energy Resources and others representing an electric distribution entity, a gas distribution entity and the fuel oil or heating fuel industry. Members serve voluntarily and meet year-round.

COUNCIL MEMBERS (as of May 2024)

Voting Members

Harry Oakley, Chair

Representing Small Commercial and Industrial Users
Director of Energy, Sustainability, Procurement, & Corporate Facilities, Ocean State Job Lot

Peter Gill Case, Vice Chair

Representing Expertise in Energy Design and Code
Principal, Truth Box, Inc.

Sue AnderBois

Representing Expertise in Environmental Issues
Climate & Energy Program Manager,
The Nature Conservancy

Dave Caldwell

Representing Energy Efficiency Education and Employment Tracking
Vice President, Caldwell & Johnson, Inc.

Jordan Day

Representing Municipalities
Deputy Director of Senate Policy,
Rhode Island State Senate

Non-Voting, Ex-Officio Members

Brett Feldman

Representing Utilities
Customer Energy Management, RI Energy

Priscilla De La Cruz

Representing Expertise in Residential Users
Director of Sustainability, City of Providence

Joe Garlick

Representing Small Non-Profit Institutions
Executive Director, NeighborWorks Blackstone River Valley

Bob Izzo

Representing Large Commercial & Industrial Users
Director, Energy & Utility Management, CVS Health

Thomas Magliocchetti

Representing Large Non-Profit Users
Consultant, Joint Commission Resources, Inc.

Kurt Teichert

Representing Energy Regulation and Law
Senior Lecturer in Environmental Studies,
Brown University

Christopher Kearns

Executive Director, EEC
Interim Commissioner, RI Office of Energy Resources

John Santoro

Representing Expertise in Delivered Fuels
CEO/Owner, Santoro Family of Companies

Appointments Pending

Voting Member Low Income Users

Ex-Officio Member Representing Utilities

COUNCIL PURPOSE

Maximizing Program Benefits for All Rhode Islanders

The Energy Efficiency Council (EEC) has been providing an integrated, comprehensive, public, stakeholder-driven organizational structure to secure for Rhode Island's energy consumers the economic and environmental benefits of energy efficiency since the Council's formation in 2006 under amendments to R.I.G.L. § 42-140.1.

In representing small and large businesses, non-profit organizations, homeowners and renters, and municipalities and government, the EEC oversees highly successful programs that allow Rhode Islanders to access energy efficiency instead of having to purchase more costly energy supply. A valuable outcome of these programs is to also support a growing industry of Rhode Island energy efficiency service and product suppliers, which support local job growth and in-state financial investments.

The effects of energy efficiency in the last decade now cumulatively account for approximately 20% of Rhode Island's electricity needs. The state's consistent investments in energy efficiency have resulted in Rhode Islanders paying half as much for its energy supply than they otherwise would have.

Rhode Island consumers are the focus of Least Cost Procurement, so ensuring the consumer voice in energy efficiency procurement decisions is critically important. The EEC, assisted by its expert consultant team, provides meaningful input into Rhode Island Energy's efficiency procurement plans, and adds significant stability to investment decisions. The EEC's model for structured stakeholder participation has been successfully deployed annually in a nationally-recognized process to set appropriate energy saving targets and then establish implementation plans that are equitable, cost-efficient and cost-effective to maximize benefits for all Rhode Islanders.

How Energy Efficiency is Funded

Energy efficiency is the most cost-effective way to reduce energy use and address climate change in Rhode Island. The funds that enable the implementation of the state's efficiency programs are collected from ratepayers via the System Benefits Charge (SBC) on electric and natural gas bills.¹ Thorough and careful evaluation, planning, and oversight ensure the funds support cost-effective energy efficiency that is less than the cost of supply, as required by the Least Cost Procurement law. Sustained and robust efficiency funding is important to ensuring Rhode Islanders continue to benefit from strong efficiency programs for years to come.

Energy Savings Targets

Every three years, the EEC is required to develop targets for annual electric and natural gas reductions as a result of energy efficiency programs administered by Rhode Island Energy. The targets support the development of Rhode Island Energy's triennial and annual energy efficiency program plans by providing guidance on potentially available cost-effective efficiency resources in the state. The EEC works with its consultant team to conduct in-depth analysis, research, and stakeholder engagement to establish achievable, cost-effective levels of energy efficiency, which are then used to inform proposed energy savings targets. Once approved by the Council, the targets are submitted to the PUC for final review and approval. Once established, the targets are used to guide the development of the ensuing triennial and annual energy efficiency program plans.

¹ Delivered fuels customers do not pay into the Systems Benefit Charge.

2023 ACHIEVEMENTS AND HIGHLIGHTS

2022 ACHIEVEMENTS & HIGHLIGHTS

ENERGY EFFICIENCY IS PAYING OFF FOR RHODE ISLANDERS

REDUCES EMISSIONS

Over their lifetime, efficiency measures installed in Rhode Island in 2022 will prevent more than...



698,000

metric tons of greenhouse gas emissions

Equivalent to taking over...



155,000 cars

...off the road for one year

LOWERS ENERGY COSTS

In 2022, energy efficiency programs resulted in...

\$489 million



...in total benefits to Rhode Islanders

SUPPORTS THE ECONOMY

In 2022, energy efficiency programs in Rhode Island created...

708 jobs (full-time equivalent)



980 companies

...delivered energy efficiency services in 2022

2022 ENERGY EFFICIENCY PROGRAM RESULTS



Total Participants:
450,581



Cost Per Lifetime kWh of Electricity Saved: \$0.11



Utility Program Cost:
\$112 million



Cost Per Lifetime therm of Natural Gas Saved: \$0.86



Total Benefits:
\$489 million



Electric Savings as a Percent of 2022 Electric Load: 1.42%

NATION LEADING RESULTS

Rhode Island remains a nationally recognized leader in implementing high-quality energy efficiency programs. Since 2009, Rhode Island has consistently ranked among the top 10 states according to the American Council for an Energy Efficient Economy’s (ACEEE) State Energy Efficiency Scorecard, which is now published bi-annually. In the most recent report, published in 2022, Rhode Island ranked #7 overall, #1 in state-led initiatives, and #4 in utility programs. The state received recognition for its established policy framework, incentives, and standards that drive savings through utility programs. The report also calls out Rhode Island’s efficient new construction program and improved sustainability in the transportation sector. The next Scorecard is expected to be published in 2024. The full report can be accessed at <https://www.aceee.org/state-policy/scorecard>.

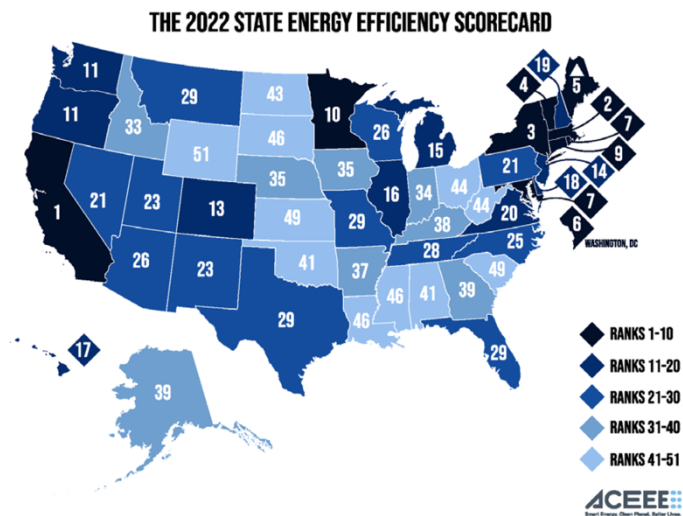


Table 2. Summary of State Scores in the 2022 ACEEE State Energy Efficiency Scorecard

Rank	State	Utility and public benefits (15 pts.)	Transportation policies (13 pts.)	Building energy efficiency policies (12 pts.)	State government initiatives (4.5 pts.)	Industrial policies (2.5 pts.)	Appliance efficiency standards (3 pts.)	Total score (50 pts.)	Change in rank from 2020
1	California	15	12	10	4.5	2.5	3	47	0
2	Massachusetts	14	11.5	10.5	4.5	2.5	1.5	44.5	0
3	New York	11.5	11.5	8.5	4.5	2.5	0.5	39	2
4	Vermont	11	9	9	4	1	2.5	36.5	-1
5	Maine	10	8.5	8.5	4.5	2.5	1.5	35.5	11
6	District of Columbia	8	11	8.5	3	2.5	2	35	2
7	Rhode Island	12.5	7.5	6	4.5	1.5	1	33	-3
7	Maryland	9.5	10	8	4	0.5	1	33	-1
9	Connecticut	9	10	7	4	2.5	0	32.5	-2
10	Minnesota	12	8	6.5	3	2.5	0	32	-1
11	Oregon	7	10	6	4.5	2	2	31.5	-2
11	Washington	6.5	9.5	7.5	3	2.5	2.5	31.5	0
13	Colorado	9	6.5	8	3	2	2	30.5	-2
14	New Jersey	9.5	7	6.5	3	1	1.5	28.5	3
15	Michigan	13	5	4	2.5	1.5	0	26	-2
16	Illinois	11	6	5	3	-0.5	0	24.5	-1
17	Hawaii	8.5	5	4.5	2	1.5	1.5	23	-3
18	Delaware	4.5	7.5	5	3	1.5	0	21.5	2

ENERGY EFFICIENCY AS A RESOURCE

In general, there are two options for meeting the energy needs of consumers, businesses, and institutions: producing energy supply or reducing energy demand. In other words, energy efficiency is capable of displacing energy supply. Because efficiency programs are generally significantly less expensive to implement than acquiring conventional supply (e.g. buying electricity), efficiency is widely considered to be not only a resource, but often the “first fuel” of choice. Efficiency programs can also defer expensive upgrades to utility infrastructure, improve system reliability, reduce peak demand, and increase energy security.

Cumulative Impact of Energy Efficiency on RI Electric Use

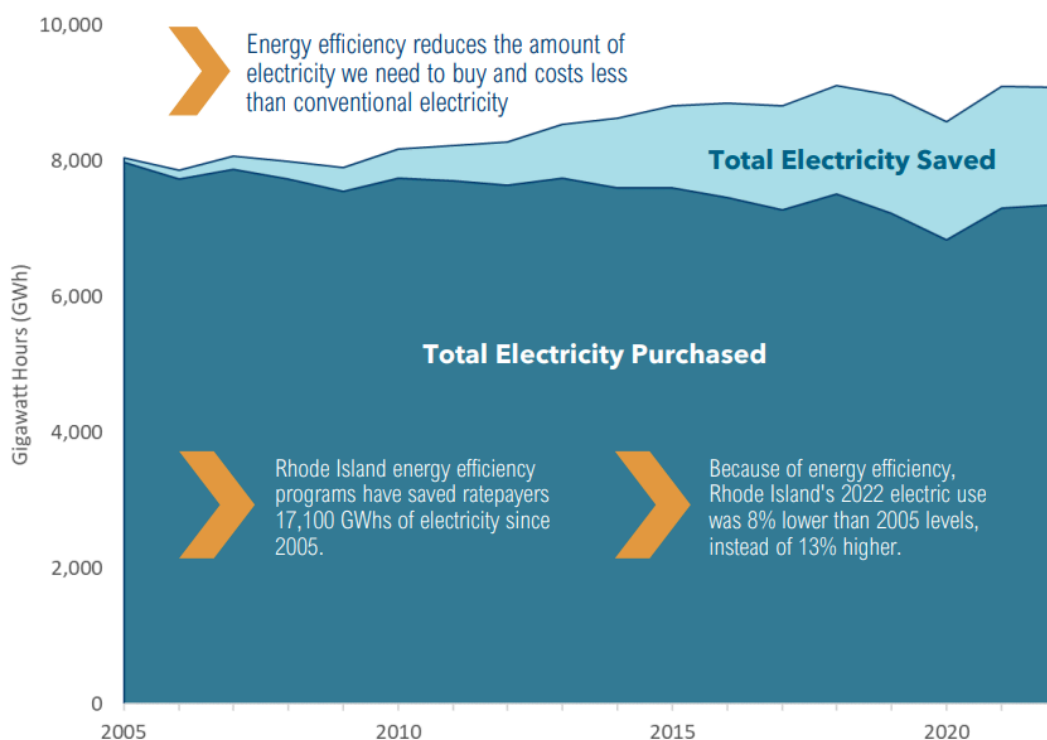


Figure 1. Cumulative Impact of Efficiency Investments on RI Electric Supply Requirements (2005-2022).

Figure 1. Cumulative Impact of Efficiency Investments on RI Electric Supply Requirements (2005-2023). Percentages represent the percent of load that cumulative electric savings since 2005 are covering.

Since 2005, Rhode Island consumers in Rhode Island Energy’s service territory have purchased over **XXX,000 GWhs** of electricity. In that same period of time, ratepayer funded energy efficiency programs have saved Rhode Island consumers about **XX,000 GWhs** of electricity.

The impact of these savings means that instead of Rhode Island’s electric load being **XX%** higher than it was in 2005, it is actually **XX%** lower. Additionally, because savings persist over the lifetime of the measures installed, the cumulative savings realized in 2023 account for over **XX%** of what the electric load would have been absent the energy efficiency programs.

THE VALUE OF ENERGY EFFICIENCY

Energy efficiency can directly lower energy bills for consumers who participate in programs, but it also has much broader benefits. Energy efficiency is one of the easiest and most cost-effective ways to reduce energy costs for all consumers, support the local economy, and combat climate change.

When we use less energy, we actually lower energy costs for everyone. By reducing the state's demand for power, for example, we reduce the impact of increasing energy prices, and those savings are passed on to all electric customers. Additionally, using less energy results in less strain on energy generation and distribution infrastructure, which lowers the costs of maintaining and expanding it – costs that the utility passes on to ratepayers. This effect also increases the energy system's reliability and security.

Value of Energy Efficiency Program Benefits Compared to Costs

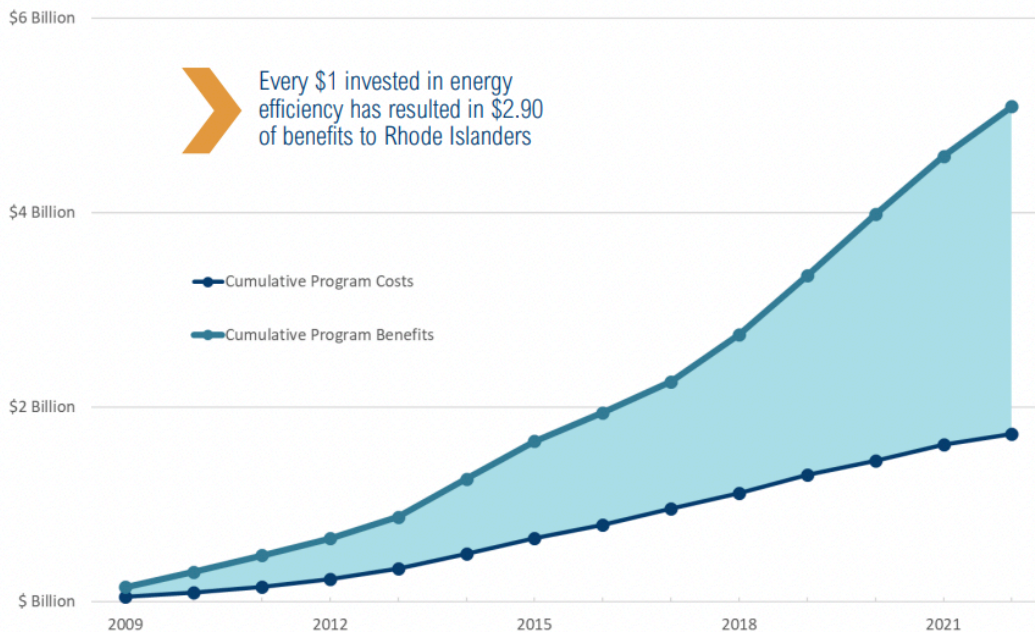


Figure 2. Cumulative Value of Energy Efficiency Program Benefits Compared to Program Costs Over Time.

Another important benefit is that, because energy efficiency programs are typically implemented by local workforces, it supports jobs and the economy. Just as importantly, efficiency is a critical tool for addressing climate change and the resulting economic, health, and environmental impacts.

Figure 2 illustrates how over time the cumulative benefits of energy efficiency programs far outweigh the costs of implementation. Since 2009, Rhode Island's ratepayer funded energy efficiency programs have provided over **\$5.2 billion** in realized benefits. This compares to total program costs of about **\$1.8 billion**, meaning that every \$1 invested in energy efficiency has resulted in **\$2.90** of benefits to Rhode Islanders. Achievement of the energy savings goals set in the 2024 Energy Efficiency Program Plan will push the total realized benefits to over **\$5.5 billion**.

2024 POLICY RECOMMENDATIONS

R.I.G.L. § 42-140.1-5 requires that the EEC “(s)ubmit to the joint committee on energy an annual report... regarding the activities of the Council, its assessment of energy issues, the status of system reliability, energy efficiency and conservation procurement, and its recommendations regarding any improvements which might be necessary or desirable.” The EEC submits the following recommendations that will support energy and utility cost reductions for Ocean State residents and businesses; support industry and employment across the state’s clean energy sector; and further Rhode Island’s position as a national leader in energy efficiency and resource conservation.

1. FULLY LEVERAGE ENERGY EFFICIENCY TO MEET ACT ON CLIMATE MANDATES

Energy Efficiency is a key, foundational strategy to achieving the Act on Climate mandates and every effort must be made to coordinate the delivery and expand the programming of our energy efficiency portfolio. The EEC should be integrated with Act on Climate initiatives to help achieve these Act on Climate mandates.

2. SUPPORT WORKFORCE DEVELOPMENT FOR CLEAN ENERGY AND ENERGY EFFICIENCY

A well-trained workforce to install robust energy efficiency measures and modernize heating and transportation equipment will be necessary to achieve the statewide decarbonization goals. Therefore, current efforts by the RI Department of Labor & Training, the Governor’s Workforce Board, and others should be ramped up and focused on training for this work. Where possible, federal funding should be pursued in coordination with existing clean energy programs. Historically marginalized communities may offer unique opportunities to both train new workers in fields ripe for employment growth and also to better serve these marginalized communities moving forward. Supporting businesses in disadvantaged communities can create virtuous cycles as these businesses provide services to their neighbors and colleagues.

3. PRIORITIZE EQUITABLE ACCESS IN ENERGY PROGRAMS

Rhode Island energy efficiency programs should constantly work to ensure that all customers and segments of the market have access to the benefits of energy efficiency savings.² There should be a concerted effort to reach those who are economically vulnerable and those who are currently above poverty guidelines but need significant assistance to make efficiency investments. Specifically, continued focus and resources should be placed on implementing strategies and providing new and different customer support mechanisms to realize increased participation in energy efficiency offerings from the Income Eligible and Multifamily sectors. Efficiency improvements in these sectors can have significant impacts on household living expenses and improve quality of life for Rhode Islanders. Increased engagement with underserved small businesses will also help drive emissions and energy reductions in the state.

The passing of the historic Bipartisan Infrastructure Law and the Inflation Reduction Act has resulted in once-in-a-generation investment in energy efficiency, decarbonization, and workforce development. These funding opportunities should be maximized for Rhode Islanders to provide a significant boost to the clean energy economy and expand upon the existing programming in the state.

Finally, President Biden’s Executive Order 14008 set a goal that a minimum of 40% of the overall benefits of federal investments flow to disadvantaged communities overburdened by pollution. Aligning state energy programming with this goal can provide a framework for ensuring that disadvantaged and historically marginalized communities are able to access and benefit from state energy programs.

² Please see the Equity Working Group’s Final Report for 2023 for additional information, available online at: https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2023-10/2335-RIE-Attachment11_Bates.pdf.

4. COORDINATE AND SUPPLEMENT EFFICIENCY PROGRAMMING WITH FEDERAL FUNDING

The passing of the historic Bipartisan Infrastructure Law and the Inflation Reduction Act has resulted in once-in-a-generation investment in energy efficiency, decarbonization, and workforce development. These funding opportunities should be maximized for Rhode Islanders to provide a significant boost to the clean energy economy and expand upon the existing programming in the state.

5. IDENTIFY AND MAXIMIZE OPPORTUNITIES FOR WEATHERIZATION AND ADDRESSING PRE-WEATHERIZATION BARRIERS

Weatherization, including improving insulation and air sealing, is an essential component for improving energy efficiency in Rhode Island. Weatherization reduces burden on the energy grid, improves the comfort of homes and buildings for occupants, and saves money for residents and building owners. Pre-weatherization barriers such as health and safety concerns, including asbestos, vermiculite, and knob-and-tube wiring, can all prevent weatherization projects from moving forward. These issues are particularly prominent in Rhode Island, which has one of the oldest housing stocks in the nation. Identifying funding and supporting a workforce to address these barriers will be essential for weatherizing homes and buildings in Rhode Island and to help decarbonize the building sector.

6. ENSURE THE STATE'S CLEAN ENERGY FUTURE

At the writing of this report, the Public Utilities Commission is hosting a conversation among key stakeholders to explore the future of the natural gas distribution system. The EERMC looks forward to reviewing the results of this analysis. The Executive Climate Change Coordinating Council is also developing plans for decarbonizing the statewide economy by 2050. These economywide analyses will be critical for guiding the future of the energy systems in Rhode Island. Evaluation and alignment of the delivered fuels sector will also be essential for achieving the mandates of the 2021 Act on Climate.

EEC PRIORITIES FOR THE 2025 ENERGY EFFICIENCY AND SYSTEM RELIABILITY PROCUREMENT ANNUAL PLANS

As part of its fulfillment of the roles and responsibilities legislated in R.I.G.L. §42-140.1, the Energy Efficiency Council (EEC or Council) provides the following input and direction in the form of Priorities to support development of the 2025 Annual Energy Efficiency Program Plan (EE Plan) for submittal to the RI Public Utilities Commission (PUC) by October 1, 2024 by Rhode Island Energy. The EEC also has clearly defined responsibilities in the PUC-issued Least Cost Procurement Standards (LCP Standards) to both support the development of the EE Plan and to vote on whether to endorse the EE Plan to the PUC. Should the EEC vote not to endorse the EE Plan, the EEC is then directed to document reasons for that decision and submit them to the PUC for its consideration.

Comply with Least Cost Procurement Standards

- The 2025 EE Plan will comply with the LCP Standards, including any updates to the LCP Standards as may be approved by the PUC, which lay out a clear structure and process for achieving the goals of least cost procurement and define the roles and responsibilities for the different program administration and oversight entities, including clear direction for strategy and planning of annual EE plans.
- Given the clear, outcome-oriented direction provided in the LCP Standards, the 2025 EE Plan should clearly indicate how each Standard is applied.

Comply with the Act on Climate

- 2025 EE Plan savings goals will be set consistently with the Act on Climate to ensure EE programs contribute an appropriate share of carbon emissions reductions.
- Rhode Island Energy will reduce investment in fossil fuel heating equipment and increase investment in weatherization.
- Rhode Island Energy will set specific goals for replacing electric resistance heating and hot water equipment with heat pump technologies.
- Rhode Island Energy will design and implement programs that take into full consideration the insights and outcomes from the Future of Gas Docket at the PUC.

Incorporate Stakeholder Input

- The Priorities indicated by the members of the EE Technical Working Group and Equity Working Group will be appropriately reflected throughout the 2025 EE Plan, and that Rhode Island Energy's documentation and response to the proposed Priorities will be presented in a transparent and comprehensive format.
- Rhode Island Energy's proposed customer feedback activities will be sufficiently robust and capture actionable customer-driven input, and it will be appropriately reflected in the 2025 EE Plan, and that Rhode Island Energy's documentation of the activities and their responses to customer input will be presented in a transparent and comprehensive format as a Plan Appendix.

Ensure an Effective and Efficient Development and Review Process

- The *2025 Plan Development Calendar*, developed in collaboration by the EEC Consultant Team, Rhode Island Energy, and OER, and discussed by the EEC, will be followed by all relevant parties to assure necessary time is afforded to the EEC and stakeholders reviewing and reaching a clear understanding of the content of the 2025 EE Plan, sufficient to make informed decisions on whether to endorse the Plan.
- The 2025 EE Plan should include key metrics that will be documented and reported to the EEC and stakeholders at minimum as part of the standard Quarterly Program Performance Reports. Metrics will be identified through a collaborative process between the EEC, RI Energy, and other stakeholders. Metrics identified through this process will be defined in the Plans and included in Quarterly Reports.

Set Ambitious Energy Savings Goals

- Rhode Island Energy will set ambitious Annual Plan goals for 2025 that meet EERMC-recommended targets or explain any gaps between the goals and targets, and signal to the industry the intent to grow energy efficiency programs and participation.
- Rhode Island Energy will increase emphasis on improving designs for programs with a pattern of recent underperformance.
- Rhode Island Energy will demonstrate a clear growth trajectory for successful programs that are highly cost-effective, lower than the cost of supply, and provide net utility system benefits.

Increase Participation in Underserved Communities

Rhode Island Energy will...

- Work with relevant parties to discuss, vet, and if deemed appropriate, propose a performance incentive mechanism that includes a discrete equity component in the performance incentive mechanism, such as a service quality adjustment tied to equity goals.
- Implement recommendations of the Equity Working Group.
- Identify clear and objective determinations of success, and regularly report progress in achieving EWG recommendations and other strategies to increase participation by historically underserved customers.
- Increase financial investments in serving historically underserved populations, including enhanced financial incentives to those customers across efficiency offerings.
- Identify and implement program improvements that will facilitate ease of participation, including through streamlining of participation steps, documentation requirements, and income verification processes.
- Enhance marketing and outreach to underserved populations.
- Develop and implement a targeting framework that focuses on all communities with high proportions of underserved and environmental justice populations and historical participation lower than average statewide participation levels.
- Enhance and increase municipal and other community-based partnerships, particularly to include partnerships with underserved communities.
- Use findings from the 2023 Small Business Process Evaluation in order to increase participation by small and microbusiness customers.
- Contract a qualified third-party vendor to develop a Language Access Plan (LAP) that sets forth how Rhode Island Energy will provide services to individuals who are non-English speaking or have limited English proficiency at each step of the customer journey.
- Target workforce development efforts to serving contractors in underserved communities (detailed recommendations on workforce development covered in separate priority). RI Energy should actively coordinate with state entities to leverage available state/federal funds and workforce development offerings.

Conduct Targeted Workforce Development

Rhode Island Energy will...

- Implement recommendations of the Equity Working Group.
- Deliver targeted workforce development for small/minority- and women-owned business enterprise (MWBE) contractors.
- Deliver workforce development focused on new and important technologies for meeting statewide climate goals, maximizing ratepayer benefits, and controlling ratepayer costs.
- Demonstrate responsiveness to recommendations from the Workforce Needs Assessment, which it completed in 2023.
- Increase investment in workforce development to expand training for existing workers, mitigate barriers to entry for new workers, and advertise training/job opportunities for workers.

Revisit the Cost of Supply Methodology

Rhode Island Energy will...

- Work with stakeholders to revisit its methodology for assessing and comparing costs of the EE programs and portfolio with the cost of procuring incremental energy supply.
- Develop and report, as appropriate, multiple sets of calculations that relate various subsets of costs of supply to costs of efficiency.
- Remove the low-income discounts from the cost of supply and benefit cost calculations given that they represent a double counting since those costs and benefits are already captured in the Company's cost of supply calculation.
- Investigate and identify, with input from Stakeholders, appropriate reference scenarios for EE benefit cost analysis under the Act on Climate's decarbonization assumptions.
- Utilize updated Avoided Energy Supply Components in New England (AESC) data sets in all relevant analysis, including implementing updates to recently completed forward-looking analyses where the results could reasonably be expected to materially change as a result of the application of updated avoided cost values.

Develop and Utilize a Framework for Justifying Programs that Exceed Cost of Supply, but Support LCP Standards
Rhode Island Energy will...

- Work with stakeholders to develop a framework for how it can justify supporting programs that exceed cost of supply when out of state and delivered fuels costs and benefits are excluded, but support other areas of LCP Standards.
- Work with stakeholders to clarify the basis for support and/or revisit design approaches for programs that do not meet cost-effectiveness and/or cost of supply thresholds under the scenarios stated in the PUC's ruling on December 19, 2023.

Ensure Robust Coordination on Federal Funding Opportunities

Rhode Island Energy will...

- Demonstrate in EE Plan materials its coordination efforts with OER on Federal funding opportunities
- Include in its 2025 Plan any outcomes of its forthcoming filing on March 18, 2024 related to how it allocates funding from System Benefit Charges to EE programs and measures where federal funded EE offerings are made available.

Update the Carbon Accounting Methodology Used in EE Plans

- Lead a Stakeholder process to revisit and refine how avoided emissions are determined and tracked within the programs. While the Commission did not make a formal ruling on this matter, it was raised at the December 19, 2023 Open Meeting as something that the PUC would like to see better clarity on, particularly in light of the Act on Climate mandates.

SYSTEM RELIABILITY PROCUREMENT (SRP) PLAN PRIORITIES:

- Rhode Island Energy will demonstrate continued responsiveness to Council and other stakeholder input, including during the implementation of the 2024-2026 SRP Three Year Plan.
- Rhode Island Energy will submit any draft SRP Investment Proposals to the Council at least six weeks prior to the Company's intended filing date for any such proposals.
- To support stakeholder engagement, Rhode Island Energy will ensure sufficient opportunities for stakeholder engagement and substantive contributions during SRP planning and implementation, including but not limited to SRP Technical Working Group meetings and Council and other stakeholder review of draft and final SRP Investment Proposal materials.
- To achieve continued methodological development, Rhode Island Energy will actively pursue further development of benefit cost analysis and assessment of internal energy efficiency and distributed energy resource solutions to grid needs.
- To ensure robust Non-Pipes program implementation, Rhode Island Energy will ensure Non-Pipes Alternative (NPA) program implementation provides regular updates to the SRP TWG, and that system need forecasting is conducted in a transparent manner with adequate lead time to enable identification and screening for multiple NPA opportunities in this three-year plan cycle.

2023 PROGRAMS & INITIATIVES

RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

Rhode Island Energy offers comprehensive energy efficiency solutions for all Rhode Island residential customers. The goals of these offerings and services are to educate residents on saving energy and reducing energy bills while improving the comfort in their homes. The energy efficiency solutions concentrate on creating energy efficient homes through education and energy-efficient products; facilitating market transformation for efficient products and zero-energy homes and buildings; and educating Rhode Islanders on energy efficiency.

RI Energy continues its work to get the word out about the residential programs available to customers. In 2023, Rhode Island Energy attended and hosted several local events to promote efficiency, including:

- Woonsocket Public Library Customer Assistance Expo
- Ocean State Center for Independent Living Lunch and Learn
- Ocean State Job Lot Earth Day
- Providence Veterans Affairs Career Fair
- Cumberland Carbon Footprint Fair

The air source heat pump incentive for electric resistance heating customers remained effective and electric savings far exceeded the goals for the EnergyStar HVAC program. Additionally, enhanced incentives were offered to oil or propane heating sources with additional Regional Greenhouse Gas Initiative funding.

In its eleventh year, the Rhode Island Home Energy Reports (HER) program continues to encourage energy efficiency behavior through personalized print and email reports, and a seamlessly integrated website. Each of the communication channels displays energy consumption patterns and contains a normative comparison to similarly sized and similarly heated homes, as well as to an energy reduction goal for each customer. XX Rhode Island customers received reports in 2023.

Rhode Island Energy continued its core residential energy efficiency programs in 2023.

EnergyWise Program

In 2023, the EnergyWise Single Family program achieved electric savings of XX net lifetime MWh (XX% of target) and gas savings of XX net lifetime MMBtu (XX% of target).

EnergyWise offers single family customers no-cost home energy assessments, weatherization, and information on their actual energy usage. Participants in this program receive personalized recommendations to reduce their energy consumption and improve the comfort in their home. In addition, this program offers technical assistance, education, and financial incentives to replace and upgrade inefficient appliances, thermostats, water fixtures, heating and cooling systems, and insulation.

2023 RESIDENTIAL RESULTS

- xx Annual MWh Saved (xx% of goal)
- xx Lifetime MWh Saved (xx% of goal)
- xx Annual MMBtu Saved (xx% of goal)
- xx Lifetime MMBtu Saved (xx% of goal)
- xx Metric Tons of Greenhouse Gas Emissions Avoided
- xx Program Participants
- \$xx Million in Lifetime Electric Bill Savings
- \$xx Million in Lifetime Gas Bill Savings
- \$xx Million in Total Economic Benefits

In 2023, XX in-person and virtual assessments were offered. EnergyWise works with single family customers of one-to-four-unit buildings in a two-pronged approach. During the initial visit (known as the home energy assessment) an energy specialist spends one-to-three hours providing educational materials and evaluating the customer's home. Instantly recognizable savings opportunities (such as pipe insulation) are installed during this first visit. At the completion of the assessment, the customer receives an Energy Action Plan that recommends additional energy savings opportunities and any accompanying incentives / financing options. Customers that proceed to the next phase of EnergyWise receive weatherization upgrades that provide savings for twenty years regardless of fuel type used. Overall, customers that install EnergyWise weatherization upgrades increase comfort while saving money on energy.

Throughout 2023, RISE (the EnergyWise Lead Vendor) took several steps to improve the customer experience and encourage program participation. These steps included utilizing Virtual Home Energy Audits (VHEAs) to reduce wait times for customers requesting audits exclusively for heat pumps and expanding its concierge service to assist customers with heat pumps. RISE also hired seven new Energy Specialists, including three Spanish speaking individuals.

Residential New Construction Program

In 2023, the Residential New Construction program achieved XX net lifetime MWh of electric savings (XX% of target) and XX net lifetime MMBtu of gas savings (XX% of target).

The Residential New Construction Program (RNC) benefits new construction and major renovation of single-family and multi-family homes for market rate and income eligible customers. The program elements include plan review, energy modeling, in-field technical assistance, insulation and air sealing inspection, third-party blower-door and duct-blaster testing (building performance testing), a HERS (Home Energy Rating System) Index rating and certification, energy performance-based incentives, complimentary WaterSense® showerheads, and optional support for projects seeking additional certifications such as ENERGY STAR® Homes, DOE Zero Energy Ready, Passive House/PHIUS, LEED-H and Living Building Challenge. In 2023, 470 housing units were built to program standards, which represents a 9% increase over 2022 year-end totals.

- 454 units were new construction/full gut rehab (97%)
- 16 were renovation/rehab (3%)
- 334 units were market rate (71%)
- 136 were Income Eligible (29%)
- 149 units had electric heat pumps (32%)
- 256 units had gas heat (54%)
- 65 units had either propane or hybrid heat pumps with propane (14%)
- 199 homes achieved >25% savings over the Program baseline (42%)
- 52 homes were ENERGY STAR and DOE Zero Energy Ready Homes certified and 48 are being submitted to PHIUS for official Passive House Certification

In addition, 798 newly planned housing units enrolled in the RNC Program.

In 2023, the RNC Lead Vendor partnered with local builders and designers to establish a local Passive House chapter. The chapter's mission is to promote the Passive House Building Energy Standard in Rhode Island through public outreach, education, advocacy, and training. The chapter held two

inaugural events and attendees included architects, builders, homeowners, insulation representatives, students, and housing non-profits and agencies.

The Passive House Rhode Island website can be found at <https://passivehouseri.org/>.

ENERGY STAR® Consumer Products Program

In 2023, the Residential Consumer Products program achieved XX net lifetime MWh of electric savings (XX% of target).

The ENERGY STAR® Consumer Products Program promotes the purchase of high efficiency household appliances and electronics such as dehumidifiers, pool pumps, and room air cleaners. Throughout the year, the Residential Consumer Products Lead Vendor continued to promote the energy efficient products offered under the Rhode Island Energy program by staffing educational tables at big box retailers such as Lowe's, Home Depot, and Walmart. These informal events provide an opportunity for RI Energy customers to ask questions and gain information about a broad range of energy efficiency programs.

As part of its continued dehumidifier recycling campaign, RI Energy finished 2023 with a record total of 1,517 old, inefficient dehumidifiers recycled (far exceeding 2022 results, which was another record year). Rhode Island Energy made a concerted effort to target diverse communities and scheduled recycling events throughout the state. The continued success of this campaign has further enhanced Rhode Island Energy's reputation as a strong community partner.

The program also continued its Most Efficient Appliance Initiative. Building off the progress of the midstream offerings at Home Depot, Rhode Island Energy and the Lead Vendor partnered with Lowe's to offer ENERGY STAR® most efficient washers, dryers, and refrigerators to RI Energy Customers. The initiative with Lowe's began in the fourth quarter and they issued an invoice for a total of seventy-seven products, a number that is expected to increase into 2024.

ENERGY STAR® HVAC Programs

In 2023, the EnergyStar HVAC program achieved XX net lifetime MWh of electric savings (XX% of target) and XX net lifetime MMBtu of gas savings (XX% of target).

ENERGY STAR® HVAC Programs (Gas and Electric Heating, Cooling and Water Heating Program) promote the installation of high-efficiency equipment for gas and electric space heating and cooling, water heating, and controls via tiered customer rebates. The program provides contractor training and incentives to ensure best practices for the proper design of distribution system improvements, equipment sizing and quality installation.

In 2023, Rhode Island Energy continued the HVAC program's weekly newsletter. Featured topics included rebate submission reminders/deadlines, promotion of upcoming trainings, industry best practices for successful installation and operation, availability of program support in Spanish, and FAQs and updates on Clean Heat RI. There are over 650 recipients currently on the newsletter's distribution list including HVAC companies, contractors, technicians, distributors, trade allies, and other industry stakeholders.

Beyond the newsletter, The HVAC Program actively encouraged contractors and customers to apply for rebates from Rhode Island Energy and Clean Heat RI. Links to Clean Heat RI are included on RI Energy's website and rebate portal. The two programs worked together in the fourth quarter to align offerings.

Throughout 2023, The HVAC Program has been working to adapt to the introduction of new DOE heat pump equipment ratings and standards. The program offered various Cold Climate Heat Pump trainings, Introduction to Heat Pump presentations, right sizing trainings, and live virtual and on-site HVAC Check Testing trainings.

Home Energy Reports (HER) Program

In 2023, The Home Energy Reports program achieved XX net lifetime MWh of electric savings (XX% of target) and XX net lifetime MMBtu of gas savings (XX% of target).

The Home Energy Reports (HER) Program encourages energy efficient actions through personalized print and email reports. Each communication channel displays energy consumption patterns, energy reduction goals, and comparisons to similarly sized and heated homes. In 2023, Home Energy Reports provided energy efficiency messaging on the following topics: high-efficiency heating systems, electric heat pump water heating, ENERGY STAR® efficient room air conditioners, cold-climate heat pumps, air purifiers, smart thermostats, and home energy assessments.

Multifamily Program

In 2023, the EnergyWise Multifamily program achieved XX net lifetime MWh of electric savings (XX% of target) and XX net lifetime MMBtu of gas savings (XX% of target).

The Multifamily Program provides comprehensive energy efficiency solutions to market rate and income eligible gas and electric multifamily (properties with five or more units) customers. In 2023, the Lead Vendor participated in several trainings and courses including Fujitsu Variable Refrigerant Flow training, Advanced Energy Auditing course by UTS Energy Engineering, SRGI heat pump training, BPI seminar for heat pump water heaters, Galetti heat pump chiller seminar, and Mitsubishi's manufacturer heat pump training. Below are a couple of examples of projects completed throughout the year:

- **Regency Plaza Apartments in Providence:** upgrades included water source heat pumps, variable frequency drives, and wall and pipe insulation. The electrical incentive for this project was \$110,463 with an estimated 1,171,500 net lifetime kWh savings, and the gas incentive was \$69,675.92 with an estimated 113,098 net lifetime therms savings.
- **56 Tell Street Apartments in Providence:** installed 6 slim duct air source heat pump systems in a 3-story apartment building consisting of 6, 2 bed apartments. The heat pumps replaced electric baseboard heat. The electric incentive for this project was \$78,750 and the estimated net lifetime savings is 428,150 net lifetime kWh.
- **Shadow Farm Condos in Wakefield:** installed attic insulation, duct sealing, attic air sealing, basement sill insulation, and programmable thermostats to participating units. In order to complete the attic weatherization, it was necessary to vent some bathrooms fans to the exterior. The gas incentive for this project was \$31,967 with an estimated 28,560 net lifetime therms savings.

INCOME ELIGIBLE SERVICES

In 2023, the Income Eligible Services Program achieved XX net lifetime MWh of electric savings (XX% of target) and XX net lifetime MMBtu of gas savings (XX% of target).

The Income Eligible Services (IES) program offers no-cost energy assessments and energy efficiency upgrades to residential income eligible customers without any financial contribution from the customer. Income Eligible Services are delivered by Rhode Island's six local Community Action Program (CAP) agencies to customers who meet one of the following criteria:

- Currently on the electric A-60 or the gas 11/13 rates; or
- Qualify for LIHEAP funds from the State; or
- Household income level falls below 60% of the Area Median Income (AMI).

Income eligible customers are eligible for a full energy assessment of their home including appliances, weatherization (insulation and air sealing), and if deemed necessary, may receive replacement of inefficient or unsafe heating systems and/or appliances. All IES customers receive all services and equipment upgrades at no cost.

2023 saw multiple enhancements to the program. Most notably, Rhode Island Energy hired an Income Eligible Services Program manager and made the necessary preparations to move to a comprehensive full house audit for weatherization in 2024. CLEAResult (the IES Lead Vendor) has been working with RI Department of Human Services (DHS) to arrange training that will upskill Tier 1, the basic appliance management program (AMP) assessment, program specialists to the comprehensive audit. The Lead Vendor has also continued to improve communication across the Income Eligible Single Family program with assistance from the local appliance vendor (the South Middlesex Opportunity Council) and other local agencies. Key Performance Indicator meetings were held with each CAP and at least one DHS representative. These meetings ensured that the CAPs were aware of their KPI goals, their pace to meet the goals, and provided a dedicated time for constructive dialog.

Collaborative Efforts

Rhode Island Energy's Income Eligible Services are administered along with related and complementary federal, state, and local programs in collaboration with Rhode Island Department of Human Services (DHS), the Community Action Program (CAP) agencies, and other local agencies. This collaboration leverages funds that provide energy services to income eligible customers in Rhode Island. The programs discussed below allow more customers to receive comprehensive energy assessments and energy efficiency benefits.

- IES Best Practice meetings were held virtually on March 28, 2023 and June 28, 2023. These meetings focused on topics spanning Rhode Island Energy Marketing, a DOE WAP update including the Bipartisan Infrastructure Law (BIL) program, a DHS update, YTD program delivery performance, equity teams, notes from the field featuring customer feedback, a Home Show primer, and Q&A sessions. Representatives from 6 CAP agencies, Rhode Island Department of Human Service, Division of Public Utilities & Carriers, the Energy Efficiency Resource Management Council, Rhode Island Energy and CLEAResult, attended.

2023 INCOME ELIGIBLE RESULTS

- xx Annual MWh Saved (xx% of goal)
- xx Lifetime MWh Saved (xx% of goal)
- xx Annual MMBtu Saved (xx% of goal)
- xx Lifetime MMBtu Saved (xx% of goal)
- xx Metric Tons of Greenhouse Gas Emissions Avoided
- xx Program Participants
- \$xx Million in Lifetime Electric Bill Savings
- \$xx Million in Lifetime Gas Bill Savings
- \$xx Million in Total Economic Benefits

- The Lead Vendor participated in the Policy Advisory Committee (PAC) meeting to review and comment on the Department of Energy (DOE) State Plan Application. The PAC is the group that has assisted the Department of Human Services chart a course for a successful Department of Energy program for 2023 and beyond.

Low Income Home Energy Assistance Program

The Low-Income Home Energy Assistance Program (LIHEAP) block grant is funded through the U.S. Department of Health and Human Services. The purpose of LIHEAP is to assist Rhode Island's income eligible households in meeting the increasing costs of home energy and reduce the severity of any energy-related crisis. Rhode Island's LIHEAP is administered by the Rhode Island Department of Human Services (DHS) Individual and Family Support/Community Services Division. LIHEAP outreach, intake and income-verification are provided by the six local CAP agencies. Households are determined eligible for LIHEAP assistance according to income guidelines established by DHS.

Weatherization Assistance Program

The Weatherization Assistance Program (WAP) provides funds for income eligible families to insulate and air seal their homes to reduce their energy bills, improve potential health and safety concerns and improve thermal comfort. WAP is funded through annual appropriations from the U.S. Department of Energy's Weatherization Assistance Program and the U.S. Department of Health and Human Services. The state allocates 15% of its annual LIHEAP funding to weatherization.

COMMERCIAL, INDUSTRIAL & PUBLIC PROGRAMS

LARGE COMMERCIAL AND INDUSTRIAL PROGRAMS

In 2023, the Large C&I New Construction program achieved XX net lifetime MWh of electric savings (XX% of target) and XX net lifetime MMBtu of gas savings (XX% of target).

Rhode Island Energy offers four Commercial and Industrial (C&I) energy efficiency programs. Depending on a customer's energy consumption and demand, they could be eligible to participate in one or more of the following programs.

1. **Large Commercial and Industrial New Construction:** Provides offerings that targeted ground up new construction, major renovations, tenant fit-outs, and end-of-life replacement equipment.
2. **Large C&I Retrofit:** Focuses on all services and technologies towards retrofits needed for existing buildings.
3. **Small Business / Direct Install:** Offers turn-key solutions to many types of small businesses.
4. **C&I Multifamily Program:** Provides joint residential and commercial energy services to condominiums and apartment complexes for energy efficiency upgrades.

The C&I sector encompasses a diverse and complex set of customers. Each large C&I customer is assigned a dedicated account representative who helps connect customers with energy efficiency resources, vendors, and incentives. To better serve customers in several market segments, Rhode Island Energy leverages a Market Sector approach. This approach allows Rhode Island Energy to provide customized efficiency solutions that align with the customers' needs, thereby increasing program participation. Customers that in market segments not targeted through industry-specific initiatives are still served by dedicated account representatives (Hospitals, Colleges and Universities, Commercial Real Estate, Retail, etc.).

Large C&I New Construction Program

The Commercial New Construction Program encourages energy efficiency in new buildings and major renovations as well as new equipment installed to replace aging or failed equipment, through financial incentives and technical assistance to customers, developers, manufacturers, contractors, and design professionals.

There were 95 active projects in the program as of the end of 2023. Projects of note included:

- A proposed new High School in Middletown
- Bryant University Dining Hall and Convocation and Arena for Athletics
- Central Falls Elementary School and High School
- Fogarty Memorial Elementary in North Scituate
- Johnston Public Schools
- Roger Williams University

2023 C&I RESULTS

- xx Annual MWh Saved (xx% of goal)
- xx Lifetime MWh Saved (xx% of goal)
- xx Annual MMBtu Saved (xx% of goal)
- xx Lifetime MMBtu Saved (xx% of goal)
- xx Metric Tons of Greenhouse Gas Emissions Avoided
- xx Program Participants
- \$xx Million in Lifetime Electric Bill Savings
- \$xx Million in Lifetime Gas Bill Savings
- \$xx Million in Total Economic Benefits

Large C&I Retrofit Program

In 2023, the Large C&I Retrofit program achieved XX net lifetime MWh of electric savings (XX% of target) and XX net lifetime MMBtu of gas savings (XX% of target).

The Large Commercial Retrofit Program incentivizes the replacement of existing equipment and systems with energy-efficient alternatives, as well as enhancements that reduce energy consumption such as advanced controls and variable-frequency drives, when the customer might otherwise not plan on making efficiency investments. The program offers three distinct pathways that aim to address specific market barriers:

1. **Prescriptive Pathway:** Prescriptive incentives supported trade allies in advancing energy efficiency sales and provide signals to customers to make direct purchases that encouraged the adoption of more efficient and cost-effective options.
2. **Custom Pathway:** Custom incentives provided services to investigate opportunities to increase efficiency and support the steps needed to implement the upgrades.
3. **Upstream Pathway:** Upstream incentives provided an efficient way for customers to receive reduced pricing at the point of sale for energy efficiency equipment.

Industrial Initiative

The Industrial Initiative targets manufacturers and other industrial customers. These customers often use specialized equipment for industrial processes and consume large amounts of energy. The initiative is implemented by a world-renowned engineering firm with expertise in this sector. The firm partners with Rhode Island Energy to implement energy efficiency opportunities for industrial customers across Rhode Island.

As an example of an Industrial Initiative project, the Lead Vendor worked with a customer to identify an energy conservation measure that would add 2 inches of fiberglass insulation to six uninsulated 10,000-gallon steel tanks. By adding insulation to the tanks, the customer was expected to realize a 5% reduction in their total annual electric energy usage.

In another example, a manufacturer of dispensing systems underwent a major renovation. The customer is installing new compressors to increase plant productivity and meet increased product demand. Energy savings are realized from the improved air compressor efficiency, better part load operation of the new VSD compressor compared with the baseline compressor (load/no load) and improved dryer operation.

EnergySmart Grocer Initiative

The EnergySmart Grocer (ESG) initiative delivered cost effective, comprehensive energy savings in the grocery market segment.

Below are four examples of 2023 projects under the EnergySmart Grocer Initiative:

- A large grocery chain proceeded with retro-commissioning measures through Rhode Island Energy's Equipment & Systems Performance Optimization ("ESPO") program. The rooftop unit and condenser coils across the customer's 26 stores in Rhode Island were cleaned, resulting in approximately 700,000 kWh of energy savings and \$16,000 in rebates.
- A grocery store chain-initiated Monitoring Based Commissioning ("MBCx") energy efficiency improvements in four stores located in Cranston, Barrington, Wakefield, and Middletown. The work was staged in two "phases", with the first phase completed in 2023 and the second phase planned for 2024. Total project savings are estimated at approximately 270,000 kWh.
- Remodel projects were completed at two locations of a grocery store chain in East Providence and Lincoln, RI in Q2. These two stores had several improvements to stores including upgraded self-contained cases, night covers, destratification fans, lids on coffin cases, and adding doors to existing cases. Combined savings from these remodels totaled 80,894 kWh and 7,853 Therms.

- A study on the energy saving benefits of refrigeration leak detection and repair concluded at a grocery store in Barrington, RI. This location was part of a larger study across state lines, with this being the only location in Rhode Island. Overall, the store was in good condition except for a few leaks that were found and repaired. These repairs saved 5,785 kWh of energy.

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SMALL COMMERCIAL AND INDUSTRIAL PROGRAMS

Small Business Direct Install Program

In 2023, the Small Business Direct Install program achieved XX net lifetime MWh of electric savings (XX% of target) and XX net lifetime MMBtu of gas savings (XX% of target).

Rhode Island Energy's Small Business Direct Install program is a retrofit program that provides turnkey services to customers that consume less than 1,500,000 kWh per year. As part of the program, customers receive a free on-site energy assessment and a customized report detailing recommended energy efficient improvements. Rhode Island Energy then completes retrofit installations at the customer's convenience.

Rhode Island Energy typically pays up to 70% of installation and equipment costs and customers can finance the remaining share of the project over as many as 60 months (typically 24) on their electric bill, interest free, using the Small Business Revolving Loan Fund, provided funds are available.

There were 23 gas weatherization projects in 2023 leveraging RGGI funds provided by OER to supplement the system benefits charge (SBC) funds to enhance customer economics for these projects. This initiative, alongside the uptake of Variable Frequency Drives (VFD) controls, drove a consistent uptick in savings throughout the year. Below is a sampling of program participants.

- **Local real estate** - a real estate company that owns several buildings in RI completed lighting and variable speed drive projects with kWh savings of approximately 25,000 kWh and rebates totaling approximately \$22,000. This customer has participated repeatedly in Rhode Island Energy's energy efficiency programs.
- **Assisted Senior Living in Warwick** - An assisted senior living facility in Warwick RI had energy efficiency lighting installed and demand circulators upgraded, resulting in savings of approximately 150,000 kWh and 4,000 therms and rebates totaling approximately \$75,000.
- **Central Falls Main Street businesses** - The Central Falls Main Street event resulted in 29 audits of which 20 converted to projects. Most of these projects were minority owned micro-businesses, resulting in an incentive spend of almost \$66k and net kWh savings of 84,951.
- **Sporting Facility in North Smithfield** - An indoor sports facility in North Smithfield installed high performance LED high bays and upgraded their HVAC/VFD system. The total project cost for both applications was \$64,081 with gross annual kWh savings of 64,961 kWh for LED and 93,681 kWh for the HVAC/VFD upgrade.
- **Non-profit in Kent County** - A private non-profit agency in Kent County installed LED Flat Panel fixtures and Wi-Fi t-stats with temperature sensors that help them balance the temperature throughout the heating space were installed. The project cost \$48,903 with gross annual kWh savings of 70,035 kWh/year and 476 gross annual therms.

OTHER PROGRAMS IN 2023

Lead by Example: State and Municipal

In December 2015, Governor Gina Raimondo issued an Executive Order directing State agencies to ‘Lead by Example’ by achieving robust clean energy targets and developing clean energy practices. The Lead by Example initiative is also promoting interdepartmental cooperation, unlocking opportunities to invest in comprehensive energy efficiency and renewable measures that can reduce and stabilize public sector energy costs, shrink the government’s carbon footprint, and support Rhode Island’s burgeoning clean energy economy.

The programs and initiatives spurred by the Lead by Example executive order are also available for municipalities and quasi-public agencies. Specifically, public entities can receive technical assistance, and in some cases financial support, from Rhode Island’s Office of Energy Resources to improve the energy efficiency of their buildings, install renewable energy systems and electric vehicle charging infrastructure, and purchase all-electric or hybrid fleet vehicles. Lead by Example efforts are meant to serve as a model for businesses, organizations, and citizens as we all work together to move Rhode Island toward a more secure, cost-effective, and sustainable energy future.

In 2022, the School LED Lighting Accelerator through the Office of Energy Resources was expanded from a two-community pilot into a program supporting 10 school districts with a budget of \$10 million dollars. Through the end of 2022, 7 schools had completed lighting upgrades, with an additional 17 in the implementation phase. The School LED Lighting Accelerator program provides technical, procurement, and financial support to qualified school districts for LED lighting upgrades. It will also leverage utility-administered energy efficiency funding and municipal funding streams/on-bill repayment.

RI Agricultural Energy Program

Recognizing the vital role that farmers play in Rhode Island’s economic and environmental framework, OER, in consultation with the Department of Environmental Management (DEM) aims to improve the accessibility of resources for farmers that will offset agricultural electric load through cost-saving energy efficiency measures and on-site renewable energy projects. Historically, farmers make use of older and traditional infrastructure, and often rely heavily on delivered fuels. These challenges have traditionally made agribusiness a hard-to-reach sector for standard energy efficiency and renewable energy programs.

The RI Agricultural Energy Program offers Rhode Island agribusinesses incentives for prescriptive energy efficiency measures. Program participants receive a free on-site energy assessment and a report detailing recommended energy-efficient improvements. Farmers or agribusiness owners can then choose to install any number of recommended electric or delivered fuels measures. Electric efficiency incentives vary depending on the application, but any approved electric measure cost not covered by an incentive can be paid back, interest free, through Rhode Island Energy’s on-bill payment system, provided that funds are available.

The RI Agricultural Energy Program (RI AgEP) offers financial incentives to farms in Rhode Island of up to \$20,000 for energy efficiency and renewable energy projects. The program has continuously held two funding rounds each year, in spring and fall. This program has helped fund 55 total projects since 2016. The spring 2022 funding round awarded six farms for solar projects, with one farm undertaking a solar & battery storage project.

OER continues to streamline the ability for farmers to leverage the RI Agricultural Energy program with other farm-related programs and grants. By establishing and maintaining open lines of communication with the Department of Environmental Management, Commerce RI, Rhode Island Energy and USDA Rural Development, OER does not limit its outreach work to the RI AgEP, but also promotes all financial incentives available to farmers at the federal and state level. With help from a University of Rhode Island Energy Fellow, additional outreach is conducted virtually and in-person through attendance at farmers markets, online

webinars, email, and one-on-one phone calls. Outreach materials and the RIAgEP page on the OER website were also updated to be easier for farmers and agribusiness owners to navigate. The Farm Energy Fellow also helps to create video profiles that are posted to the OER website to spread awareness about program benefits and success stories. The 2022 video is currently is stil in production and will be released in 2023. . Presentations were also given at several workshops and further outreach was conducted through the program’s growing social media presence: Facebook and Instagram (@RIFarmEnergyResources).

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COMMERCIAL, INDUSTRIAL & PUBLIC FINANCE

Large C&I Revolving Loan Fund

Through the electric large C&I revolving loan fund, Rhode Island Energy offered \$X through one loan in on-bill financing to one large commercial customers. At the end of 2023, the fund had a balance of \$X (including committed 2023 dollars). After accounting for the approved \$X injection, the electric Large C&I revolving loan fund begins 2023 with a balance of \$X. This amount will be available for loans in 2024 and beyond.

Through the gas large C&I revolving loan fund, Rhode Island Energy offered \$X million in loans to X large commercial customers. At the end of 2023, the fund had a balance of \$X (including committed 2023 dollars). The gas large C&I revolving loan fund begins 2024 with a balance of \$X. This amount will be available for loans in 2024 and beyond.

Rhode Island Energy continues to wind down the revolving loan fund in support of the RI Public Energy Partnership (RIPEP). X customers participated in this offering in 2023. At the end of 2024, the fund had a balance of \$X. Rhode Island Energy anticipated that the final loans would be repaid in 2023, allowing for the remaining funds to be returned to RI OER.

Small Business Revolving Loan Fund

All Small Business Direct Install program participants receive financing to cover 30% of project costs, either over 24 months at 0% interest or a lump sum payment with a 15% discount. Through the small business revolving loan fund, Rhode Island Energy offered \$X in loans to X small business customers. At the end of 2022, the fund had a balance of \$X.

Efficient Buildings Fund (EBF)

Since 2015, Rhode Island Energy, the Rhode Island Office of Energy Resources (OER), and the Rhode Island Infrastructure Bank (RIIB) have been working together to leverage system benefit charge (SBC) funds and drive energy improvements in facilities in cities and towns across Rhode Island.

In 2023, the EBF approved projects to help the Town of Hopkinton install solar on Town facilities and for the Town of Smithfield to make efficiency improvements to two of its school buildings. These projects will help these communities reduce both their energy costs and their emissions.

Since inception, the EBF has supported 22 projects to municipalities, loaning out over \$69 million dollars to support a variety of energy efficiency projects. These will deliver \$109 million in savings over the lifetime of the installed measures.

Commercial Property Assessed Clean Energy (C-PACE)

Since the program was adopted in Rhode Island in 2015, 33 projects have been completed, totaling over \$87 million in energy efficiency and renewable energy for businesses. Outreach by the Rhode Island Infrastructure Bank and Rhode Island Energy will continue in 2023.

INCENTIVES BY TOWN

Table 2. Gas and Electric Energy Efficiency Incentives Provided to Residential, Commercial and Industrial Customers in 2023.

2023 PILOTS, DEMONSTRATIONS, AND ASSESSMENTS (Residential and Commercial and Industrial)

Table 3. 2023 Demonstrations, Pilots and Assessments in Residential and Commercial & Industrial Sectors including objectives, brief findings, and next steps.

Pilot, Demonstration, or Assessment	Objectives	Findings	Next Steps
Final Gas Appliances-Assessment-Residential	Assess opportunities for electric appliances at new homes.	Study report finalized.	Apply study results to program design
Gas Demand Response- Pilot-C&I	Test supply and/or distribution system benefits, reduction of gas system peak demand via a reduction in overall natural gas consumption, customer adoption of gas DR and incentive levels to drive participation.	Winter season concluded.	Analyze winter results
Gas Leak Survey-Demonstration-C&I	Investigate the program potential of providing customers with gas leak detection and repair services.	Working with vendors to determine savings calculation assumptions and post-verification procedures.	Test post-verification procedures at sites.
Rightsizing RTUs-Assessment- C&I	Explore developing an approach for identifying rightsizing opportunities and estimating incremental savings through rightsizing equipment.	Completed assessment, which identified strategies for RTU right-sizing	Integrate strategies into program design and implementation.
Automated RTU Optimization-Demonstration-C&I	Examine the effectiveness of automated systems optimization for smaller customers with 2 or more RTUs.	Evaluation report completed.	Integrate strategies into program design and implementation.
Commercial Weatherization-Assessment- C&I	Explore cost-effective opportunities to expand on historical weatherization efforts.	Completed training with vendors; gathering feedback and conducting research for development.	Develop express tool.
Air Curtains-Demonstration-C&I	Review similar air curtains measures in other regions, and develop / demonstrate a RI-specific offering	Opted to develop measure offering, in line with MA PA's.	Collaborate with MA, develop program offering, and develop go-to-market plan.
Smart Valves for Chilled Water Systems-Demonstration-C&I	Demonstrate smart valves for chilled water systems. Recruit customers, monitor installed systems, develop analysis framework, and assess savings / cost-effectiveness.	Final report submitted.	Review report and develop plan on next steps.

CROSS-SECTOR PROGRAMS

Community Initiative

The Rhode Island Community Initiative is Rhode Island Energy's energy efficiency awareness campaign that drives program participation by engagement with communities ranging from residents and small businesses to business parks or other types of communities and local officials.

The Quonset Development Corporation (QDC) and Rhode Island Energy (RI Energy) have continued their energy efficiency partnership since it began in 2020. Building on the success to date, this partnership provides continued access to technical assistance and enhanced incentives to identify and implement energy-savings projects. In support, QDC and RI Energy will continue to provide workshops to introduce energy programs and technologies to the Quonset community.

The goal is helping all Quonset companies, as well as sites working with QDC and the RI Ready Program, participate in RI Energy customer programs. Over the span of the initiative, RI Energy also hopes to engage the 13,000 Quonset employees in residential energy efficiency programs.

Since this partnership began, Quonset businesses have:

- Received over \$X million in incentives for completed energy efficiency improvements
- Saved over \$X million annually on their energy bills
- Saved over X million kWh of electricity
- Saved more than X gas therms
- Green House Gas emissions reductions equivalent to removing X gas powered vehicles for one year³

In 2023, Rhode Island Energy conducted its small business coordination by working with the Office of Planning and Economic Development and the Chamber of Commerce to help promote the initiative and to help identify potential customer leads. The Company also worked with the Department of Public Works to prioritize buildings based on EUI and began performing energy assessments of high priority buildings. In the second quarter, Rhode Island Energy implemented initiatives for underserved communities and delivered 20 new projects under the Main Street program in East Providence. These projects included both Minority Owned and Women Owned businesses. The Lead Vendor expects continued success in these markets as it added an internal "lead generation" employee in 2023. The employee received extensive training on identifying new opportunities and assisting Energy Specialists.

Building Energy Codes and Appliance Standards

The Codes and Standards initiative provides targeted stakeholder outreach and technical guidance to improve compliance with minimum energy efficiency policies currently in effect and accelerate the improvement of these minimum efficiency requirements. In 2023, Rhode Island Energy continued to expand its energy code compliance support services to a variety of stakeholder groups.

In 2023, the Code Compliance Enhancement Initiative (CCEI) conducted 61 training events across the state with 990 total attendees.

- 53 residential trainings with 743 attendees
- 9 commercial trainings with 247 attendees

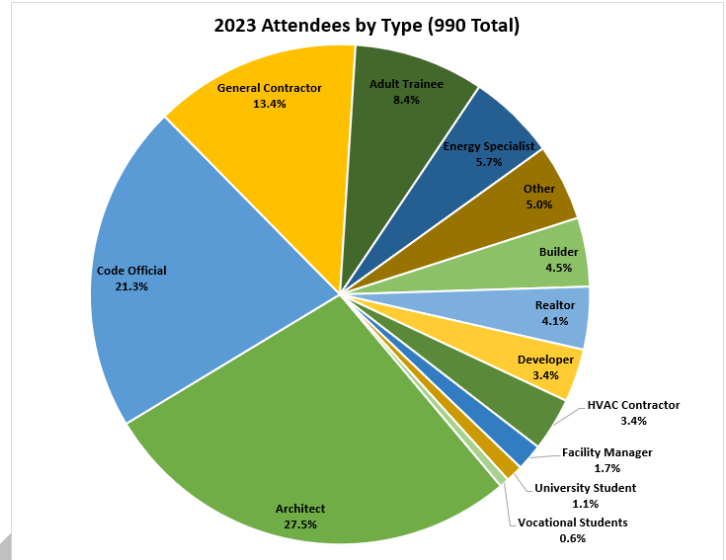
Rhode Island Energy partnered with several local organizations to promote and deliver trainings, including:

³ <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

- Rhode Island Builders Association
- Rhode Island Association of Realtors
- American Institute of Architects – Rhode Island

A sampling of training topics included:

- Health Homes & Indoor Air Quality
- Advanced Building Science and Zero Energy Homes
- Heat Pump Incentives
- Introduction to Heat Pumps
- Zero Energy Homes Case Studies
- Commercial Passive House
- Chapter 11 – 1&2 Family Dwelling Energy Code
- Advanced Framing
- MSHP Design for Low Load Homes
- Insulation & Wallboards
- Air Sealing & Air Leakage Testing



CCEI also launched a 20-week Residential Construction pre-apprentice training course funded through the RI Department of Labor and Training and Rhode Island Builders Association and offered through the Residential Construction Workforce Partnership. Trainings sponsored through this initiative engaged a diverse range of participants. The course provided the basic skills and training needed for entering a career in energy efficiency, including soft skills, introduction to building science, weatherization, and HVAC. The goal was to provide employment opportunities for participants by connecting them with companies and organizations such as CAP agencies who often struggle to attract and retain skilled energy auditors. The Income Eligible Services, EnergyStar HVAC and Residential New Construction programs supported this course through the Lead Vendors providing specific training in respective expertise areas.

New trainings were also developed and delivered to address the upcoming requirements associated with the 2024 IECC, which the state intends to adopt in full, without amendments. The 2024 IECC is still under review by the ICC and should be finalized in early 2024. The Initiative will develop an updated toolkit and suite of resources once the 2024 IECC has been finalized.

Block Island Energy Efficiency Program

Block Island Utility District (BIUD), with the support of OER and funding from RGGI auction proceeds, launched its first utility-run energy efficiency program with PUC approval in 2020. The efficiency program aims to educate and engage BIUD customers and deliver energy conservation measures including energy efficiency assessments, and upgrades to LED lighting, insulation and weatherization, and more efficient HVAC equipment. The utility district started the energy efficiency program to provide its customers with more information about, and control over, their energy usage and to help manage the extreme peaks experienced on its grid due to the seasonal nature of operations on Block Island.

The 2022-2023 energy efficiency plan seeks to build on the initial customer interest for residential energy assessments, while also serving more business customers and working to facilitate greater contractor interest in serving the growing pipeline of customers on the island for weatherization and HVAC related services. The program year runs from June through the following May and BIUD expects to have its 2023-2024 plan in front of the PUC for review and approval in April of 2023. Further details about the new energy efficiency program can be found on Block Island Utility District's [website](#).

Energy Efficiency in Pascoag Utility District

The 2022 energy efficiency plan continued to deliver significant energy and cost savings to PUD customers through energy efficiency audits, LED lighting, and strong incentives for insulation and HVAC equipment upgrades. The utility also conducted a customer survey to inform future program development and investment opportunities throughout 2022. Based on the results of this survey, continued customer demand for efficiency programming, and the prior success of this effort, PUD proposed a modest increase in its energy efficiency charge for the first time. This increase, approved by the PUC to take effect in 2023, will help support continued investment in the core efficiency strategies that Pascoag customers have enjoyed for the past 5+ years and will position them to have a robust and self-sustaining efficiency program for years to come.

Zero-Energy Buildings (ZEB) Task Force and Working Group

In 2023, Rhode Island Energy provided technical support for several Residential New Construction (RNC) Program zero energy and Passive House projects, which included contractor training, in-field support, and design review. RI Energy has also continued to develop and deliver presentations on Designing HVAC for Large Spaces with Low Loads. The RNC Program Lead Vendor continues to provide technical support for Zero Energy homes across the state, including 48 seeking Passive House certification and 52 seeking DOE Zero Energy Ready certification.

In the second quarter, the RNC Program held a tour of a DOE Zero Energy Ready (ZER) single-family home on Biscuit City Road in Charlestown:

- The RNC program held a tour of this single-family home, in collaboration with the builder Steve DeMetrick of DeMetrick Housewrights



- RI Energy is showcasing the home on their website: <https://weare.rienergy.com/building-a-zero-energy-ready-home/>

Zero Energy for the Ocean State

Since 2019, the Office of Energy Resources, RI Housing, and Rhode Island Energy (formerly National Grid) have partnered together for the Zero Energy for the Ocean State (ZEOS) program. This program provides grants to builders to create innovative, replicable, zero energy housing for low- and moderate-income Rhode Islanders. To date, six residential projects have been supported through this program and in 2023, a third round of funding was announced to continue this program.

Building Operator Certification

In 2022, Rhode Island Energy continued its long-standing sponsorship of Building Operator Certification (BOC) training that is discounted or free for building operators in Rhode Island. Those that completed the course are expected to benefit by learning to better communicate with occupants about maximizing facility efficiency, identify low-cost energy conservation opportunities, and implement best practices in preventative maintenance.

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COUNCIL PUBLIC EDUCATION EFFORTS

An important role of the Energy Efficiency Council (EEC) is to promote public awareness of energy efficiency programs and their benefits. The Council hosts and sponsors a variety of public events and initiatives that help Rhode Islanders understand the value of energy efficiency as the state works to achieve its energy and climate goals.

2023 Plugged Into Energy Research Lecture Series at the University of Rhode Island

In 2023, the EEC once again sponsored the University of Rhode Island's Plugged Into Energy Research (PIER) Lecture Series. Since 2015, the PIER Lecture Series has highlighted cutting-edge research and outreach projects and engages industry experts to explore how a variety of energy-related topics may affect our daily lives in the future. The goal of the PIER lecture series is to increase literacy around energy topics of concern in Rhode Island. Join us this fall at the URI Kingston Campus or on livestream.

The 2023 series included three lectures, held in-person and virtually, themed around *Energy Efficiency in the Marketplace: Communicating Value and Encouraging Participation*, and addressed the transition towards an economy driven by renewable energy sources.

The first lecture was held on September 19, 2023 and was titled *Energy Efficiency Unraveled: Analyzing Participation in RI's Incentive Programs*. This lecture addressed nonparticipation in energy efficiency programs that are designed to save ratepayers money and reduce energy consumption. Participants will hear from experts in market research, behavioral economics, and energy equity, who will discuss the relationship between consumer behavior and the effectiveness of our energy efficiency programs.

The second lecture was held on and was titled *Is the Price Right? Embracing Energy Efficiency in the Real Estate Market*. This lecture addressed the pathways, obstacles, and opportunities for incorporating energy efficiency as a market driver for real estate and rental properties. Participants will hear from experts in energy efficiency policy, research and housing development discuss how the real estate market can more effectively reflect the value of energy efficient buildings.

The third lecture was held on October 18, 2023 and was titled *Wired for the Future: Navigating the Path to Electrification*. Participants heard from experts on the economics of electrifying everything in the home, how to calculate the cost of electrifying and how regional governments are incentivizing, and planning for, the transition to electrifying everything.

Among the three events, there were a total of 160 in-person attendees and 482 livestream attendees, with 610 YouTube views to date. Participants included members of the general public, industry professionals, students, and university faculty and staff. The lecture recordings can be found at:

<https://web.uri.edu/coopext/plugged-into-energy-research-lecture-series/>.

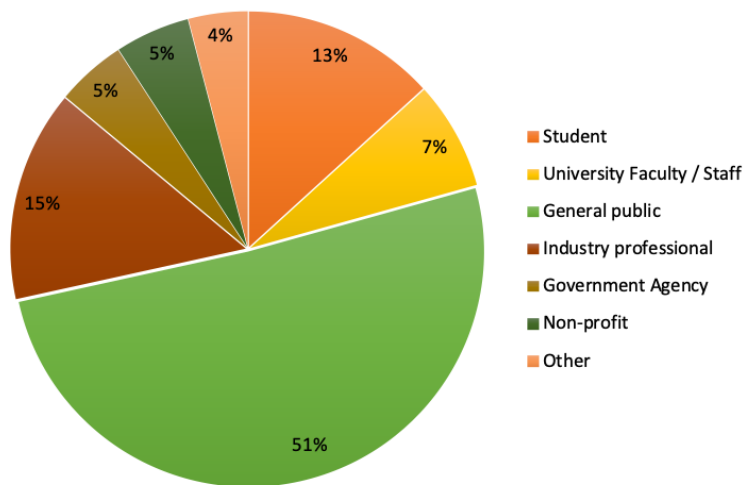


Figure 4. PIER Lecture Series Attendees

Energy Efficiency Council Annual Public Forum

With the help of the University of Rhode Island (URI) Cooperative Extension, this year's EEC Public Forum took a new and more direct approach to reaching target audiences by partnering with the Rhode Island

Department of Health's Health Equity Zone (HEZ) Initiative. The HEZ Initiative's mission is to build a healthy and resilient Rhode Island by investing in communities and their capacity to affect change, honoring the expertise of those who live and work in those communities, and challenging the systems and structures that perpetuate health inequities. As a society, we spend an enormous amount of resources on healthcare, yet 80% of our health is determined outside the doctor's office and inside our homes, schools, jobs, and neighborhoods. Energy efficiency is one of the many factors that play a role in addressing systemic inequities and fostering healthy communities.

On August 10, 2023, URI Cooperative Extension, working on behalf of the EEC, hosted a workshop as part of the all-day HEZ Learning Community Event held at Rhode Island College. These annual events convene HEZ Initiative stakeholders, including a wide array of community-based organizations, for shared learning, training, and technical assistance. This format allowed the EEC to connect with an existing network of people working in underrepresented communities to raise awareness about how energy efficiency programs can contribute to shared goals around housing affordability and health.

The workshop featured three speakers. A representative from Green and Healthy Homes Initiative (GHHI) laid the groundwork by explaining the relationship between energy efficiency and health. Next, the Community Outreach Coordinator from the state's Low Income Home Energy Assistance Program (LIHEAP) discussed program eligibility and pathways to reducing the energy burden. Lastly, the Weatherization Coordinator from Comprehensive Community Action outlined a roadmap for navigating the state's weatherization program.

Then the workshop's 80 participants broke out into 10 groups and discussed key questions with the goals of identifying community-based approaches to improving access to energy efficiency programs, mapping connections between different organizations and community members, and strategizing methods for increasing awareness of and successful participation in available energy efficiency programs.

The EEC looks forward to building on this successful event as a way of actualizing some of the many recommendations identified to address equity issues in energy programs and reduce energy burden within Rhode Island communities.

Energy Expo at the Rhode Island Home Show

Since 2014, the EEC has sponsored the Energy Expo at the Rhode Island Home Show in partnership with the Rhode Island Builders Association, Rhode Island Energy, and the Rhode Island Office of Energy Resources. The goal of the Energy Expo is to connect Rhode Islanders with resources that can help them reduce energy usage, save money, and increase the comfort of their homes. At the Energy Expo, residents can interact with dozens of energy related companies, sign-up for a no-cost home energy assessment, attend energy seminars, and learn about clean energy programs available in Rhode Island. In 2023, the Home Show had over 16,000 attendees, 85% from Rhode Island and 15% from Massachusetts. Learn more at <https://ribahomeshow.com/learn/>.

The Home Show engages over 1500 students from 26 local Career and Technical Education schools to design and construct various elements of the show floor, including an energy efficient residential technologies demonstration. The Rhode Island Department of Education has approved this work-based learning and career exploration opportunity to satisfy internship requirements for graduation. This year's student-built demonstration included an insulation comparison, an air source heat pump, a hybrid hot water tank, electrical panel upgrades, smart technologies, electric vehicle charging, solar panels, and efficient lighting.

EEC Branding & Communications Initiative

In 2023, the EEC engaged in an effort to further develop its brand identity and enhance its communication tools with the goals of fostering increased brand recognition and building trust and credibility among the Rhode Island general public. Council members and staff worked closely with a communications and design

team to refresh its mission language and visual identity including a new name, logo, and website. The Council launched the new brand in early 2024 to serve as a foundation for future efforts to promote public awareness of the state's energy efficiency programs and provide educational opportunities around current energy topics that impact Rhode Islanders.

Farm Energy Outreach

Due to the volatile nature and seasonality of many farm businesses, keeping costs low is vital to their success. However, participation in the half-dozen available farm energy programs has remained relatively low in comparison with other small-scale programs. Conversations with stakeholders, energy program administrators, and Rhode Island Energy suggest low participation is due, in part, to a lack of knowledge of available programs.

In 2023, the EEC and the Office of Energy Resources co-funded a University of Rhode Island Energy Fellow from February through December to assist with outreach to the farm community regarding energy management. The Energy Fellow conducted outreach virtually through, email, attendance at farmer's markets, and one-on-one phone calls. The 2023 Energy Fellow focused on increasing awareness about thermal decarbonization options available to farmers, such as air source heat pumps and heat pump water heaters. She developed flyers to promote heat pump technologies through RI AgEP, and visited nearly every farmers market open in Rhode Island during the busy season.

These efforts were successful in engaging farmers for the Fall 2023 round, which saw the first heat pump applications come through the program. A video profile for Sweet and Salty Farm in Little Compton was written, filmed, and produced describing the benefits of several clean energy projects on the farm's operations and the programs utilized to implement that work. This video will be published to the OER website in 2023, along with the other Energy Profile Videos. These video profiles help supplement written energy profiles to share the success stories of agribusinesses tackling clean energy projects. Social Media outreach was conducted through the program's growing online presence: Facebook and Instagram (@RIFarmEnergyResources).

Combined Heat and Power Public Meeting

On Thursday, June 8, 2023, the EEC hosted the Annual Rhode Island Combined Heat and Power (CHP) Stakeholder Meeting virtually. As a legislative mandate, this meeting gives stakeholders the opportunity to provide feedback on the state's CHP programs and policies. The meeting also serves to inform CHP developers and potential customers about program details and updates for the upcoming year. The meetings are timed to allow for any recommendations to be incorporated, as appropriate, into the Three-Year and Annual Energy Efficiency Program Plans.

Invitations were distributed to Rhode Island Energy's database of CHP vendors as well as past and potential program participants. The Rhode Island Office of Energy Resources also sent the invitation to a variety of contacts, including potential Efficient Buildings Fund borrowers as well as legislative, municipal, quasi, and school contacts. There were about 25 participants, the majority of which were CHP developers or vendors that provide related technical assistance or financing.

ENERGY JUSTICE & EQUITY EFFORTS

In 2023 the EERMC continued to take steps to increase awareness of energy justice and improve the understanding of equity as it relates to energy efficiency.

Energy Efficiency Equity Working Group

As a part of Rhode Island Energy's 2023 Annual Energy Efficiency Program, Rhode Island Energy committed to continuing work with the Office of Energy Resources (OER) to co-host an Equity Working Group. The goal of this working group was to provide Rhode Island Energy with written recommendations to advance equity in the planning, design, and delivery of its Energy Efficiency Programs. The Equity Working Group was comprised of over thirty representatives from state agencies, community-based organizations, advocacy organizations, and local subject matter experts in equity. The Equity Working Group met four times in 2023 and provided a space where voices and concerns of impacted communities could inform discussions on equity issues and to help identify areas of importance and focus around issues of equity for the energy efficiency programs.

The Equity Working Group's focus in 2023 was to identify equity-related challenges and to develop recommendations to incorporate in the Company's 2024 Annual Energy Efficiency Plan. As an outcome of this focus, the Equity Working Group identified six key issues and recommendations which were accompanied by a list of suggested strategies, metrics, and targets. The key issues identified by the Equity Working Group were participation barriers, multifamily barriers, weatherization deferrals, workforce development and training, micro- and small-businesses, and establishment of metrics tracking and reporting⁴. In its 2024-2026 Three-Year and 2024 Annual Energy Efficiency Plans, Rhode Island Energy highlighted the Equity Working Group's recommendations and provided commitments that aim to be responsive to each recommendation⁵.

EEC Activities on Advancing Equity in RI Energy Efficiency Programs

In 2023 the EERMC held three meetings in the months following Rhode Island Energy's filing of its Equity Working Group report as part of its energy efficiency Plans. Each of the three meetings included presentations and updates from the Company on its continued progress on equity efforts following the completion of the Equity Working Groups activities for the year. The focus of those presentations, and ensuing Council discussion, was to emphasize the importance of building on the Equity Working Group's recommendations so that meaningful progress could be made prior to the start of the new program year in 2024. The Council expects to continue to hold additional meetings with topic areas around issues of equity in energy efficiency programs in 2024.

Equity in EERMC Priorities and Policy Recommendations

This year the Council has once again included equity considerations in its stated priorities for the 2025 Annual Energy Efficiency Program Plan, as well as in its 2024 Policy Recommendations. Emphasizing and embedding equity considerations in the design and delivery of all state energy programs is critical to ensuring that all Rhode Islanders receive the maximum possible benefits.

⁴ For more information on the Equity Working Group's recommendations, as well as a full report of its activities, please see Attachment 11 of Rhode Island Energy's 2024-2026 Energy Efficiency Three-Year Plan and Annual Energy Efficiency Plan for 2024, available at: https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2023-10/2335-RIE-Attachment11_Bates.pdf

⁵ For more information on Rhode Island Energy's planned commitments related to the Equity Working Group recommendations, please see Section 3.2.4 in the 2024-2026 Three-Year Energy Efficiency Plan, and Section 2.7 – Equity of the 2024 Annual Energy Efficiency Plan, available at: https://ripuc.ri.gov/sites/g/files/xkgbur841/files/2023-10/2335-RIE-Annual-ThreeYr-EEPlan_10-2-23-Bates.pdf

PLANNING INITIATIVES

State Goals: State Energy Plan & GHG Reduction Goals

2022 was the first full year of efficiency programming since the signing of the landmark 2021 Act on Climate. The 2021 Act on Climate sets a requirement that Rhode Island must achieve net-zero carbon emissions economy-wide by 2050.

The Act on Climate required that the RI Executive Climate Change Coordinating Council (EC4) provide an update on the state's greenhouse gas emissions reduction plan⁶, which was published December 15th, 2022. This report showed that as of 2019, the state's economy-wide emissions are estimated to be 10.82 MMTCo_{2e}, 1.8 percent below 2016 emissions. Electric power consumption emissions decreased by 28 percent and industrial emissions decreased by 9.2 percent, but residential heating emissions increased by 13.5 percent and commercial heating emissions increased by 8.8 percent. This report identified energy efficiency as a priority action for reducing emissions from the electric sector and the next comprehensive emissions reduction plan will be published by the EC4 in 2025.

In 2022, Rhode Island also signed into law a requirement to achieve a 100 percent renewable energy standard by 2033. This is the most aggressive renewable energy standard in the country, and meeting this requirement will be a vital element for achieving the goals set by the 2021 Act on Climate.

Energy 2035: The Rhode Island State Energy Plan, formally adopted in October 2015, lays out a long-term, comprehensive energy strategy for Rhode Island. The vision of the Plan is to provide energy services across all sectors—electricity, thermal, and transportation—using a secure, cost-effective, and sustainable energy system. The Plan identifies energy efficiency as the state's "first fuel" and a centerpiece strategy for achieving the Rhode Island Energy 2035 Vision. The State Energy Plan identifies energy efficiency as the lowest-risk, lowest-cost, and arguably, the most sustainable energy resource available for Rhode Island. The Plan also lists Least-Cost Procurement as one of Rhode Island's cornerstone energy policies, and the primary vehicle for delivering the benefits of energy efficiency to Rhode Island consumers and businesses.

RI 2030⁷ was released in 2021 as a working document of the State's priorities for the next decade. This plan identifies climate objectives including examining opportunities for a renewable thermal standard, replacing fossil fuel electricity generation with renewable resources, and continuing investment in energy efficiency as a foundational climate strategy.

To achieve the objectives of these plans and the Act on Climate, the Energy Efficiency and Resource Management Council is working closely with the Office of Energy Resources and the EC4 to ensure that Rhode Island's energy efficiency programs continue to provide a strong foundation for the necessary energy demand reduction.

Three-Year Energy Efficiency Program Plan

As part of the legislated triennial process to develop Three-Year Energy Efficiency and System Reliability Plans, the EEC worked with Rhode Island Energy, the Office of Energy Resources, the Division of Public Utilities and Carriers, and other key stakeholders to develop the 2024-2026 Energy Efficiency Program Plan for Rhode Island. Rhode Island Energy filed the Three-Year Plan with the Public Utilities Commission on October 2, 2023. The purpose of this Three-Year Plan was to establish an overarching strategy for the next three years that will enable Rhode Island Energy to successfully meet the goals of Least Cost Procurement and meet the Energy Savings Targets developed by the EEC and approved by the Public Utilities Commission. The Three-Year Plan met the objectives of being cost-effective and less than the cost of supply, and is

⁶ <https://climatechange.ri.gov/media/1261/download?language=en>

⁷ https://ri2030.com/files/public/RI_2030_final.pdf

grounded in economics, flexible to changing market conditions, and designed to maximize consumer benefit. The Public Utilities Commission deferred its ruling on the Three-Year plan until a later date in 2024.

While the 2021-2023 Energy Efficiency Plan has guided the work of the annual plans for the past three years, work is already underway in 2023 to set the stage for the next three-year period of 2024-2026. An initial outline of the 2024-2026 plan was delivered to stakeholders on April 6th and the first draft is slated to be delivered in June. It is anticipated that the final draft of the 2024-2026 Plan will be considered by the Council in September with Rhode Island Energy filing the Plan in October.

Annual Energy Efficiency Program Plan

In addition to the Three-Year plan, Annual Energy Efficiency Program Plans (Annual Plans) are developed by Rhode Island Energy with significant stakeholder input. These Annual Plans clearly define how the energy efficiency programs will be implemented and specify how the programs will be cost-effective. The Annual Plans are considered by the Council and are ultimately reviewed and ruled on by the PUC. Work on the 2025 Annual Plan is already underway and the Council expects to vote on it at its September 26, 2024 meeting prior to the Company filing it with the PUC by October 1, 2024.

System Reliability Procurement

As an electric and gas distribution company, Rhode Island Energy (RIE) owns and operates the electric and gas distribution systems. The electric distribution system is composed of the entirety of poles, wires, transformers, substations, and other infrastructure that supports delivering electricity to customers across Rhode Island. The gas distribution system is composed of the pipelines, gate stations, pumps, and other infrastructure required to move gas through the pipelines to the equipment that uses it. As customer needs change, generation evolves, and technology matures, RIE continually examines its electric and gas distribution systems to prioritize necessary investments for maintaining safe, affordable, reliable electricity and gas service.

System Reliability Procurement (SRP) is one strategy for investing in electric and gas distribution systems.⁸ Unlike RIE's direct ownership of, say, the poles and wires that make up our electric grid (called Utility Reliability Procurement), through SRP, RIE identifies targeted alternative solutions to certain distribution system needs that are instead owned by third-party vendors. These solutions are referred to as non-wires solutions and non-pipes solutions, which include both customer-side and network-side solutions and which must be cost-effective, reliable, prudent, environmentally responsible, and provide the path to lower supply and delivery costs to customers in Rhode Island.

In 2022, RIE continued to progress actions described in the 2021-2023 System Reliability Procurement Three-Year Plan (SRP Plan).

- Non-wires solutions: RIE continued to screen electric distribution system needs for the potential to be served by non-wires solutions in alignment with Least-Cost Procurement statute, standards, and the 2021-2023 SRP Plan. For all electric distribution system needs, system reliability procurement was not a viable investment strategy, so RIE pursued utility reliability procurement.
- Non-pipes solutions: In 2022, RIE made progress toward producing a detailed initial non-pipes solution program, including continued analysis of the current non-pipes solutions screening and development

⁸ System Reliability Procurement (SRP) is a statutory obligation of public utilities and carriers under RIGL 39-1-27.7 (commonly referred to as "Least-Cost Procurement"). The purpose of SRP within the overarching umbrella of least-cost procurement is "Least-cost procurement shall comprise system reliability and energy efficiency and conservation procurement, as provided for in this section, and supply procurement, as provided for in § 39-1-27.8, as complementary but distinct activities that have as common purpose meeting electrical and natural gas energy needs in Rhode Island, in a manner that is optimally cost-effective, reliable, prudent, and environmentally responsible" [RIGL 39-1-27.7(a)].

process, and continued background research on non-pipes solutions. RIE engaged stakeholders in the development of a non-pipes solution program, opportunities, and challenges through the SRP Technical Working Group. Even though the non-pipes program is still in development, RIE actively screened gas distribution system needs for the potential to be served by non-pipe solutions but determined system reliability procurement was not a viable investment strategy.

- **Coordination:** All investments RIE proposes are aimed at advancing safe, affordable, reliable, decarbonized energy distribution to satisfied customers. As such, RIE must coordinate across all investment portfolios, including Infrastructure, Safety, and Reliability Plans, Energy Efficiency Plans, Renewable Energy Programs, and others. Of note in 2022, RIE filed its Advanced Metering Functionality Business Case and its Grid Modernization Plan, and the Public Utilities Commission opened its Future of Gas docket. RIE has and will continue to coordinate internally.
- **Stakeholder engagement:** RIE revitalized the SRP Technical Working Group, an external stakeholder group that advises RIE on matters related to system reliability procurement. In 2022, the SRP Technical Working Group conducted work planning for the 2023 calendar year. Additional detail about RIE's activities in 2022 related to system reliability procurement, including assessment of non-wires solutions and advancements in non-pipes solution program development, can be found in RIE's 2022 System Reliability Procurement Year-End Report (forthcoming filing with the Public Utilities Commission)

Additional detail about RIE's activities in 2022 related to system reliability procurement, including assessment of non-wires solutions and advancements in non-pipes solution program development, can be found in RIE's 2022 System Reliability Procurement Year-End Report (forthcoming filing with the Public Utilities Commission).

LOOKING FORWARD: 2024 ENERGY EFFICIENCY PROGRAM PLAN HIGHLIGHTS

2024 RESIDENTIAL PROGRAMS

In 2024, Rhode Island Energy will continue all residential programs offered in 2023 and will additionally focus on changes that improve equity and access and that leverage findings from the non-participant and participant studies.

EnergyWise Weatherization

The EnergyWise Program offers a number of weatherization services to customers, including insulation and air sealing. However, due to the older housing stock in Rhode Island, several homes have pre-weatherization barriers (e.g., asbestos, knob-and-tube wiring, and vermiculite) that prevent customers from moving forward with weatherization projects. Rhode Island Energy is considering using energy efficiency funds to address pre-weatherization barriers on a project-by-project basis or program-by-program basis so long as the project or program remains cost effective. Additionally, Rhode Island Energy plans to improve data collection efforts around pre-weatherization barriers to better understand their impact on energy efficiency progress. Addressing these pre-weatherization barriers will help to ensure the equitable distribution of program benefits to households with high energy burdens.

Multifamily Outreach

Rhode Island Energy will incorporate a multi-family component into the Residential Equity Outreach Assessment where Rhode Island Energy partners with community-based organizations that have experience and established relationships with neighborhoods and municipalities to promote the multifamily program and the benefits of energy efficiency. Through this assessment, Rhode Island Energy looks to strengthen communication channels and build trust with multi-family building owners.

Residential New Construction Standards

In 2024, RI Energy plans to increase the number of projects achieving advanced building standards and certifications including Zero Net Energy and Passive House. Additional training for builders, homeowners, and code officials will be held to make them aware of these certifications and advanced building standards. Additionally, Rhode Island Energy will make revisions to the 2024 RNC Program's guidelines to reflect changing baseline assumptions, since meeting the percentage savings targets will become more difficult with these higher baselines. The implementation changes will be determined based on the ongoing User Defined Reference Home study.

High-Efficiency HVAC and Hot Water

To facilitate customer transition from electric resistance heating to high efficiency heat pumps, Rhode Island Energy plans to coordinate with OER to leverage additional funding opportunities funded through the American Rescue Plan Act (ARPA) and the Inflation Reduction Act (IRA), such as Clean Heat Rhode Island. This program is administered by OER and received \$25 million in ARPA funds to provide financial incentives to residential and C&I customers for the purchase and installation of high efficiency electric heat pumps. RI Energy will also introduce Energy Star 6.1 Cold Climate certifications for heat pumps as a rebate-eligible option and will accept both SEER/HSPF (old) and SEER2/HSPF2 (new) rated equipment for rebate eligibility as systems are tested and re-rated against the new standards.

2024 COMMERCIAL AND INDUSTRIAL PROGRAMS

In 2024, Rhode Island Energy is focused on building a program ecosystem that supports a more diversified mix of electric measures, while harvesting remaining lighting savings, controlling program costs, and promoting equity among small business owners and within the workforce. Although Rhode Island Energy anticipates that lighting will continue to constitute a large source of electric savings in the 2024 C&I programs, its efforts are focused on driving non-lighting program enhancements that encourage deeper, more comprehensive measure adoption and build for long-term program success. There is a particular focus on high-efficiency heating, cooling, ventilation, and air conditioning (HVAC) measures, as well as controls to improve the performance of HVAC equipment.

In 2024, some highlights of Rhode Island Energy's efforts will be to:

- Implement revised participation pathways for the New Construction program to simplify enrollment and increase total program activity.
- Develop more effective savings calculators, including:
 - A Heat Pump Hot Water Heater calculator
 - An Energy Management System prescriptive calculator
 - A C&I weatherization tool
- Expand on equity efforts begun in recent years.
- Deploy a data-driven approach to increasing customer participation.
- Monitor and help mitigate supply chain disruptions and inflation impacts.
- Continue to enhance continuing education offerings for building managers and facilities operators.
- Provide technical assistance and funding to local higher education institutions in support of developing new Industrial Assessment Centers. If awarded, these IACs would conduct energy assessments and provide additional workforce capacity while adhering to Justice40 guidelines.
- Phase out most of the lighting program in response to a changing market. Due in part to the resounding success of efficient lighting initiatives by Rhode Island Energy and others, upgrades are now more affordable and available than ever before, reducing the need for continued incentives.
- Offer a limited-time incentive to contractors who identify opportunities to retrofit commercial and industrial sites with variable frequency drives (VFD).

INNOVATING FOR FUTURE ENERGY EFFICIENCY SAVINGS FOR RHODE ISLAND CUSTOMERS: PILOTS, DEMONSTRATIONS, AND ASSESSMENTS

For 2024, Rhode Island Energy intends to continue or start three Pilots, Demonstrations, or Assessments. Rhode Island Energy will continue to provide updates on the progress, findings, and next steps of all Pilots, Demonstrations, and Assessments in its 2024 Quarterly Reports.

The following table outlines the objectives, planned activity, and next steps of the three Pilots, Demonstrations, or Assessments underway in 2024.

Pilot, Demonstration, or Assessment	Objectives	Planned 2024 Activity	Next Steps
Weatherization <i>C&I Demonstration</i>	Continue to research opportunities for expansion around commercial and industrial weatherization. Test a wide range of potential solutions.	Integrate weatherization into other pathways (e.g., Equipment and Systems Performance Optimization Initiative).	Use a third-party vendor to assist in determining target facilities and potential solutions.
Residential Equity Outreach Assessment <i>Residential Assessment</i>	Understand and address barriers to program participation by landlords in equity communities. Work closely with and incentivize selected organizations/non-profits to conduct outreach and education.	Select partners (nonprofits/municipalities), co-create outreach and education plan, determine desired outcomes and performance metrics	Work with funding recipients to design an equitable and robust landlord/renter outreach and education plan
Multifamily Financing <i>Residential Demonstration</i>	Test an alternative financing model to fund projects at residential multifamily buildings with a particular focus on smaller buildings with two to twenty units.	Work with vendor to incorporate new financing structure into project proposals.	Expand outreach and education efforts to contractors.

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