

# Rhode Island Energy Efficiency

Third Quarter 2022 | Rhode Island Energy

November 14, 2022

## Overview

Rhode Island Energy's energy efficiency programs continued to deliver energy savings for Rhode Island customers by achieving 367,266 net lifetime MWh of electric savings (44.0% of the net lifetime goal) and 1,874,849 net lifetime MMBtu of natural gas savings (46.2% of the net lifetime goal) while continuing to address the challenges faced due to the supply chain issues and elevated levels of inflation.

- **Residential Consumer Products:** With Rhode Island Energy leading the dehumidifier turn-in campaigns, the Company has exceeded YTD in 2022 the number of dehumidifiers recycled in all of 2021. During the dehumidifier events customers are also educated about \$30 incentive for the purchase of a new Energy Star dehumidifier as well as a wide variety of other energy efficiency products and HVAC equipment.
- **Income Eligible Services (IES):** Feedback from the CAP agencies is that although there is still a backlog on appliances, communication with the appliance scheduler has improved. The Lead Vendor has also been working with customers, CAPs and the appliance scheduler to see whether the customer is interested in receiving different appliance models than the requested model if they have been waiting for more than six months.
- **Large Commercial Retrofit:** Rhode Island Energy renewed its SEMP agreements with two universities during Q3, extending each of the agreements for an additional three-year period. The Company also signed a new SEMP with a customer that operates hospitals and other healthcare facilities throughout Rhode Island. This customer had participated previously and signed the new agreement after a gap of several years.

## 2022 Program & Initiative Updates – Q2

### Residential New Construction (RNC)

The Residential New Construction (RNC) program achieved 2,493 net lifetime MWh of electric savings (16.7% of the lifetime goal) and 16,802 net lifetime MMBtu of gas savings (25.9% of the lifetime goal) through the third quarter of 2022.

### Q3 RNC Program Enrollments and Completed Units

- 50 housing units were built to RNC Program standards
  - 44 units were new construction/full gut rehab (88%)
  - 6 were renovation/rehab (12%)
  - 48 units were market rate (96%)
  - 2 were income eligible (4%)
  - 13 units had gas heat (26%)
  - 13 units had all electric heat (heat pumps) (26%)
  - 19 units had hybrid electric/propane heat pumps (38%)
  - 970 LEDs were installed through the Program
  - 7 homes were Energy Star and DOE Zero Energy Ready Certified
  - 6 homes were Passive House Certified
- 65 newly planned housing units enrolled in the RNC Program

### Q3 RNC Program Challenges

- Construction Schedule Delays
  - While much of the EE industry was disrupted instantly by COVID-19, the effects are only now being seen in new construction
  - Construction that had broken ground and was already underway by early 2020 continued through to completion in 2020 and 2021, which enabled the RNC Program to achieve goals during these years
  - However, projects in planning, design, and groundbreaking phases in 2020 and 2021 have gotten off to late starts due to issues with permitting, labor, material shortages, delayed funding, etc.
  - These delays have resulted in fewer completed units than anticipated in 2022
  - Most RNC Program projects originally slated to complete in 2022 have shifted towards completing in late 2022 and into 2023

- The RNC Program has continued to enroll new projects currently in planning and design phases into the program (477 units YTD), so the pipeline of projects is strong going into 2023
- The RNC Program Vendor and Trade Allies continue to perform inspections during the construction of these projects, and to provide training and technical support

### **Q3 RNC Program Highlights**

- Rhode Island EC4 [Climate Buildings Workshop](#) Presentation
  - RI OER invited Jon Erickson from the RNC Program Vendor to present on Zero Energy Homes at a public workshop on August 24<sup>th</sup>
  - The virtual workshop covered how buildings contribute to climate change and how they must be made more resilient due to changes and increased frequency of extreme weather
  - Additional panelists included representatives from OER and Dr. Joseph da Silva, Coordinator, RI School Building Authority
  - Jon shared the successes of Sheridan Small Homes, a zero-energy affordable housing project in Providence that recently participated in RI Energy's RNC Program

### **Q3 RNC Program Zero Energy Project Highlights**

- Zero Energy Homes Pipeline
  - The RNC Program Vendor continued to provide technical support for Zero Energy homes across the state, including 194 seeking Passive House certification and 6 seeking DOE Zero Energy Ready certification
- Zero Energy Homes Certification
  - The RNC Program Vendor certified seven Energy Star and DOE Zero Energy Ready Homes in Q3, six of which also achieved Passive House
- RNC Program Zero Energy Homes Case Study
  - 1492 Westminster Street, Providence, successfully met RNC Program requirements during Q3 and was certified for Energy Star, DOE Zero Energy Ready and Passive House



Above: Final Exterior



Above: Final Interior

1492 Westminster Street is the first mixed-use, multifamily building in Rhode Island built to the exacting Passive House standards administered by the Passive House Institute US (PHIUS). The PHIUS standards are widely regarded as the most stringent energy efficiency standards in the world.

Located on a narrow, vacant, urban infill site, 1492 Westminster offers a ground floor commercial space and seven one-bedroom apartment units, including an accessible unit on the ground floor. The vibrant commercial space supports the neighborhood and connects to street life with generous window openings (open in good weather) and a comfortable table seating area on the sidewalk. As part of the Armory Historic District, 1492 Westminster references common features of neighboring historic buildings – parapets, variation in materials, window composition, and bays – while remaining a contemporary building. The site design pushes parking to the middle of the block, away from the street while the stormwater system keeps all stormwater on site.

This building has a super-insulated envelope, airtight construction, high-performance windows, efficient systems, and smart design. The building achieves an expected Energy Use Intensity (EUI) of only 16.7 kBtu/ft<sup>2</sup>yr. This represents a nearly 75% reduction in operational energy use relative to the national average EUI for multifamily housing. With the rooftop solar photovoltaic system, the expected EUI will drop to 5 kBtu/ft<sup>2</sup>yr.

The building relies on proven high-performance assemblies throughout. The foundation is an insulated slab-on-grade with insulated frost walls. Exterior walls are “double stud” walls with a 12” deep cavity for insulation, in this case, a mix of closed and open cell spray foam with a low greenhouse gas emission (GHG) HFO blowing agent. Floors and roofs are constructed with prefabricated open web wood trusses and the roof/ceiling cavity is also insulated with a mix of low emissions closed and open cell spray foam. The robust air barrier is created by taped and caulked plywood sheathing and rigorous quality control. Each unit includes an individual heat-pump hot water tank, air-to-air mini-split heat pump, and an energy recovery ventilation unit for fresh air.

1492 Westminster embodies the COTE Framework for Design Excellence addressing Design for Energy, along with Design for Equitable Communities, Water, Economy, Well-being, and Resources. In doing, the project clearly demonstrates how architecture can directly address the urban housing shortage while also advancing critical climate goals.



Left: Blower Door Testing



Right: Exterior Under Construction



Left: Foundation



Right: Interior Insulation

Photography: Courtesy of Jason Wessel

Project Architect: [Truthbox](#)

## **Income Eligible Services (IES)**

The Rhode Island Energy Income Eligible Services program achieved 8,145 net lifetime MWh of electric savings (21.2% of the lifetime goal) and 85,428 net lifetime MMBtu of gas savings (39.0% of the lifetime goal) through the third quarter of 2022.

The third quarter IES Best Practice meeting was held at Westbay CAP, and was available with hybrid web participation, on September 29, 2022. This meeting focused on residential fire safety, the best practice process using the WiFi Smart thermostat installations as an example, educated all parties on the Moderate Income Offering for customers that make too much to qualify for LIHEAP, year-to-date program delivery performance, and appliance delivery update.

Feedback from the CAP agencies is that although there is still a backlog on appliances, communication with the appliance scheduler has improved. The Lead Vendor has also been working with customers, CAPs and the appliance scheduler to see whether the customer is interested in receiving different appliance models than the requested model if they have been waiting for more than six months.

## **Challenges and Responses**

Providing services equitably to all Rhode Island Income Eligible Customer continues to be a challenge.

Supply shortages are decreasing, enhancing implementation, particularly for appliances. The emergency appliance replacement program for customers whose refrigerator is no longer functioning has reduced the wait time for customers without a needed appliance. The system also improves tracking and reporting of all emergency responses.

Staffing at some CAPs continues to be a challenge to IES Program implementation. IES is implementing several approaches to reducing the impact of these barriers:

- Contracting for additional auditors providing freelance audit services to the agencies. In Q3 we had an experienced team start working with CAP of Providence to provide Audit services.
- The Interagency Referral program where leads or completed audits are referred by one CAP agency to another CAP agency for implementation services.
- RIBA Auditor & Installer program, RWCP (Residential Construction Weatherization Program) is building a class for spring of 2023.

### **Customer Highlight**

(dated 10/25/2022)

David,

It's here, it's beautiful!!!!

It's big! The doors stay closed! The shelves don't fall off when I open it! And it has a light!! It's not screaming like it's in agony!

And the crew is awesome! Mike and Trevor were here before and I absolutely love them!

Gentlemen, so exceedingly nice!

I cannot thank you enough, David!

Hopefully we can talk later on so I can thank you.

I've never had a new anything until this program.

Thank you again,

Pat

### **EnergyWise Single Family**

The EnergyWise Single Family program achieved 9,233 net lifetime MWh of electric savings (68.5% of the lifetime goal) and 396,134 net lifetime MMBtu of gas savings (82.8% of the lifetime goal) through the third quarter of 2022.

The EnergyWise program conducted 2,758 home energy assessments and completed 1,237 weatherization projects in the third quarter. 113 customers financed their weatherization work with the HEAT loan. The RGGI Moderate Income offering is actively being promoted, and the program has served 41 RGGI moderate income customers.

Activities of interest include:

- Updated weatherization pricing went into effect in August
- Energy specialists enrolled in sales training in Q2 and have participated in monthly sales trainings throughout Q3. These trainings are scheduled through June 2023
- The company and the lead vendor attended the following events: RI Navy Salute to Summer 8/27, Back to School Celebration of RI backpack event 8/27, East Providence Touch a Truck 9/24
- Deployed the strategy plan for HP concierge initiative; started outreach to customers and scheduled site visits with interested customers in Q3
- Through Q3, 15% of assessments and 12% of weatherization participants are renters/landlords.
- Spanish and English outreach for the moderate-income weatherization offering continues using RGGI moderate income funding

**Income-Based Enhanced Incentives**

Thank you for taking the first step toward saving energy with a Home Energy Assessment. During the assessment, your Energy Specialist recommended weatherization upgrades as your key energy-saving improvement. Weatherization includes sealing air leaks around your home and adding insulation.

Insulation and air sealing can help you:

- Save energy and money
- Reduce allergens and outside noise
- Increase home comfort year-round

In partnership with the Rhode Island Office of Energy Resources, Rhode Island Energy wants to help you maximize your comfort and energy savings by offering an enhanced incentive of 100% of approved insulation to qualifying customers.

To take advantage of this limited time offer of a 100% incentive, up to \$15,000:

- Review the income eligibility guidelines to make sure you qualify.

Household Size	Pre-Tax Annual Household Income	Household Size	Pre-Tax Annual Household Income
1 person	\$33,646 - \$44,650	7 people	\$87,349 - \$118,464
2 people	\$43,959 - \$58,683	8 people	\$95,590 - \$130,052
3 people	\$54,351 - \$72,467	9 people	\$91,231 - \$123,640
4 people	\$64,703 - \$86,269	10 people	\$93,172 - \$124,228
5 people	\$75,055 - \$100,072	11 people	\$95,113 - \$126,816
6 people	\$85,408 - \$113,876	12 people	\$97,054 - \$129,404

- If you believe you meet the guidelines above, complete the self-attestation form provided by your Energy Specialist.
- If approved, RISE Engineering (the vendor who performed your assessment) will provide you with an updated contract reflecting this limited time promotion.

We look forward to helping you save energy. If you have any questions or would like to check the status of your application, please contact RISE Engineering at 1-401-784-5700.

**RISE ENGINEERING** **OFFICE OF ENERGY RESOURCES**

Please note, this special offer is only valid for the property where the home energy assessment was conducted. RISE Engineering is an independent provider of energy efficiency services for Rhode Island Energy's Energy Star Program. These programs are funded by the energy efficiency charge on all customers' gas and electric bills, in accordance with Rhode Island law.

**Incentivos mejorados según el nivel de ingresos**

Gracias por dar el primer paso hacia la eficiencia energética con una Evaluación del consumo de la vivienda. Durante la evaluación, el especialista en energía le recomendó que implementara mejoras de climatización como la acción que más lo ayudará a ahorrar energía. Estas mejoras incluyen sellar las fugas de aire de su vivienda e instalar aislamiento.

Usar aislamiento y sellar las fugas de aire pueden ayudarlo a lo siguiente:

- Ahorrar dinero y energía
- Reducir la presencia de alérgenos y el ruido exterior
- Aumentar la comodidad de la vivienda todo el año

En colaboración con la Rhode Island Office of Energy Resources (Secretaría de Recursos Energéticos de Rhode Island), Rhode Island Energy desea ayudarlo a maximizar la comodidad y el ahorro energético. Para ello, ofrece un incentivo mejorado del 100% de aislamiento aprobado, a clientes que cumplen con los requisitos.

Para aprovechar esta oferta disponible por tiempo limitado del incentivo del 100%, hasta \$15,000, deberá seguir los siguientes pasos:

- Revise las pautas de elegibilidad en virtud de los ingresos para asegurarse de que cumple con los requisitos.

Tamaño del grupo familiar	Ingresos familiares brutos anuales	Tamaño del grupo familiar	Ingresos familiares brutos anuales
1 persona	De \$33,646 a \$44,650	7 personas	De \$87,349 a \$118,464
2 personas	De \$43,959 a \$58,683	8 personas	De \$95,590 a \$130,052
3 personas	De \$54,351 a \$72,467	9 personas	De \$91,231 a \$123,640
4 personas	De \$64,703 a \$86,269	10 personas	De \$93,172 a \$124,228
5 personas	De \$75,055 a \$100,072	11 personas	De \$95,113 a \$126,816
6 personas	De \$85,408 a \$113,876	12 personas	De \$97,054 a \$129,404

- Si cree que cumple con las pautas mencionadas, complete el formulario de autoverificación que le entregó su especialista en energía.
- Si se aprueba su participación, RISE Engineering (el proveedor que realizó la evaluación) le brindará un acuerdo actualizado en el que se incluye esta promoción por tiempo limitado.

Esperamos ayudarlo a ahorrar energía. Si tiene alguna pregunta o le gustaría controlar el estado de su solicitud, comuníquese con RISE Engineering al 1-401-784-5700.

**RISE ENGINEERING** **OFFICE OF ENERGY RESOURCES**

Tenga en cuenta que esta oferta especial solo es válida para la propiedad donde se realizó la evaluación del consumo de la vivienda. RISE Engineering es un proveedor independiente de servicios de eficiencia energética para el programa Energy Star de Rhode Island Energy. Estos programas se financian con el cargo para la eficiencia energética que se cobra en las facturas de gas y electricidad a todos los clientes conforme a la legislación de Rhode Island.

## Challenges and Responses

Pricing on materials and labor continue to increase. Independent insulation contractors have expressed a need to revisit pricing due to upward pressure on materials and more favorable pricing in Massachusetts. The program has leveraged the outcome of a recent pricing RFP for weatherization that was issued in MA to inform regional pricing. Updated pricing for the program went into effect in August.

## Customer Highlights

Customer feedback themes from the HEA included:

- Several customers were disappointed the program did not include window and door replacement
- Many customers complimented the auditor who conducted their HEA

Customer feedback themes from weatherization contractors included:

- Many customers expressed appreciation of the representatives that they worked with from RISE Engineering and the weatherization contractors, stating that the representatives they worked with were helpful and informative, scheduling was easy, contractors were efficient and professional
- A few customers stated that they noticed the improved comfort and temperature retention in their home right away

## Contractor Demographic Update

Of the 37 independent insulation contractor companies providing weatherization services to this program, 9 are women or minority owned businesses.

## **EnergyWise Multifamily, Income Eligible Multifamily, C&I Multifamily**

The EnergyWise Multifamily program achieved 1,262 net lifetime MWh of electric savings (6.1% of the lifetime goal) and 23,018 net lifetime MMBtu of gas savings (15.7% of the lifetime goal) through the third quarter of 2022. The Income Eligible Multifamily program achieved 846 net lifetime MWh of electric savings (3.5% of the lifetime goal) and 79,315 net lifetime MMBtu of gas savings (29.0% of lifetime goal) through the third quarter of 2022. The C&I Multifamily program achieved 21,962 net lifetime MMBtu of gas savings (16.7% of the lifetime goal) through the third quarter of 2022.

### **Customer Highlights**

#### **Income Eligible Project- Affordable housing apartments in Riverside, RI**

There was a replacement of three existing 300 MBH heat boilers to two 600 MBH high efficiency condensing boilers. The existing DHW and heating circulator pumps were also replaced with new high efficiency circulator pumps. Also included in this project was complete relamp and rebalast of common area strip fixtures. The electric incentive for this installation was \$23,512 and has an estimated 282,360 net lifetime kWh savings. The gas portion of the project was \$234,605 and has an estimated net lifetime Therms savings of 367,262.

#### **Standard Income Project in Providence, RI**

There was a replacement of 110 in-unit non-programmable thermostats with digital programmable thermostats as well as exterior and interior common area lighting. The commercial gas incentive for this installation was \$20,680 and has an estimated net lifetime Therms savings of 23,178. The electric portion of the project was \$48,245 and has an estimated net lifetime kWh savings of 54,540.

### **Challenges and Responses**

Material lead times continue to cause significant project delays for heating and cooling retrofits. The lead time for most equipment is 8-12 weeks out from the initial order.

The Lead Vendor continues to follow up with customers and contractors regularly to keep projects moving forward and they are completing all other aspects of a project while awaiting necessary materials.

## **Workforce Development**

In Q3 the Lead Vendor's mechanical team completed Lochinvar boiler factory training. The training included new product lines and boiler controls.

### **ENERGYSTAR® HVAC (Heating and Cooling)**

The ENERGYSTAR® HVAC (Heating and Cooling) program achieved 75,627 net lifetime MWh of electric savings (97.3% of the lifetime annual goal) and 199,449 net lifetime MMBtu of gas savings (45.4% of the lifetime goal) during the third quarter of 2022.

#### **Q3 HVAC Contractor Trainings**

- Eight half-day and quarter-day contractor trainings were held during the third quarter, providing both refresher courses and new trainings for HVAC technicians
- The HVAC Program offers several types of HVAC Check trainings
  - HVAC Check, which includes both AC Check and MS Check
  - MS Check, specifically for contractors who only install mini splits
  - AC Check & MS Check as separate modules, to make it easier for contractors to fit training into their schedules
- Trainings were modified for and delivered to sales staff and distributors
- The Program offered on site training for several participating HVAC companies
- Contractor feedback:
  - "Over the past several years we have attended HVAC Check training sessions hosted by the folks at CLEAResult. The training is always thorough and taught in a way that everyone comes out with a better understanding of how to properly assess system performance. We are specifically happy with the Mini Split Check training program since our primary line of work is mini split heat pump systems. The MS Check trainings have been especially helpful in getting our technicians up to speed with mini split heat pump system charging techniques. The training team has always been very responsive to any questions we may have and work hard to find answers for us when needed." – HVAC Program Participating Contractor

#### **Q3 HVAC Check Testing**

- Contractors perform HVAC Check testing on heat pumps during warm weather
- The HVAC Program team actively reached out to HVAC contractors during the third quarter to encourage them to perform this testing on both new systems

and existing systems during preventative maintenance visits to ensure proper operation

- 288 HVAC Check tests were performed by HVAC contractors during the third quarter

### Q3 HVAC Enhanced Rebate Quality Control Inspections

- 44 Quality Control (QC) inspections were performed on recently installed heat pumps
- These inspections verify equipment eligibility and provide an opportunity to connect with residents to determine how well their systems are operating, and to share best practices for operation

### Q3 HVAC Program Participating Contractors

- Rhode Island Energy provides customers with a list of Program Participating Contractors
- To be listed (and stay listed) contractors must attend a Program Training, and perform a minimum number of HVAC Check tests each year
- Only Participating Contractors can offer Enhanced Rebates
- During the third quarter the HVAC Program team followed up with both new and existing contractors to offer training and technical support, and to ensure they met and continue to meet the requirements for being listed
- There are currently 75 HVAC Program-approved contractors on the list

### Q3 Weekly HVAC Contractor Newsletter

- The team prepares and distributes a weekly HVAC Program newsletter specifically for HVAC companies, contractors, technicians, distributors, and other trade allies
- Topics for the newsletter during the third quarter included reminders for HVAC vendor staff, MS/AC Check testing tips, rebate submission requirements, reminders and deadlines and links to upcoming HVAC Check trainings
- The newsletter also contained information and links to programs such as EnergyWise and the HEAT Loan
- There are 650+ recipients on the distribution list

**Rhode Island HVAC Report  
Weekly Update**  
September 27, 2022

**Rhode Island Energy™**  
a PPL company

**RI Heating & Cooling Program: Updated Listing to be Posted**

- Only trained, active, participating contractors can offer the Enhanced rebates.
  - MUST submit at least **3 passing tests** to remain eligible to offer the Enhanced rebates and appear on the Published List!
  - Get tests submitted to be listed on the next update.
- Need On-Site Tech Support? Let us know at [HVAC@CLEAResult.com](mailto:HVAC@CLEAResult.com) in advance
- OR have techs call 508-365-3262, 8AM-5PM, for live tech support

### Q3 High Efficiency Gas Program Support

- The HVAC Program team continued to promote Rhode Island Energy’s high efficiency gas rebates to distributors, gas equipment factory representatives and contractors through the weekly newsletter and through direct contact (email, phone)

### Q3 High Efficiency Equipment Marketing Efforts

- High efficiency electric and natural gas hot water solutions
  - Rhode Island Energy promoted the availability of incentives for electric heat pump water heaters, gas combination boiler water heaters and gas water heaters to existing customers
- High efficiency electric heating and cooling
  - Rhode Island Energy promoted the availability of incentives for central heat pumps, mini-split heat pumps and central air conditioning

**Rhode Island Energy**  
A VE company

**Stay cool in the summer and save energy all year long.**

Not only will a heat pump cool your home during the summer months, but this innovative, all-in-one technology is also designed to stand up to even the coldest Northeast winters. Heat pumps are also very energy-efficient compared to traditional electric, oil and propane heating equipment. That means you'll be saving energy—and the environment.

Whether you are looking to supplement or replace your existing HVAC system, there are several options. See which heat pump is right for you:

- Central Heat Pumps**  
Maximize efficiency and comfort with this whole-home system that can be retrofitted into existing duct work.  
**Get \$1,050 rebate\***
- Mini-Split Heat Pumps**  
An ideal solution for heating and cooling specific rooms in your home, mini-splits can be ducted or ductless.  
**Get \$450 or \$1,050 rebate\*†**
- Central Air Conditioning**  
If you're just looking for a cooling solution for your home, upgrade to a new energy-efficient central air conditioning system.  
**Get \$150 rebate\***

**Rhode Island Energy**  
A VE company

**Enjoy more energy savings — and more comfort.**

Water heating is essential to our daily lives at home, but it's something most of us don't think about until our equipment breaks down. If your water heater is getting older, we are here to help with exclusive rebates on new high-efficiency electric and natural gas water-heating solutions.

- Electric Heat Pump Water Heaters**  
**Get up to \$600 rebate**
- Gas Combination Boiler-Water Heaters**  
**Get up to \$1,200 rebate**
- Gas Water Heaters**  
**Get up to \$500 rebate**

### Q3 HVAC Program Challenges

- Ongoing equipment supply issues continue to cause delays in the purchase and installation of equipment

## **Residential Consumer Products**

The Residential Consumer Products program achieved 7,441 net lifetime MWh of electric savings (15.6% of the lifetime goal) through the third quarter of 2022.

With Rhode Island Energy leading the dehumidifier turn-in campaigns the Company has exceeded YTD in 2022 the number of dehumidifiers recycled in all of 2021. During the dehumidifier events customers are also educated about \$30 incentive for the purchase of a new Energy Star dehumidifier as well as a wide variety of other energy efficiency products and HVAC equipment.

Rhode Island Energy kicked off the Most Efficient Refrigerator and Clothes Washer appliance initiative with Home Depot in late Q2. The goal is to influence retailers to stock most efficient appliances at an attempt to drive consumer behavior. Home Depot stores across Rhode Island installed RI Energy marketing material promoting ME appliances resulting in 99 Most Efficient Refrigerators and 7 Most Efficient Clothes Washers sold through September.

Pool pump distributors are reporting brisk business in pool installations for the 2022 season. The Company's outreach vendor TRC has emphasized to installers that only ENERGY STAR® specification 3.0 variable speed pumps on the ENERGY STAR list at time of installation are eligible for the incentive programs. Submissions to the Rhode Island Energy variable speed (frequency) pool pump incentive program currently stand at 128 pumps submitted for incentive. The first submission was from Baystate Pool Supplies, a partner since the inception of the programs.

### **Q3 Residential Consumer Products Challenges**

In conversations with big box retailers, they've reported product sales across the nation are down and believe consumer buying habits are the result of current economic challenges.

## **Home Energy Reports (HER)**

The Home Energy Reports (HER) program achieved 23,639 net lifetime MWh of electric savings (88.0% of the lifetime annual goal) and 79,792 net lifetime MMBtu of gas savings (85.3% of the lifetime goal) through the third quarter of 2022.

In the third quarter, Home Energy Reports provided messaging on fridge recycling, the online marketplace, heat pumps, and gas heating equipment.

**Let us recycle your old fridge**

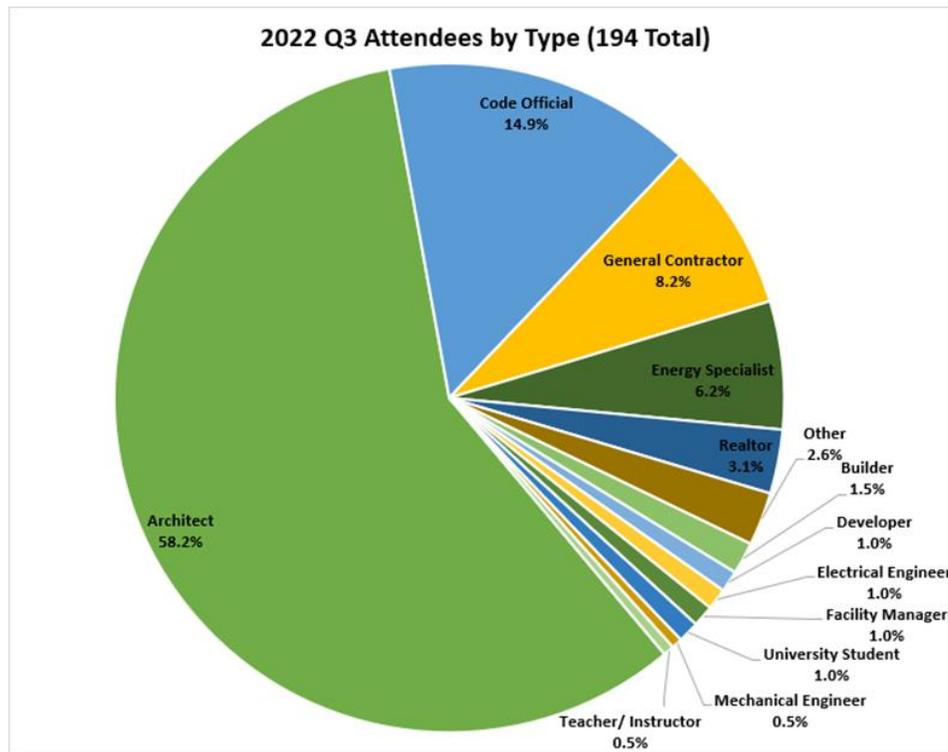


Have an old fridge you're not using much? We'll pick it up and recycle it at no cost. Plus, you'll get a \$50 rebate.

**Schedule a safe pickup**

## Code Compliance Enhancement Initiative (CCEI)

The Company sponsored 12 CCEI training events that engaged 194 industry participants during this quarter. This included nine trainings focused on residential construction with 110 attendees and three commercial training with 84 attendees.



*Q3 Training Participants – Attendees by Type*

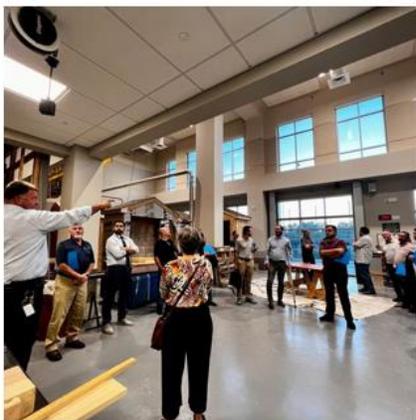
The Company and its vendor continued to partner with several organizations to sponsor and promote trainings in the third quarter. Organizations include Rhode Island Builders Association (RIBA), Rhode Island Building Officials Association (RIBOA), AIA-Rhode Island, Rhode Island Association of Realtors (RIAR), and Rhode Island Plumbing & Mechanical Inspectors Association (RIPMIA). Topics included:

- Weatherization, Insulation and Building Science
- Envelope and Building Science in the Energy Code
- Insulation and Wallboard
- Healthy Homes, Indoor Air Quality and Your Health
- Blower Door & Duct Leakage Testing (Hands-on)
- Home Comfort – Heating Cooling & Ventilation
- Advanced Building Science, Zero Energy Homes & the RI Stretch Code
- Green Building Fundamentals & Standards
- 2021 RI Residential Energy Code

- HVAC Design for Large Spaces with Low Energy Loads
- Introduction to Building Commissioning

# Rhode Island Commercial Energy Code Training

## East Providence High School Building Tour



*Pictured above: East Providence High School Training & Tour*

These trainings are approved for RI Contractor Registration and Licensing Board continuing education units. Since the onset of COVID-19, most trainings have been held virtually, which typically increases attendance. In-person trainings included:

- Evening pre-apprentice training course coordinated through the Residential Construction Workforce Partnership
- Plumbing & Mechanical Inspectors Association Education Meeting in East Providence
- Zero Energy Home Renovation in Providence

### **Challenges and Responses**

The next Rhode Island Energy Conservation Code is expected to be based on IECC 2021. The Company anticipates the state's next Code will be adopted in 2023. The Residential portion of the Energy Conservation code is expected to be substantially more stringent than current code. Although this will save energy over the long term, the Company's vendor raised concerns that many builders, architects, and building code officials are not familiar with design techniques necessary to meet IECC 2021, and there will be a steep learning curve. In the near term, this may lead to design and construction errors that result in issues related to durability and indoor air quality. To help mitigate this risk, the Company and its vendor are collaborating with the Rhode Island Building Code Commission to train as many Rhode Island builders, architects, and code officials as possible on building techniques to meet the new code requirements.

The Company is also involved in development of a stretch code through its work on the Rhode Island Green Building Commission.

### **Large Commercial New Construction**

The Large Commercial New Construction program achieved 47,747 net lifetime MWh of electric savings (24.8% of goal) and 276,165 net lifetime MMBtu of gas savings (35.0% of goal) through the third quarter of 2022.

There are 36 active projects in Q3. A Zero Net Energy (ZNE) non-profit project under the Path 1 ZNE program has qualified for the Path 1 ZNE program.

The New Construction program team is working with a university on a new arena and dining hall on the campus. In addition, the team has engaged a new 60,000 science building at a college that will go through Path 2. In Q3, program staff identified a new state health laboratory in the \$165 million Jewelry District building. A meeting with the State and design team will be held in the future.

## **Challenges and Responses**

The recent energy code changes, adopted February 1, 2022, have reduced potential savings eligible within the New Construction Program. The New Construction team continues to research ways to maintain program savings as the energy code becomes more stringent.

Lighting and gas measures were particularly hard hit, and even HVAC controls measures (such as demand controlled ventilation) are now considered baseline. The Company is updating savings calculations to account for these baseline changes.

Although these changes align with the goals of the energy efficiency programs (helping customers use less energy), it means less claimable program savings. The New Construction program team continues to research ways to maintain program savings as the energy code becomes more stringent.

The slowdown of project design and construction seen in Q2 is starting to improve in Q3 as owners adjust to the new pricing and energy code.

## **Large Commercial Retrofit**

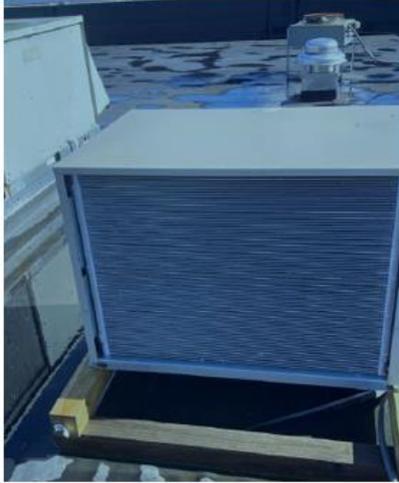
The Large Commercial Retrofit program achieved 150,098 net lifetime MWh of electric savings (48.0% of goal) and 644,585 net lifetime MMBtu of gas savings (48.4% of goal) through the third quarter of 2022.

## **Industrial Initiative**

The Company's Industrial Initiative vendor identified an opportunity for a customer to eliminate simultaneous heating and cooling. The space previously had separate controllers for air conditioning and heating systems. The customer integrated the HVAC system into the building management system, preventing heating while the space is being cooled. This is expected to result in 21,800 kWh per year of savings at very little cost to the customer.

## **EnergySmart Grocer Initiative**

A national grocery store chain began pursuing energy efficiency improvements across its portfolio of Rhode Island stores under the Equipment Systems Performance Optimization (ESPO) initiative in mid-2021. In Q3 2022, a convenience store chain performed coil cleaning on their rooftop condensers and HVAC units at 12 of its locations in Rhode Island, resulting in an energy savings of nearly 10,000 kWh of annual savings at very little cost to the customer.



In addition, one grocery store chain worked installed anti-sweat heating controls at seven locations in Rhode Island, which resulted in nearly 1 million kWh of annual savings.



### **Strategic Energy Management Partnership (SEMP)**

Rhode Island Energy renewed its SEMPs with two universities during Q3, extending each of the agreements for an additional three-year period. The Company also signed a new SEMP with a customer that operates hospitals and other healthcare facilities throughout Rhode Island. This customer had participated previously and signed the new agreement after a gap of several years.

### **Building Analytics**

The Building Analytics Program (BAP) will offer incentives to cover set-up costs associated with these systems provided by prequalified qualified service providers (QSPs). In Q3, Rhode Island Energy and its implementation vendor selected several QSP's through a request for

qualifications (RFQ) to offer software solutions and associated services. The Company expects to onboard QSPs and launch this new initiative in Q4.

### **Challenges and Responses**

The Company continued to observe significant delays in project timelines resulting from supply chain delays. To help mitigate these delays, the Company worked with its vendors to help customers, contractors, and distributors identify alternative equipment with shorter lead times.

In Q3, the company’s line of sight to supply chain issues improved, although the issues persist. Material delays have lengthened project timelines, shifting much of the project pipeline into Q4, specifically for lighting projects.

The availability of qualified refrigeration contractors is a persistent issue. This constraint is less severe in the cooler months, and thus it is a good time for them to work on energy efficiency projects. Nevertheless, this is a significant labor issue, and there is no immediate resolution in sight to attract and train additional refrigeration contractors.

### **Small Business Direct Install**

The Small Business Direct Install (SBDI) program achieved 40,735 net lifetime MWh of electric savings (63.3% of goal) and 52,200 lifetime MMBtu of gas savings (56.9% of goal) through the third quarter of 2022.

### **Enhanced reporting**

To show progress on priority initiatives, the Company will report the number of weatherization projects and LED retrofit kits and luminaires (with and without controls).

There have been 75 gas weatherization projects in the first three quarters of 2022, leveraging RGGI funds to supplement the system benefits charge (SBC) funds to enhance customer economics for these projects.

The table below shows the number of luminaires and retrofit kits with controls for 2020, 2021, and the first three quarters of 2022.

<b>Period</b>	<b>Luminaires</b>	<b>Luminaires with controls</b>	<b>Retrofit kits</b>	<b>Retrofit kits with controls</b>
2020	13,032	149	17,260	450
2021	12,804	246	15,932	908
Q1-Q3 2022	8,199	1,216	6,556	731

## **Projects highlights**

Pawtucket: The SBDI vendor worked with the Pawtucket Businesses Development Corporation (PBDC) on a new initiative targeted to low/moderate income building owners whose property is “public facing” or is located in designated low/moderate income census tracts. The program provides grants to supplement RI Energy SBDI assistance for HVAC-related projects that will result in indoor air quality improvements. An SBDI assessment is the first step in qualifying. Projects up to \$50,000 can be funded in full, with the PBDC picking up the customer’s share of the project cost after the RI Energy incentive is applied. The PBDC has roughly \$300,000 available, and the SBDI vendor began accepting applications in Q3. This is an excellent opportunity to fund comprehensive mechanical improvement for targeted owners and to utilize the RGGI Weatherization initiative to ensure that the building envelope is properly weatherized at the same time.

East Providence: The SBDI vendor participated in planning meetings with RI Energy and East Providence Chamber of Commerce management on opportunities to offer/market program services in conjunction with other RI Energy initiatives in targeted neighborhoods in East Providence. It is expected that the effort will be underway no later than 2023.

Providence: The SBDI vendor participated in preliminary discussions with the City of Providence on its plans for an energy efficiency and electrification initiative leveraging federal funds from the American Rescue Plan Act of 2021 (ARPA). The concept of using this funding to supplement RI Energy’s offerings was explored, including the RGGI weatherization initiative which can be an important resource to make building envelope improvements possible. A sample audit of a facility was conducted and prepared. It is expected that those discussions will continue.

Marketing collateral was maintained for all three of these efforts along with dedicated web pages in English and Spanish to ensure comprehension. Additionally, the Company's vendor has a Spanish-speaking employee on hand for any translation needs.

## **Challenges and Responses**

The period was marked by limited demand for program services. While weatherization promotions during summer months typically only yielded limited results, this period showed very weak uptake.

To help re-energize demand for the program, two direct mail pieces were distributed in late September/early October to approximately 10,000 RI Energy small business customers, spaced about two weeks apart. It is hoped that these pieces, coupled with a seasonal uptick and complementary RI Energy outreach, will help restore demand to healthy levels.

In addition, during the period RISE worked with entities in three urban communities on the design of initiatives to stimulate activity, particularly in neighborhoods that would include a higher concentration of disadvantaged small businesses.

## **Evaluation, Measurement, and Verification**

Four studies were completed in the third quarter of 2022.

The C&I Lighting Market Characterization Study was completed in September 2022 by DNV. The study calculated adjusted measure lives for non-residential custom and prescriptive lighting measures lives in RI. The results of this study were adopted into RI Energy's 2023 Plan.

The Impact Evaluation of PY2020 Custom Gas Installations was completed in August 2022 by DNV. The study updated realization rates for custom gas projects, as part of a rolling effort that incorporated results from PY2018, PY2019, and PY2020. The results of this study were adopted into RI Energy's 2023 Plan.

The Impact Evaluation of PY2020 Custom Electric Installations was completed in September 2022 by DNV. The study updated realization rates for custom electric projects, as part of a rolling effort that incorporated results from PY2018, PY2019, and PY2020. The results of this study were adopted into RI Energy's 2023 Plan.

The Cannabis Industry Standard Practice (ISP) Study was completed in August 2022 by DNV. The study identified industry standard practices for the medical market cannabis industry with a focus on horticultural lighting, lighting controls, cultivation area HVAC, HVAC controls, and dehumidification. The ISPs from the study were adopted to be used by implementors as the baselines for projects and by evaluators when evaluating projects.

## **ConnectedSolutions**

For the Residential Thermostat program, 15 events were called in the 2022 season. There are currently 4,854 thermostat enrollments, with 366 pending enrollments.

For the Residential Battery program, 47 events were called in the 2022 season. There are currently 521 battery enrollments.

There are currently 536 C&I customers enrolled in the Commercial ConnectedSolutions program.

**Pilots, Demonstrations, Assessments**

<b>PDA Name</b>		<b>Q3 2022 Updates</b>
<b><u>New Air Sealing &amp; Insulation - Demonstration - Resi</u></b>	Date	10/25/2022
	Stage	Retire demonstration
	Recent Activity	Study completed
	Next steps	n/a
<b><u>Solar Inverter DLC - Demonstration - Resi</u></b>	Date	7/18/2022
	Stage	Launch
	Recent Activity	Successfully demonstrated the technology.
	Next steps	Launch full-scale program in 2023.
<b><u>Final Gas Appliances - Assessment - Resi</u></b>	Date	10/21/2022
	Stage	Qualify
	Recent Activity	Continue assessing opportunities for electric appliances at new homes
	Next steps	Finalize assessment
<b><u>Gas HPs - Demonstration - Resi</u></b>	Date	7/8/2022
	Stage	Retire
	Recent Activity	Due to limited product interest and slow payback periods, this demonstration is ending.
	Next steps	Retire demonstration
<b><u>HVAC Lighting Controls Plus - Demonstration - C&amp;I</u></b>	Date	10/21/2022
	Stage	Retire
	Recent Activity	Completed Demonstration. Concluded limited potential for NLC+HVAC approach.
	Next steps	Retire demonstration
<b><u>Building Flexibility through DR - Assessment - C&amp;I</u></b>	Date	10/25/2022
	Stage	Develop or Demonstrate
	Recent Activity	Study with DNV ongoing
	Next steps	Finalize study and evaluate results
<b><u>Refrigeration Leak Survey &amp; Repair - Demonstration - C&amp;I</u></b>	Date	10/25/2022
	Stage	Develop or Demonstrate
	Recent Activity	Post-installation monitoring of refrigerant leakage is nearing completion. Analysis will be conducted in Q4.
	Next steps	Complete monitoring and analyze data and savings

<b><u>Gas DR - Pilot - C&amp;I</u></b>	Date	10/25/2022
	Stage	Develop or Demonstrate
	Recent Activity	Enrolling new customers for this winter
	Next steps	Conduct pilot this winter season
<b><u>Gas HPs - Demonstration - C&amp;I</u></b>	Date	7/8/2022
	Stage	Retire demonstration
	Recent Activity	Attempted customer recruitment with little success.
	Next steps	n/a
<b><u>Rightsizing RTUs - Assessment - C&amp;I</u></b>	Date	10/21/2022
	Stage	Plan
	Recent Activity	Kicked off in Sept. Vendor began study.
	Next steps	Continue Assessment
<b><u>Automated RTU Optimization - Demonstration - C&amp;I</u></b>	Date	10/25/2022
	Stage	Demonstrate
	Recent Activity	Recruiting customers; installing product and monitoring equipment
	Next steps	Continue recruitment and installation
<b><u>SEM/CEI - Demonstration - C&amp;I</u></b>	Date	7/8/2022
	Stage	Retire demonstration
	Recent Activity	Closed out final CEI projects
	Next steps	n/a
<b><u>Air Curtains - Demonstration - C&amp;I</u></b>	Date	11/9/2022
	Stage	Qualify
	Recent Activity	No recent demonstration activity, as next steps are to develop the existing documentation into a measure.
	Next steps	Modify previous development work to create RI-specific measure analysis; provide analysis to Evaluation for review.
<b><u>Smart Valves for Chilled Water Systems - Demonstration - C&amp;I</u></b>	Date	10/25/2022
	Stage	Develop or Demonstrate
	Recent Activity	Monitoring of operating chillers is ongoing.
	Next steps	Finalize monitoring, analyze consumption and savings

**RHODE ISLAND ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND**  
**Table 1: Summary of Electric 2022 Target and Preliminary 3rd Quarter Results**

ELECTRIC PROGRAMS Sector and Program	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(18)	(13)	(14)	(15)	(19)	(16)	(17)
	Demand Reduction (Annual kW)			Energy Savings (Annual MWh)			Customer Participation			Expenses (\$ 000)				Energy Savings (Lifetime MWh)				\$/Lifetime kWh	
	Target	Year To Date	Pct Achieved	Target	Year To Date	Pct Achieved	Target	Year To Date	Pct Achieved	Budget	Year To Date	Pct Achieved	Year End Forecast	Target	Year to Date	Pct Achieved	Year End Forecast	Target \$/kWh	Year to Date
<b>Commercial and Industrial</b>																			
Large Commercial New Construction	1,745	394	22.6%	12,589	3,190	25.3%	96	24	25.3%	\$ 9,034.1	\$ 2,222.1	24.6%	39.2%	192,343	47,747	24.8%	34.1%	\$ 0.047	\$ 0.047
Large Commercial Retrofit	8,490	3,179	37.4%	41,132	19,947	48.5%	2,239	2,033	90.8%	\$ 25,010.5	\$ 7,224.6	28.9%	87.1%	312,931	150,098	48.0%	92.4%	\$ 0.080	\$ 0.048
Small Business Direct Install	904	871	96.4%	9,976	5,010	50.2%	490	339	69.1%	\$ 8,883.3	\$ 3,877.5	43.6%	82.8%	64,394	40,735	63.3%	100.5%	\$ 0.138	\$ 0.095
Commercial ConnectedSolutions										\$ 4,393.6	\$ 298.7	6.8%	110.7%						
Community Based Initiatives - C&I										\$ 85.0	\$ 3.9	4.6%	100.0%						
Financing										\$ 2,000.0	\$ -	0.0%	100.0%						
Commercial Workforce Development										\$ 157.5	\$ -	0.0%	100.0%						
<b>SUBTOTAL</b>	<b>11,139</b>	<b>4,445</b>	<b>39.9%</b>	<b>63,696</b>	<b>28,147</b>	<b>44.2%</b>	<b>2,825</b>	<b>2,396</b>	<b>84.8%</b>	<b>\$ 49,564.1</b>	<b>\$ 13,626.8</b>	<b>27.5%</b>	<b>79.3%</b>	<b>569,668</b>	<b>238,580</b>	<b>41.9%</b>	<b>73.6%</b>	<b>\$ 0.087</b>	<b>\$ 0.057</b>
<b>Income Eligible Residential</b>																			
Single Family - Income Eligible Services	480	119	24.9%	3,314	785	23.7%	3,583	3,153	88.0%	\$ 13,275.3	\$ 6,063.9	45.7%	75.3%	38,506	8,145	21.2%	74.8%	\$ 0.345	\$ 0.744
Income Eligible Multifamily	49	38	76.6%	1,538	287	18.7%	3,600	1,060	29.4%	\$ 3,538.9	\$ 173.8	4.9%	79.1%	24,309	846	3.5%	65.0%	\$ 0.146	\$ 0.205
<b>SUBTOTAL</b>	<b>529</b>	<b>157</b>	<b>29.7%</b>	<b>4,851</b>	<b>1,072</b>	<b>22.1%</b>	<b>7,183</b>	<b>4,213</b>	<b>58.7%</b>	<b>\$ 16,814.3</b>	<b>\$ 6,237.7</b>	<b>37.1%</b>	<b>76.1%</b>	<b>62,816</b>	<b>8,991</b>	<b>14.3%</b>	<b>71.0%</b>	<b>\$ 0.268</b>	<b>\$ 0.694</b>
<b>Non-Income Eligible Residential</b>																			
Residential New Construction	74	28	37.8%	867	130	15.0%	462	168	36.4%	\$ 1,617.0	\$ 792.9	49.0%	75.4%	14,947	2,493	16.7%	45.0%	\$ 0.108	\$ 0.318
ENERGY STAR® HVAC	240	155	64.7%	4,620	4,294	93.0%	5,229	3,691	70.6%	\$ 4,684.4	\$ 2,707.6	57.8%	120.0%	77,717	75,627	97.3%	145.0%	\$ 0.060	\$ 0.036
EnergyWise	424	338	79.7%	2,789	2,006	71.9%	12,000	8,394	70.0%	\$ 15,557.0	\$ 9,911.2	63.7%	100.4%	13,472	9,233	68.5%	100.0%	\$ 1.155	\$ 1.073
EnergyWise Multifamily	143	52	36.5%	1,424	351	24.7%	3,600	1,882	52.3%	\$ 3,238.3	\$ 629.5	19.4%	60.0%	20,783	1,262	6.1%	45.0%	\$ 0.156	\$ 0.499
Residential Consumer Products	1,118	242	21.6%	6,885	1,016	14.8%	34,692	2,426	7.0%	\$ 2,796.0	\$ 946.1	33.8%	70.0%	47,554	7,441	15.6%	50.0%	\$ 0.059	\$ 0.127
Home Energy Reports	3,692	3,250	88.0%	26,852	23,639	88.0%	323,248	263,019	81.4%	\$ 2,639.1	\$ 1,634.9	61.9%	100.0%	26,852	23,639	88.0%	100.6%	\$ 0.098	\$ 0.069
Residential ConnectedSolutions										\$ 1,822.6	\$ 808.3	44.3%	89.5%						
Energy Efficiency Education Programs										\$ -	\$ 39.6	0.0%	0.0%						
Community Based Initiatives - Residential										\$ 255.1	\$ 0.0	0.0%	49.0%						
Comprehensive Marketing - Residential										\$ 247.9	\$ 17.8	7.2%	60.5%						
<b>SUBTOTAL</b>	<b>5,691</b>	<b>4,065</b>	<b>71.4%</b>	<b>43,435</b>	<b>31,436</b>	<b>72.4%</b>	<b>379,231</b>	<b>279,579</b>	<b>73.7%</b>	<b>\$ 32,857.4</b>	<b>\$ 17,487.9</b>	<b>53.2%</b>	<b>94.1%</b>	<b>201,325</b>	<b>119,695</b>	<b>59.5%</b>	<b>95.9%</b>	<b>\$ 0.163</b>	<b>\$ 0.146</b>
<b>Regulatory</b>																			
EERMC										\$ 766.2	\$ 218.6	28.5%	100.0%						
OER										\$ 1,541.7	\$ 1,196.0	77.6%	100.0%						
Rhode Island Infrastructure Bank										\$ 3,737.5	\$ -	0.0%	100.0%						
<b>SUBTOTAL</b>										<b>\$ 6,045.4</b>	<b>\$ 1,414.5</b>	<b>23.4%</b>	<b>100.0%</b>						
<b>TOTAL</b>	<b>17,359</b>	<b>8,668</b>	<b>49.9%</b>	<b>111,983</b>	<b>60,655</b>	<b>54.2%</b>	<b>389,239</b>	<b>286,188</b>	<b>73.5%</b>	<b>\$ 105,281.1</b>	<b>\$ 38,767.1</b>	<b>36.8%</b>	<b>84.5%</b>	<b>833,808</b>	<b>367,266</b>	<b>44.0%</b>	<b>78.8%</b>	<b>\$ 0.126</b>	<b>\$ 0.106</b>
Municipal LED Street Lights										485.9	\$ 573.7	118.1%							

NOTES  
(1)(4)(7) Targets from Docket 5189 - Attachment 5, Table E-7 (electric), Refiled January 27, 2022.  
(3) Pct Achieved is Column (2)/ Column (1).  
(6) Pct Achieved is Column (5)/ Column (4).  
(7) Participation was planned and is reported in 'net' terms which takes into account free-ridership and spillover.  
(9) Pct Achieved is Column (8)/ Column (7).  
(10) Approved Implementation Budget from Docket 5189, Attachment 5 Table E-3 (electric), Refiled January 27, 2022.  
(11) Year To Date Expenses include Implementation expenses.  
(12) Pct Achieved is Column (11)/ Column (10).  
(17) \$/lifetime kWh = Column (11)/Column (14)  
(16) Planned \$/lifetime MWh from Docket 5189 - Attachment 5, Table E-5 (electric), Refiled January 27, 2022 - adjusted to reflect format of quarterly report. Program Implementation Expenses/lifetime kWh.  
(18) (19) Year End Spending and Energy Savings forecasts are best estimates based on the information available and may change throughout the year.  
Values in quarterly reports are preliminary and subject to change. Data is finalized in the Year-End Report.

**RHODE ISLAND ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND**  
**Table 2: Summary of Gas 2022 Target and Preliminary 3rd Quarter Results**

GAS PROGRAMS Sector and Program	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(16)	(10)	(11)	(12)	(17)	(13)	(14)	(15) Peak Hour Gas Demand Savings (MMBtu)
	Energy Savings (Annual MMBtu)			Customer Participation			Expenses (\$ 000)				Energy Savings (Lifetime MMBtu)				\$/Lifetime MMBtu		
	Target	Year To Date	Pct Achieved	Target	Year To Date	Pct Achieved	Budget	Year To Date	Pct Achieved	Year End Forecast		Planned	Year To Date	Pct Achieved	Year End Forecast	Planned	Year to Date
<b>Commercial and Industrial</b>																	
Large Commercial New Construction	52,956	20,382	38.5%	94	18	19.4%	\$ 3,140.9	\$ 1,430.8	45.6%	67.3%	788,763	276,165	35.0%	78.4%	\$ 3.98	\$ 5.18	10.19
Large Commercial Retrofit	142,888	63,127	44.2%	62	60	96.1%	\$ 4,672.1	\$ 3,037.1	65.0%	114.1%	1,332,508	644,585	48.4%	103.9%	\$ 3.51	\$ 4.71	31.56
Small Business Direct Install	6,113	2,743	44.9%	170	81	47.5%	\$ 354.1	\$ 277.4	78.4%	85.1%	91,700	52,200	56.9%	100.0%	\$ 3.86	\$ 5.32	1.37
Commercial & Industrial Multifamily	8,803	1,242	14.1%	729	58	8.0%	\$ 957.0	\$ 236.2	24.7%	55.0%	131,220	21,962	16.7%	51.7%	\$ 7.29	\$ 10.75	0.62
Commercial Pilots							\$ 215.8	\$ 67.2	31.1%	100.0%							
Community Based Initiatives - C&I							\$ 28.3	\$ 1.2	4.3%	100.0%							
Commercial Workforce Development							\$ 67.5	\$ -	0.0%	100.0%							
<b>SUBTOTAL</b>	<b>210,760</b>	<b>87,494</b>	<b>41.5%</b>	<b>1,056</b>	<b>217</b>	<b>20.5%</b>	<b>\$ 9,435.7</b>	<b>\$ 5,049.8</b>	<b>53.5%</b>	<b>91.0%</b>	<b>2,344,192</b>	<b>994,912</b>	<b>42.4%</b>	<b>92.3%</b>	<b>\$ 4.03</b>	<b>\$ 5.08</b>	<b>43.75</b>
<b>Income Eligible Residential</b>																	
Single Family - Income Eligible Services	10,942	4,271	39.0%	1,098	368	33.5%	\$ 6,370.0	\$ 2,825.7	44.4%	75.0%	218,847	85,428	39.0%	75.0%	\$ 29.11	\$ 33.08	2.14
Income Eligible Multifamily	14,700	3,264	22.2%	3,150	1,202	38.2%	\$ 2,947.5	\$ 874.2	29.7%	115.0%	273,085	79,315	29.0%	90.0%	\$ 10.79	\$ 11.02	1.63
<b>SUBTOTAL</b>	<b>25,642</b>	<b>7,536</b>	<b>29.4%</b>	<b>4,248</b>	<b>1,570</b>	<b>37.0%</b>	<b>\$ 9,317.6</b>	<b>\$ 3,700.0</b>	<b>39.7%</b>	<b>87.7%</b>	<b>491,932</b>	<b>164,743</b>	<b>33.5%</b>	<b>83.3%</b>	<b>\$ 18.94</b>	<b>\$ 22.46</b>	<b>3.77</b>
<b>Non-Income Eligible Residential</b>																	
EnergyWise	20,850	16,817	80.7%	1,761	2,804	159.2%	\$ 8,575.0	\$ 6,513.7	76.0%	104.5%	478,550	396,134	82.8%	105.0%	\$ 17.92	\$ 16.44	8.41
Energy Star® HVAC	26,740	11,991	44.8%	3,062	1,537	50.2%	\$ 3,650.5	\$ 1,453.5	39.8%	75.7%	439,717	199,449	45.4%	80.0%	\$ 8.30	\$ 7.29	6.00
EnergyWise Multifamily	8,279	1,076	13.0%	4,000	123	3.1%	\$ 1,488.6	\$ 230.8	15.5%	70.0%	147,064	23,018	15.7%	60.0%	\$ 10.12	\$ 10.03	0.54
Home Energy Reports	93,548	79,792	85.3%	152,324	145,011	95.2%	\$ 441.5	\$ 255.8	57.9%	100.0%	93,548	79,792	85.3%	100.0%	\$ 4.72	\$ 3.21	39.90
Residential New Construction	3,610	672	18.6%	289	67	23.1%	\$ 566.4	\$ 323.2	57.1%	98.0%	64,899	16,802	25.9%	68.0%	\$ 8.73	\$ 19.24	0.34
Comprehensive Marketing - Residential							\$ 68.0	\$ 15.2	22.4%	100.0%							
Community Based Initiatives - Residential							\$ 85.0	\$ 0.0	0.0%	23.5%							
<b>SUBTOTAL</b>	<b>153,027</b>	<b>110,348</b>	<b>72.1%</b>	<b>161,436</b>	<b>149,542</b>	<b>92.6%</b>	<b>\$ 14,875.0</b>	<b>\$ 8,792.1</b>	<b>59.1%</b>	<b>93.1%</b>	<b>1,223,778</b>	<b>715,194</b>	<b>58.4%</b>	<b>88.3%</b>	<b>\$ 12.16</b>	<b>\$ 12.29</b>	<b>55.17</b>
<b>Regulatory</b>																	
EERMC							\$ 259.5	\$ 74.0	28.5%	100.0%							
OER							\$ 755.6	\$ 527.0	69.7%	100.0%							
Rhode Island Infrastructure Bank							\$ 1,262.5	\$ -	0.0%	100.0%							
<b>SUBTOTAL</b>							<b>\$ 2,277.6</b>	<b>\$ 601.0</b>	<b>26.4%</b>	<b>100.0%</b>							
<b>TOTAL</b>	<b>389,430</b>	<b>205,378</b>	<b>52.7%</b>	<b>166,740</b>	<b>151,329</b>	<b>90.8%</b>	<b>\$ 35,906.0</b>	<b>\$ 18,143.0</b>	<b>50.5%</b>	<b>91.6%</b>	<b>4,059,902</b>	<b>1,874,849</b>	<b>46.2%</b>	<b>90.0%</b>	<b>\$ 8.84</b>	<b>\$ 9.68</b>	<b>102.69</b>

**NOTES**

- (1)(4) Targets from Docket 5189 - Attachment 6, Table G-7 (gas), Refiled January 27, 2022.
  - (3) Pct Achieved is Column (2)/ Column (1).
  - (4) Participation was planned and is reported in 'net' terms which takes into account free-ridership and spillover.
  - (6) Pct Achieved is Column (5)/ Column (4).
  - (7) Approved Implementation Budget from Docket 5189, Attachment 6 Table G-3 (gas), Refiled January 27, 2022.
  - (8) Year To Date Expenses include Implementation expenses.
  - (9) Pct Achieved is Column (8)/ Column (7).
  - (13) Planned \$/lifetime MMBtu from Docket 5189 - Attachment 6, Table G-5 (gas), Refiled January 27, 2022 - adjusted to reflect format of quarterly report. Program Implementation Expenses/lifetime MMBtu.
  - (14) \$/lifetime MMBtu = Column (8)\*1000/Column (11)
  - (15) Peak Hour Gas Demand Savings is a test metric in 2022 and represents a rough approximation of peak-hour gas demand impacts. Column(2) \*0.01 \*0.05
  - (16) (17) Year End Spending and Energy Savings forecasts are best estimates based on the information available and may change throughout the year.
- Values in quarterly reports are preliminary and subject to change. Data is finalized in the Year-End Report.

**RHODE ISLAND ENERGY ELECTRIC ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND**  
**Table 3: Rhode Island Energy 2022 Revolving Loan Funds**

**Large C&I Electric Revolving Loan Fund**

**Small Business Electric Revolving Loan Fund**

<u>Income Statement</u>			<u>Income Statement</u>		
(1)	2022 Funds Available	\$5,202,855	(1)	2022 Funds Available	\$3,137,538
(2)	2022 Loan budget	\$12,000,000	(2)	2022 Loan budget	\$1,500,000
(3)	Committed	\$2,492,539	(3)	Committed	\$792,593
(4)	Paid	\$2,913,223	(4)	Paid	\$594,445
(5)	<u>Repayments</u>	<u>\$4,652,026</u>	(5)	<u>Repayments</u>	<u>\$676,603</u>
(6)	<u>Available 6/30/22</u>	<u>\$4,449,119</u>	(6)	<u>Available 6/30/22</u>	<u>\$2,427,103</u>
(7)	Outstanding loan volume	\$14,483,647	(7)	Outstanding loan volume	\$494,515
(8)	Loan defaults during period (\$)	\$0	(8)	Loan defaults during period (\$)	\$0
(9)	Arrears over 120 days at period end (\$)	\$75,497	(9)	Arrears over 120 days at period end (\$)	\$14,686
 <u>Program Impact</u>			 <u>Program Impact</u>		
(10)	Number of loans	64	(10b)	Participants	436
(10b)	Participants	35	(11)	Annual Savings (Gross MWh)	5,572
(11)	Annual Savings (Gross MWh)	6,124	(12)	Annual Savings (Net MWh)	5,051
(12)	Annual Savings (Net MWh)	4,810	(13)	Lifetime Savings (Gross MWh)	44,879
(13)	Lifetime Savings (Gross MWh)	45,097	(14)	Lifetime Savings (Net MWh)	41,270
(14)	Lifetime Savings (Net MWh)	27,192	(15)	Annual Savings (Gross kW)	1,069
(15)	Annual Savings (Gross kW)	1,197	(16)	Annual Saving (Net kW)	873
(16)	Annual Saving (Net kW)	556	(17)	Total associated incentive volume (\$)	\$3,558,440
(17)	Total associated incentive volume (\$)	\$1,821,582	(18)	Total annual estimated energy cost savings (\$)	\$893,972
(18)	Total annual estimated energy cost savings (\$)	\$851,370			

**Rhode Island Public Energy Partnership (RI PEP)**

<u>Income Statement</u>		
(1)	2022 Funds Available	\$46,895
(2)	2022 Loan budget	\$0
(3)	Committed	\$0
(4)	Paid	\$0
(4a)	Funds Returned to OER	\$0
(5)	<u>Repayments</u>	<u>\$7,267</u>
(6)	<u>Available 6/30/22</u>	<u>\$54,162</u>
(7)	Outstanding loan volume	\$0
(8)	Loan defaults during period (\$)	0
(9)	Arrears over 120 days at period end (\$)	\$0
 <u>Program Impact</u>		
(10)	Number of loans	0
(10b)	Participants	0
(11)	Annual Savings (Gross MWh)	0
(12)	Annual Savings (Net MWh)	0
(13)	Lifetime Savings (Gross MWh)	0
(14)	Lifetime Savings (Net MWh)	0
(15)	Annual Savings (Gross kW)	0
(16)	Annual Saving (Net kW)	0
(17)	Total associated incentive volume (\$)	\$0
(18)	Total annual estimated energy cost savings (\$)	\$0

Notes

- 1 Amount available as of January 1, 2022. Includes line (6) "Available 12/31/21" plus line (3) "Committed" in Table E-6 and G-6 of the 2021 Year End Report.
- 2 Budget adopted by Sales Team for 2022 operations. Budget includes projections of repayments made during 2022.
- 3 As of September 30, 2022
- 4 As of September 30, 2022. This includes all projects paid through September 30, 2022 and the OBR associated with those projects. OBR payment are processed once the associated incentive has been paid, usually in batches.
- 4a Funds returned to RI OER.
- 5 As of September 30, 2022. This includes all projects paid through September 30, 2022 and the OBR associated with those projects. OBR payments are processed once the associated incentive has been paid, usually in batches.
- 6 Fund balance as of September 30, 2022. Committed funds are subtracted from this amount.
- 7 Total outstanding loan balance. Loans lent out that still need to be paid back. This includes loans from previous years.
- 8 Total loan value in default during period.
- 9 Total loan value in arrears for over 120 days as of September 30, 2022.
- 10 As of September 30, 2022
- Unique customer names for large business (one customer name can have multiple sub accounts as is in the case of a franchise). Customer accounts used for small business (not adjusted for net-to-gross).
- 11 As of September 30, 2022
- 12 As of September 30, 2022
- 13 As of September 30, 2022
- 14 As of September 30, 2022
- 15 As of September 30, 2022
- 16 As of September 30, 2022
- 17 Incentives paid out with loans.
- 18 Estimated energy cost savings to loan fund participants.

Values in quarterly reports are preliminary and subject to change. Data is finalized in the Year-End Report.

**RHODE ISLAND ENERGY GAS ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND**  
**Table 4: Rhode Island Energy 2022 Revolving Loan Funds**

**Large C&I Gas Revolving Loan Fund**

<u>Income Statement</u>		
(1)	2022 Funds Available	\$1,035,330
(2)	2022 Loan budget	\$2,000,000
(3)	Committed	\$305,912
(4)	Paid	\$747,752
(5)	Repayments	\$475,910
(6)	<u>Available 6/30/22</u>	<u>\$457,576</u>
(7)	Outstanding loan volume	\$1,580,213
(8)	Loan defaults during period (\$)	\$0
(9)	Arrears over 120 days at period end (\$)	\$59,979
<u>Program Impact</u>		
(10)	Number of loans	33
(10b)	Participants	26
(11)	Annual Savings (Gross MMBtu)	32,385
(12)	Annual Savings (Net MMBtu)	29,713
(13)	Lifetime Savings (Gross MMBtu)	395,781
(14)	Lifetime Savings (Net MMBtu)	369,634
(17)	Total associated incentive volume (\$)	\$1,556,025
(18)	Total annual estimated energy cost savings (\$)	\$609,235

Notes

- 1 Amount available as of January 1, 2022. Includes line (6) "Available 12/31/21" plus line (3) "Committed" in Table E-6 and G-6 of the 2021 Year End Report.
- 2 Budget adopted by Sales Team for 2022 operations. Budget includes projections of repayments made during 2022.
- 3 As of September 30, 2022
- 4 As of September 30, 2022. This includes all project paid through September 30, 2022 and the OBR associated with those projects. OBR payment are processed once the associated incentive has been paid usually in batches.
- 5 As of September 30, 2022
- 6 Fund balance as of September 30, 2022. Committed funds are subtracted from this amount.
- 7 Total outstanding loan balance. Loans lent out that still need to be paid back. This includes loans from previous years.
- 8 Total loan value in default during period.
- 9 Total loan value in arrears for over 120 days as of September 30, 2022.
- 10 As of September 30, 2022
- 10b Unique customer names for large business (one customer name can have multiple sub accounts as is in the case of a franchise).
- 11 As of September 30, 2022
- 12 As of September 30, 2022
- 13 As of September 30, 2022
- 14 As of September 30, 2022
- 15 As of September 30, 2022
- 16 As of September 30, 2022
- 17 Incentives paid out with loans.
- 18 Estimated energy cost savings to loan fund participants.  
 Values in quarterly reports are preliminary and subject to change. Data is finalized in the Year-End Report.

**Table 5  
Rhode Island Energy  
2022 Test Metrics**

**Carbon Reduction<sup>2</sup>**

	<b>CO2 (Electricity)</b>	<b>CO2 (Natural Gas)</b>	<b>CO2 (Oil)</b>	<b>CO2 (Propane)</b>	<b>CO2 (Total)</b>
<b>Residential</b>	12,008	6,455	8,586	15,580	42,631
<b>Income Eligible</b>	410	441	319	14	1,183
<b>C&amp;I</b>	10,752	5,118	(494)	-	15,376
<b>Total</b>	23,170	12,015	8,411	15,594	59,190

NOTES

<sup>2</sup> Carbon emissions values are from AESC 2021, Appendix G Table 159.

Values in quarterly reports are preliminary and subject to change. Data is finalized in the Year-End Report.