

# 2021 EERMC Annual Report

To the General Assembly

April 22, 2021



Rhode Island Energy Efficiency & Resource Management Council

Rhode Island Energy Efficiency and Resource Management Council One Capitol Hill, Providence, RI 02908

rieermc.ri.gov

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### **2021 ANNUAL REPORT EXECUTIVE SUMMARY**

### **Energy Efficiency is Paying Off for Rhode Islanders**



827 full-time equivalent jobs in 2020



1093 firms delivered energy efficiency services in 2020



760,000

metric tons of greenhouse gas life of efficiency measures installed in 2020.

emissions prevented over the Equivalent to taking



\$601 million in total benefits achieved by

efficiency programs in 2020

234,294 cars

off the road for one year

### **2021 Policy Recommendations**



Extend Least Cost **Procurement Law** (§ 39-1-27)



Concentrate support on clean energy workforce development



Share building energy information with new homeowners and renters



Ensure/expand energy program accessibility



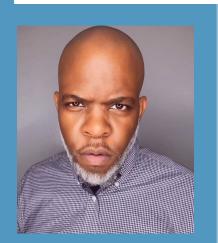
Adopt appliance efficiency standards



Coordinate across energy programs and policies

The Rhode Island Energy Efficiency & Resource Management Council (EERMC) is a group of stakeholders that represents all Rhode Islanders to ensure the utility is investing in the least expensive energy resource – energy efficiency. Learn more at www.rieermc.ri.gov

#### LETTER FROM THE CHAIR



Anthony L. Hubbard, Acting Chair RI EERMC

To Governor Daniel McKee, Leaders and Members of the General Assembly, and all Rhode Island energy consumers:

It is astonishing what our nation had to endure over the last year. Many have said that the COVID-19 virus alone was enough to bring our State to its knees, not to mention the global impact. Add civic unrest and the unveiling of inequities that our nation's most vulnerable people face, and you have all the indicators that change is needed.

As these issues took the forefront, energy efficiency seemed to be less important. But I beg to differ. With the increase of families being at home almost full-time, residential demand for energy increased greatly and energy bills along with it. For already struggling households, the increase in energy cost was quite noticeable as families were forced to decide which basic human need they could meet with their limited resources. I find myself wondering, if the most affected households had benefited previously from Rhode Island's energy efficiency programs, would the impact on their household budgets have been more digestible during the pandemic?

Also, I believe many people are starting to understand the importance of energy and environmental justice issues. Using less energy by incorporating energy-efficient appliances, heating and cooling, and lighting can benefit the environment and have a lasting impact on the personal bottom line. So what needs to happen? Access and resources.

As a Council, we have identified our income-eligible program as a challenging program. We continue to push for program evaluation and redesign to ensure that we meet the needs of all ratepayers. We must insist on program designs that incorporate engagement strategies to maximize the number of low-income households served.

As a member of the EERMC and the income-eligible representative, I am proud of the commitment and priorities of the Council to continue to elevate issues of accessibility to energy programs, skilling the workforce, and achieving the State's greenhouse gas reduction goal of 80% below 1990 levels by 2050. As a community leader, I am personally committed to equity and economic stability—the two work hand and hand.

Therefore, I am excited that the council is continuing our commitment to serve all Rhode Islanders, create a more skilled energy efficiency workforce, support emerging technologies to maximize energy savings, and to do so through an equity lens.

Lastly, I would like to say that I am entering my first term as Chair of the EERMC and am hoping that I will make the Council proud. I thank the outgoing Chair, Christopher Powell, for his many years of hard work and dedication. I commit to always elevating the voice of those who often remain voiceless in system change conversations.

Respectfully Submitted,

Anthony L. Hubbard, Acting Chair

**Energy Efficiency and Resource Management Council** 

#### LETTER FROM THE EXECUTIVE DIRECTOR

To Governor Daniel McKee and Members of the General Assembly:

The Rhode Island Energy Efficiency and Resource Management Council (EERMC) and Office of Energy Resources (OER) are pleased to present the 2021 EERMC Annual Report.

Despite a challenging year in which the worldwide COVID-19 pandemic had significant impacts on our community and economy, Rhode Island has maintained its leadership in cost-effective, least-cost energy investments that are foundational to the state's clean energy future and economy. Rhode Island ranks fourth in the nation for its ambitious policies that promote energy efficiency, create jobs, and help lower the cost of electricity and natural gas for local businesses and consumers, according to the 2020 scorecard of the American Council for an Energy Efficient Economy (ACEEE). The

Nicholas S. Ucci , Executive Director RI EERMC

independent organization found that Rhode Island "continues to achieve among the highest levels of savings in the country" through its aggressive energy saving targets.

With Rhode Island on the frontlines of global climate change and the April 2021 passage of the Act on Climate, which established an economy-wide net-zero emissions target by 2050, it is more important than ever that our state innovate and deploy cost-effective energy efficiency solutions at scale. Energy efficiency is the only resource in our portfolio that places downward pressure on all other components of our utility bills, such as transmission distribution, and capacity costs. In fact, the state's energy efficiency programs saved consumers \$601 million in 2020 alone. Moreover, these programs represent the least-cost means of reducing energy consumption, utility bills, and greenhouse gas emissions, all while creating jobs, improving building stock, and enhancing the comfort of our homes and businesses.

Since 2005, Rhode Island consumers have purchased over 121,000 GWhs of electricity. In that same time, ratepayer funded energy efficiency programs have saved Rhode Island consumers over 13,000 GWhs of electricity. The impact of these savings means that instead of Rhode Island's electric load being 7% higher than it was in 2005, it is actually 15% lower today.

Moreover, energy efficiency is an engine of our local clean energy economy. Prior to COVID's impact on our economy, energy efficiency-related employment accounted for six out of every ten clean energy jobs across Rhode Island, as measured by the state's 2020 Clean Energy Jobs Report. Many clean energy jobs are a source of sustainable-wage employment for Rhode Island residents, particularly for high unemployment communities, and represent workforce opportunities that cannot be outsourced. Thanks to this work, we are also improving the quality, comfort, and safety of Rhode Island homes, businesses, schools, and other public sector facilities.

As the post-pandemic economy recovers in the months ahead, the OER and EERMC look forward to collaborating with policymakers and other valued stakeholders to advance a clean, affordable, reliable, and more equitable energy future for the people of Rhode Island.

Sincerely.

Nicholas S. Ucci

Commissioner, Rhode Island Office of Energy Resources

Executive Director, Energy Efficiency and Resource Management Council

#### **ABOUT THE EERMC**

#### **COUNCIL MEMBERSHIP**

The EERMC consists of fifteen members appointed by the Governor with the advice and consent of the Senate. Eleven 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, 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**

#### **Anthony Hubbard, Acting Chair**

Voting Member Representing Low Income Energy Consumers Director, YouthBuild Providence

#### Peter Gill Case, Acting Vice Chair

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

#### **Roberta Fagan**

Ex-Officio Member Representing Expertise in Delivered Fuels

President, Energy Marketers Association of RI

#### Joe Garlick

Voting Member Representing Small Non-Profit Institutions

Executive Director, NeighborWorks Blackstone River Valley

#### **Thomas Magliocchetti**

Voting Member Representing Large Non-Profit Users Former Vice President, Facilities Management, Rhode Island Hospital

#### **Bill Riccio**

Voting Member Representing Municipalities
Director of Public Services, City of Newport

#### **Kurt Teichert**

Voting Member Representing Expertise in Environmental Issues Senior Lecturer in Environmental Studies, Brown University

#### Nicholas Ucci

Ex-Officio Member - Executive Director, EERMC Commissioner, Office of Energy Resources

#### Karen Verrengia

Voting Member Representing Energy Efficiency Education and Employment Tracking Building Operator Certification Course Manager, CLEAResult

#### **Appointment Pending**

Voting Member Representing Small Commercial & Industrial Users

#### **Appointment Pending**

Voting Member Representing Large Commercial & Industrial Users

#### **Appointment Pending**

Voting Member Representing Residential Users

#### **Appointment Pending**

Voting Member Representing Expertise in Energy Regulation and the Law

#### **Appointment Pending**

Ex-Officio Member Representing Utilities

#### **Appointment Pending**

Ex-Officio Member Representing Utilities

#### WHO WE ARE & WHAT WE DO

The Energy Efficiency and Resource Management Council (EERMC) 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 EERMC 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.

#### **Our Mission**

The Council's mission is to serve Rhode Islanders in their homes and businesses. We represent your needs by providing integrated, comprehensive stakeholder feedback about energy decisions. Our goal is to ensure Rhode Islanders are getting the least expensive and most environmentally healthy energy supply through energy efficiency, conservation, and resource management.

### **Our Purposes**



Make Recommendations



**Engage Stakeholders** 



Monitor and Evaluate



**Ensure Public Benefit** 

The effects of energy efficiency in the last decade now cumulatively account for approximately 20% of Rhode Island's electricity needs. Without the cost-effective energy efficiency investments made over time, which cost on average about 4 cents per kilowatt-hour saved, we would now be paying more than twice that amount to supply that energy.

Rhode Island consumers are the focus of Least Cost Procurement, so ensuring the consumer voice in energy efficiency procurement decisions is critically important. The EERMC, assisted by its expert consultant team, provides meaningful input into National Grid's efficiency procurement plans and adds significant stability to investment decisions. The EERMC'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.

#### **2020 ACHIEVEMENTS AND HIGHLIGHTS**

Rhode Island remains a nationally recognized leader in implementing high-quality energy efficiency programs. Since 2009, Rhode Island has consistently been in the top 10 states ranked by the American Council for an Energy Efficient Economy's State Energy (ACEEE) Scorecard. In 2020, Rhode Island maintained the #1 ranking (tied with Massachusetts) in the category of "utility-sector energy efficiency programs and policies" earning a near perfect score in that category.

Overall, Rhode Island ranked #4 by posting some of the highest energy savings levels in the nation, promoting goals to cut emissions 45% below 1990 levels by 2035, installing more public electric vehicle charging stations than most states, consolidating home energy data in a central portal, promoting and standardizing residential energy labeling practices, requiring efficient public buildings and fleets, and working to advance construction of zero energy buildings. See Appendix A for Rhode Island's scorecard.



### 2020 STATE ENERGY EFFICIENCY SCORECARD



Rhode Island ranked fourth in the 2020 State Energy Efficiency Scorecard, one position lower than it held last year. The state earned 39.5 points out of a possible 50, 1 point less than it earned in 2019.

# 2020 ENERGY EFFICIENCY PROGRAM RESULTS



**Total Participants:** 

801,759



**Utility Program Cost:** 

\$112.8 million



**Total Benefits:** 

\$601.3 million



Cost Per Lifetime kWh of Electricity Saved: \$0.068

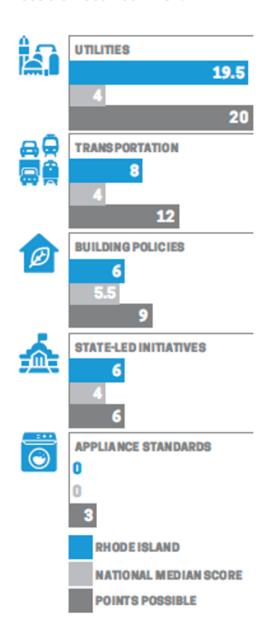


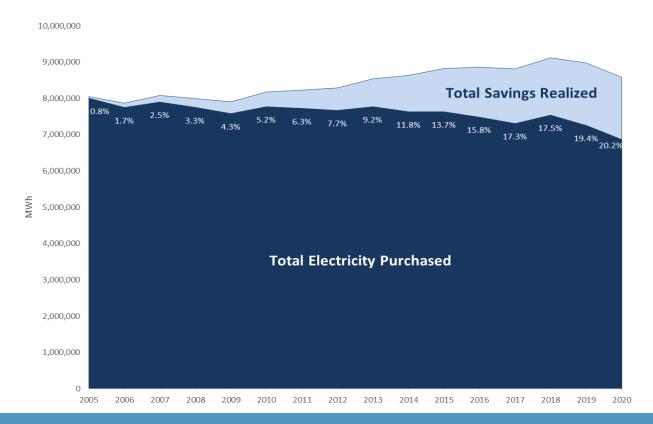
Cost Per Lifetime MMBTU of Natural Gas Saved: \$8.31



Electric Savings as a Percent of 2015

Electric Load: 2.10%





**Figure 1. Cumulative Impact of Efficiency Investments on RI Electric Supply Requirements (2005-2020).** Percentages represent the percent of load that cumulative electric savings since 2005 are covering.

Since 2005, Rhode Island consumers in National Grid's service territory have purchased over 121,000 GWhs of electricity. In that same time, rate payer funded energy efficiency programs have saved Rhode Island consumers over 13,500 GWhs of electricity. The impact of these savings means that instead of Rhode Island's electric load being 7% higher than it was in 2005, it is actually 15% lower. Additionally, because savings persist over the lifetime of the measures installed, the cumulative savings realized in 2020 account for over 20% of what the electric load would have been absent the energy efficiency programs.

### **Energy Efficiency is Paying Off for Rhode Islanders**



**827** full-time equivalent jobs in 2020



**1093** firms delivered energy efficiency services in 2020



760,000

metric tons of greenhouse gas emissions prevented over the life of efficiency measures installed in 2020.

Equivalent to taking

**234,294** cars off the road for one year



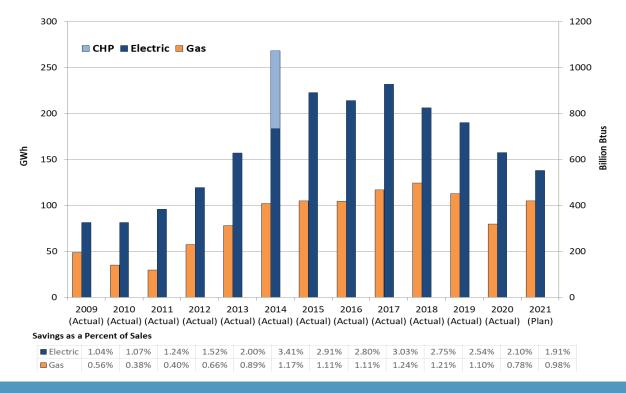
\$601 million

in total benefits achieved by efficiency programs in 2020

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#### **2020 ACHIEVEMENTS AND HIGHLIGHTS**

Since 2009, National Grid's Energy Efficiency Programs have provided over \$3.9 Billion in realized benefits. This compares to total program costs of about \$1.5 Billion, resulting in a cumulative benefit-cost ratio of 2.8. Achievement of the 2021 Plan goals will push the total realized benefits to over \$4.7 Billion.



**Figure 2.** Actual Energy Savings (2009-2020) and Goals (2021). Electric and natural gas energy savings over time shown in annual GWh and Billion Btus, respectively. Savings as a Percent of Sales is based on forecasted sales for 2009-2014 and reference loads thereafter. 2015-2017 is based on the 2012 Reference Load, 2018-2020 is based on the 2015 Reference Load, and 2021 is based on the 2019 Reference Load.

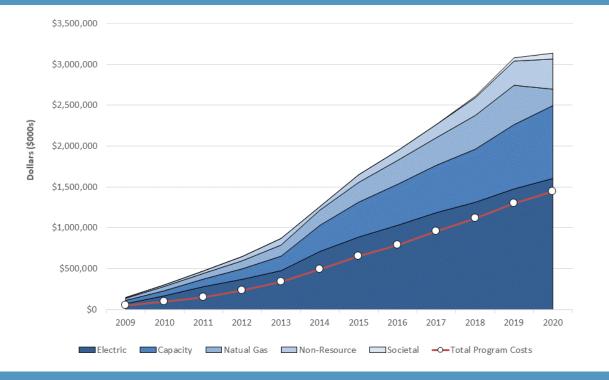


Figure 3. Cumulative Value of Energy Efficiency Program Benefits vs. Costs.

#### **2021 POLICY RECOMMENDATIONS**

R.I.G.L. § 42-140.1-5 requires that the EERMC "Submit 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 EERMC submits the following recommendations that will support Rhode Island's position as a national leader in energy efficiency and resource conservation.



#### **Extend Least Cost Procurement law**

The EERMC strongly recommends that the General Assembly extend Rhode Island's Least Cost Procurement law (§ 39-1-27.7) for electric, delivered fuels, and gas customers by passing legislation that perpetuates, facilitates, and enhances implementation of the law for years to come. Currently the law is set to expire in 2024. This law is foundational to all of Rhode Island's clean energy and greenhouse gas emissions reduction goals. It supports the least-cost means of reducing ratepayer energy bills and carbon. These programs also employ the majority of clean energy works in Rhode Island – six out of every ten sector jobs (pre-COVID) were derived from these activities.



### Concentrate support on clean energy workforce development

If Rhode Island is to achieve its economy-wide greenhouse gas emissions targets, it will require a well-trained workforce to install robust energy efficiency measures and modernize heating and transportation equipment. In particular, the energy efficiency workforce will be rapidly changing in the coming years and requires a retooling of existing skillsets. Therefore, current efforts by the RI Department of Labor & Training and the Governor's Workforce Board should be ramped to accommodate this work and coordinate with existing clean energy programs wherever possible. This is particularly true for historically marginalized communities which may offer unique opportunities to train new workers in fields ripe for employment growth.



### Ensure/expand energy program accessibility

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. There should be a concerted effort to reach those who have been historically marginalized, are economically vulnerable, and/or those who are currently above poverty guidelines but need significant assistance to make efficiency investments. Coordination among all utility, state and federal income-eligible offerings/programs should be optimized to enhance the customer experience, increase program efficiency, and to strive for widespread program participation.



### **Adopt appliance efficiency standards**

Rhode Island should adopt comprehensive appliance efficiency standards that also backstop existing federal appliance standards that may languish. Such action would achieve large energy and cost savings for Rhode Islanders. Appliance efficiency standards set achievable energy and water use limits for appliances sold in Rhode Island. Rhode Island has not updated its appliance standards legislation since 2006. As other nearby states update their appliance standards, we potentially expose Rhode Islanders to less efficient products that are more expensive to operate. Timely appliance standards updates are an important means of reducing utility bills as well as energy and water waste.



### Coordinate across energy programs & policies

A concerted effort should be made to coordinate energy efficiency programs with renewable energy deployment, grid modernization, heating sector transformation, state health initiatives, resiliency efforts, and any other relevant state and federal programs that promote well-being and energy security and affordability for all Rhode Islanders.



#### Share building energy information with new homeowners & renters

Aggregated or asset-based building energy information should be shared with prospective buyers/renters when a building is put up for sale or lease. This would allow greater transparency in Rhode Island building transactions, would spur the market for more energy efficient homes, and would provide a level of customer protection not currently available to home buyers and renters. Legislation to require the generation of building energy labels and their disclosure at time of listing is necessary to ensure comparability between buildings. States such as New York and Hawaii provide home energy information during building transactions as a means of protecting consumers from potentially unseen utility costs.

# EERMC PRIORITIES FOR THE 2022 ENERGY EFFICIENCY AND SYSTEM RELIABILITY PROCUREMENT ANNUAL PLANS

As part of its fulfillment of the roles and responsibilities legislated in R.I.G.L. §42-140.11, the EERMC provides the following input and direction to support development of the 2022 Annual Energy Efficiency and System Reliability Plans. The Council looks forward to continuing its long-standing role as contributor to and facilitator of the yearly collaborative effort to develop and enhance energy efficiency programs that provide significant economic, health, and environmental benefits to Rhode Island ratepayers. Additional detail can be found at rieermc.ri.gov.

#### Priority #1: Align with Three-Year Plan

- Target "High Scenario" for savings and benefits goals
- Identify how each Three-Year Plan priority will apply in 2022 Plan
- Align with Market Potential Study (MPS)
- Maximize cost-efficiency while delivering maximum savings and benefits

#### **Priority #2: Comply with Least Cost Procurement Standards**

- Apply the clear, outcome-oriented direction provided in the LCP Standards section on General Plan Design and Principles for annual planning
- Include key metrics to be tracked and reported

#### **Priority #3: Incorporate Stakeholder Input**

- Reflect Priorities set by Technical Working Group members
- Reflect Equity Working Group findings and conclusions
- Incorporate input from robust and actionable Customer Feedback Activities
- Incorporate feedback from Annual Combined Heat and Power event stakeholders

#### **Priority #4: Support Equity and Access**

- Fulfill and apply results to 2022 EE Plan from the 2021 EE Plan commitments, including:
- Commit to create clear, comprehensive list of tasks that will be added to quarterly reports to support full and transparent accountability of performance in achieving the commitments
- Include clear, detailed remediation strategies to assure corrective action on underperforming programs

### **Priority #5: Ensure an Effective and Efficient Development and Review Process**

- Adhere to Key Deliverables and Schedule
- Assure necessary time is afforded the EERMC and stakeholders to participate in, review and reach clear understanding of the content of the 2022 EE Plan sufficient to make informed decisions on whether to endorse the plan

### **System Reliability Priorities:**

- Be Responsive Continued responsiveness to Council and other stakeholder input, including specific points identified in the Council's comments on the SRP Plan
- Engage Stakeholders Ensure sufficient opportunities for stakeholder engagement and substantive contributions during SRP planning and implementation

## The remainder of this report describes the activities of the EERMC in 2020, which include:

- Providing oversight and input into 2020 program implementation, which achieved 88% of the electric savings goal and 71% of the natural gas savings goal
- Collaborating with National Grid and key stakeholders on the development of the 2021-2023 Three Year Plan, the 2021 Annual Energy Efficiency Plan, and the 2021 System Reliability Plan
- Collaborating with National Grid on responding to COVID-19's impact on energy efficiency programs
- Monitoring and supporting finance product enhancements of the Rhode Island Infrastructure Bank, and proposing key recommendations for making energy efficiency more accessible to Rhode Islanders through improved financing options
- Exploring challenges, barriers, and opportunities to have a lower cost, cleaner energy future through comprehensive energy system planning and policies

#### **2020 PROGRAMS & INITIATIVES**

# RESIDENTIAL ENERGY EFFICIENCY PROGRAMS

#### National Grid Residential Energy Efficiency Programs

National Grid 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 through annual events such as the Energy Expo at the Rhode Island Home Show and the Company's community-based initiative. 2020 was an unusual year which resulted in innovation and program enhancements to accommodate shifting rules associated with the COVID-19 pandemic.

In mid-March the Company temporarily suspended the contracted vendor delivery of onsite energy efficiency services. Throughout the second quarter of 2020, all programs were gradually resumed, implementing new strategies that had been developed during the suspension including new health and safety protocol for inperson services, virtual services including assessments, training, quality assurance/quality control inspections, front-door delivery of LED bulbs and appliances.

In 2020, more than 3,800 residential thermostats and 52 residential battery systems were enrolled in the Residential Connected Solutions program. Over the course of 34 events in the summer of 2020, these customers delivered an average of 3.9MW from thermostats, and 0.2 MW from batteries, of active demand response curtailment, helping to lower peak load on the grid.

2020 saw a continuation of residential market transformation in lighting. Progress is expected to continue in 2021 as the final year of the residential lighting program.

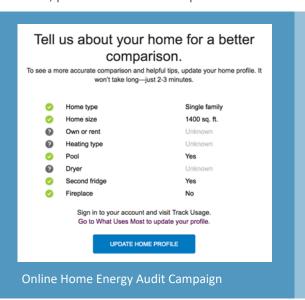
#### **2020 RESIDENTIAL RESULTS**

- 77,803,349 Annual MWh Saved
- 342,731 Lifetime MWh Saved
- 159,135 Annual MMBtu Saved
- 1,206,576 Lifetime MMBtu Saved
- 260,470 Metric Tons of Greenhouse Gas Emissions Avoided
- 791,351 Program Participants
- \$61.0 Million in Lifetime Electric Bill Savings
- \$16.7 Million in Lifetime Gas Bill Savings
- \$175.6 Million in Total Economic Benefits

The heating electrification program to replace or displace oil or propane heating sources with highefficiency air source heat pumps (ASHPs) was discontinued due to a determination that under the Least Cost Procurement Law, using electric ratepayer funds to conduct fuel switching was not within the intent of the Law. However, the ASHP incentive for electric resistance heating customers remained effective and 347 homes successfully replaced inefficient electric resistance heating systems with high-efficiency cold climate ASHPs.

In its eighth year, the Rhode Island Home Energy Reports (HER) program continues to encourage energy conservation 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. 312,120 Rhode Island customers received reports in 2020.

From January – March 2020, the Energy Innovation Hub continued to serve as a community engagement destination designed to expand customer education and outreach and enrich the customer's understanding of energy and opportunities to reduce energy consumption. The Hub helps customers to understand their own energy use as well as how participation in energy efficiency programs contributes to the State's greenhouse gas and energy reduction goals. Located in the lobby of Dunkin' Donuts Center, prior to the COVID-19 pandemic the Hub

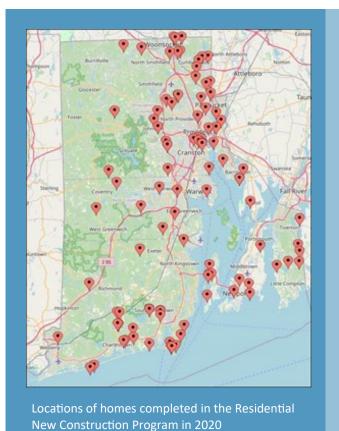


drew walk-in customers and groups of customers from local businesses and schools.

In 2020 during the COVID-19 pandemic, the Energy Innovation Hub worked to remain relevant in the communities that our Hub serves by updating our pathways for communication. By utilizing newsletters, social media, virtual presentations, and personal networks, we have created a more expansive platform for our messaging, hosting 106 customers via virtual presentations, and countless others via other electronic means. With an updated web presence, virtual connections will be more accessible than ever. In the future, we will pair these new means of outreach with safe in-person programs at our Hub to maintain a comprehensive and effective strategy for building interaction between customers and our Hub network. Phone: 401-572-3560. Email: EnergyInnovationHub@NationalGrid.com.

National Grid continued its core residential energy efficiency programs in 2020:

**EnergyWise** offers single family customers nocost 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, technical assistance and education, and offers for financial incentives to replace inefficient lighting, appliances, thermostats, heating and cooling systems, and insulation with technologies that are more energy efficient. For the fifth consecutive year, the program was awarded the Sustained Excellence, ENERGY STAR® Partner of the Year award in program delivery. This award recognizes the robust savings Rhode Islanders are receiving as well as the innovative program design. The program also celebrated 20 Century Club recipients who are insulation contractors that weatherized 100 or more residential homes in Rhode Island. In 2020, EnergyWise introduced virtual home energy assessments to provide remote access with an energy specialist to assess a home's energy needs. This new offering addressed customer concerns with in-home visits. Weatherization incentives increased to 100% to develop a pipeline of work for contractors that were furloughed during the beginning of the pandemic.



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

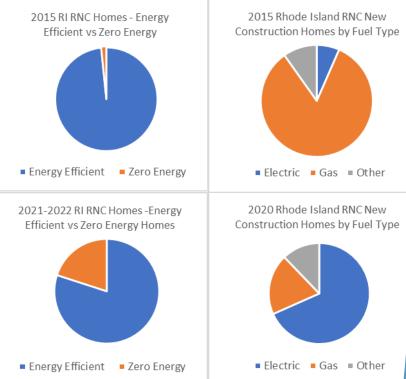
customers. The program elements include plan review, energy modeling, in -field technical assistance, insulation and air sealing inspection, third-party blower -door and duct-blaster testing (building performance testing), a HERS (Home Energy Rating System) Index rating and certification, energy performance-based incentives (compared to the 2017 baseline), 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. Construction continued throughout 2020 as RI deemed it an essential business, and technical support continued via remote means. In 2020, 482 housing units were built to the RNC standards, and 410 newly planned units enrolled in the Program. Of the 482 units, 68% were market rate and 32% were affordable housing. In 2020, RNC offered a new High Efficiency Electric Homes incentive that provided an additional \$1,000 per unit for 1-4 unit buildings, and \$500 per unit for 5+ unit

buildings that were high efficiency all-electric (fossil-fuel-free) homes with approved, and accurately sized, heating and cooling equipment. 2020 Program trends continue to demonstrate market transformation in electrically heated homes compared to gas heated homes and zero-energy ready and Passive House homes. The RNC Program partners with the EnergyWise Program on master-metered projects to provide envelope and equipment improvements, respectively, and together completed 211 master-meted gas renovation/rehabilitation affordable housing units.

#### The ENERGY STAR® Consumer Products Program

promotes the purchase of high efficiency household appliances and electronics. 2020 produced strong results with strong consumer interest in refrigerator and freezer recycling, dehumidifiers, room air conditioners, room air cleaners, dryers, pool pumps, and advanced power strips. No contact refrigerator and freezer

recycling pick-ups were introduced in 2020 along with an enhanced incentive. Low-E storm windows moved to an online sales model which effectively resulted in customer participation.



Zero Energy and Passive House Homes 2015: 2% Zero Energy Ready 2021-2022 Pipeline: 25% Zero Energy

**Gas Heat vs Electric Heat Homes** 2015: 84% gas, 7% electric 2018: 54% gas, 39% electric 2020: 19% gas, 68% electric

The ENERGY STAR® Lighting Program provides negotiated pricing to customers for the purchase of ENERGY STAR® qualified lighting, retail store promotions, and/or pop-up stores, and limited online flash sales. Online promotions were utilized when shelter-at-home orders were instituted in the state. When restrictions on staying home were removed, short-term promotions with local stores were also supported.

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. In 2020, COVID-19 restrictions resulted in cancelling classroom sessions, but the program quickly pivoted to online webinars as an alternative. The gas heating program continued to see a strong consumer purchase of the energy-efficient combination boiler/hot water systems

(1100 systems) verses a much lower purchase of the stand-alone energy efficient boilers (236). The Company launched an enhanced incentive for emergency replacement of eligible natural gas heating and water heating equipment during the challenging Covid-19 pandemic. The HVAC electric program continued to promote the replacement of old electric resistance heating systems with high-efficiency cold climate electric air source heat pumps (ASHP) and successfully upgraded 347 heating systems. 14 HVAC Check trainings were offered, resulting in 70 contractors being added to the list of Approved Contractors to ensure that ASHP savings are sized accurately, installed correctly, and the equipment is working properly. 94 distributor visits were conducted in 2020 (in-person/virtual) to provide ongoing communication about the HVAC Program.

The Home Energy Reports (HER) Program continued in 2020 with a specific focus on COVID messaging and billing options for customer. High bill alerts continued in 2020 and were adjusted to alert customers earlier if they were trending towards higher use in the month so that they could plan accordingly.

The Multifamily Program concluded 2020 with mixed results for the year. After a pause on onpremises work during the first phase of the pandemic and reluctance by property owners to allow contractors on premise through most of the year, the program made a strong recovery in the fourth quarter. The program faced greater relative challenges in achieving its gas goals for 2020, primarily because of hesitation from property owners around having contractors perform work on premise. Also, many property managers were reluctant to make large capital investments due to unprecedented rent collection issues as a result of COVID. In contrast, the multifamily program made significant progress toward its Market Rate electric goals, due to excellent lighting opportunities with several large apartment buildings under one property manager. This property management group worked collaboratively with our vendor to complete in-unit measures during their own maintenance visits, which helped to limit onsite visits and limit residents' exposure to onsite workers. The Income Eligible program had greater difficulty achieving its electric goal

relative to its gas goal, primarily due to equipment delays, as well as greater difficulty with completion of on-premises work because of a disproportionate number of vulnerable customers, such as those who are elderly or who have varied health issues. Many of the jobs in the Income Eligible electric pipeline had to be delayed to 2021.

#### **Income Eligible Services**

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 are currently on the electric A-60 or the gas 11, 13 rates; qualify for LIHEAP funds from the State; or whose 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 lighting, appliances, 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.

In 2020, the IES program conducted 2,621 energy assessments – 53% in-home, and 47% virtual assessments due to Covid-19 restrictions. Compared to 2019, 2020 did see overall reductions in the installation of insulation, appliances and heating system replacements due to lack of in-home access due to Covid-19, staffing limitations among CAPs, and nationwide appliance shortage of items such as refrigerators and air conditioners. In 2020, the IES Program initiated a Referral Program that allows CAPs to refer weatherization jobs to a third-party that will complete the work. The Referral Program was an effort to support the CAPs in managing their pipeline of weatherization jobs and provide cost-savings benefits to the customers more efficiently. Continuing from 2019, the IES offered replacement of electric resistance heating systems with high-efficiency Cold Climate Air Source Heat Pump heating solutions to help save money on the customers' utility bills, of which six jobs were completed. Progress was achieved,

and ongoing, reflective of the recommendations set forth in the Process Evaluation, including an updated audit process to reduce paperwork and redundant data entry; a new Auditor Evaluation process; KPI's to ensure standardized apartment comparisons between agencies; the Standardization Group continues to assess the current, and future, state of the RI WAP/IES program to improve standardization across RI CAPs.

Overall, in 2020, IES achieved 54% of the electric savings goal and 31% of the gas savings goal. 2020 savings were lower than expected due to COVID-19 restrictions, reduction in CAP staffing and appliance shortages.

#### Income Eligible Program/WAP Collaborative

National Grid'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.

# Low Income Home Energy Assistance Program (LIHEAP)

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 the thermal comfort.

#### **2020 INCOME ELIGIBLE RESULTS**

- 2,587,768 Annual MWh Saved
- 27,169 Lifetime MWh Saved
- 13,233 Annual MMBtu Saved
- 224,251 Lifetime MMBtu Saved
- 27,674 Metric Tons of Greenhouse Gas Emissions Avoided
- 6,830 Program Participants
- \$4.4 Million in Lifetime Electric Bill Savings
- \$3.1 Million in Lifetime Gas Bill Savings
- \$30.5 Million in Total Economic Benefits

These funds provide the most advanced technologies and testing protocols available in the industry to improve the energy performance of income eligible housing.

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 AND INITIATIVES

National Grid offered five Commercial and Industrial energy efficiency programs. Depending on the customer's energy consumption and demand they could be eligible to participate in one or more of the five main energy efficiency programs.

- Large Commercial and Industrial New Construction: Provided offerings that targeted ground up new construction, major renovations, tenant fit-outs and end of life replacement equipment.
- 2) Large C&I Retrofit: Focused on all services

and technologies towards retrofits needed for existing buildings.

- Small Business/ Direct Install: Offered turnkey solutions to many types of small businesses. (Note: restricted to customers who consume less than 1,000,000 kWh per year)
- Active Demand Response Program: Aimed at reducing peak electric demand and associated costs for large and small commercial customers.
- 5) C&I Multifamily Program: Provided 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, to reach these customers, National Grid leverages a Market Sector approach. The Market Sector approach allows National Grid to provide customized efficiency solutions that aligned with the customers' needs, thereby increasing participation in energy efficiency. The following market sectors were incentivized in 2020: Grocery, Municipal and State Buildings, Commercial and Municipal Strategic Energy Management Planning, Manufacturing/ Industrial, K-12 schools, Hospitality (Restaurants and Lodging), Specialty Building (Farm/ Agriculture and Extended Care Facilities), Hospitals, Colleges and Universities, Commercial Real Estate, and Multifamily.

#### **Commercial New Construction Program**

The Commercial New Construction Program encourages energy efficiency in new construction, major renovations, planned replacement of aging equipment, and replacement of failed equipment through financial incentives and technical assistance to developers, manufacturers, vendors, customers, and design professionals. The program supports both the commercial and industrial new construction projects with proactive technical assistance during design with energy modeling and analysis.

In 2020, the New Construction Program

performed well and exceeded its electric (175%) and gas (120%) annual energy goals. This was achieved by working with other C&I programs to reallocate additional resources to this program to help balance for lost savings opportunities attributable to COVID-19. Some examples of comprehensive new construction projects include a new location of an RI based supermarket chain, which saved 174 MWh and 2,152 MMBtus, and a project with 1,000 exterior LED light installations, with estimated savings of over 1,000 MWh.

#### **Large Commercial Retrofit Program**

The Large Commercial Retrofit Program incentivizes the replacement of existing equipment and systems with energy-efficient alternatives when the customer might otherwise not plan on making efficiency investments. The program offered three distinct pathways that aimed to address specific market barriers and to advance efficiency:

- 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.
- Custom Pathway: Custom incentives provided services to investigate opportunities to increase efficiency and support the steps needed to implement the upgrades.
- Upstream Pathway: Upstream incentives provided an efficient way for customers to receive reduced pricing at the point of sale for energy efficiency equipment.

In 2020, the Company expanded its Large Commercial Retrofit portfolio to include a new market-specific initiative, and several new measure offerings for existing initiatives and programs. The new market-specific initiative is titled "Serve up the Savings" and focuses on working with national and regional restaurants to discover and implement energy efficiency opportunities for franchisees across Rhode Island. In addition to the new initiative, both the Grocery Initiative and the Upstream Program

added new measure offerings to help support customers achieve savings and reduce their energy bills. National Grid also signed a contract with a vendor to work with customers in the telecommunications space in 2021. Historically, these customers have been underserved due to a host of technical and nontechnical reasons but have strong potential for future savings. Beyond these new developments, the Company also continued its Strategic Energy Management Planning (SEMP) partnerships and renewed one of the six customers to a non-binding Memorandum of Understanding with annual energy reduction goals. Overall, the Large Commercial Retrofit program finished the program year with 49,456 net annual MWh of electric savings and 86,451 MMBtus of gas savings.

#### **Industrial Initiative**

The Industrial Initiative leverages the world-renowned engineering firm Leidos, who partner with National Grid Sales representatives to determine energy efficiency opportunities for commercial and industrial customers across the state of Rhode Island. In 2020, the Industrial Initiative resulted in approximately 64 electric and 13 gas project applications, amounting to roughly 16,600 gross annual MWh of electric savings and over 34,886 gross annual MMBtus of nature gas savings. The energy efficiency projects ranged from large-scale lighting installations to complex process and HVAC upgrades.

#### **EnergySmart Grocer Initiative**

The EnergySmart Grocer (ESG) initiative delivered cost effective, comprehensive energy savings in the Grocery market segment in 2020 by providing nearly 6,635 net MWh and 1,948 net MMBtus in annual savings. The Company would like to highlight two projects that were completed in 2020 for grocery customers.

A RI based supermarket chain completed construction on a brand-new location in Warwick. The project was comprehensive with the following energy saving measures being installed: doors on cases, night covers, HVAC and DHW Heat reclaim, floating head and suction on medium temperature and low temperature rack systems, exhaust fan VFDs on the main kitchen

#### 2020 LARGE C&I RESULTS

- 66,615,277 Annual MWh Saved
- 802,867 Lifetime MWh Saved
- 142,963 Annual MMBtu Saved
- 1,498,063 Lifetime MMBtu Saved
- 421,618 Metric Tons of Greenhouse

  Gas Emissions Avoided
- 2,879 Program Participants
- \$123.7 Million in Lifetime Electric Bill Savings
- \$19.3 Million in Lifetime Gas Bill Savings
- \$352.2 Million in Total Economic Benefits

hoods and a Munter's roof top unit. The project saved 174,893 kWh.

An east coast supermarket chain conducted an upgrade of the floating head and suction pressure controls for their 6 locations in Rhode Island: Cranston, Woonsocket, Warwick, Johnston, Pawtucket, and Providence. The projects saved a total of 240,536 kwh.

### Serve Up Savings (Regional and national chain restaurant) Initiative

This initiative, new in 2020, worked with more than 24 chain restaurant locations to save 355 net annual MWh and 1,822 net annual MMBtu. In 2021, the Company will build on the momentum generated at several of these chains to explore more HVAC related savings.

#### **Telecommunications Initiative**

A contract was signed with Franklin Energy to be the vendor for a new Telecommunications Initiative. This initiative will serve mobile, fiber optic, and cable data companies and their associated infrastructure. This initiative will be deployed by the first quarter of 2021.

#### **Combined Heat and Power Program**

Combined heat and power (CHP) systems are a cost-effective way for customers to achieve energy savings and improve resiliency. Customers who install CHP generate electricity on-site and captures the thermal load for process related needs, thereby eliminating the requirement to procure additional non-electric energy. While the total energy savings from CHP can be substantial, the CHP installation process can be challenging due to the long-lead times, complex technical requirements, and substantial capital investments. In 2020, National Grid completed a 630kW CHP system at a wastewater treatment facility. The treatment facility will leverage its operational byproduct (sludge) as a biomass to fuel the CHP system. The project will result in ~4,089,000 kWh of annual savings.

#### **Solid State Street Light Initiative**

The National Grid Solid-State Street Light Initiative provided energy efficiency incentives for street lighting and controls to municipal customers. There are two options for participating in this initiative, customer owned, and Company owned.

Customer Owned Street Lighting- Rhode Island municipal customers are now eligible to purchase their own streetlights from National Grid. Incentives are being offered for solid state lighting and controls, as funding allows. In addition to the funding offered by National Grid, the Office of Energy Resources continues to accept applications for street lighting grant funding from communities.

Company Owned Street Lighting – National Grid filed a company owned street lighting tariff in 2016. If the municipal customer prefers to continue leasing their streetlights from National Grid, the customer will receive the incentive and the Company will claim the savings.

In 2020, the Solid-State Street Lighting Initiative awarded over \$333,000 in incentives to 3 different municipalities, resulting in approximately 1,628 MWh of annual electric energy savings. One of the highlights from the Solid-State Street Lighting Initiative included a Pawtucket streetlight and controls project which

resulted in the installation of 5,971 street lighting fixtures and over 23,100 MWh of net lifetime electric savings.

#### **Commercial Connected Solutions**

The Company implemented an active demand reduction program in 2020 and 2019 after having run the program as a demonstration in 2017 and 2018. Under the active demand reduction approach, customers agree to reduce their electric use during the system peak. In 2020, the Targeted Dispatch measure of the Commercial ConnectedSolutions program curtailed an average of 24.2 MW with 152 customer accounts participating in three events over the summer. In 2020, the Daily Dispatch measure of the Commercial ConnectedSolutions program curtailed an average of 4 MW with 13 customer accounts participating.

#### **Small Business Direct Install Program**

National Grid's Small Business Direct Install program is a retrofit program that provides turnkey services to customers that consume less than 1,000,000 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. National Grid then completes retrofit installations at the customer's convenience. In 2020, the program served small businesses of all types including car dealerships, non-profits, and small offices.

National Grid 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, providing that funds are available. This year the program offered a 100% incentive starting in April to increase participation as the pandemic closed small businesses and owners' attention was focused on business continuation and health/safety concerns. The program also offered virtual audits during the time it was not possible to be in customers' businesses.

The Company would like to highlight projects that were completed in 2020 for small business

#### customers.

- RISE completed a retrofit lighting project of an office building in Providence. This project will result in savings of 23,000 kWh per year and \$3,600 per year. The customer was very complimentary of the impact the upgrade had on their internal office spaces. In Cranston, RISE served the customer's retail plaza common areas and tenanted spaces with a mix of various LED lighting upgrades and 10, WiFi thermostats. This project captured 20,000 annual kWh and 660 annual therms.
- The program completed several projects at houses of worship in the fourth quarter. This concluded a year of successful outreach to this segment. Retrofits were completed in over 30 sites. Measures included lighting, lighting controls, domestic hot water (DHW) and WiFi and programmable setback thermostats.

In 2020, National Grid continued to utilize the existing contractor/electrician base through the Customer Directed Option (CDO) where customers are allowed to use their own contractors in conjunction with the expertise of the lead vendor in the Small Business Program. These additional "feet on the street" are helping the program maintain its success even as some segments continue to be successfully served through other paths. In 2020, 21% of savings in the SMB/DI program came from CDO contractors.

#### Farm Energy Efficiency Program

The Farm Energy Efficiency 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 National Grid's on-bill payment system, provided that funds are

#### 2020 SMALL C&I RESULTS

- 10,339,537 Annual MWh Saved
- 126,392 Lifetime MWh Saved
- 3,513 Annual MMBtu Saved
- 31,231 Lifetime MMBtu Saved
- 55,515 Metric Tons of Greenhouse
  Gas Emissions Avoided
- 699 Program Participants
- \$20.1 Million in Lifetime Electric Bill Savings
- \$391,809 in Lifetime Gas Bill Savings
- \$43.0 Million in Total Economic Benefits

#### available.

In 2020, nine Rhode Island farms received nocost, farm-specific energy assessments. With help from a University of Rhode Island Energy Fellow, additional outreach was conducted virtually through online webinars, email, and one-on-one phone calls. The Farm Energy Resource Guide, which was developed and finalized in 2019 was printed and served as another valuable resource to guide agricultural business owners through the energy management process. Presentations were also given at several workshops and further outreach was conducted through the program's growing social media presence: Facebook and Instagram (@RIFarmEnergyResources).

#### **Lead by Example: State and Municipal Entities**

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. As of December 2020, Rhode Island State agencies have reduced their energy consumption by 11.3% (2014 baseline), saved \$4.4 million (FY 2019) from competitive energy

procurement processes, and as of October of 2020 are procuring 100% of their electricity supply from renewable energy sources. 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 government's carbon footprint, and support Rhode Island's burgeoning clean energy economy. Major projects completed in 2020 include the deployment of solar PV installations with the National Guard, the continued conversion of State and municipal streetlights to cost-effective LEDs, the expansion of electric vehicle charging infrastructure across the State, and numerous interior and exterior LED lighting retrofits and HVAC upgrades across State facilities.

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 and National Grid to better manage their energy bills through Portfolio Manager (a free online tool from the U.S. Environmental Protection Agency), 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.

Key 2020 Lead by Example accomplishments include:

- Continued support of State and municipal LED streetlight retrofits, with 80% of all Rhode Island streetlights now converted
- Ensuring that 100% of electricity consumed by State facilities comes from renewable energy resources
- Reducing the energy consumption across
   State facilities by 11.3 % compared to 2014
   baseline

- Supporting the installation of 40 new dual port electric vehicle charging stations at facilities across the State
- Participating in a Demand Response
   Program to reduce peak energy demand and generate revenues for the State
- Promoting the State's first a voluntary building Stretch Code
- Developing and managing competitive electricity and natural gas supply contracts for all state agencies
- Utilizing a centralized utility bill payment system for all state agencies that saves money by avoiding late fees and increasing staff efficiency
- Converting numerous facilities lighting to LED – huge push in State facilities for both exterior lighting (the Pastore complex had over 1000 lights replaced with LED) and interior lighting across multiple buildings
- HVAC and control improvements at Powers Building (DOA), the RI State Police Barracks, and the Department of Labor and Training.
- Retro-commissioning of several large State facilities will yield significant electric and gas savings, including the RI School for the Deaf

# COMMERCIAL, INDUSTRIAL & PUBLIC FINANCE

#### Large C&I Revolving Loan Fund

Through the electric LC&I revolving loan fund, the Company offered \$5.14 million in on-bill financing to 74 Large Commercial customers through 101 loans resulting in electric savings of 7,570 annual MWh. At the end of 2020, the fund had a balance of \$1.19 million, money that will be available for more loans in 2021 and in the future.

Through the gas LC&I revolving loan fund, the Company offered \$0.46 million in loans to 20 Large Commercial customers resulting in gas savings of 18,173 net annual MMBtu. At the end of 2020, the fund had a balance of \$1.09 million,

money that will be available for more loans in 2021 and in the future.

The Company continued to manage a revolving loan fund in support of the Rhode Island Public Energy Partnership (RIPEP). No customers participated in this offering in 2020. At the end of 2020, the fund had a balance of \$0.426 million.

#### **Small Business Revolving Loan Fund**

The Small Business Revolving Loan fund was able to provide \$.784 million in loans that led to more than 10,275 MWh in annual energy savings. At year end, the fund had a balance of \$3.144 million.

#### **Efficient Buildings Fund (EBF)**

Since 2015, National Grid, 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.

The seed money to support this unique revolving loan fund came from a \$1.8 million allocation of ratepayer (SBC) funds, mandated by the law, and \$3.0 million in funds from the Regional Greenhouse Gas Initiative (RGGI) controlled by OER. In addition, National Grid, based on a request from RIIB, and working in conjunction with the Technical Working Group each program year, agreed to transfer \$5.26 million in energy efficiency program funds to RIIB in 2020 and \$5.0 million in 2021 to support EBF. The transfer in 2021 will be subject to prior approval by the PUC. These transfers were included in their respective Energy Efficiency Plans and related budgets.

In 2020, the EBF helped support a city-wide streetlight conversion from legacy technologies to LEDs in Pawtucket. The EBF also helped support energy efficiency projects in the cities of East Providence and Warwick, as well as supporting an innovative utility scale battery storage system in the Pascoag Utility District. EBF helped East Providence finance a portion of a brand-new high school construction project, which will feature numerous state-of-the-art energy efficiency measures and be built above the required energy code. The City of Warwick utilized EBF financing to undertake LED streetlight conversion citywide. As mentioned above, EBF was able to support the Pascoag Utility District

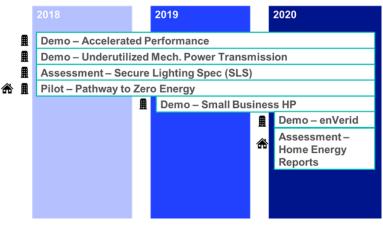
with the installation of a utility scale battery storage system that will help provide resiliency, reduce peak demand, and avoid a much costlier transmission system upgrade. 2020 was one of the most successful years in EBF since inception with 2,172 net annual MWh claimed.

### Commercial Property Assessed Clean Energy (C-PACE)

National Grid has one C-PACE project in progress with the City of Providence. However, no gas or electric savings were claimed related to this project in 2020. Outreach by the Rhode Island Infrastructure Bank and National Grid will continue in 2021.

# 2020 PILOTS, DEMONSTRATIONS, AND ASSESSMENTS (Residential and Commercial and Industrial)

In 2020, the Company continued or started thirteen Pilots, Demonstrations, or Assessments. These research and development efforts ranged from completing pilots for ZNE pathways for residential and commercial and industrial new construction projects and continuing the Gas Demand Response pilot to demonstrations investigating Network Lighting Controls for HVAC control and Kitchen Exhaust control strategies for energy savings to assessments into the impact of including Home Energy Reports as part of HEA process. The



Company updated the EERMC and PUC of the progress, findings, and next steps of all Pilots, Demonstrations, and Assessments over the course of 2020 in the subsequent Quarterly Reports.

The following table outlines the objectives, brief findings, and next steps of the eight Pilots, Demonstrations, or Assessments completed in 2020. Those five efforts continuing into 2021 will be detailed in the 2021 Look Forward section.

Pilot, Demonstration, or Assessment	Objectives	Findings	Next Steps
Accelerate Performance C&I Demonstration	Use performance-based procurement to hold design teams contractually accountable throughout design and into occupancy.	Tried six different project recruitment efforts. Customers ultimately not willing to sign up. Projects pivoted to typical whole building approach offerings.	Close demonstration; Pivot to focus on whole building design approach.
Mechanical Power Transmission C&I Demonstration	To investigate adoption of higher efficiency belt and other various types of machinery used in C&I facilities	No installations; common enough understanding to combine with other O&M-type measures using ESPO platform	Transfer replacement of v-belts with synchronous belts and similar settings to ESPO offering suite
Secure Lighting Spec C&I Assessment	Develop a partnership with Lighting Manufacturers Reps, the common quoting software	Partnerships unable to be formed. Software unable to be augmented.	Closed assessment
Small Business Heat Pumps C&I Demonstration	Explore a go-to market strategy for cold climate heat pumps for small business.	Using the energy optimization framework, MA determined cost-effective fuel switching for small business electrification. Currently prohibited in RI, except with elec heat.	Use MA methodology, where applicable for RI (e.g. Elec Resistance)
Absorption Air Cleaner C&I Demonstration	<ul><li>(1) Identify the barriers to adoption of this technology;</li><li>(2) Measuring energy savings and monitoring (IAQ)</li></ul>	Potential for scalability if energy analysis is simplified; code authorities use prescriptive codes for ventilation	Recommend to offer this measure through our custom gas and electric programs
Pathway to Zero Energy – C&I C&I Pilot	Test if the program design, can successfully drive market participation in Zero Energy Buildings in Rhode Island.	Education, awareness, marketing, and training was deployable. Recruiting, construction, and completion challenging.	Transfer market activity to programs: Whole Building New Construction offering
Pathway to Zero Energy – Resi Residential Pilot	Test if the program design, can successfully drive market participation in Zero Energy Buildings in Rhode Island.	Education and awareness, marketing, and training was deployable. ~100 ZER units in design, development, and construction	Transfer market activity to program: Residential New Construction offering
Home Energy Reports Residential Assessment	(1) identify if HES improved conversion rates, and (2) assess the how HES could be integrated within HEA processes	Participants receiving the score had a higher conversion rate. Due to small sample size no clear conclusion on installing major measures. Sustained marketing needed	Complete <sup>2</sup> . Use findings of the evaluation in program design evolution.

#### **INCENTIVES BY TOWN**

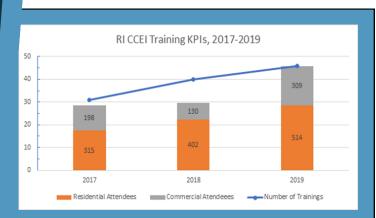
**Table 1.** National Grid Gas and Electric Energy Efficiency Incentives Provided to Residential, Commercial and Industrial Customers in 2020

Barrington	\$1,262,865	New Shoreham	\$4,122
Bristol	\$1,212,310	Newport	\$4,313,619
Burrillville	\$464,713	North Kingstown	\$5,107,039
Central Falls	\$347,287	North Providence	\$938,961,
Charlestown	\$540,673	North Smithfield	\$876,736
Coventry	\$2,713,191	Pawtucket	\$4,539,691
Cranston	\$6,384,554	Portsmouth	\$1,219,308
Cumberland	\$1,943,187	Providence	\$14,985,844
East Greenwich	\$1,514,073	Richmond	\$351,246
East Providence	\$3,138,735	Scituate	\$1,143,611
Exeter	\$336,914	Smithfield	\$2,436,116
Foster	\$177,415	South Kingstown	\$660,182
Glocester	\$608,406	Tiverton	\$880,769,
Hopkinton	\$214,067	Warren	\$871,299
Jamestown	\$361,069	Warwick	\$5,915,402
Johnston	\$2,241,816	West Greenwich	\$400,051
Lincoln	\$1,437,643	West Warwick	\$1,373,639
Little Compton	\$116,416	Westerly	\$1,699,543
Middletown	\$1,362,820	Woonsocket	\$2,153,582
Narragansett	\$2,713,416	Grand Total	\$79,089,004

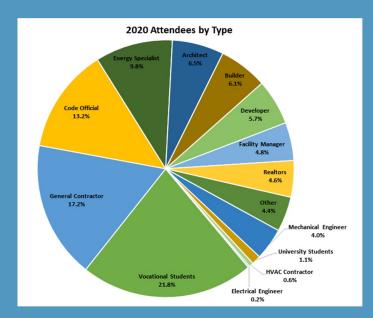
#### **CROSS-SECTOR PROGRAMS**

#### **Community Initiative**

In 2020, the Company reached out to four towns, however, due to COVID-19 challenges, only one town committed to the initiative. In the third quarter, the city of East Providence enrolled in the initiative. Specified metrics were set for East Providence including residential energy assessment goals, weatherization jobs, Wi-Fi thermostats, Small Business projects, homes converted to mini-split heat pumps, and refrigerators recycled. Due to COVID-19, the initiative's timeframe was extended to the end of April 2021 in order to allow the city to continue to promote the program in order to achieve the metrics to earn a potential financial award.



**Figure 4.** Key Performance Indicators (KPIs) for Code Compliance Enhancement Initiative (CCEI)



**Figure 5.** 2020 Code Compliance Enhancement Initiative (CCEI) training attendees by type

East Providence, along with the Company, engaged residents and small businesses beginning in the summer and running through December 2020. Custom marketing materials were created, along with social media and webpage postings, and letters from municipal leadership. Local events were not held due to COVID-19.

#### **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 2020 the Company continued to expand its energy code compliance support services to a variety of stakeholder groups.

#### Overview of Performance

In 2020, the Code Compliance Enhancement Initiative (CCEI) conducted 39 training events across the state with 514 total attendees. Both figures were significant decreases from last year's extremely high performance. This is largely attributable to COVID-19 since all inperson trainings scheduled in partnership with organizations were cancelled or postponed until further notice. CCEI responded by expanding its web training offerings and took attempted new ways to keep stakeholders engaged, such as development and delivery of its first ever virtual building tours.

While code officials have historically been CCEI's most targeted audience, reaching construction professionals was a focus in 2020. Through industry partnerships, most notably through incorporation into the curriculum of RIBA's Contractor Training & Development Program, vocational students and general contractors were the groups most engaged by CCEI in 2020 and together comprised about 40% of training participants. Otherwise, CCEI trainings continue to engage diverse stakeholders.

In addition to classroom and on-site trainings, CCEI also provides project-specific technical assistance as well as development and dissemination of energy code documentation/ compliance assistance tools. The Company also continues to support awareness and use of the RI Stretch Code through CCEI, including promotion at every training event and fundamental technical guidance.

#### **Block Island Energy Efficiency Program**

Through the Regional Greenhouse Gas Initiative (RGGI), proceeds were allocated to the Block Island Utility District (BIUD) to support the development and delivery of cost-effective energy efficiency programs and incentives to customers over three years (2020-2022). In 2019, OER worked in coordination with Block Island Utility District management and customers to iterate on the successful Block Island Saves energy efficiency pilot and create their first Energy Efficiency Plan to leverage utility and RGGI funds to implement cost-effective efficiency measures in the community of New Shoreham.

Building on the success of the pilot program BIUD partnered with OER to develop a full-scale energy efficiency program. The proposed energy efficiency program was approved by the Utility District's Board and filed with the Public Utilities Commission (PUC), ultimately receiving approval in May of 2020. The program will provide no-cost energy assessments and direct install measures and will also emphasize important costeffective savings measures like weatherization, heat pump heating and cooling systems, and programmable thermostats. The goals of the efficiency program are to continue empowering customers to make clean energy decisions that lower their energy usage and costs, reduce energy burdens, and help provide grid stability and reduce challenging peak loads during the summer tourist season.

After PUC approval, OER helped BIUD develop RFPs for a lead efficiency vendor, an energy efficiency consultant, and post-installation inspection services. Once vendors were hired the program was launched in the fall of 2020 and saw immediate demand from residents for home energy assessments, both in-person and virtually. The initial program year will run through April of 2021 and OER will work with BIUD and its consultant to review and evaluate the program and look to grow and improve it year over year.

The final report on the Block Island Saves Pilot Program is available on OER's website and details about the new energy efficiency program can be found on Block Island Utility District's website.

#### **Energy Efficiency in Pascoag Utility District**

Through the Regional Greenhouse Gas Initiative, proceeds were allocated to support the accelerated adoption and delivery of cost-effective energy efficiency measures by customers located in the Pascoag Utility District (PUD). OER worked with Pascoag Utility District management to begin implementing elements of the multi-year strategy they jointly developed in 2018, starting with a significant increase in home energy audits. In conjunction with OER and their efficiency consultant, Pascoag staff began optimizing program incentive levels and streamlining program delivery to better encourage and facilitate the adoption of energy efficiency in homes and businesses.

With the support of OER and their efficiency consultant, Pascoag has managed to grow their efficiency program nearly ten times and continued to safely provide critical energy efficiency programming to customers despite the challenges of COVID-19. Working with their lead vendor, Pascoag was able to begin offering virtual home energy assessments to continue serving customers while also protecting public health. Recognizing the financial strain, the pandemic was having on customers, PUD increased incentive levels for key efficiency measures like weatherization to allow all customers realize critical energy savings even in tighter financial times. They intend to incorporate these adaptive strategies and lessons learned in their 2021 DSM plan as well to ensure they can continue to provide important efficiency services safely and accessibly to their customers.

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

In 2020, the "Path to Zero Ready" program continued with a focus on training and providing technical support and incentives for projects under construction and in the design stage. The Working Group did not convene as the program shifted to project-specific technical support.

#### **2020** Path to Zero Ready Program key elements:

Education and Awareness—To raise

awareness of the design, construction and benefits of zero energy homes in RI, 5 trainings, were held in 2020 with over 90 attendees. Due to Covid-19, tours of zero energy homes were not conducted.

 Project Incentives— In addition to the technical support and financial incentives provided through the RNC program, a project that commits to zero energy ready can receive additional technical support as well as additional incentives for meeting the RI Stretch Code or being PV and EV ready.

#### **Building Operator Certification**

In 2020, the Company sponsored discounted or free Building Operator Certification (BOC) to building operators in Rhode Island. Those that completed the course are expected to benefit from holding the professional BOC credential, being better able to communicate with occupants about maximizing facility efficiency, being able to identify low-cost energy conservation opportunities, and knowing how to implement best practices in preventative maintenance.

#### **Rhode Island Energy Innovation Hub**

The Energy Innovation Hub (Hub) is a community engagement destination designed to provide a hands-on opportunity for customers to learn about energy efficiency, renewable technologies, electric vehicles, state energy goals, and a vision for a clean energy future. The Hub content, and knowledgeable staff and energy interns, provide information to customers to empower them to take action to reduce their energy use, adopt smart technologies and learn about renewable power and electric vehicles. The space and its exhibits showcase: (a) energy solutions accessible to all customers; (b) innovative advancements for system reliability; and (c) a vision of a sustainable energy future. Visitors learn about technologies available to create smart, energyefficient homes and businesses, renewable technologies, demand response, electric vehicles, storm management, and core services that the National Grid provides.

In 2020 during the COVID-19 pandemic, we

worked to remain relevant in the communities that our Hub serves by updating our pathways for communication. By utilizing newsletters, social media, virtual presentations, and personal networks, we have created a more expansive platform for our messaging, hosting 106 customers via virtual presentations, and countless others via other electronic means. With an updated web presence, virtual connections will be more accessible than ever. In the future, we will pair these new means of outreach with safe in-person programs at our Hub to maintain a comprehensive and effective strategy for building interaction between customers and our Hub network.

# COUNCIL PUBLIC EDUCATION EFFORTS

#### **2020 EERMC PUBLIC FORUM**

The fourth annual EERMC Public Forum, COVID-19 Crossroads: Achieving Equitable Health Outcomes Through Energy Efficiency, was held virtually on Thursday, September 24, 2020. Driven by the wide-ranging impacts of the COVID -19 pandemic, the Forum focused on the relationships between public health, equity, and energy efficiency and featured health and energy experts from across the U.S. Nearly 100 industry professionals, decision-makers and joined the event. Anthony Hubbard, EERMC Chair, gave welcoming remarks, followed by keynote speaker Reilly Loveland of the New Buildings Institute in Portland, OR who set the stage talking about the investments needed around efficiency, equity and health – and how that progress can be tracked.

The first panel, The Intersectionality of Energy, Socioeconomic Status, Race & Health, featured representatives from RI Office of Energy Resources, United Way of Rhode Island, Tohn Environmental Strategies, and Children's Mercy Kansas City. The second panel, Opportunities for Improvement: Models and Solutions for the Future, featured industry leaders representing Energy Marketers Association, Green and Healthy Homes Initiative, NY State Energy Research and Development Authority, and Habitat for Humanity Rhode Island. Attendees also heard from EERMC member Karen Verrengia, who let attendees know how to engage in the State's energy efficiency planning process. The recorded forum can be viewed at https://www.youtube.com/watch? v=9y08LNu5vzs&feature=youtu.be.

### PLUGGED INTO ENERGY RESEARCH LECTURE SERIES AT THE UNIVERSITY OF RHODE ISLAND

Since 2015, the University of Rhode Island's Plugged into URI Energy Research (PIER) Lecture Series has provided stakeholders with research-based information on important energy topics and highlighted ongoing academic energy research. In 2020, the EERMC sponsored three

virtual lectures themed around the nexus of health outcomes, equity and energy efficiency.

The first lecture was held on October 7, 2020 and was titled Energy Efficiency, Human Health, and COVID-19. Speakers included representatives from American Council for an Energy-Efficient Economy (ACEEE), Three3 (ThreeCubed), and the University of Illinois at Urbana-Champaign. The second lecture was held on October 28, 2020 and was titled Energy Efficiency in Schools: Safer Buildings, Healthier Students. Speakers included representatives from the Harvard T.H. Chan School of Public Health, the RI Department of Education (RIDE), Northeast Energy Efficiency Partnerships, and National Grid. The final lecture was held on November 18, 2020 and focused on Barriers to Energy Efficiency in Rental and Affordable Housing. Speakers included representatives from American Council for an Energy-Efficient Economy, Illume Advising, Green and Healthy Homes Initiative, Direct Action for Rights and Equality, Richard Weinberg, Providence Housing Authority, and HousingWorks RI at Roger Williams University.

There were over 250 virtual attendees between to the three events, including professionals in energy, health, education and equity, students, and members of the general public. Another 250 viewers have watched the recorded lectures on YouTube. More information, including lecture recordings, can be found at <a href="https://web.uri.edu/coopext/plugged-into-energy-research-lecture-series/">https://web.uri.edu/coopext/plugged-into-energy-research-lecture-series/</a>.

#### **ENERGY TRAINING FOR K-12 TEACHERS**

The National Energy Education Development (NEED) Project provides energy curriculum and training to K-12 teachers and students throughout the United States with over 30 years of programming in Rhode Island with OER and National Grid. In 2020, the EERMC supported the expansion and enhancement the NEED energy efficiency and conservation curriculum and training with content on energy justice and climate science. Building on NEED's portfolio of energy curriculum resources and training processes, this new curriculum module brings together energy efficiency and conservation (both school and residential), building science,

climate science, energy justice, and health for Rhode Island teachers, students and families. The project seeks to include additional components for healthy outdoor spaces, urban landscapes and heat islands as related to energy, efficiency, climate and health. These components will strengthen the use of the curriculum in Rhode Island schools, especially Environmental Science, and non-formal education programs. The first workshop to train teachers on the new module was held in March 2021, and the second will be held in the fall of 2021.

#### **FARMER EDUCATION**

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 low. Conversations with stakeholders, energy program administrators, and National Grid suggest low participation is due, in part, to a lack of knowledge of available programs. In 2019, the EERMC and National Grid co-funded an Energy Fellow (University of Rhode Island student) from March through December to assist with outreach to the farm community regarding energy management. Due to the COVID-19 pandemic, efforts took a digital approach this year, with outreach conducted virtually through webinars, social media, and email lists. The Energy Fellow also printed the Farm Energy Guide developed in 2019, which helps farmers navigate the many energy programs and incentives available to them and will be a valuable resource for years to come. Presentations were also given at several workshops and further outreach was conducted through a growing social media presence: Facebook and Instagram (@RIFarmEnergyResources).

# 2020 COMBINED HEAT AND POWER PUBLIC MEETING

On May 14, 2020, the EERMC hosted the Annual Rhode Island Combined Heat and Power (CHP) Public Meeting. Due to COVID-19, this year's meeting was held virtually. As part of a legislative mandate, these meetings are designed to collect stakeholder feedback on challenges and opportunities related to the

state's CHP program. The meetings also serve to inform developers and potential participants on program details, any updates for the current year, and finance options. The meetings are timed to allow for any recommendations to be incorporated, as appropriate, into the Three-Year and Annual Energy Efficiency Program Plans. There were over 50 virtual participants, the majority of which were CHP developers or vendors that provide related technical assistance or financing.

Outgoing EERMC Chair Chris Powell welcomed attendees and introduced the Council and its purpose. He also invited ongoing participation in the energy efficiency conversation through monthly Council meetings. The Council's consultant team briefly summarized the CHPrelated results from the Rhode Island Market Potential Study as well as the three-year energy savings targets for CHP. Representatives of National Grid and the Rhode Island Infrastructure Bank (RIIB) presented on program updates and finance opportunities. For the first time this year, a survey was distributed in advance of the meeting in an attempt to learn more about the CHP landscape in Rhode Island from those "on-the-ground". The full results and complete slide deck from the CHP meeting can be found on the EERMC's website at www.rieermc.ri.gov.

# ENERGY JUSTICE AND EQUITY EFFORTS

In 2020 the EERMC took steps to increase awareness of energy justice and improve the understanding of equity as it relates to energy efficiency.

- ECP Standards: OER, in collaboration with EERMC council members and various other stakeholders proposed equity language to the Public Utilities Commission in 2020 for inclusion in the LCP Standards. Rhode Island's LCP Standards provide definitions and rules that guide the development of energy efficiency program plans that are filed with the Commission. The proposed language was adopted in part and created requirements for describing how proposed energy efficiency investments are equitable and how proposed program designs ensure equitable opportunities to participate along with fair allocations of costs and benefits.
- **EE Equity Working Group:** As a part of National Grid's 2021 Annual Energy Efficiency Program, National Grid has committed to working with OER to co-host an Equity Working Group. The goal of this working group will be to give impacted communities and the organizations that serve them an ongoing and structured opportunity to collaborate and provide input and feedback on the planning, design, and delivery of National Grid's energy efficiency programs, with a specific focus on equity. This will be a chance for continued education for all parties involved; Equity Working Group members will receive education surrounding Rhode Island's energy systems, processes, and energy efficiency, and the hosting organizations will have a chance to learn from communities what the most pressing needs are within the energy efficiency space.
- Presentation to the EERMC on Energy
  Justice: In the December 17th council
  meeting, the EERMC received a presentation
  from OER on energy justice. The
  presentation included an overview of

environmental justice, its history relating to segregation and redlining, and the ways in which energy injustice manifests itself today in Rhode Island. It concluded with OER's current actions towards addressing energy justice. Additional presentations and conversations surrounding the topic are expected in 2021.

# LEAST COST PROCUREMENT STANDARDS UPDATED EQUITY LANGUAGE 2020

#### **SECTION 1.3-E. Prudent**

- i. The distribution company shall assess:
- how the investment supports the goals of the electric or natural gas system and the purposes of Least-Cost Procurement.
- b. potential for synergy savings based on alternatives that address multiple needs;
- c. how the entire investment proposal affects the risks of ratepayers and the distribution company;
- d. how the investment effectively uses available funding sources and integrates with energy programs and policies; and
- e. how the investment is equitable in consideration of the allocation of costs, the allocation of benefits, customer access, and customer participation. This shall be done by, at minimum, assessing which groups have historically received disproportionately lower benefits from LCP investments and by presenting other appropriate, quantifiable metrics that describe how an investment is equitable

#### NATIONAL GRID 2020 ENERGY EFFICIENCY WORKFORCE STUDY

National Grid hired Guidehouse, Inc. (formerly Navigant) to conduct a study of the job impacts from National Grid's energy efficiency programs in 2020. The study estimates the number of full-time equivalent (FTE) employees engaged in all aspects of energy efficiency programs where National Grid provided funding support in 2020.

The FTE counts cover a wide range of energy efficiency services, including independent contractors and plumbers, rebate processers, engineers, and National Grid Staff. The study also includes counts of Weatherization Assistance Program (WAP) FTEs that are employed by the Community Action Program agencies that deliver low-income energy efficiency services. A complete list of all contractors and subcontractors involved in 2020 Rhode Island energy efficiency programs is included in Appendix D of this report.

The study's findings were developed through interviews with energy services and equipment vendors and National Grid contractors, as well as through a detailed review of National Grid's records of all energy efficiency measures installed in homes, apartment buildings, businesses, and industries throughout the state in 2020. Guidehouse calculated the labor hours required for each installation based on industry standards and discussions with contractor experts.

Guidehouse determined that 827.5 full-time equivalent (FTE) employees had work in 2020 supported by investments by National Grid in energy efficiency programs provided to its Rhode Island electricity and natural gas customers. One FTE equals 1,760 work hours, or the total of one person working 8 hours a day for 220 workdays in an average year. Because a "full-time equivalent" employee often represents the labors of more than one person over the course of a year, the number of individual workers employed as result of Rhode Island energy efficiency programs funded by National Grid is far larger than the total of FTEs. Most of the jobs supported by energy efficiency investments were local because they were tied to installation of equipment and other materials.

Table 2. Full-Time Equivalent Employment Associated with Energy Efficiency Programs in Rhode Island in 2020

PROGRAMS	TOTAL FTEs
Electric Programs	
— Commercial and Industrial	203.7
Residential Income Eligible	59.1
Residential Non-Income Eligible	263.7
Gas Programs	
— Commercial and Industrial	19.8
Residential Income Eligible	38.5
Residential Non-Income Eligible	189.2
Other	
— National Grid EE Staffing	44.4
— Marketing	9.0
— COVID-19 Training	0.3
Total 2020 Rhode Island FTEs	827.5

The study also identified 1,093 companies and agencies involved in National Grid's 2020 energy efficiency programs, 73% of which were located in Rhode Island. The companies identified include those whose employees are counted in the FTE analysis, as well as additional companies who assisted customers to secure equipment rebates, for example through the New Construction, Commercial Upstream Lighting, or High Efficiency HVAC programs.

The study fulfills Rhode Island General Law 39-2-1.2, which was enacted by the General Assembly in 2012. The study will benefit those who work in workforce development, training or those interested in the state's green jobs.

#### **PLANNING INITIATIVES**

# STATE GOALS: STATE ENERGY PLAN & GHG REDUCTION GOALS

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, costeffective, and sustainable energy system. The Plan demonstrates that Rhode Island can increase sector fuel diversity, produce net economic benefits, and reduce greenhouse gas emissions by 45 percent by the year 2035. The Plan proposes state-of-the-art policies and strategies to achieve those goals.

The Plan identifies energy efficiency as the state's "first fuel" and a centerpiece strategy for achie ing 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.

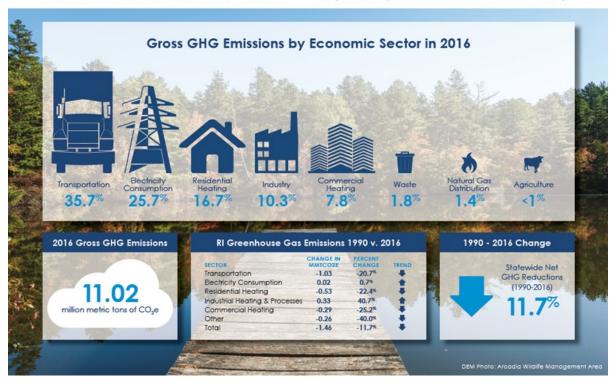
After the development of the State's Energy Plan, Governor Raimondo passed multiple Executive Orders focused on reducing greenhouse gas emissions across the state. Her Executive Order 19-06 tasked the Office of Energy Resources and the Division of Public Utilities & Carriers to create a strategy to support the decarbonization of Rhode Island's heating sector. In 2020, Executive Order 20-01 also committed the state to 100% renewable electricity by 2030. To achieve the objectives of these Executive Orders, the Energy Efficiency and Resource Management Council is working closely with the Office of Energy Resources to ensure that Rhode Island's energy efficiency programs are laying a strong foundation for the necessary energy demand reduction. Final reports from these initiatives can be viewed on the Office of Energy Resources' website:

http://www.energy.ri.gov/HST/ http://www.energy.ri.gov/100percent/

# Quick Facts



1990-2016
Rhode Island Greenhouse Gas (GHG) Emissions Inventory



#### MARKET POTENTIAL STUDY & SAVINGS TARGETS SETTING

In preparation for the development of the 2021-2023 Three-Year Energy Efficiency and System Reliability Plans, the EERMC commissioned a Rhode Island Market Potential Study (RI MPS) to quantitatively assess the level of energy savings that can be achieved over the next several years. The EERMC selected Dunsky Energy Consulting to conduct the study, which covers energy efficiency, demand response, heating electrification, combined heat and power, and behind-the-meter distributed generation and renewable energy. The MPS covered calendar years 2021-2026 and was used as a key input in the process of setting three-year Energy Savings Targets, which was developed by the EERMC and approved by the Public Utilities Commission.

#### **Energy Savings Targets**

Year	Electric Energy (MWh)	Natural Gas Energy (MMBtu)	Delivered Fuel Energy (MMBtu)
2021	1,949,782	9,598,108	3,709,796
2022	2,037,314	9,948,779	3,731,665
2023	2,059,265	9,958,127	3,806,532

#### **Electric Peak Demand Reduction Targets**

Year	Total Electric Peak Demand Reductions	Energy Efficiency Passive Peak Demand Reduction	Active Demand Response Peak Demand Reduction
2021	64.7	30.8	33.9
2022	85.9	33.2	52.7
2023	108	33.5	<i>74.5</i>

#### **CHP Electric Energy and Peak Demand Reduction Targets**

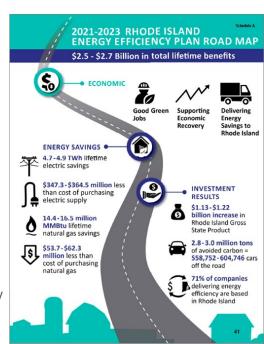
	CHP Electric Energy Savings (Lifetime	CHP Peak Demand Reduction (Annual
Year	MWh)	MW)
2021	723,337	11.1
2022	723,337	11.1
2023	723,337	11.1

The study produced several sets of results, including a maximum achievable scenario, which captures the total pool of energy saving opportunities that can be achieved with very robust energy efficiency

programs. The 2021-2023 Energy Savings Targets recommended by the Council and approved by the Commission were set based on this scenario and are shown in the tables below.

# 2021-2023 ENERGY EFFICIENCY PROGRAM PLAN (THREE-YEAR PLAN)

As part of the legislated triennial process to develop Three-Year Energy Efficiency and System Reliability Plans, the EERMC worked with National Grid, the Office of Energy Resources, the Division of Public Utilities and Carriers, and other key stakeholders to develop the 2021-2023 Energy Efficiency Program Plan for Rhode Island. National Grid filed the Three-Year Plan with the Public Utilities Commission on October 15, 2020. The purpose of this Three-Year Plan is to establish an overarching strategy for the next three years that will enable National Grid to successfully meet the goals of Least Cost Procurement and meet the Energy Savings Targets developed by the EERMC and approved by the Public Utilities Commission. The



Three-Year Plan met the objectives of being costeffective and less than the cost of supply, and is grounded in economics, flexible to changing market conditions, and designed to maximize consumer benefit.

# ANNUAL ENERGY EFFICIENCY PROGRAM PLAN

In addition to the three-year plan, annual energy efficiency program plans (Annual Plans) are developed by National Grid 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 also reviewed and ruled on by the PUC. Work on the 2022 Annual Plan will commence in summer 2021.

### SYSTEM RELIABILITY PROCUREMENT

Through System Reliability Procurement (SRP), the Company identifies targeted alternative solutions, through customer-side and grid-side opportunities, that are safe and reliable, prudent, environmentally responsible, cost-effective, and provide a path to lower supply and delivery costs for customers in Rhode Island. The EERMC worked with National Grid to complete all twelve 2020 SRP commitments.

As part of meeting this purpose, the Company develops and implements non-wires alternative (NWA) solutions. "Non-Wires Alternatives" is the inclusive term for any targeted investment or activity that is intended to defer, reduce, or remove the need to construct or upgrade components of an electric system, or "wires investment". NWA solutions use clean energy technologies to address electric grid needs. Clean energy technologies can include, but are not limited to, solar PV, energy efficiency and conservation, demand response, storage, and other types of renewable energy systems. NWA solutions can help the grid deliver electricity to homes and businesses when electricity demand is highest, sometimes at a lower cost than upgrading the wires, transformers, and substations through capital investment. NWA solutions can also provide clean renewable energy, which may reduce net greenhouse gas emissions.

In 2020, National Grid continued to analyze its screening criteria and development processes for non-wires solutions generally. The company also explored the benefit streams that could be combined with NWA solutions to improve cost-effectiveness. Continuing to evaluate and improve the process for implementing a non-wires solutions is ongoing into 2021.

National Grid pursued third-party solutions for previously identified non-wires opportunities and investigated viable alternative solution pathways for two non-wires opportunities for which National Grid was unable to source a costeffective third-party solution.

Similar to non-wires solutions, non-pipes solutions are cost-effective projects that maintain safe and reliable natural gas delivery while limiting traditional infrastructure investment in the pipeline system. In 2020, National Grid conducted background research on non-pipe solutions, explored how non-pipe solutions fit into company policy and regulatory standards, and engaged with stakeholders to discuss and understand opportunities and challenges to implementing non-pipe solutions. The EERMC will continue to work with National Grid to develop a non-pipe solutions program in 2021-2023.

SRP activities are cross-cutting in nature. In 2020, National Grid continued synchronization and coordination with other programs and initiatives, including Power Sector Transformation; National Grid's Grid Modernization Plan and Advanced Metering Business Case; the Energy Efficiency program; the Infrastructure, Safety, and Reliabi ity program; and calculations of shareholder incentives across all programs. The EERMC was represented at each meeting of National Grid's SRP Technical Working Group throughout 2020 to monitor program implementation and inform 2021 program development.

Throughout 2020, the EERMC, National Grid, and other parties actively informed revisions to the Least-Cost Procurement Standards, the set of regulatory rules that describe what should be included (or excluded) from the SRP programs. The EERMC worked closely with National Grid and other stakeholders to develop the 2021-2023 Three-Year SRP Plan in alignment with the revised Standards.

National Grid further enhanced the Rhode Island System Data Portal (Portal) in 2020. The Portal is an interactive, publicly-accessible, online mapping tool developed by the Company. The purpose of the Portal is to provide the market with information about grid-beneficial locations for siting cost-effective grid solutions and distributed energy resources (DERs), like solar and energy storage. The goal of the Portal is to reduce costs for Rhode Island customers through such market engagement. In 2018, National Grid initiated the Portal with maps that include characteristics of the distribution system, approximate levels of load on distribution lines and substations, and an annual snapshot of how much distributed generation (DG) can be hosted on each distribution feeder (called "hosting capacity").

In 2020, National Grid added functionality to the Portal maps related to sea level rise and ZIP code layer. The sea level rise map can be found on the new "Sea Level Rise" tab, with data sourced and mirrored from the National Oceanic and Atmospheric Administration (NOAA) Seal Level Rise Viewer. The ZIP code map layer has been added to each map tab to display the ZIP code area assignments so that the market and customers can more easily view National Grid's electric system across the state, which is particularly useful for third-party bid proposals to NWA opportunities. Finally, the Portal contains the NWA tab that contains a link to National Grid's publicly accessible NWA website. National Grid has continued to improve and streamline the NWA website, providing information to the market on the NWA definition, process and sourcing, and open RFP opportunities.

National Grid continued market outreach and engagement in 2020. Market engagement is important to increase industry knowledge about grid-beneficial NWA opportunities and available informational resources such as the Portal and NWA website. 2020 outreach and engagement included two webinars to demonstrate the Portal, two email campaigns, direct vendor contact, and a market survey in Q3 2020 to source vendor feedback on the Portal. The Company has entered a maintenance phase with market engagement for the Portal starting in

2021 because Portal awareness and engagement appear to have achieved market saturation and web traffic appears to have reached a steady state in 2020. Therefore, the only planned SRP market engagement activities for the Portal are to maintain web traffic analytics to the Portal landing page. These web traffic analytics have no cost to operate or acquire.

Additional details on 2020 SRP activities can be found in National Grid's 2020 System Reliability Procurement Year-End Report to be filed in Commission Docket 4980 on June 1, 2021. Additional details on planned activities for 2021-2023 can be found in National Grid's 2021-2023 Three-Year System Reliability Procurement Plan filed in Docket 5080 with the PUC on November 20, 2020. Both reports are also available on National Grid's System Data Portal.

## POWER SECTOR TRANSFORMATION

In March of 2017, Governor Gina M. Raimondo charged the Public Utilities Commission (PUC), the Office of Energy Resources (OER), and the Division of Public Utilities and Carriers (DPUC) with developing recommendations to advance power sector transformation (PST) in Rhode Island. The goal of the PST Initiative is to transition to a more dynamic utility regulatory framework in order to achieve a cleaner, more affordable, and reliable energy system for the 21st century and beyond. The three agencies partnered to solicit input from Rhode Island stakeholders and national experts, submitting a final Phase One Power Sector Transformation report with recommendations to the Governor in November 2017. The final report drew upon previous work to date by the EERMC, the Distributed Generation Board, the Systems Integration Rhode Island Working Group, and the PUC's Docket 4600 Investigation of the Changing Distribution System.

Following the submission of the PST report, National Grid filed an electric distribution rate case with the PUC, which addressed several topics identified in the PST report. In May 2018, National Grid, the DPUC, OER, and several other parties submitted a settlement agreement relative to National Grid's rate case at the PUC.

Among other items, the PUC ordered National Grid to implement two of their proposed initiatives. Through the Electric Transportation Initiative, National Grid is conducting a pilot to understand how rebates can encourage electric vehicle drivers to charge off peak, providing advisory services to fleet managers to understand the value proposition for transition to an electric fleet, providing incentives to make sites ready for electric vehicle charging infrastructure, and offering a discount on demand charges for DC Fast Charger hosts. Through the Energy Storage Initiative, National Grid is installing two battery energy storage facilities, one of which will be paired with electric vehicle charging infrastructure. With the help of the PST Advisory Group, National Grid has since refined a longer-term proposal for grid modernization and to develop a business case for advanced metering functionality. The Public Utilities Commission will review these filings throughout 2021.

For more information on the Power Sector Transformation Initiative, please visit: <a href="https://www.ripuc.ri.gov/utilityinfo/electric/">www.ripuc.ri.gov/utilityinfo/electric/</a> PST home.html.

# **LOOKING FORWARD:** 2021 ENERGY EFFICIENCY PROGRAM PLAN HIGHLIGHTS

### **2021 RESIDENTIAL PROGRAMS**

## **Residential New Construction**

In 2021 the Company will continue to work with building industry representatives to determine the cost-effectiveness of offering the zero energy ready initiatives in the RNC program. The Company will continue to offer contractor training – virtually, and when appropriate in-person, and will continue to strive to help participants agree to achieve high efficiency, low-carbon, design and construction through the new All Electric incentive.

# The High-Efficiency Heating and Cooling Programs (Gas Heat Program and CoolSmart Program)

In 2021the Company will continue to offer electric resistance heating customers with attractive incentives to replace old electric resistance heating systems. In addition, the Company will support the RGGI-Funded ASHP Program offer that will provide oil/propane heating customers an enhanced incentive (from RGGI funds) to displace/replace the their heating system with air source heat pumps. Ongoing training will be offered to ensure that contractors are properly trained in cold climate air source heat pump (ASHP) system design and installation as well as delivering customer education.

# **Income Eligible Enhancements**

In 2021, the Program aims to develop strategies, similar to the new referral program for weatherization, to continue the support of the RI Community Action Programs in delivering the IES services and incentives. The IES Program will continue to participate in the Community Expos services to provide customer service and increase participation in the IES program.

# **Community Initiative**

The Community Based Initiative in 2021 will continue the Community Initiative model to support cities and towns in achieving certain energy saving metrics to earn grant monies for future energy efficiency projects at a municipal site. The Company will continue recruit new communities for 2021/2022 to drive awareness and participation in energy savings programs that drive deeper energy efficiency in those communities. The communities will again

be provided with start-up funding and marketing kits to promote efficiency throughout the year.

# **Home Energy Reports**

Target Rank reports will be run over another six months. This new approach will encourage customers to aim for higher ranking, so they know their energy saving actions are having an impact on their usage. Context-aware tips and personalized tip savings estimates will be provided in 2021.

# **Multifamily Program**

In 2021 the company is committed to conducting research studies that will benefit the multifamily program, including a RI Multifamily Census study and a non-participant study. A vendor has been selected to complete these studies and a draft of the workplan has already been completed. The company is also incorporating recommendations from the 2020 Multifamily Impact and Process Evaluation study into the upcoming RFP, these recommendations include increased facilitation of health and safety barrier remediation, updating language and redesigning customer facing documents, and increasing the availability of virtual services. The company also continues to examine a tiered incentive structure to increase engagement in condominium facilities and allow condo owners to work with preferred contractors to increase the ease of participation.

# 2020 COMMERCIAL & INDUSTRIAL PROGRAMS

In 2021, the Commercial and Industrial sector will focus on non-lighting opportunities and program enhancements that help drive progress toward deeper comprehensive measure adoption. The specific priority measures vary by customer, but in general the priority measures are reflective of the opportunities highlighted in the Market Potential Study.

The Commercial and Industrial New Construction program will feature a new four path program structure in 2021 reflecting the incorporation of learnings from pilots run during 2018-2020. The two paths targeting the deepest savings introduce a focus on establishing an energy use intensity (EUI) target early in the design process and is designed to

provide support during the design, construction, and occupancy periods to achieve this goal. Another new path introduces a streamlined spreadsheet-based approach to reduce barriers to program participation for smaller projects. This four path approach was designed through regional collaboration and is also being rolled out in neighboring states.

The Large Commercial Retrofit Program will offer new market segment designs that will provide customers with tailored approaches to comprehensive savings opportunities (e.g. the Telecommunication Initiative), and enhancements to existing offerings that make customer participation easier or more attractive (e.g. new offerings for ESPO and Small Business). Listed below, is a synopsis of the Telecommunication Initiative, and a rationale for its addition into the Large Commercial Retrofit Program.

• Telecommunication Initiative (New to 2021): The Telecommunication Initiative is designed to serve mobile, fiber optic, and cable data companies and their associated infrastructure. The objective of the Initiative is to achieve increased savings predominately from nonlighting measures that were highlighted in the Market Potential Study, specifically HVAC related savings from data centers. Additionally, the Company believes this to be an equitable use of ratepayer funds as this market has not been served in previous years.

The Small Business Direct Install Program is eligible to commercial customer who have less than 1,000,000 kWh in annual usage. After a Small Business Energy Specialist conducts a no-cost site assessment, the Specialist works with the customer to identify strategies to pursue the appropriate energy efficiency measures. In 2021, the Company will be working on the following enhancements —

- The Company and its vendor will be actively working towards the goal of increased controls on lighting projects. The goal is that 30% of luminaires and retrofit kits will have integrated controls which allows more energy savings to be claimed.
- National Grid has budgeted and planned for savings related to HVAC in 2021. Roof top units and kitchen exhaust control are two areas that the Company feels have potential in the small business space.

- The Company has planned for at least one small business marketing campaign to the women and minority owned business community.
- National Grid will be increasing efforts to weatherize gas heated small businesses. This allows a customer to save money now and prepares them for the coming era of more efficient electric heating through heat pumps.

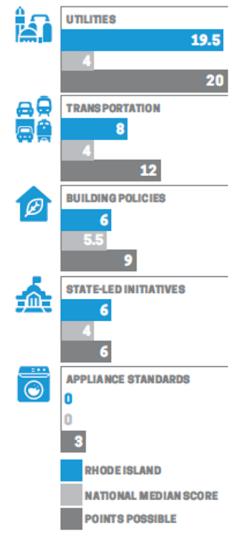
Innovating for Future Energy Efficiency Savings for Rhode Island Customers: Pilots, Demonstrations, and Assessments

For 2021, the Company intends to continue or start fourteen Pilots, Demonstrations, or Assessments. These research and development efforts range from continuing the Gas Demand Response pilot to continuing demonstrations investigating Network Lighting Controls for HVAC control and Kitchen Exhaust control strategies, gas heat pumps for both C&I and residential customers among other energy savings investigations to assessments into pre-fab retrofit of existing homes and refrigeration leak surveys and repair. The Company will continue to update the EERMC and PUC of the progress, findings, and next steps of all Pilots, Demonstrations, and Assessments over the course of 2021 in the Quarterly Reports.

# Appendix A: ACEEE State Energy Efficiency Scorecard Rhode Island Summary

# 42

Rhode Island ranked fourth in the 2020 State Energy Efficiency Scorecard, one position lower than it held last year. The state earned 39.5 points out of a possible 50, 1 point less than it earned in 2019.



# 2020 STATE ENERGY EFFICIENCY SCORECARD

# **Rhode Island**

Rhode Island continues to rank high among the top states in the State Scorecard, with National Grid meeting ambitious savings targets through successful programs outlined in its three-year Least Cost Procurement Plan. Rhode Island continues to look for ways to capture untapped savings through innovative pilot programs and planning efforts intended to a chieve zero-energy buildings and reduce greenhouse gas (GHG) emissions.

### UTILITIES

Rhode Island continues to achieve among the highest levels of savings in the country. Efficiency program administrators in the state devote notable levels of funding to acquire all cost effective energy efficiency resources. Rhode Island has set aggressive energy savings targets as part of its energy efficiency resource standard, which includes both electricity and natural gas. There has also been an increased focus on extending energy efficiency programming for delivered fuels customers, which is an underserved population in Rhode Island. In 2019, utility programs began offering enhanced incentives for air source heat pumps to delivered fuel customers, and their 2021–23 plans call for increased contractor training around heat-pump technology, enhanced recruitment, and partnerships with educational institutions to promote energy efficiency as a career.

## TRANSPORTATION

The state integrates transportation and land use planning, sets a goal for GHG emissions reductions from the transportation sector, and devotes significant funding to transportation initiatives. Rhode Island has set tailpipe emissions standards and passed complete streets legislation. In addition, the state has more public charging stations per capita than most states and has seen a decrease invehicle miles traveled per capita in recent years. The state also incentivizes the creation of low-income housing near transit facilities and considers the proximity of transit facilities when distributing federal Low-Income Housing Tax Credits to qualifying property owners.

# BUILDING ENERGY EFFICIENCY POLICIES

In 2019 Rhode Island adopted the 2015 International Energy Conservation Code (IECC) for residential buildings and 2015 IECC and American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) 90.1-2010 for commercial construction, albeit with weakening amendments. The state also released a voluntary stretch code in 2018. Rhode Island has completed a baseline compliance study for commercial and residential buildings and conducts an array of ongoing activities to improve compliance rates. It has partnered with Northeast Energy Efficiency Partnerships (NEEP) to advance issuance and listings of home energy ratings. In 2019, National Grid's Residential New Construction Program supported the state's first-zero energy ready neighborhood project.

# STATE GOVERNMENT-LED INITIATIVES

The state offers a variety of energy efficiency incentives for consumers and has an active Property Assessed Clean Energy (PACE) program. State government leads by example by requiring efficient public buildings and fleets, benchmarking energy use, and encouraging energy savings performance contracts. The state is a member of the Regional Greenhouse Gas Initiative and since 2012 has reinvested more than two-thirds of cap-and-trade proceeds towards energy efficiency programs.

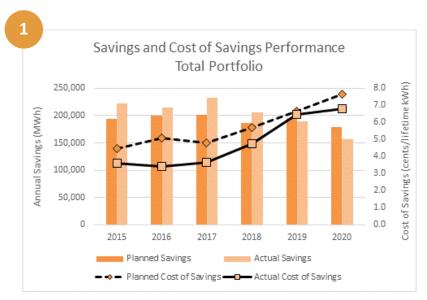
# APPLIANCE STANDARDS

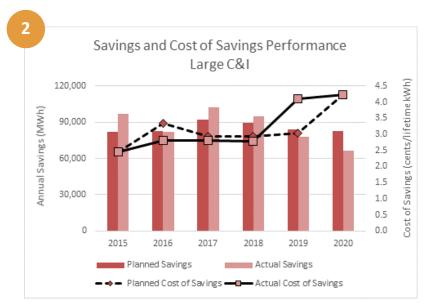
Rhode Island is one of the few states to set appliance standards, although none have gone into effect in the past three years. The state adopted its most recent standards in 2006 and all but two have been preempted by federal standards.

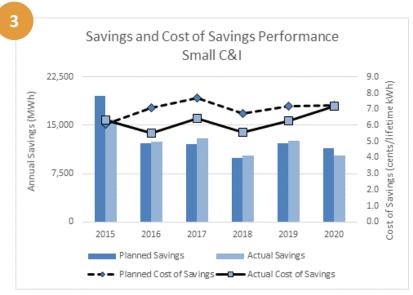


# Appendix B: Electric Program Trends Over Time 2015-2020

# **ELECTRIC PROGRAM TRENDS OVER TIME: 2015-2020**







Graphs 1-5 show the cost per lifetime savings (cents/lifetime kWh) achieved by the electric energy efficiency programs each year from 2015 through 2020. They also depict planned versus achieved electric savings. Graph 1 shows trends for the total portfolio of electric programs while graphs 2-5 highlight specific market sectors: Large Commercial & Industrial (C&I), Small C&I, Residential, and Income Eligible.

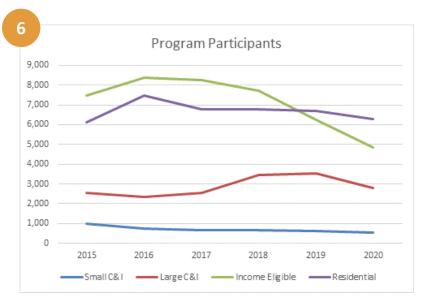
Each year, the EERMC works in coordination with National Grid to continue to enhance program delivery strategies and optimize energy efficiency benefits for all ratepayers. Maximizing the costefficiency of the programs is a top priority for the Council. Consistently, these efforts have resulted in greater than expected electric savings. This trend has changed recently as the portfolio of electric programs have achieved lower than expected electric savings in 2019 and 2020. Similarly, the cost per lifetime kWh of the programs was pretty consistent from 2015-2017 but has increased in each successive year for all market sectors since.

Through the programs, lighting upgrades have historically provided significant amounts of lower-cost energy efficiency savings. Both in RI and across the nation energy efficiency programs have played a critical role in transforming the lighting market from incandescent bulbs and other inefficient lighting to energy-efficient LEDs. With the lighting market transforming to LED technologies, it means homeowners will be able to choose from energy efficient lighting options without need for program funding. This represents a great success story for energy efficiency.

However, because lighting savings historically have made up a large portion of the electric energy efficiency portfolio and these lighting savings will not be claimable by the programs once the lighting market is fully transformed, it is essential that new technologies and offerings addressing the thermal, HVAC, and hot water end-uses be included in upcoming program plans. The EERMC looks forward to working with program adminis-







trators to continue innovating and evolving the programs.

Graph 6 shows program participation over time from 2015 through 2020. Please note that Residential program participation numbers are shown in hundreds. The residential electric programs have the largest participation numbers of all the market sectors.

During the 2017-2019 period, participation levels increased for large C&I customers, remained relatively consistent for small C&I and residential customers, and decreased for income eligible customers. Perhaps not surprisingly, program participation levels decreased across the board in 2020 in part due to impacts of COVID-19. It remains a priority of the EERMC and National Grid to continue expanding access to energy efficiency programs for all ratepayers.

# Appendix C: National Grid Efficiency Program Case Study

# Emerging Zero Net Energy Building Case Study





# **OVERVIEW**

Predicted Energy Use Intensity (EUI): 23.2 kBtu/sf/yr

Renewable Energy Production: 25.5 kBtu/sf/yr

Predicted Net EUI: -2.3 kBtu/sf

Predicted HERS Index: Unit A: -8,

Unit B: 0

Home Sizes: 750-790 sf

Location: City of Providence, RI

Construction Type: Five single family

new construction homes

Construction Years: 2019-2021

Occupation Date: December 2020 -

Spring 2021

Total Development Cost: \$1.5 million

# SHERIDAN SMALL HOMES

The story of Sheridan Small Homes begins with a spark of inspiration stemming from Rhode Island School of Design (RISD) architecture students. In 2018, RISD students participated in the Race to Zero Student Design Competition, a collegiate design challenge sponsored by the U.S. Department of Energy. The students were selected as <u>finalists</u> for their affordable, energy efficient home prototypes.

Learning of their success, the City of Providence, RI saw an opportunity for the RISD students to help them achieve multiple city goals: provide more affordable housing, address climate change, and increase local workforce understanding of achievable, high performance construction techniques.

In Providence, RI, 70% of carbon emissions are from buildings. Cutting building energy use and removing fossil gas are key parts of the strategy to become carbon neutral by 2050, as detailed in the City's <u>Climate Justice Plan</u>.

The City approached the RISD team and Professor Jonathan Knowles about a partnership with One Neighborhood Builders, a community based affordable housing developer. The team found a three-quarter acre site zoned for multiple units, conveniently located on a bike path to downtown, near ballfields, and an adjacent neighborhood. The lot offered an opportunity for construction of new housing on lots typically not large enough for new homes. Working together, the team designed and developed five zero net energy, all-electric, solar-powered homes. As a zero net energy project, the homes are expected to produce as much energy as they consume over the course of the year.



Appendix D: 2020 Energy Efficiency Vendors

# **2020 ENERGY EFFICIENCY VENDORS**

The following list includes contractors and subcontractors performing work directly for National Grid Energy Efficiency programs in 2020 that were counted in the FTE analysis and additional companies who assisted customers to secure equipment rebates, for example through the New Construction, High Efficiency HVAC programs, and upstream lighting. The list also includes the Community Action Program agencies and their subcontractors involved with the delivery of the low-income program, whether under National Grid funding or WAP/LIHEAP/ARRA funding.

The list is organized by state, with companies then listed alphabetically. Rhode Island firms are listed first. Of the 1,093 companies, agencies, contractors and sub-contractors listed here, 73% are either headquartered in Rhode Island or have a physical presence in Rhode Island. 19% are Massachusetts-based companies with no physical presence in Rhode Island. 3% of companies are Connecticut firms. The remaining firms have offices in the other New England states or outside of New England.

Vndor Name	City	State	Apple Valley Alarms	North Scituate	RI
210 Plumbing	Portsmouth	RI	Apuzzo Plumbing & Heating	North Scituate	RI
3GB LLC	Riverside	RI	Aquidneck Services LLC	Taunton	RI
A & L Plumbing	Westerly	RI	AR Heating & Cooling Inc.	Central Falls	RI
A. Perry Plumbing & Heating	Coventry	RI	Arden Engineering Constructors, LLC	Pawtucket	RI
A&I Electric	Pawtucket	RI	Ardente Supply Co. Inc.	Providence	RI
A Santurri Electric	East Greenwich	RI	Armor Insulation	Pawtucket	RI
A E Costa Electrical Contractor LLC	Warwick	RI	Arther Lettieri	Providence	RI
A/C Burner Service	East Providence	RI	Arthur W. Adler	Bristol	RI
A-1 Plumbing & Drain Cleaning	Pawtucket	RI	Aten Energy	Providence	RI
Accu Electric	Providence	RI	Atlantic Plumbing & Heating Supply	Coventry	RI
Acorn Oil	Pawtucket	RI	Atlantic Power Services Inc.	Pawtucket	RI
ACR Construction & Management Corp	North Providence	RI	ATLANTIS COMFORT SYSTEMS	West Warwick	RI
Cardin, Adam	Burrillville	RI	Atlas Insulation	North Scituate	RI
ADERO	Cranston	RI	ATMS Electrical Services	East Providence	RI
Adler Bros. Development	Smithfield	RI	Audet, E.W. & Sons Inc.	Providence	RI
Advance Electrical Corporation	Providence	RI	Audet, Robert F. Inc.	East Greenwich	RI
Advanced Comfort Systems Inc.	North Smithfield	RI	Aussant Electric	Cumberland	RI
Advanced Heating & Cooling	Greenville	RI	Autiello Plumbing & Heating	Cranston	RI
Aero Mechanical Inc.	Roxbury Crossing	RI	Automatic Temperature Controls	Cranston	RI
Affordable Building & Weatherization, Inc.	Cumberland	RI	Automatic Heating Equipment	Providence	RI
Affordable Heating & Air Conditioning Services	North Providence	RI	AZ Corporation	Hopkinton	RI
Affordable Insulation, Inc.	Providence	RI	B & B Consumers Natural Gas Service & Air Conditioning	Woonsocket	RI
Air Flow Inc.	Coventry	RI	B & J Matzner	Warwick	RI
Air Metalworks Ltd.	Carolina	RI	B & K Electric, LLC	Warwick	RI
Air Quality LLC	Cranston	RI	B & M Plumbing	Warwick	RI
Air Synergy LLC	Providence	RI	B Martel Plumbing & Heating	Central Falls	RI
Air Tech Pro HVAC	Cranston	RI	B Z Electric	West Warwick	RI
Air Temp	Riverside	RI	B&D Boiler Removal	Pawtucket	RI
Airhart Electric Inc.	Coventry	RI	B&W Building Maintenance Electrical Contractors	Providence	RI
Larocci, Al	Warwick	RI	B. LaChapelle Home Improvements LLC	Lincoln	RI
Al Swajian & Son	Cranston	RI	Bard Plumbing & Heating	Warwick	RI
Ala & Sons Construction	Warwick	RI	Barlow Heating LLC	Warwick	RI
Alan Menard Plumbing LLC	Pawtucket	RI	Barrett Plumbing & Heating Inc.	West Greenwich	RI
Alan Paul Electric	Warwick	RI	Barrington Plumbing & Heating Inc.	Barrington	RI
All Electrical Solutions	Providence	RI	Baum Energy	Warren	RI
All Phase Heating & Cooling	Coventry	RI	Bayside Electric Company	Warwick	RI
All Star Insulation	Providence	RI	Beauchemin Design	North Smithfield	RI
Allen Engineering	Warwick	RI	Belcher Electric LLC	Warwick	RI
Alliance HVAC	Cumberland	RI	Beneficial Energy	Pawtucket	RI
Alpha & Omega Homes	Cumberland	RI	Benjamin Jenkins Dba	Middletown	RI
Alpha Mechanical	East Providence	RI	Berard Heating & HVAC	Warwick	RI
Al's Electric	North Providence	RI	Bertrand Plumbing Inc.	Pascoag	RI
AM Electric LLC	Warwick	RI	Bileau HVAC Inc.	Woonsocket	RI
Amaral, Paul	Tiverton	RI	Bill The Plumber	Smithfield	RI
Amazon	Barrington	RI	Bill's Direct Plumbing & Heating	Bristol	RI
American Heating, Plumbing, & Sprinkler, Inc.	North Providence	RI	Bill's Heating Service Inc.	Warwick	RI
American Home Heating & Air Conditioning	Cranston	RI	Bisono Construction	Providence	RI
American Pride Plumbing & Heating LLC	Warwick	RI	Blackstone Valley Community Action	Pawtucket	RI
Anchor Insulation Inc.	Pawtucket	RI	Blanco, Owen	Warwick	RI
Anchor Plumbing & Heating	Providence	RI	BLH Realty	Warwick	RI
Anderson Energy Solutions LLC	Charlestown	RI	BMB Services LLC	Cranston	RI
Andrade & Co LLC	North Providence	RI	Bobby Hopkins	Exeter	RI
Andy's Overhead Electric LLC	Exeter	RI	Bodell Plumbing & Heating	South Kingstown	RI
Anibal J. Cante	Central Falls	RI	Boss Heating	Westerly	RI
Anthony Januario Heating	Bristol	RI	Boucher HVAC/R Inc	Wakefield	RI
Anything Plumbing & Heating Service	Harrisville	RI	Brandon Schiano Plumbing & Heating	Cranston	RI
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Braswell's Plumbing & Heating	North Kingstown	RI	David R. Gince Electrician	Woonsocket	RI
Brian Mellor	Warren	RI	David Parrillo Plumbing, Heating & Son LLC	Норе	RI
Brien Godin	Cumberland	RI	David Phillips Plumbing & Heating	Riverside	RI
Brittain Electric Inc.	Jamestown	RI	David Seddon Electrician	Rumford	RI
Brock's Electric	Johnston	RI	David St. Angelo	Barrington	RI
Broway Electric, LLC	Cranston	RI	Dayco Electric	Warwick	RI
Bruno & Son Electric Inc.	North Providence	RI	DCI Construction	Cumberland	RI
			Delmonico Enterprises, Inc.	Cranston	RI
Buckley Heating & Cooling	Middletown	RI	·		RI
Burbank's Plumbing & Heating Inc.	North Kingstown	RI	Delta Electro Power Inc.	Cranston	
Butler & Sons Plumbing & Heating	Cranston	RI	Delta Mechanical Contractors	Pawtucket	RI
C & L Energy Corp	Cranston	RI	Dennis Decorpo Electric	Scituate	RI
C. Caswell Plumbing	Jamestown	RI	Dennis Pratt Plumbing & Heating	Harrisville	RI
C.J. Nemes Inc. Plumbing & Heating	Woonsocket	RI	Derek DeCosta	Riverside	RI
Cal Supply Company, Inc.	Cranston	RI	Derek Germain	Cumberland	RI
Calson Corporation	Johnston	RI	Desmarais Plumbing & Heating Inc.	Johnston	RI
Calyx Retrofit	Lincoln	RI	Dessaint Electric Co.	Warwick	RI
CAM HVAC & Construction Inc.	Smithfield	RI	Devivo Plumbing & Heating	North Smithfield	RI
			Dimery, Robert W. Dba	Barrington	RI
CARJON Air Conditioning & Heating Inc.	Smithfield	RI	• · · · · · · · · · · · · · · · · · · ·	Pawtucket	RI
Carlino Electric	Coventry	RI	Diorio, Joseph		
Casey's Oil & Propane	Portsmouth	RI	DIROCCO Plumbing ServiceS LLC	North Providence	RI
Casperson Construction	Johnston	RI	Divona Enterpries	Cranston	RI
Cassana HVAC LLC	Johnston	RI	DJL Electric	Warren	RI
Cavaco Brothers Plumbing & Heating	East Providence	RI	Dominic Mazza Construction	Pawtucket	RI
CD Heating, Inc.	Cranston	RI	Done Right	North Providence	RI
Century Heating	Smithfield	RI	Donovan & Sons	Middletown	RI
Century Sheet Metal, Inc.	Riverside	RI	DP'S Plumbing & Heating	Scituate	RI
CFC Electrical Contracting Inc.	Providence	RI	Driver's Plumbing & Mechanical	Providence	RI
			DSC Heating & Air Conditioning	North Kingstown	RI
Charette Plumbing LLC	Richmond	RI	· ·	•	
Charland Enterprises	Pawtucket	RI	DSL & Sons Heating & Cooling Inc.	Bradford	RI
Charles Doherty & Steve Girard	Warwick	RI	Dual Voltage Electric	Johnston	RI
Charter Plumbing & Heating Co	Warren	RI	Dudek Oil	Warren	RI
Chilabato, Peter	Portsmouth	RI	Dumais Plumbing & Remodeling Inc.	Slatersville	RI
Chris Cardillo Electrician	Providence	RI	Dupuis Oil Co.	Pawtucket	RI
Chris Electric, Ltd.	Newport	RI	Duran Electric	Lincoln	RI
Cinco Plumbing & Heating	Coventry	RI	Durante Electric	Lincoln	RI
	Smithfield	RI	DWI Electrical Group	Johnston	RI
CJ's Plumbing & Heating Specialists			Dynamic Air Systems Inc.	East Providence	RI
CK Plumbing & Heating	Pawtucket	RI	E. A. Marcoux & Son Inc.	Woonsocket	RI
Clearesult	Providence	RI			
Clermont Mechanical Plumbing	Glendale	RI	Eagle Design Corp	Middletown	RI
Cleverly Plumbing LLC	Greene	RI	East Coast Electric	South Kingstown	RI
CMA Heating & AIR	East Providence	RI	Eastbay Community Action	Riverside	RI
CMAGS HVAC	Warwick	RI	Eastern Plumbing & Heating	Providence	RI
Coastal HVAC	Wakefield	RI	Ecologic Spray Foam Insulation Inc.	Tiverton	RI
Cohen Heating Supply Inc.	Providence	RI	Econ Electric Contractors	Bristol	RI
Collard Enterprises	Coventry	RI	Economy Air Inc.	Exeter	RI
Comfort Systems	•	RI	Ed Sylvia Plumbing	Narragansett	RI
•	West Kingston	RI	Eddys Weatherization	Providence	RI
Community Action Partnership of Providence	Providence		Edward Martino	Johnston	RI
Competitive Chimney Sweep Inc.	Woonsocket	RI			
Complete Construction Inc.	Providence	RI	Edward Silvia	Middletown	RI
Comprehensive Community Action	Cranston	RI	Eirich Electric Inc.	Portsmouth	RI
Condon, James	Tiverton	RI	Electrical Concepts Inc	East Greenwich	RI
Connolly and Sons Heating Services	Harmony	RI	Electrical Construction Specialists LLC	Middletown	RI
Consolidated Maintenance	Johnston	RI	Electrical Wholesaler Inc.	Cranston	RI
Consumers Propane, Bousquet Oll	Woonsocket	RI	Electro-Tec Systems Inc	Lincoln	RI
Continental Engineering Inc.	Johnston	RI	Elite Heating & Cooling LLC	Pawtucket	RI
Control Systems	Cranston	RI	Emerald Services	Foster	RI
Cordeiro, Nathan	Portsmouth	RI	Emergency Response Service	Providence	RI
	East Providence	RI	Energy Conservation Inc.	South Kingstown	RI
Costa, Dave			· · · · · · · · · · · · · · · · · · ·	Pawtucket	RI
Cross Insulation	Cumberland	RI	Energy Efficient Exteriors, Inc. Energy Electric, Inc.	Woonsocket	RI
Cruz Remodeling & Construction Co	Providence	RI	,		
Crystal Plumbing & Heating	Providence	RI	Energy Geeks	North Smithfield	RI
CS Plumbing & Heating	Warwick	RI	Energy One	West Warwick	RI
CSV Mechanical	South Kingstown	RI	Energy Source LLC	Providence	RI
Custom Comfort	Cumberland	RI	EP Electric	East Providence	RI
Custom Plumbing & Heating Co	Newport	RI	Erban Plumbing	Warwick	RI
Cutler H. Besser & Sons	Scituate	RI	Eric R. Krause Electrician	Cranston	RI
CW Cummings Plumbing Co.	Coventry	RI	Eric Tyler Electrician	Charlestown	RI
5	East Greenwich	RI	Esmond Electric	Smithfield	RI
D & D Electric Company			Eurotech Climate Systems LLC	Pawtucket	RI
D & E Electric, Inc.	Warwick	RI	Evergreen Plumbing & Heating	Warwick	RI
Dave Fortier (D & Z Electric)	Woonsocket	RI			
D Gomes Electric LLC	Pawtucket	RI	F & S Electric Inc.	Bristol	RI
D P Electric	Cumberland	RI	Falcon Electric	Pawtucket	RI
D&D Electric	Cranston	RI	Falcone, Arthur P	Hope Valley	RI
D&S Construction Co	Lincoln	RI	Feather HVAC	Cumberland	RI
D&V Mechanical Inc.	Westerly	RI	Feula Plumbing & Heating	Johnston	RI
D.F.S. Plumbing Services	Cranston	RI	Figliozzi Plumbing & Heating	Peace Dale	RI
D.S. Plumbing	Quincy	RI	Fiore & Sons LLC	Warwick	RI
Danico LLC	North Providence	RI	Five Star Mechanical	Richmond	RI
Dante Gonzales	Providence	RI	Fleet Plumbing & Heating Inc.	North Scituate	RI
			Flint Audio Video	Middletown	RI
Dauphinais Electrical Services LLC	Woonsocket	RI	Flou HVAC	Charlestown	RI
David A. Ciancio, Jr., Inc.	Scituate	RI		Challestown	KI
			ED		

FM Bodington Plumbing & Heating Inc.	Little Compton	RI	Jerry's Paint & Hardware	Narragansett	RI
Fox & Delomba Heating, Air Conditioning & Plumbing	Riverside	RI	JG Home Remodeling	Riverside	RI
Francis Heating & Hydronics	East Providence	RI	Jim Silvia	Warwick	RI
Frank Lombardo & Sons	Providence	RI	Jim Steitz Plumbing & Heating	Greene	RI
Fred Manupelli Plumbing & Heating	Johnston	RI	JKL Engineering Co. Inc	Providence	RI
Frontier Mechanical	Providence	RI	JL Electric Inc.	Middletown	RI
Furtado Lighting & Design LLC	Bristol	RI	JLJ Enterprises Dba Jenkins Heating S	Smithfield	RI
G. Gagnon Electric & Sons Ltd	Cumberland	RI	JMAC Plumbing and Heating Inc	Warwick	RI
G.M. Perron & Son Plumbing & Heating	North Smithfield	RI	JMC Construction	Providence	RI
5 5		RI	Jo Da Plumma	Warwick	RI
Gallo Electric	West Greenwich		Jo Plumbing	Warwick	RI
Gambit Electric	Johnston	RI	Joe Falconi Jr.	Westerly	RI
Gary Fernandes Electrician	Woonsocket	RI	Joe Vigneault Electrician	Riverside	RI
Gary Ficca Electrician	North Smithfield	RI	Joe's Plumbing & Heating	Warwick	RI
Gas Doctor	Providence	RI	0 0		
Gatta Electric	Cranston	RI	John Ekdahl	Chepachet	RI
Gerald M Lepore Jr.	Cranston	RI	John Fletcher Heating	Ashaway	RI
Giorno Plumbing & Heating	Cranston	RI	John Giguere Electrician Dba	North Smithfield	RI
GKT Refrigeration	Pawtucket	RI	John Nicholson Mechanical Contractor	North Scituate	RI
Glenn Smith Construction LLC	Middletown	RI	John Schweglewis Plumbing Solutions LLC	North Smithfield	RI
Globex Industries Inc.	Narragansett	RI	Johnny Mack Electric	Narragansett	RI
Gomes Heating & Cooling	North Kingston	RI	Johnny's Home Solutions LLC	Central Falls	RI
Gordon Building & Excavating Inc.	Hope Valley	RI	Johnny's Oil & Heating	Providence	RI
Graham Builders	Smithfield	RI	Johnson & Johnson Plumbing	Narragansett	RI
Gravel Electric Inc.	Harrisville	RI	Johnston Electric Inc.	North Scituate	RI
Graver Electric Inc.  GreanSeal Insulation		RI	Johnstone Supply	Providence	RI
	North Kingston		Jonathan Svitil	Lincoln	RI
Greenwich Insulation	West Greenwich	RI	Jordan Osedacz	Warwick	RI
Greg Blanchette	North Smithfield	RI	Jose Toledo	Coventry	RI
Greg Brown	Smithfield	RI	Joseph C. Grimm Plumbing Inc	Narragansett	RI
Griff Electric LLC	Portsmouth	RI		•	RI
Gross, Carl	Providence	RI	Joseph Janton	West Warwick	
Guarino Power Systems LLC	Smithfield	RI	Joseph Joyce	Westminster	RI
Guy Clemont Plumbing & Heating	Cranston	RI	Joseph M Arriaga	Barrington	RI
H&R Electric Contractors Inc.	Greenville	RI	Joseph McDermott Pipeworks	Bristol	RI
Harris Plumbing & Heating Inc.	Narragansett	RI	Joseph Soave	North Providence	RI
Hawkes Plumbing & Heating Co. Inc.	Fiskdale	RI	Josh's Plumbing Services	Foster	RI
Heavenly Homes	Cranston	RI	JP Island Plumbing	Middletown	RI
Henderson Electric	Pawtucket	RI	Juan Villanueva	Cumberland	RI
Henderson, Paul	Warwick	RI	Julio Ortiz	Johnston	RI
Hilario A. Quezada Electrician	Providence	RI	Just Heat	Portsmouth	RI
Hill Electrical Services		RI	K Electric	Warwick	RI
	Pascoag	RI	K&B Mechanical LLC	North Providence	RI
Hodges Electric	Scituate		Kafin Oil Company	Woonsocket	RI
Holland Electric	Peace Dale	RI	Kazounis Plumbing and Heating	Hope Valley	RI
Homan Associates	Warwick	RI	KE Plumbing LLC	Burriville	RI
Home Depot	Smithfield	RI	Keith Weindel (Amped Electric)		RI
Houle Plumbing & Heating	Coventry	RI	Kelto Electric Inc.	Coventry	
Howards Heating	North Kingstown	RI		Johnston	RI
HSP Construction LLC	Coventry	RI	Kelley, James	Scituate	RI
Hughes Inc.	North Kingstown	RI	Kennedy's Home Improvement	Lincoln	RI
Hutchins Electric	East Greenwich	RI	Kenny Pierce	Ashaway	RI
HVAC Excellence	Central Falls	RI	Ken's Heating	Providence	RI
HVAC Inc.	Cumberland	RI	Kent County Electrical Service	Warwick	RI
Hynson Electrical Construction Inc	Bristol	RI	Kevin Messier Electrical	Cumberland	RI
lasimone Plumbing & Heating	North Providence	RI	Kirk Rerick	Hope	RI
Industrial Refrigeration Corporation	Cranston	RI	Kirkbrae Electric	Lincoln	RI
Installed Measures	Coventry	RI	Kirwin Brothers Contracting	Newport	RI
IPA Electric LLC	Cranston	RI	KME Electric	Woonsocket	RI
IRB Solutions Inc.	Greenville	RI	KMJ Electric & Construction	North Providence	RI
	Harrisville	RI	Knight Plumbing & Heating	Cranston	RI
Iron Pipes Plumbing LLC			Koolco Inc.	Wakefield	RI
Iroquoian Plumbing & Heating	Providence	RI	KP Sullivan Heating LLC	Cumberland	RI
Island Solar Plumbing and Heating	Jamestown	RI	Kwik Plumbing & Heating	Johnston	RI
It's Shocking Electric Corp.	Cranston	RI	L&B Remodeling	North Providence	RI
Izzo & Sons Electric	Warwick	RI			
J & A Electric	Providence	RI	L & F Plumbing LLC	Cranston	RI
J & K Supplemental Plumbing Inc.	East Greenwich	RI	Lamar & Sons	Greenville	RI
J Colacone Plumbing	North Kingston	RI	Lamplighter, In	Little Compton	RI
J Joyce Plumbing & Heating	Warwick	RI	Lancellotta Plumbing & Drain Cleaning	North Scituate	RI
J Zarrella Plumbing & Heating	Cranston	RI	Landy, Ross	Portsmouth	RI
J&M Plumbing	Coventry	RI	Leak Free Lifestyles	Coventry	RI
J. Emilio Reyes	Pawtucket	RI	Lee'S Plumbing & Heating	Providence	RI
J.D. Mello Plumbing & Heating Inc	Westford	RI	Leidos Engineering	Newport	RI
Jack's Electric	Jamestown	RI	Lemay, Donald	Bristol	RI
Jacobson Energy Researc	Providence	RI	Leveille Electric	Smithfield	RI
James J. O'Rourke, Inc.	Warwick	RI	Liddell Brothers Inc.	Woonsocket	RI
Jan Co	Cranston	RI	Lifespan Corp.	Providence	RI
			Lighten Up Electric, LLC	Cranston	RI
Jaquez General Contractor	Providence	RI	Lincoln Electric LLC	Warwick	RI
Jason Truppi Plumbing and Heating	North Providence	RI	Lincoln Sheet Metal	Central Falls	RI
JB Cote Construction	Cumberland	RI	LJ Giorgi Plumbing & Heating	North Providence	RI
JBK Plumbing	Warwick	RI	Lombardi Electric Co	Warren	RI
JC Electric Inc.	Wakefield	RI	Lowe's Home Improvement	Warwick	RI
JD Power Electric LLC	North Smithfield	RI	Lubera Plumbing	Foster	RI
JED Electric Inc.	Greene	RI	Labora i idilibiliy	1 00101	W
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Luke Beaudreault Plumbing & Heating N	Harrisville	RI	Newport Electric	Portsmouth	RI
Luso Plumbing & Heating Inc.	Cumberland	RI	Nexgen Mechanical Inc.	Cranston	RI
M & Correia's Plumbing & Heating Supply	Warren	RI	Nexus Electric	North Providence	RI
M D'Andrea Electric LLC	Portsmouth	RI	NGB Electric	Smithfield	RI
	North Smithfield	RI	Nicolas Bermudez	Pawtucket	RI
M P Samsky Corp.			Nite Oil	Tiverton	RI
M & M Electric	Providence	RI		Pawtucket	
M. Deltufo Plumbing & Heating	East Greenwich	RI	Nivaldo Rocha		RI
Macchio Construction	Johnston	RI	Nolin Electric	North Scituate	RI
Madden Electric	Little Compton	RI	Norbury Construction Company Inc.	Portsmouth	RI
Mador Electric, LLC	Providence	RI	Northeast Temperature Control	Westerly	RI
Maggiacomo Plumbing Inc.	Cranston	RI	Northern Electric	Harrisville	RI
Magnetic Electric Inc	Warwick	RI	Northern Energy Services Inc.	Providence	RI
Main Street Plumbing LLC	Pawtucket	RI	NS Electric LLC	Exeter	RI
Majestic Mechanical	Hope	RI	Oal Service Co.	Central Falls	RI
•	•	RI	Ocean State Air Solutions	Portsmouth	RI
Malone Plumbing & Heating Inc.	Cranston				
Maloney's OIL Company	Pawtucket	RI	Ocean State Mechanical Inc.	Fiskeville	RI
Mandarini Plumbing and Heating	Cranston	RI	Ocean State Service Group	Central Falls	RI
Manfredo Electric	Warwick	RI	Oceanline Combustion	Pawtucket	RI
Manning Plumbing Company	Warwick	RI	Old Tyme Electric, Inc.	Pawtucket	RI
Mansfield Heating Inc.	East Greenwich	RI	Omni Electric	Wakefield	RI
Marcel MS LLC	Pawtucket	RI	On The Side HVAC	Cranston	RI
Marcelo's Home Improvements	Warwick	RI	O'Neil Electric Company	Warwick	RI
Marchetti, Matthew A.	Cranston	RI	Oscar Lopez	Cranston	RI
Marinelli & Sons Electric	West Kingston	RI	P & S Electric Inc.	Cranston	RI
	•	RI	Papa's Plumbing	Johnston	RI
Mario's Appliances	Woonsocket			Warwick	RI
Marisa Desautel	Providence	RI	Parisi Electric		
Mark Southworth Maintenance	Johnston	RI	Parrella Electric	Providence	RI
Maron Construction Co. Inc.	Providence	RI	Patrick Butler	Providence	RI
Martel Plumbing & Heating	Lincoln	RI	Paul Manfredo Electric	Warwick	RI
Mastrocinque & Sons Plumbing & Heating	Portsmouth	RI	Paul Musco	Cranston	RI
Matt Plumbing	Warwick	RI	Paul Partridge Plumbing & Heating	East Providence	RI
Matthew Fitts Electrical	Greeneville	RI	Paul Scotto Electrical	Portsmouth	RI
McCormick Electrical	North Kingstown	RI	PAV Electric	Wakefield	RI
MCJ Services LLC	Cranston	RI	Pawtucket Power Association	Pawtucket	RI
			Pecchia Plumbing & Heating	Warwick	RI
McKee Bros Oil Corp	Cumberland	RI			
Mechanical HVAC	Peace Dale	RI	Pellegrino Plumbing	Westerly	RI
Mercury Tec Inc.	East Providence	RI	Pelletier & Son Plumbing	North Kingstown	RI
Messier, Jacob	Warwick	RI	Percivalle Electric Inc	Warwick	RI
Metro Electric	Woonsocket	RI	Perez Construction	Providence	RI
MH Electric	Cranston	RI	Perez Plumbing Heating & Air Conditiong	Cranston	RI
Michael Babbitt	Lincoln	RI	Perfect Touch Electrical Contractors Corp.	Cranston	RI
Michael Dias	Smithfield	RI	Performance Electric	Coventry	RI
Michael Faria	Cranston	RI	Peter Bibby Ponagansett LLC	Providence	RI
Michael Freitas Plumbing & Heating	Pascoag	RI	Peter Shadoian Electrician	North Providence	RI
5 5	•		Pete's Heat	Foster	RI
Michael Kennedy	Bradford	RI			
Michael LaFleur Electrician	Smithfield	RI	Petrarca Plumbing & Heating	Warwick	RI
Michael Lundy	Tiverton	RI	Petro Heating & AC Services	Warwick	RI
Michael Marchetti Electrician	Cranston	RI	Petro Home Services	East Greenwich	RI
Micheletti Oil	Johnston	RI	Petronelli Plumbing & Heating	Johnston	RI
Midstate Heating & Cooling	Hope Valley	RI	Pezzullo & Sons Electric Inc.	East Providence	RI
Mike Simone Plumbing & Heating	Cranston	RI	Phalanx Engineering Inc.	Warwick	RI
Miller Electric Corp.	West Warwick	RI	Phillip J Bolster	Wakefield	RI
Miller Mechanical Inc.	Wayland	RI	Phillip J. Forcier Electric	Cumberland	RI
MJ Bouchard Heating & Air Conditioning	Greenville	RI	Phillips Plumbing & Mechanical Inc.	Cranston	RI
y y	Central Falls	RI	Phil's Heating & AC	Westerly	RI
MJ Electric and Refrigeration			<u> </u>	•	RI
MJ Heating & Air Conditioning	Tiverton	RI	Pickles Plumbing and Heating LLC	Mapleville	
MJF Plumbing & Heating	Bristol	RI	Pinnacle Plumbing & Heating	Greenville	RI
Mo HVAC Service	Warwick	RI	Platinum Plumbing Inc.	Pawtucket	RI
Modern Mechancial LLC	Woonsocket	RI	Plumb Pro LLC	Cranston	RI
Moises Chevalier Electrician	Cranston	RI	Plumbing & Heating Solutions LLC	East Greenwich	RI
MoonWorks	Woonsocket	RI	Plumbing With Merritt	Warwick	RI
Morra Electric Inc.	Johnston	RI	Polaris Plumbing & Heating	Johnston	RI
MPG Mechanical	Charlestown	RI	Polisena Construction	Smithfield	RI
Mr. HVAC LLC	Warwick	RI	Positive Energy Electric	Saunderstown	RI
Mr. Plumber LLC	East Providence	RI	Post Theul Electrician	Providence	RI
Mr. Rooter	Warwick	RI	Potvin Electric Inc.	North Providence	RI
				Richmond	RI
MSC Mechanical	Warwick	RI	Power by Design Electrical Contracting LLC		
MTS Mechanical	East Providence	RI	Preferred Heat Inc.	Providence	RI
MussulliElectric	Harrisville	RI	Premair HVAC	Warwick	RI
MUTUAL Engineering	Warwick	RI	Presto Plumber LLC	Westerly	RI
North Atlantic Heating, Inc	Coventry	RI	Pride HVAC Services	Portsmouth	RI
N Berardinelli & Sons	Warwick	RI	Prince Noah HVAC	Central Falls	RI
National Refrigeration Inc.	Warwick	RI	Priority Plumbing & Heating Inc.	Warwick	RI
National Service Company	Warwick	RI	PRO-MAC Inc.	Woonsocket	RI
NDL Designs	Portsmouth	RI	Property Ventures	Smithfield	RI
Near Shore Builders Inc.	East Greenwich	RI	ProPlumbing of RI	West Warwick	RI
			Prout Mechanical	Warwick	RI
NEC Home ServiceS LLC	Bristol	RI			
Nestor Padilla After Hours Plumbing	Providence	RI	Providence Mechanical Services LLC	Smithfield	RI
New England Boiler Works LLC	Coventry	RI	Providence Plumbing & Heating	Warwick	RI
New England Insulation	Woonsocket	RI	PSE Agency	Providence	RI
Newbury Insulation	Woonsocket	RI	R & M Electric Inc.	Coventry	RI

R.B. Queern & Co Inc.	Portsmouth	RI	Sensible Heating & Air Conditioning LLC	Hope Valley	RI
R.C Plumbing & Heating	Smithfield	RI	Shamrock Electric	Middletown	RI
R.E. Coogan Heating Inc.	Warwick	RI	Shawn Duguay	Johnston	RI
R.E.M. Electric, Inc.	North Kingstown	RI	Shearman Oil	Tiverton	RI
R.E.M. Mechanical LLC	•	RI	Shepard Services	Cumberland	RI
	North Kingstown		Sheridan Electric Inc.	Warwick	RI
R.F. Heating & Cooling Inc.	Exeter	RI			
R.K. Plourd & Son Construction LLC	Warwick	RI	Sherman Plumbing	Rumford	RI
Rafelito Heating Services	Providence	RI	Sine Plumbing & Heating	East Providence	RI
Ralph Desimone	Pawtucket	RI	Size Construction	Cranston	RI
Ralph Geiselman	Pawtucket	RI	Small's Plumbing Inc	Woonsocket	RI
Rama Electric	Wakefield	RI	Smithco Oil Service	Wakefield	RI
Ray Ciampanelli Plumbing & Heating Co.	Peace Dale	RI	Smithfield Plumbing & Heating Supply	Greenville	RI
Raymond Degnan	North Providence	RI	SMP Electric, LLC	West Warwick	RI
Raymond J Reinsant Plumbing & Heating	Lincoln	RI	SMS Oil Burner Service	Jamestown	RI
RAZ Heating & Plumbing Services	Foster	RI	Soares, William	Bristol	RI
Reddy Piping Concepts	Cranston	RI	Sonner Plumbing, Heating & Construction Inc.	Cranston	RI
, , , ,		RI	Sosa & Son Corporation A/C Heating, Plumbing Refrigeration	Woonsocket	RI
Regan Heating & Air Conditioning	Providence				RI
Regent Electric Co. Inc	Coventry	RI	South County Gas Service	Narragansett	
Reichert & Sons Fuel Oil Inc.	Chepachet	RI	Spencer's Plumbing	East Greenwich	RI
Reilly Electrical Contractor Inc.	Cranston	RI	SPL Electrical Corporation	North Smithfield	RI
Relevant Discover-e	Providence	RI	Stable, HVAC Mechanical Contractor	Pawtucket	RI
Reliant Electric	Cranston	RI	StandishHeating & AC	Coventry	RI
Remy Plumbing & Heating	Warren	RI	Stanton Electric, Inc	Cumberland	RI
Renaissance Sheet Metal LLC	Cranston	RI	Statewide Insulation	North Smithfield	RI
Repair Services	Providence	RI	Statewide Plumbing & Heating Co., Inc	Cranston	RI
Restivos Heating & Air	Johnston	RI	Stedman & Kazounis	Charlestown	RI
RF Audet Inc.	East Greenwich	RI	Stem Electrical	Warwick	RI
RF Plumbing & Heating	Johnston	RI	Stephen Andrea Fire & Electric, LLC	Coventry	RI
Richard Gayer Electric	Bristol	RI	Stephen Larochelle	Cumberland	RI
· · · · · · · · · · · · · · · · · · ·			Sterling Mechanical Services LLC	Greene	RI
Rholen Central	Bristol	RI	•	Bradford	RI
RI Electrical Contractors (Carlos M. Delgado)	Providence	RI	Steven Dubois Inc.		
RI Insulation	Hope	RI	Stonylane Electric	Exeter	RI
RI Pipe Guys	Warwick	RI	Sugrue & Associates	Smithfield	RI
RI Sheet Metal LLC	East Providence	RI	Summit Electrical Contractors Inc	Lincoln	RI
Riasbo	Providence	RI	Summitt Heating Service Inc.	Coventry	RI
Richard Ditusa	Johnston	RI	Sunshine Fuels & Energy Services	Bristol	RI
Richburns Plumbing	Portsmouth	RI	Superior Comfort Inc.	Bristol	RI
Rightway Electric, Inc.	Providence	RI	Superior Electric	Warwick	RI
RISE Engineering	Cranston	RI	Superior Fire & Electrical Services	North Providence	RI
Ritacco Electric LLC	Westerly	RI	Superior Insulation LLC	Smithfield	RI
RMD Plumbing	Newport	RI	Superior LED Lighting LLC	Warwick	RI
RMS Ruggieri & Sons Mechanical LLC	Wyoming	RI	Superior Plumbing & Heating	Cranston	RI
Robert Cordeiro	North Providence	RI	Supply New England	Peace Dale	RI
			11.7	Lincoln	RI
Robert Dionne	Smithfield	RI	Supreme Duct Systems		
Roberts Electric	Pawtucket	RI	Sustainable Energy Solutions	Providence	RI
Rodriguez Plumbing & Heating	Provincetown	RI	SW & Sons Plumbing & Heating LLC	North Providence	RI
Rolland M Belanger Plumbing & Heating	Pascoag	RI	T. Cabral Rooter & Plumbing Repair	Cranston	RI
Rooter Man Plumbers	Johnston	RI	T. Gomes Heating & Cooling	Warwick	RI
Rossi Electric Company	Cranston	RI	T.A. Gardiner Plumbing and Heating	Bristol	RI
Round One Electric	Harrisville	RI	Tebano Electric	Bristol	RI
Rowlett & Son's HVAC	Cranston	RI	Tebo Electric Inc	Woonsocket	RI
RPM Electrical Services	Providence	RI	Ted Buhre Building Firm LLC	West Greenwich	RI
RSC Plumbing LLC	Exeter	RI	TempTec Mechanical	Providence	RI
RSM Electric	North Providence	RI	TH Malloy & Sons	Cumberland	RI
Rudy Almada Electrician	East Providence	RI	The Plumber Company LP	Newport	RI
Rumford Mechanical	Rumford	RI	Thermal Energy Inc.	Cranston	RI
Rusco Enterprises Inc./TA	Warwick	RI	Therrien Mechanical Systems	Lincoln	RI
Russ Lembo Electrician	Johnston	RI	Thibault Plumbing & Heating Inc.	Cranston	RI
			Thielsch Engineering	Cranston	RI
Ryan Bartlett	Coventry	RI	5 5		
S & K Electric Inc.	Charlestown	RI	Thomas Adamson Electrician	Coventry	RI
S & S Electric	Chepachet	RI	Thompson Properties LLC	Barrington	RI
S Gomes	East Providence	RI	Thumbs Up Plumbing and Drain Clearing	North Smithfield	RI
S.B. Carbone	Cranston	RI	TJ Billington & Son Contracting	Warwick	RI
Salder Services	Rumford	RI	TJP Heating	Johnston	RI
Sakonnet Electric	Bristol	RI	TMT Construction	Jamestown	RI
Sakonnet Plumbing & Heating	Little Compton	RI	Todd A Desarro	Hope Valley	RI
Sal Manzi & Son Plumbing & Heating Inc	Cranston	RI	Todd Campopiano Electrician	North Providence	RI
Salks Hardware & Marine Inc.	North Kingstown	RI	Tom Jenkins Jr.	Middletown	RI
Sam Bliven Jr. Plumbing & Heating Inc.	Westerly	RI	Tom McGee	North Smithfield	RI
Sam Ponte Heating & Air Conditioning LLC	Hope Valley	RI	Tom Peters Plumbing & Heating	Milton	RI
Sanches Plumbing & Heating	Cumberland	RI	Tom Whitaker	Newport	RI
Sanford Electric	Bristol	RI	Tomas HVAC	Smithfield	RI
Santoro Electric	Warwick	RI	Toner Electric Company	Middletown	RI
			Total Comfort Heating & Cooling	Cumberland	RI
Santoro Oil	Providence	RI	ğ ğ		RI
Sargent Plumbing Inc.	West Kingston	RI	Total Construction Services, Inc.	Providence Powtucket	
SAS Brothers Inc.	Johnston	RI	TPF Electrical Service	Praytidana	RI
Sauvageau, Roy	South Kingstown	RI	Trac Buildings	Providence	RI
Save The Bay	Narragansett	RI	Travers Plumbing & Heating Inc	Portsmouth	RI
Scotto Electric	Portsmouth	RI	TRG Construction LLC	North Kingston	RI
Seddon Electric	Rumford	RI	Tri-Town Community Action	North Providence	RI
Sensible Air Heating AC	Riverside	RI	Tuma Insulations	Warwick	RI

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Tyler Steiner HVAC	Scituate	RI	Innerworkings Inc	Chicago	IL MA
U.G. Nason's Inc.	Middletown	RI	5C Energy A & M Electrical Mechanical, Inc.	Attleboro Fall River	MA
Ultimate Plumbing	Warwick	RI RI	A&M Electrical Mechanical, Inc.	Fall River	MA
United Mechanical Universal Contractor Group LLC	Cranston Providence	RI	ABE Electrical Installations Company	Cotuit	MA
Universal HVAC LLC	NORTH PROVIDENCE	RI	Action Inc	Fall River	MA
V. Letizia Plumbing & Heating	Providence	RI	Advanced Energy Services	Hopedale	MA
Valcourt Heating Inc.	Tiverton	RI	Advanced Mechanical Solutions	Mansfield	MA
Valley Heating & Cooling	Hope Valley	RI	Advanced Plumbing & Heating	Seekonk	MA
Valley Repair Inc.	Wyoming	RI	Aetna Corp	Cambridge	MA
Van's Electric Inc.	Bristol	RI	AGS HVAC Services LLC	Westport	MA
Vaughn Oil	Smithfield	RI	Ahaesy Electric	Fall River	MA
Vicmir & Sons	Riverside	RI	Al3 Architects	Wayland	MA
Victor Allienello	Providence	RI	Air Tight Insulators	New Bedford	MA
Viking Electric Inc.	Riverside	RI	Alternative Creative Energy	Blackstone	MA
Vision Energy Solutions, Inc	Providence	RI	Alternative Weatherization, Inc.	Fall River	MA
Vivona Plumbing & Heating Inc.	Portsmouth	RI	American Plant Maintenance	Woburn	MA
Vose Hardware	Woonsocket	RI	Andelman and Lelek Engineering Inc.	Norwood	MA
Wagner Plumbing Services	East Providence	RI	Anthony Vieira lii Heating & Air Conditioning	Attleboro	MA
Wakefield Heating Service	South Kingston	RI	ARCA Recycling Inc.	Franklin	MA
Wakefield Plumbing LLC	Middletown	RI	Attention to Detail Plumbing & Heating	Somerset	MA
Waldo Plumbing & Heating	Lincoln	RI	Audio Concepts Austin Plumbing & Heating	North Attleboro Franklin	MA MA
Watermark Plumbing LLC	Cranston	RI	B & L Ductless	Swansea	MA
Wayne Electric, Inc.	Bristol	RI	B2Q Associates Inc.	Andover	MA
Westbay Community Action	Warwick	RI RI	Baraby Electric	Fall River	MA
Wickford Appliance	Pawtucket Hope Valley	RI	Baystate Energy Reduction	Norwood	MA
Wilkinson Plumbing & Heating LLC	' '	RI	Beaupre Electric	Assonet	MA
William J. Riley Plumbing & Heating William N. Harris HVAC Solutions	Warwick	RI	Biello Electric	Fall River	MA
William Rocchio	Barrington	RI	BL Mechanical Inc.	Uxbridge	MA
Wojcik Electric Inc	Coventry Narragansett	RI	Bob Costa Plumbing & Heating	Seekonk	MA
Wood's Heating Service	Providence	RI	Bob's Appliance Repair	Fall River	MA
Wood's rieating Service Wordell Heating & Cooling LLC	Little Compton	RI	Botelho Electric	Rehoboth	MA
Wright Comfort Solutions Inc.	Coventry	RI	BRH Electrical Services	Seekonk	MA
Wyman & Son Electric	Providence	RI	Brian Macdonald Plumbing & Heating	Attleboro	MA
XPT Plumbing LLC	Exeter	RI	Briggs Mechanical	North Attleboro	MA
Yoakum Septic Services LLC	Smithfield	RI	Bristow Electric Company, Inc.	Attleboro	MA
Zawadski Plumbing	Warwick	RI	Bruin Corp.	North Attleboro	MA
Association of Energy Services Professionals	Phoenix	AZ	Building Science & Construction	Braintree	MA
Cohen Ventures	Oakland	CA	Caliber Building & Remodeling	Sandwich	MA
CRM Orbit	San Francisco	CA	Camara's Heating & Air Conditioning Services	Westport	MA
Simple Energy Inc.	Miraloma	CA	Central Cooling & Heating	Falmouth	MA
Tetra Tech Inc.	Pasadena	CA	Champion Resources	Ipswich	MA
E Source Companies LLC	Boulder	CO	Classic Sheet Metal Heating & Air Conditioning	Swansea	MA
Televent USA LLC	Fort Collins	CO	Coastal Electric Inc.	Hanover	MA
ABC Refrigeration	North Stonington	CT	Coastal Energy Services	Swansea	MA
Best Energy	Pawcatuck	CT	Columbus Energies Inc.	Swansea	MA
Branco Electric	Trumbull	CT	Complete Recycling Solutions LLC	Fall River	MA
Cameron Hanna	Somers	CT	Conservations Services Group	Westborough	MA
Craig C. Porter	Dayville	CT	Cotti-Johnson HVAC Inc	Taunton	MA
Duncklee Inc.	Stonington	CT	Coughlin & Associates Energy Consulting	Stow	MA
Dynamic Building & Energy	North Stonington	CT	Curt, Kevin R. LLC	Fall River	MA
Eagle Industries Inc.	Colchester	CT	D & S Electrical Systems	Lakeville	MA
Energy Resources	Thomaston	CT	D.B.A Matthews Cedarfield	Warwick	MA
Greentemp Mechanical Services	Groton	CT	Dalio Electric	Northbridge	MA
JKMUIR LLC	Rocky Hill	CT	Dave LeBlanc Heating & Air Conditioning	Fairhaven	MA
John Doyle Plumbing & Heating	Wolcott	CT	David J. Dionne Electric	Blackstone	MA
Kelly Electric	Jewett City	CT	Davis Plumbing & Heating LLC	Monson	MA
KENAIR	East Lyme	CT	Deblok Heating & Cooling	East Longmeadow	MA
Lantern Energy, LLC	Norwich	CT	Delux Plumbing & Heating	Roslindale	MA
Lourerio Engineering Associates, Inc.	Plainville	CT	Diamond Heating	Blackstone	MA
MG Heating & Cooling LLC	Branford	CT	DMI	Wellesley	MA
Millas Heating & Cooling LLC	Mystic	CT	DNV GL	Medford	MA
Santor Electrical Contractor	North Windham	CT	Dominic Ingemi Electrician	Attleboro	MA
Santoro Plumbing & Well Service	Prospect	CT	DQR Electric	Marlborough	MA
Simmons HVAC	Pawcatuck	CT	Drolet Electric	North Attleboro	MA
South Shore Heating & Cooling, Inc.	Pawcatuck	CT	Dube'S Plumbing	Blackstone	MA
The HDL Company LLC	Lisbon	CT	E & V Oil Company Inc./Iron Man Heating	Swansea	MA
Thermaxx LLC	West Haven	CT	Efficiency Forward Inc. (DLC)	Medford	MA
Tom Bueler	North Stonington	CT	Efficient Buildings LLC	Bridgewater	MA
Valley Heating & Cooling Inc.	Jewett City	CT	Elder Plumbing & Heating	Hopkinton	MA
Viking Supply Company	Norwich	CT	Elite Construction Corp	Seekonk	MA
Williams & Associates	North Stonington	CT	Elite Energy Services	Fall River	MA
Cadeo Group LLC	Washington	DC	Elite Heating & Air Conditioning	Seekonk	MA
Energy Solutions Center	Washington	DC	Emerson Swan Inc.	Randolph	MA
ICF Resources LLC	Wilmington	DE	Enel X	Boston North Andover	MA
AC Wholesalers	Doral	FL	Energy & Resource Solutions Inc.	North Andover	MA
Burton Energy Group LLC	Alpharetta	GA	Energy Efficiency Advisers Inc.	Mendon Westborough	MA
National Energy Educational Development Need	Manassas	GA	Energy Monster	Westborough Worcester	MA MA
ECOMFORT.COM	Bolingbrook	IL "	Energy Monster Energyiwise Inc.	Sutton	MA
Frontier Energy Inc.	Chicago	IL	Energyimod inc.	Outton	IVIA

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	NGIE Services US	Norwell	MA	Rethinking Power Management	Boston	MA
	xpandable Sound	East Freetown	MA	Retrofit Insulation	Fall River	MA
	airbanks Energy Services Inc	Hingham	MA	Reynolds, Jeffrey Dba	Westport	MA
	arias Home Services	Mansfield	MA	Rich May PC	Boston	MA
	LM Plumbing & Heating	Seekonk	MA	Rickard & Sons Plumbing & Heating	Seekonk	MA
	uid Industrial Associates I	Woburn	MA	Ritchie's Insulation	Westport	MA
	orte Electric Inc.	Attleboro	MA	River Energy Consultants	Fall River	MA
	ortin Electric	New Bedford	MA	River St Heating & Cooling	Plymouth	MA
	oster Electric	Worcester	MA	Robinson & Cole LLP	Boston	MA
	useideas	Winchester	MA	Roia, Jason Electrica	Fall River	MA
G	& L Electric Inc.	Bellingham	MA	Sean Walsh	Kingston	MA
Gl	M Refrigeration	Fall River	MA	Seekonk Supply Inc.	Rehoboth	MA
G.	.H. Electrical Service Company	Attleboro	MA	Shane LaCroix	Seekonk	MA
	ermaine Plumbing & Heating	Attleboro	MA	Simon's Supply Company	Fall River	MA
Gl	H Electrical Service	Attleboro	MA	South Coast Alternative Power Solutions	Acushnet	MA
Gl	lynn Electric Inc.	Plymouth	MA	St. George, Paul R.	Dighton	MA
H-	-I-M Mechanical Systems, Inc.	Bridgewater	MA	Stateline Fuel & Burner	Seekonk	MA
Ηι	ull Electric	Marblehead	MA	Steam Trap Systems	Amesbury	MA
H۱	VAC Experts Heating & Air	Auburn	MA	Steel Hill Plumbing & Heating Inc.	Rockland	MA
1.1	N.O Electric Service	Assonet	MA	STP Plumbing & Heating	Blackstone	MA
ΙB	M Corp	Cambridge	MA	Suburban Heating & Cooling Services	Swansea	MA
In	dependent Pipe & Supply Corp	Canton	MA	Superior Energy Solutions, Inc.	Swansea	MA
In	sulation 2 Save	Fall River	MA	Synapse Energy Econ. Inc.	Cambridge	MA
ln:	sulation R Us	Fall River	MA	T & J Heating, Air Conditioning and Plumbing	Bellingham	MA
Irc	onman Heating & Cooling	Swansea	MA	Tangney Electric Co	Worcester	MA
	& L Heating and Air	Plainville	MA	Tappen Plumbing & Heating	Fall River	MA
	RR Contractors	Fall River	MA	TC Building	Medfield	MA
	ay Sheldons Heating	Seekonk	MA	The Cadmus Group LLC	Boston	MA
	Electric	Quincy	MA	The Energy Efficiency Group	Norwood	MA
	ohn A. Moniz Electrical	Swansea	MA	THE Heating Man	Rehoboth	
	ohn McDonough Electrician	Boston	MA	•		MA
	ohn Ryan Electric	Weymouth	MA	Theroux Mechanical	South Attleboro	MA
	puberts Heating & Air Conditioning	Warwick	MA	TNZ Energy Consulting Inc.	Stoughton	MA
	R's HVAC Design	Belmont	MA	Total Comfort Heating & Cooling Inc.	Mansfield	MA
	9	Seekonk	MA	TRC Environmental Corp.	Boston	MA
	afayette & Cross Co. Inc	Rehoboth	MA	Triangle Refrigeration	Fall River	MA
	arry's Heating			Triple B Plumbing Inc.	Seekonk	MA
	awrence Air Systems Inc.	Seekonk	MA	Trust Energy Solutions	Marlborough	MA
	edoux Electric	Seekonk	MA	United Refrigeration	Woburn	MA
	efevre, Douglas	Taunton	MA	Utility Energy Inc.	Fall River	MA
	eiser Corporation	Weston	MA	UTS Energy Engineering LLC	Quincy	MA
	exicon Energy Consulting	Condord	MA	Veolia North America	Boston	MA
	temor	Norwood	MA	Victory Heating, Air Conditioning, Plumbing	Bellingham	MA
	ockheed Martin	Burlington	MA	Walsh Heating & Air Conditioning	Swansea	MA
	ussier, Joseph - Lussier Electric Services	Worcester	MA	Wipro Ltd	Quincy	MA
	achado Plumbing & Heating	Dighton	MA	WM A Hurley Plumbing & Heating Inc.	Springfield	MA
	agina Electrical	Seekonk	MA	WNUK Plumbing LLC	East Longmeadow	MA
	AM Plumbing	Rehoboth	MA	Worcester Electric Association	Worcester	MA
	arc's Sheet Metal Inc	Assonet	MA	Young Electrical Service	Taunton	MA
	azzarella Mechanical	Seabrook	MA	Your Plumber Inc.	Norton	MA
	ike Bell Electric	Seekonk	MA	Enerwise Global Technologies Inc.	Baltimore	MD
M	N Electric	Marshfield	MA	Naomi Mermin Consulting	Portland	ME
M	odern Heating & A/C Co	Rochester	MA	G L Smith Heating & Cooling	St. Joseph	MO
M	otus LLC	Boston	MA	Hussmann Corp.	Bridgeton	MO
M	urphy Electric & Industry Control LLC	Pembroke	MA	APEX Analytics	Greensboro	NC
M'	V Electric	Acushnet	MA	Coastal Lighting LLC	Wilmington	NC
Na	ational Light Bulb Company	North Easton	MA	KT&T Distributors	Nashua	NH
Na	avigant Consulting, Inc.	Boston	MA	Precision Plumbing LLC	Derry	NH
Ne	ew England Safety Systems	Taunton	MA	Shamrocks Plumbing	Pelham	NH
Ne	ew England Weatherization, LLC	Attleboro	MA	Clear Energy LLC	Bloomfield	NJ
Ne	ext Step Living	Boston	MA	CMC Energy Services Inc.	Cranbury	NJ
N	MR Group Inc	Somerville	MA	Dodge Data & Analytics LLC	Hamilton	NJ
No	ortheast Electrical Service	Bellingham	MA	Ideas Agency Inc	Blairstown	NJ
No	ortheast Energy Efficiency	Lexington	MA	SHI International Corp.	Somerset	NJ
	.H. Burg Corporation	Stoughton	MA	Bourque Mechanical System	Rensselaer	NY
	racle America	Cambridge	MA	Customertimes	New York	NY
	acheco Plumbing & Heating	Fall River	MA	EnergyHub Inc.	Brooklyn	NY
	ariseau Electric, Inc.	Seekonk	MA	Eric Mower & Associates	•	NY
	atriot Sheet Metal HVAC	Seekonk	MA		Syracuse	
	aul Elder Plumbing & Heating Co	Hopkinton	MA	Homeserve USA	New York	NY
	elland Electrical Contractors	Chicopee	MA	Niagara Mohawk Power Corp	Syracuse	NY
	eriand Electrical Contractors eregrine Energy Group	Boston	MA	Ram Marketing	Saint James	NY
	umbers Supply Co	New Bedford	MA	Rensselaer Polytechnic Institute	Troy	NY
			MA	Trane Inc.	Plainview	NY
	rism Energy Services	Quincy		Questline Inc	Columbus	OH
	uality Air Metals Inc.	Holbrook	MA	Cascade Energy Inc.	Portland	OR
	uality Energies	Rehoboth	MA	Aramark Refreshment Service	Philadelphia	PA
	R Services	Swansea	MA	Home Performance Coalition Inc.	Moon Township	PA
	ALCO Electric Inc.	Westport	MA	One Hour Heating & A/C	Lancaster	PA
	amos Electric	Holyoke	MA	Pontoon Solutions Inc.	Pittsburgh	PA
	aymond D. Melanson Electric	Swansea	MA	H&K International Inc.	Mesquite	TX
	ebello Weatherization Inc.	Swansea	MA	Lopez Negrete Communication	Houston	TX
Re	esendes Electric	Swansea	MA	NexRev Inc.	Plano	TX

Protect America	Austin	TX
Smith System Driver Improvement	Arlington	TX
Compressed Air Challenge	Alexandria	VA
New Navy Exchange	VA Beach	VA
Optimal Energy Inc.	Hinesburg	VT
New Buildings Institute Inc.	White Salmon	WA
Northwest Energy Efficiency Council	Seattle	WA
Slipstream Group Inc	Madison	WI

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