2022 Residential and Income Eligible Energy Efficiency Solutions and Programs

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1. Overview

2022 is a pivotal year for residential energy efficiency programming. The residential lighting program culminated at the end of 2021 with controlled lighting opportunities continuing in the direct install programs during the year. 2022 builds on the transition away from lighting by concentrating on longer life benefits in the residential portfolio and equitable access to the programs for all Rhode Island customers. The goal is to support the transition of inefficient homes to super-efficient homes by maximizing the potential of insulation, heating/cooling/hot water systems, efficient appliances, and WI-FI controls. their energy efficiency through high-efficiency equipment and well trained energy experts and service provider.. This vision is for all homes to be effectively insulated, have safe and efficient heating, cooling and hot water systems, encourage customers to see their home as a comprehensive system, and transform the residential new construction industry to a Zero Net Energy market.

The detailed program descriptions provided in the attachments to each Annual Plan offer snapshots and evidence of how programs are continuously evolving, building from one Plan year to the next. They show how high-level strategies are translated into specific actions and activities that secure savings for customers; help to contextualize specific program innovations and enhancements described only briefly in the main text of the Annual Plan; and demonstrate how key strategies cross multiple program designs and end use targets.

The detail in this attachment is designed to allow stakeholders, the Public Utilities Commissioners and staff, and other interested parties to delve deep into and fully explore the complex interplay between specific customer and building types, program implementation and delivery, incentive design, and high efficiency technologies.

What to look for in 2022

The Company has focused heavily across all residential programs to supercharge weatherization, efficient heating, and hot water. The elevation of these three critical areas reflect stakeholder priorities and opportunities highlighted in the Market Potential Study. The innovations and enhancements also reflect many ideas and insights that have evolved from the close collaboration with the EERMC and the EERMC consulting team, OER, the Division, our vendors, and customer feedback. There are new bundled incentive designs, enhancements that make participation in multiple programs easier or more attractive, and reduced barriers to adoption of comprehensive measures.

Equity and workforce development objectives have been applied across all residential programs, resulting in program design shifts and investment prioritization to ensure all Rhode Islanders have access to program opportunities and that we succeed in building the workforce infrastructure that can deliver on the vision of transitioning to high performing technologies while also creating robust jobs and economic development opportunities for Rhode Islanders. Of particular note, the Income Eligible

Services (IES) program is working closely with the Company discount rate program to actively bring more customers into the income eligible program where 100% of costs are covered. To support development of high growth long term energy jobs that support the shift to high performance homes and technologies, ASHP installation and design training and Zero Net Energy New Construction trainings are planned to rebuild and expand the workforce to support the emphasis on deeper home energy upgrades.

Residential and Income Eligible Programs

The Company offers the below overarching programs to provide comprehensive services to two regulatorily defined sectors, market rate and income eligible:

Table 1. Residential and Income Eligible Programs

Energy*Wise* Single Family	**Income Eligible Single Family**
Multifamily	**Income Eligible Multifamily**
Residential New Construction	
Home Energy Reports	
ENERGY STAR® Lighting	
Residential Consumer Products	
Residential High Efficiency Heating and Hot Water	
Residential Connected Solutions	

This attachment provides detailed descriptions of the residential energy efficiency and active demand programs, including detail on the market (customer/building types) targeted, eligibility requirements, offers, the implementation and delivery design, and new items for 2022, along with the rationale for changes in a table format.

The Company will continue to focus on pilots, demonstrations, and assessments; please refer to Attachment 8 for a detailed scope and list for each pilot, demonstration, and assessment proposed for the 2022 Energy Efficiency Plan.

Program Description Structure

In order to streamline PUC, stakeholder, and reader access to the most pertinent program information in the 2022 Annual Plan, the Company has adopted the following structure for each of the programs:

Eligibility Criteria (i.e. Customer/Building Type)	This section describes which customers and/or building types are eligible for participation in the program or initiatives.
Offerings	This section describes the offers available to customers under the program or initiative. It can include technical assistance, incentives, design support,

	verification services and financial offerings. This section also describes the various pathways by which a customer or building can participate in a program or initiative.
Implementation and Delivery	This section describes the process by which the Company engages the customer with energy efficiency programs and offerings.
Customer Feedback	Customer feedback can be received by the Company in various ways; via an implementation vendor, direct feedback from the customer, via surveys conducted by the Company.
Changes for 2022	The section captures the changes proposed in the year stated.
Rationale for Changes	Captures the rationale for the changes proposed in the planning year.
Proposed Upcoming Evaluations	Evaluation information can be found in this section at the program level. Initiatives like the Grocery Initiative or the Industrial Initiative are typically not evaluated. The measures included in these initiatives are evaluated as part of larger evaluations for the programs. Hence at the initiative-level tables you will not see this "Proposed Upcoming Evaluations" section.
Notes	Additional notes related to the program, customer, offerings etc.

Electric Program Goals, Metrics, Budgets, Participation for 2022

Fuel	Lifetime MWh (Electric)	Annual MWh (Electric)	Annual Passive Demand Reduction kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane[1])	Budget ($000)	Participation[2]
Electric						

[1] For a breakdown of program level energy savings goals see Attachment 5, table E6-A and Attachment 6, table G6-A for more details.
[2] For information on the metric used to measure participation by program, please reference the main text, section 4.5.

Gas Program Goals, Metrics, Budgets, Participation for 2022

	Lifetime MMBtu (Gas)	Annual MMBtu (Gas)	Budget ($000)	Participation
Gas				

The below Figures 1 – 8 compare the distribution of the residential and income eligible sectors' energy savings goals when measured in annual savings compared to lifetime savings. The lifetime metric captures the long-term energy savings whereas the annual metric shows the first year savings only.

Figure 1: 2020 Planned Distribution of Lifetime MWh Goals for Residential Electric Sector

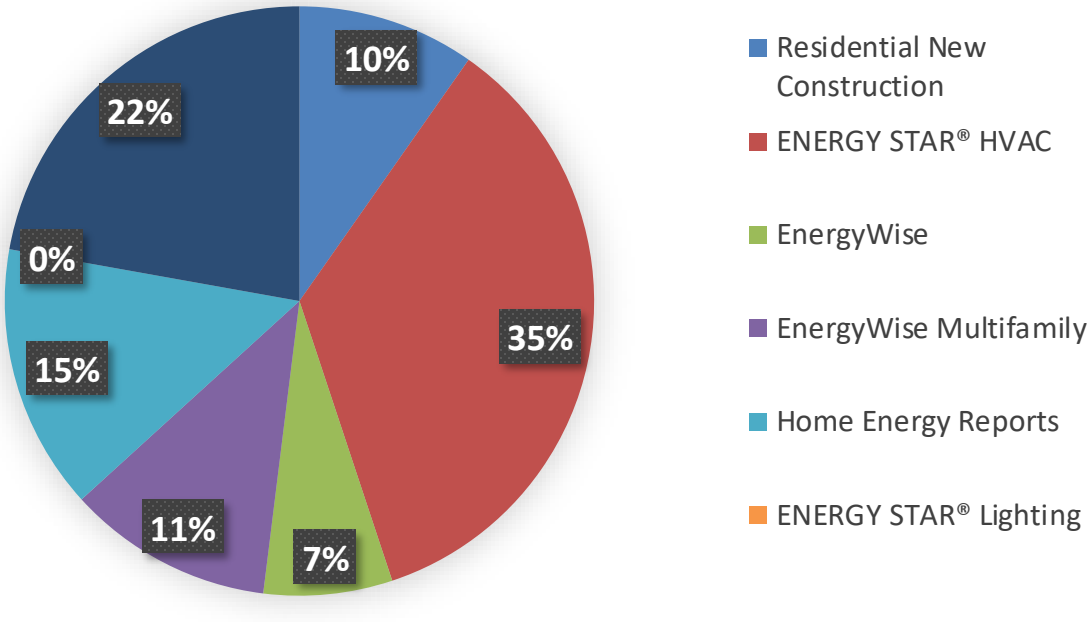


Figure 2. 2022 Planned Distribution of Annual MWh Goals for Residential Electric Sector

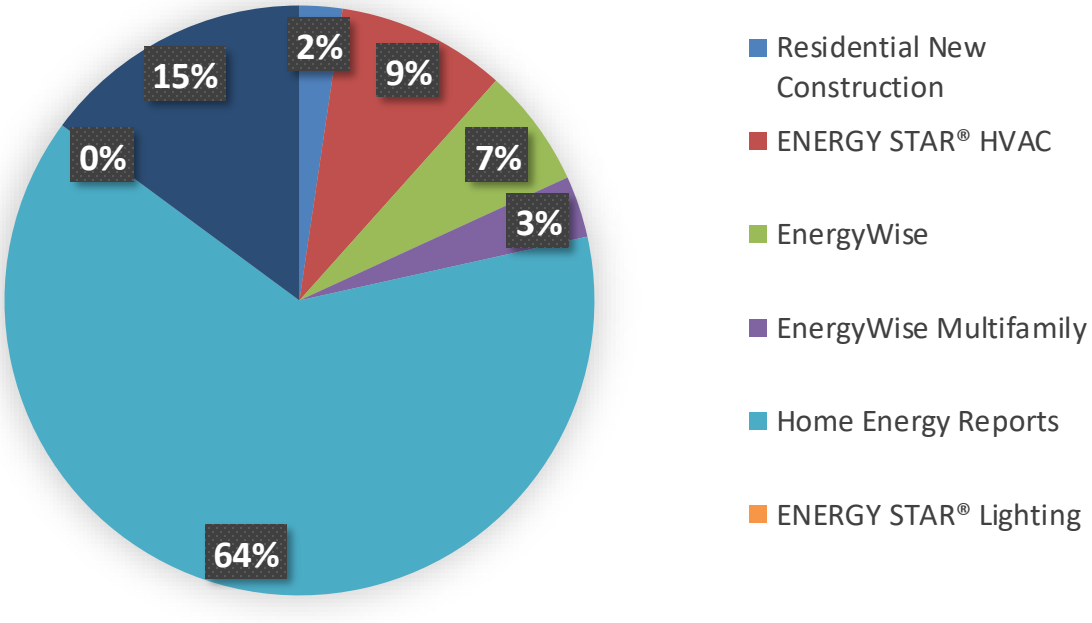


Figure 3. 2022 Planned Distribution of Lifetime MMBtu Goals for Residential Gas Sector

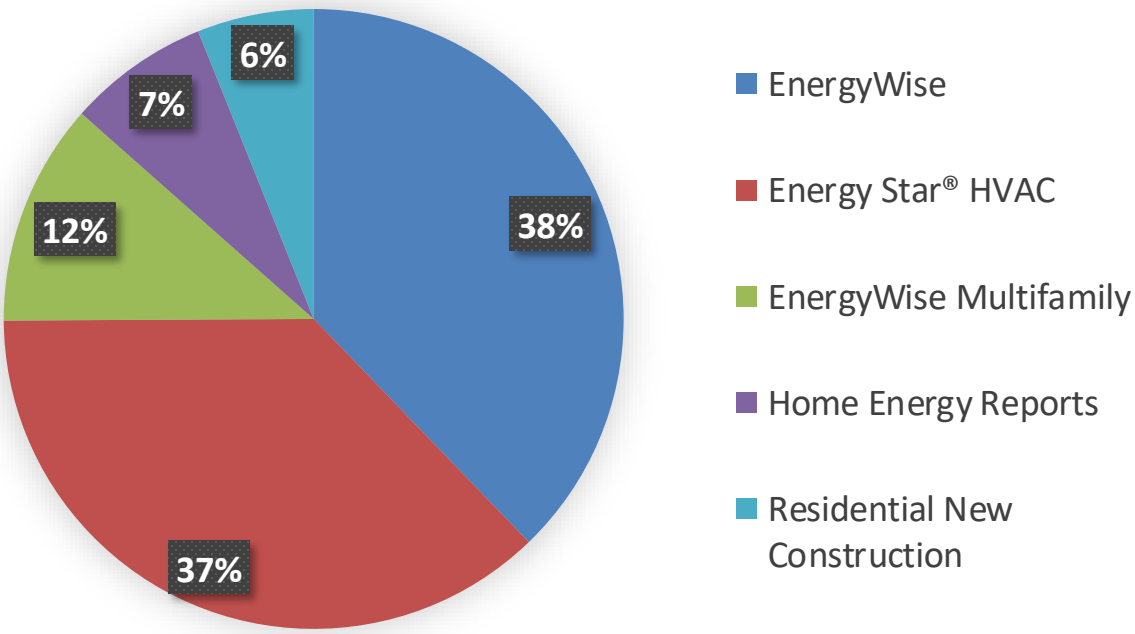


Figure 4. 2022 Planned Distribution of Annual MMBtu Goals for Residential Gas Sector

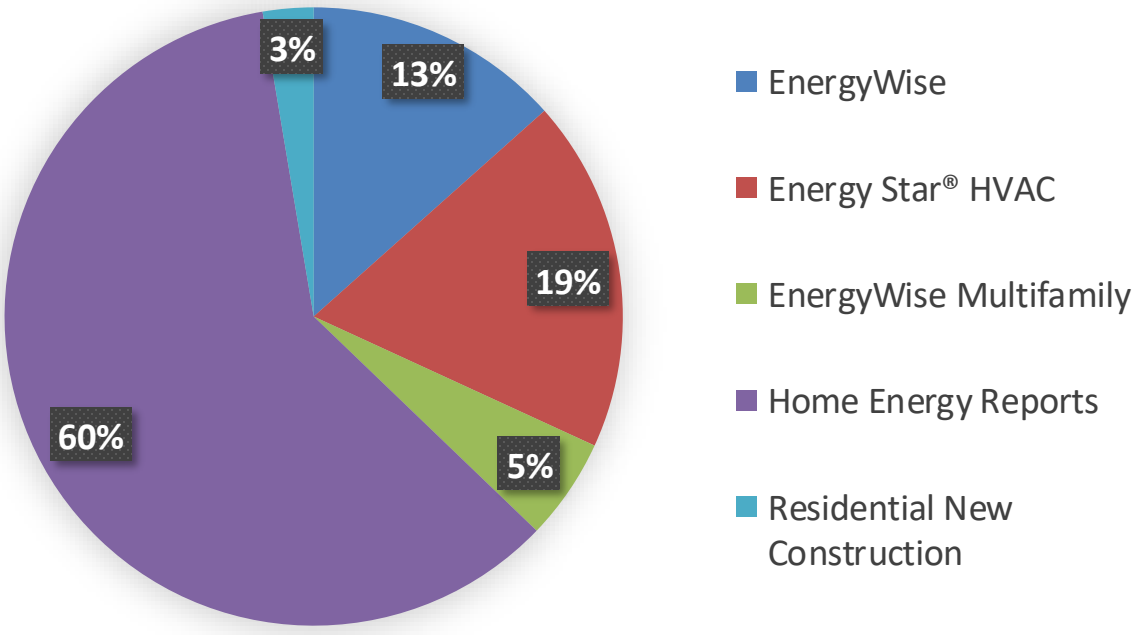


Figure 5. 2020 Planned Distribution of Lifetime MWh Goals for Income Eligible Electric Sector

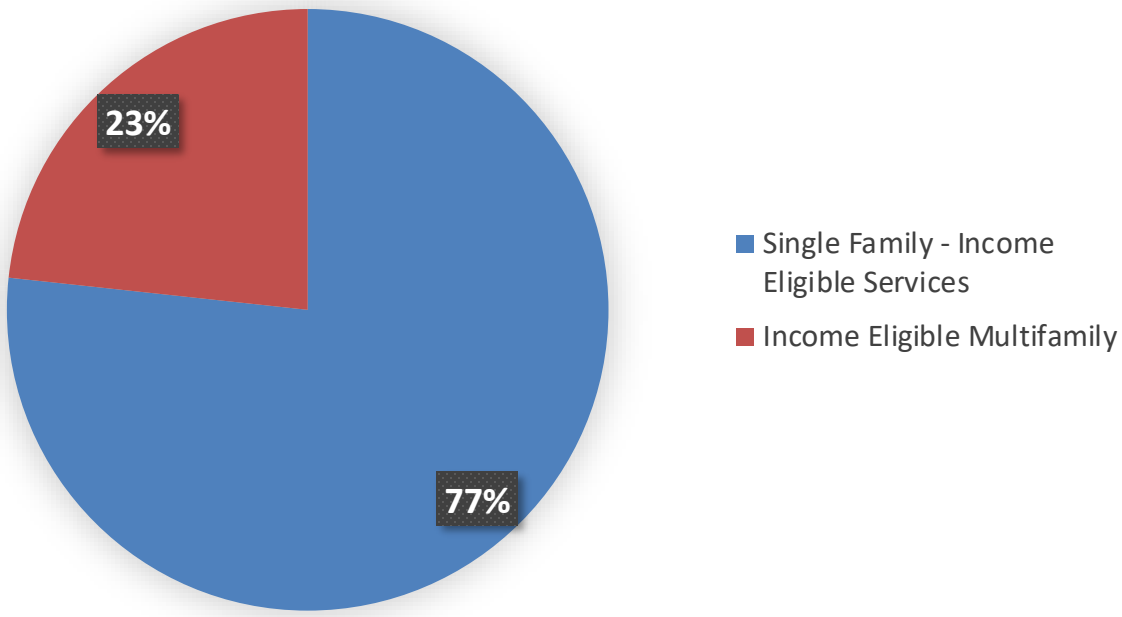


Figure 6. 2022 Planned Distribution of Annual MWh Savings for Income Eligible Electric Sector

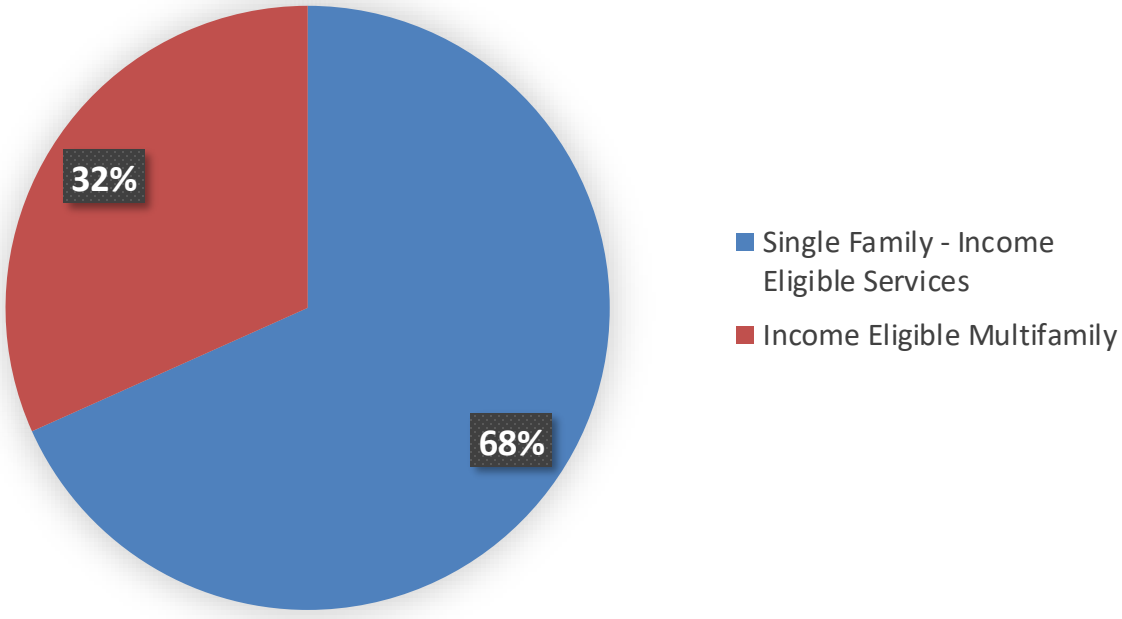


Figure 7. 2022 Planned Distribution of Lifetime MMBtu Goals for Income Eligible Gas Sector

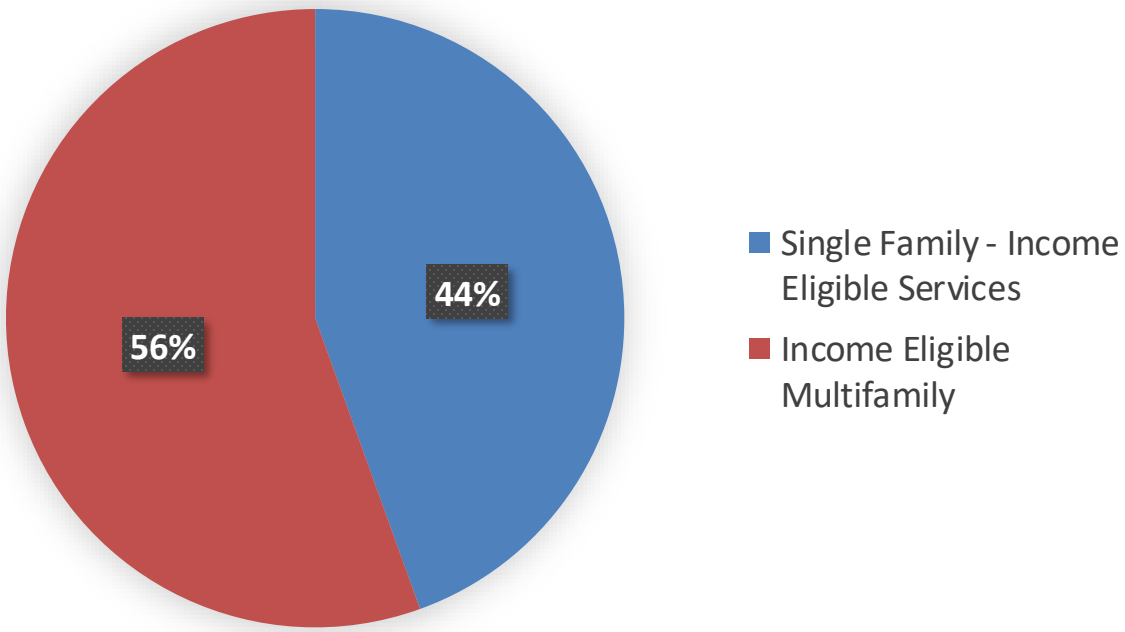
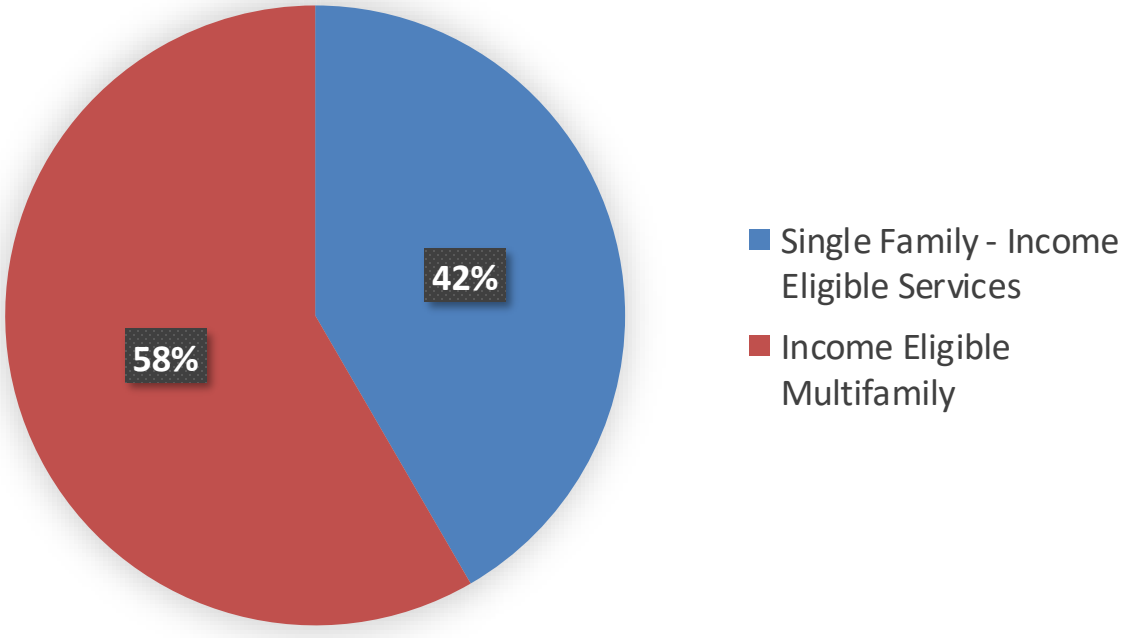


Figure 8: 2022 Planned Distribution of Annual MMBtu Goals for Income Eligible Gas Sector



2. Energy*Wise* Single Family (Electric and Gas)

Eligibility Criteria	Energy*Wise* is the flagship in-home comprehensive energy efficiency offering for all Rhode Islanders in single family residences (defined as one to four units) that are not candidates for Income Eligible Services. All market rate customers with either an electric or gas National Grid account can participate. Homeowners, renters, and landlords are all encouraged to participate. Customers with any heating fuel type, including delivered fuels, are served as long as they have a National Grid account. Delivered fuel customers can receive services through their electric account.
Offerings	Energy*Wise* offers comprehensive energy efficiency services using a whole-house approach to identify energy saving opportunities in all major energy systems and uses, including heating and water heating systems, appliances, lighting, water saving measures, plug loads, and building envelope leaks. In 2021, EnergyWise was awarded an ENERGY STAR® Partner of the Year, Sustained Excellence in Energy Efficiency Program Delivery for the sixth consecutive year. 12,000 home energy assessments are planned for 2022. EnergyWise provides in-home services in two phases: home energy assessment and weatherization. **Home Energy Assessment** Historically, an in-home, no cost energy assessment was the entry point for customers into the Energy*Wise* whole home suite of energy efficiency services. The in-home assessment has been refined over many years to focus on helping educate participants on the home's energy use and providing them a comprehensive roadmap of opportunities for energy upgrades. During the in-home assessment, an energy specialist(s) will upgrade lighting, provide advanced power strips, and look for water saving opportunities. Applying a comprehensive, whole-house approach, the energy specialist will evaluate all major energy systems including the heating and water heating systems, appliances, lighting, water saving measures, plug loads, and tightness of the building envelope (the roof, the basement, and the walls). **Virtual Home Energy Assessment (VHEA)** In 2020, the COVID-19 pandemic prompted innovation with in-home energy assessments transitioning to a virtual experience (Virtual Home Energy Assessment, VHEA). Customers participating in the VHEA receive the energy saving devices traditionally installed by the energy specialist during the in-

	home visit through the mail. Customers are able to self-install the products or they can be installed when contractors are present during the weatherization process. In 2021 customers were able to choose whether to have an in-person assessment or a VHEA. Based on customer preference, about two-thirds of customers have selected the in-person assessment over the virtual. Customer satisfaction between the two offerings are consistent with a slightly higher ratings for in-person assessments. **Online Home Energy Assessment (OHEA)** For customers beginning their energy education journey or those who may not have time for or are reluctant to have an in-home assessment, the online home energy assessment captures the current state of the customer's energy usage and identifies opportunities for energy efficiency upgrades. If a customer takes the online assessment and determines they are interested in a virtual or in-person assessment, those opportunities are available to the customer. Online home energy assessment tool v2 is set to launch at the end of 2021. The OHEA consists of a 5minute online survey to collect information on the customer's home profile and provide disaggregation results, top recommendations, and savings tips back to the customer. Through promotion within emailed Home Energy Repots (HER) and QR codes on print HERs, customers will be automatically directed to the authenticated version of the online assessment tool, and data collected will feed back into the behavior platform for more accurate and personalized normative comparisons and recommendations across the platform, within reports and customer's Web portal. **Weatherization** The energy specialist's primary focus during an in-home assessment is to examine the opportunity to increase the home's building envelope through air sealing (decreasing air leaks) and increasing insulation, collectively referred to as "weatherization." Weatherization is the most cost-efficient way to improve a building's performance. It also offers customers a healthier and more comfortable home that will passively remain cooler in the summer and warmer in the winter, helping reduce energy bills for customers. Many health and safety considerations are addressed when

	weatherizing, such as adding attic ventilation or using mechanical fans to ensure a healthy air exchange rate. The recently completed Energy*Wise* evaluation, as well as additional research from prior assessments, identified a number of pre-weatherization barriers, generally health and safety or physical barriers, which prevent the continuation of weatherization until remediated. At this time, Energy*Wise* does not pay for remediation of the pre-weatherization barriers, nor are they included in the weatherization scope of work to be implemented by program contractors. The Company does not manage the process of hiring contractors to complete remediation. The Company recognizes, however, that if a customer learns that additional work not included in the weatherization scope is required before weatherization can proceed, customers may become confused or irritated. Therefore, the program provides a $250 incentive to certify that pre-weatherization barriers have been remediated. Additionally, some pre-weatherization costs can be included in the HEAT Loan **Energy Action Plan** An Energy Action Plan is presented to the customer at the end of the assessment. The Energy Action Plan gives the customer a clear roadmap for upgrading their home, including a recommended path to weatherization (air-sealing, insulation, and duct sealing) and associated costs, including the company incentive and customer costs. The Energy Action Plan also provides the customer a streamlined path to engage a qualified independent insulation contractor to perform the weatherization work. The Energy Action Plan also details other potential energy upgrades and additional incentives the customer may be eligible for, including heating and hot water systems. Opportunities for financing the customer share of the weatherization (as well as other upgrades) are also provided at this time. If a customer accepts the Energy Action Plan recommendations and wants to move forward with weatherization, the customer signs a contract with the Lead Vendor and schedules a date for weatherization work. **Connecting Customers with Additional Opportunities** The Energy*Wise* assessment process also identifies opportunities to engage the customer in additional energy saving programs including HVAC, Consumer Products, and Connected Solutions. During home visits, energy specialists capture the age and condition of heating systems, the heating

	fuel type, and verify the number of stories in the home. This data is used to identify if homes are good candidates for high efficiency heating, cooling, and hot water systems such as air source heat pumps and hot water heat pumps. Homes meeting optimal building design with current electric heating and/or water heating systems are provided information about enhanced incentives for air source heat pump systems and automatically referred to the HVAC program for follow up. The Energy*Wise* assessment can identify if a home has central air conditioning and a smart thermostat, which allows the Company to offer these customers the opportunity to participate in the ConnectedSolutions program. To provide customers a full picture of all their clean energy opportunities, the energy specialist also performs a quick assessment survey to determine whether the home is a good candidate for solar. Additionally, the National Grid marketplace offers Energy Sage solar quotes at https://ri.home.marketplace.nationalgridus.com/content_solar_energy.html **Moderate Income Customers** Energy*Wise* supports moderate income customers and renters with a 100% landlord weatherization incentive, which encourages landlords to weatherize homes by removing any direct costs for the landlord. Renters then benefit with lower energy bills and a more comfortable home. In 2022, the Company will introduce a 100% moderate income incentive for customers that are at 80% or below the state median income. This is consistent with a moderate income offering that leverages RGGI funding which was introduced in 2021. Homeowners with less than perfect credit scores can take advantage of the lender of last resort, which makes 0% Heat Loans available to these customers.
Implementation and Delivery	Energy*Wise* is delivered through a Lead Vendor model where the Lead Vendor provides assessments and schedules weatherization projects with the Independent Insulation Contractors that provide weatherization services (air sealing and insulation). The Lead Vendor provides 100% quality control for all weatherization work. The Lead Vendor model facilitates consistent assessments for customers and allows the program to incorporate testing of new concepts as well as generating leads for other

	programs. The RI program design has consistently been recognized as best in class with six years of ENERGY STAR® Partner of the Year awards for program implementation. A customer begins the home energy assessment process by either calling, emailing, or mailing an expression of interest and the initial in-home assessment is scheduled. The assessment generally takes 1.5 - 2.5 hours with an energy specialist(s) going through the home with the customer. This provides the customer one-on-one education about how their home is currently operating and helps them understand how recommended upgrades will improve their efficiency and comfort. At the completion of the assessment, participants decide whether to take action on recommended energy upgrades. When a customer agrees to proceed with recommended weatherization, the customer is connected with an insulation contractor and a visit is scheduled to install the weatherization upgrades. The customer can apply for 0% financing through the Heat Loan to finance the customer costs associated with the upgrade(s). Financing the energy upgrades requires selecting an approved lender and applying for the loan. For customers with less than perfect credit, there is a lender that specializes in financial coaching and approves Heat Loans for energy upgrades. Prior to the actual weatherization, communication occurs with the customer to ensure their home is prepared for the activity and that an adult will be at home in case questions arise. To allow the insulation contractors to efficiently air seal and insulate, customers must provide clear access and remove all personal items from the attic, basement, and exterior walls. Before the insulation contractor closes the job, the Lead Vendor provides a quality assurance check of all weatherization work to verify that all work has been completed. This process minimizes return visits and complaints from customers. In response to COVID-19, the Company fast tracked and implemented a Virtual Home Energy Assessment. The virtual assessment follows a similar education and information capture process as the in-home assessment with a "live" virtual energy specialist. The virtual assessment generally takes one hour and is conducted by phone or video call. The specialist may request information from the customer in advance of the virtual assessment such as pictures of their attic, lighting fixtures, the exterior of their home, and heating and hot water systems. Also in response to COVID-19, the Company

	increased marketing and employed innovative methods to reach customers and deliver information in response to the new conditions and challenges of the pandemic. This included developing a video and buying advertisements at drive-in movie theaters, as well as over-the-top (OTT) and connected TV (CTV) ads, which play before streamed programming. Additionally, an online energy assessment, which is available 24-hours a day, allows a customer to learn more about their home's energy usage at their own convenience. The online assessment takes five to ten minutes to complete and immediately provides insights on what items use the most energy in the home, energy saving tips, and opportunities for energy incentives. The customer can also decide if they would like to sign up for a virtual home energy assessment after the online assessment. The online assessment also provides the Company upgrade opportunities for heating and hot water systems.
Customer Feedback	Customers are surveyed after both the initial assessments and subsequent weatherization work. Customers consistently rank their satisfaction at or above 97% out of 100%. Customers are generally pleased with the upgrades provided during the assessment and impressed with the professionalism and care taken by the insulation contractors A sampling of customer feedback from customer satisfaction surveys follow: Program Suggestions • I wish you were into helping replacing windows. I had to put plastic up on windows this winter. • I wish the program included doors and windows. Those are the biggest issues in my home Professional and Knowledgeable • We had a very professional and very polite inspector, we also learned a lot from him. • Your representative arrived timely. He was professional and knowledgeable. He was thorough and friendly. He answered all of my questions. He provided us with a report in a timely matter. His recommendations were reasonable and easy to understand Great Program

	• We were very satisfied with the work done, the inspections and the explanation that was given to us. The cleanup inside our house was great as well. However there was insulation/sealing materials left all over our yard. It was snowing so we believe it may have been covered up by the falling snow so the team didn't see it, but since the snow melted we have been finding and picking up various materials from the yard. This was a danger to our pets. Overall it was a great experience. We wanted to flag this so you are aware for future customers. • This is a great program. Reducing home heating cost is a great way to reduce co2. Using less energy for cooling too. Waiting time was 9 months to get insulated. I understand construction so I knew what was happening. Worth the Wait • The timeline for work was extended out much more than I had anticipated due to the pandemic, but it was very much worth the wait! The insulation has made an enormous difference in my home! • Took longer than expected due to masonry issues in attic space that had to be addressed before insulation work could be completed. Insulation work was begun in the late fall/early winter, but could not be completed until months later in April because the masonry work had to wait until the outside temperature was consistently high enough. So, many unexpected delays but the work did eventually get completed and the crew was always very polite when they were here. Cleaned up the copious dust well but left black handprints on the ceiling hatch to the attic space. Work was only recently completed so cannot judge whether it had any noticeable positive effects yet--maybe after next winter we'll have a better sense!
Changes for 2022	**Supporting equity by adding a reporting element for Independent Insulation Contractors that are sub-contractors in the EnergyWise program**. The lead vendor will report on the number of minority and women owned businesses working within EnergyWise so a baseline can be established. The program will test a **concierge service for electric resistance heated homes to facilitate the design and right sizing of a heat pump electric heating system installation**. The Lead Vendor will calculate the sizing and

	work with HVAC contractors to schedule the installation of the new system. The customer benefits by having one point of contact for both the weatherization and HVAC installations. The Lead Vendor will continue **workforce development upskilling** that supports EnergyWise. Historic trainings have included sales support for promoting energy efficiency and identifying opportunities for electric heat. Energy*Wise* will **offer a 100% weatherization incentive for moderate income customers, defined as households at or below 80% state median income.** Weatherization was identified by the Market Potential Study to have high savings potential and this offering will provide opportunities for more customers to participate in weatherization. The program anticipates beginning the program year with aligned incentives for all heating fuel types however depending on trajectory of savings and spending, there may be **different weatherization incentives for non-electric and non-gas heated homes**. The Company is **jointly sponsoring research with other utilities** through ESource and ICF to advance the evolution of incentive design through the Incentive Project. This will be the second year of a three-year research project that will explore how lessons from academic research can be applied to consumer behavior, pricing, and discounting theory to influence incentive design. One aspect of the research will view incentives and financing opportunities holistically.
Rationale for Changes	**Equity reporting for minority and women owned businesses supporting EnergyWise:** 2022 will establish a baseline of minority and women owned business reporting for contractors that provide weatherization services for the program. Once a baseline is established, the Company can develop next step actions to support these businesses. **Concierge service for electric resistance heated homes:** For some customers time and program complexity can be a significant barrier in progressing through energy efficiency upgrades. The Company will work with electrically heated homes to perform a manual J calculation for electric heat pump systems based on rightsizing systems after weatherization. The customer will have one primary point of contact for their efficiency work that coordinates all the activities.

	Facilitating connections to HVAC and/or electrical contractors: Upwards of 45% of all home energy assessments have some type of pre-weatherization barrier that prevents the customer from moving forward with the weatherization project. If the customer does not have a contractor with whom they are comfortable working, it can take additional time to obtain multiple quotes for a remediation project. To simplify the process, the Program will facilitate connections to HVAC and electrical contractors that resolve the most common types of pre-weatherization barriers, removing one additional task for the customer. The alleviation of pre-weatherization barriers was also a recommendation from the recently completed Energy*Wise* evaluation. **Workforce development upskilling:** One benefit of this program is that customers receive consistent assessments by skilled energy specialists. By continually addressing skills required to successful communicate the benefits of energy efficiency, The Company works with the Lead Vendor to determine skill enhancements that supports EnergyWise success. Historic trainings have included sales support for promoting energy efficiency and identifying opportunities for electric heat. **100% weatherization incentive for moderate income customers:** This supports equity priorities shared with our stakeholders by enabling consumers most likely to face financial barriers to benefit from energy efficiency. The Company saw a strong increase in weatherization in 2020 during the COVID-19 pandemic when the 100% weatherization incentive was offered, which helped increase the number of customer conversions. While conversion to weatherization is generally around 35% - 40%, conversion increased to 65% with the 100% incentive during the 2020 COVID-19 pandemic. Expanding the incentive to moderate income consumers helps to achieve both savings and equity priorities. **Different weatherization incentives for non-electric and non-gas heated homes:** In recognition of the Commission's focus on electric and gas energy savings, the Company may reduce the incentives offered to non-electric and non-gas heated homes to control program costs. The Company is excited to participate in the Incentives Project research project. Many industries have sophisticated methodologies for incentive design and the goal is to learn from these best practices and see how they can be applied to the energy efficiency area.

Proposed Upcoming Evaluations	No specific EnergyWise evaluations planned in 2022, but the results of the residential participant and non-participant evaluations, which conclude in 2022, will be used to support program design.
Notes	

Energy*Wise* Single Family – Electric Program Goals, Metrics, Budgets, Participation for 2022

Fuel	Lifetime MWh (Electric)	Annual MWh (Electric)	Annual Passive Demand Reduction kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget ($000)	Participation
Electric	13,014	2,763	426	427,973	16,116	12,000

Energy*Wise* Single Family – Gas Program Goals, Metrics, Budgets, Participation for 2022

	Lifetime MMBtu (Gas)	Annual MMBtu (Gas)	Budget ($000)	Participation
Gas	478,550	20,850	8,642	1,761

3. Multifamily (Electric and Gas)

Eligibility Criteria	Eligible Multifamily program participants are defined as the following:[2] • Buildings with five or more dwelling units • Properties consisting of four or more one- to four-unit buildings that meet both of the following requirements: ○ Are within a reasonable geographical distance[4] from each other, or to a five plus unit building, and ○ Are owned by the same individual or firm. Both market-rate and income-eligible multifamily properties are subject to the above multifamily eligibility requirements for coordinated services. For the income-eligible properties, co-payments for energy efficiency services and measures may be waived. The income-eligible multifamily sector is defined by properties that meet one of the following criteria: • Owned by public housing authorities or community development corporations; • Receive affordable housing tax credits or any type of low-income funds/subsides from the state or federal government; or • Consist of building units where a majority of customers qualify as income-eligible customers (receive utility service on the A-60 Low-Income rate and/or have a household income of less than 60% of the Area Median Income). All customers who have an electric account with the Company are eligible, regardless of their heating fuel type. A multifamily property may be eligible for services and incentives under both residential and commercial programs. As an example, a building with 20 dwellings that is electrically sub-metered (20 residential accounts) with a commercial electric account for common areas and one commercial gas account serving a central heating/hot water system will likely qualify for incentives through both Multifamily and the Commercial & Industrial Multifamily programs. While this adds a layer of complexity for the Company, it is critical that the Company maintain accounting via these various program budgets to ensure equity for all customers, funding energy efficiency through the energy efficiency program charge. In contrast, the customer will not need to deal with this added layer of complexity and will instead receive a consolidated incentive for all efficiency work completed at the site.

Offerings	The program offers comprehensive energy services for multifamily customers including energy assessments, incentives for heating and domestic hot water systems, cooling equipment, lighting, appliances and air source heat pumps. Coordinated services will be offered for all types of multifamily properties.
Implementation and Delivery	The Rhode Island Multifamily program has a single Lead Vendor that utilizes a network of Rhode Island sub-contractors to serve all customers, including income eligible customers. A customer can learn about The Company's Multifamily program offerings in a myriad of ways ranging from communicating directly with the Lead Vendor, the National Grid Website, direct mail and print marketing, and digital marketing campaigns. If the customer is interested in starting the process, the customer would go through the following steps: 1. A customer contacts the Multifamily vendor to express interest in receiving an energy assessment. 2. A "pre-assessment" is performed over the phone or in person to determine if the customer is eligible for participation in the program based on the aforementioned criteria. 3. An energy assessment is then scheduled with the facility's authorized representative. 4. An energy assessment is completed by an energy specialist to identify ways to conserve electricity, natural gas, or delivered fuels. 5. The Lead Vendor then conducts post site screening to identify which measures pass a benefit/cost (B/C) screening on a project level basis. If a measure does not pass, customers can still include it in the project without an incentive. 6. A final proposal is then presented to the customer that includes the scope of work, costs, available incentives, and an estimated time frame. The customer is made aware of financing options available to them as well. If the customer decides to proceed with the project, installation work is then scheduled. 7. Once installation work is completed, a final walk through with the customer is done. A completion report is then created and presented to the site's authorized representative and signed off on. A customer survey is also conducted once work is complete.

Customer Feedback	Post project customer surveys are conducted and have high satisfaction results. Surveys are scored on a scale of 0 to 100 with such questions as: • On a scale of 1 to 5, how satisfied are you with the energy efficiency services you received? • On a scale of 1 to 5, would you recommend this service to family, friends, and/or colleagues? The most recently available average survey score for 2020 is 86.
Changes for 2022	**Relaunch tiered incentive offer.** A tiered incentive approach encourages building owners and facility managers to include more residential unit owners in multifamily projects. Offering an additional incentive for the participation of additional residential units benefits the program as a whole and helps increase customer participation and energy savings. From Q3 2020 through Q1 2021 the Company launched its first iteration of a tiered incentive to customers. The offering increased interest in the multifamily program however due to COVID-19, participation did not increase as much as anticipated at the time. However, due to the positive customer feedback, the Company plans to relaunch this opportunity and restructure incentives as appropriate to increase program attractiveness to customers. The Company plans to work with the Lead Vendor to relaunch the tiered incentive approach in the last quarter of 2021 to ensure annual goals are met and ensure a strong 2022 pipeline. **Increase contractor participation.** In 2021 the Company piloted a bring-your-own-subcontractor approach with Air Source Heat Pumps (ASHP). Taking this step will provide customers with greater choice, open energy efficiency project opportunities to more contractors which may drive down project costs, improve the quality of installations and increase participation among all multifamily facilities. Based on the success of the pilot's structure, the Company will consider expanding this subcontractor model to other aspects of the multifamily program in 2022. Success will be based on customer satisfaction and an overall increase in ASHP installations in 2021. **Implement recommendations from Multifamily Impact and Process Evaluations.** The Company received results from the Impact and Process Evaluation of the Market Rate and Income Eligible Multifamily programs in June 2021. The process evaluation examines customer participation, vendor participation, and overall program processes. For 2022, the Company plans to utilize the results of this evaluation to make several improvements to program design of the multifamily programs. Firstly, the Company will work with its multifamily vendor to increase facilitation of health and safety barrier remediation by

	providing customers with more information about how to complete remediation and how to locate a local remediation contractor. Secondly, the Company will set clearer program expectations with customers by updating language and redesigning the website landing pages and program brochure. Thirdly, the company will work with the Lead Vendor to identify is a long-term role of virtual energy assessments in multifamily buildings is feasible. **Leverage market research studies to better identify and segment Multifamily customers.** Based on the findings of the forthcoming RI Multifamily Census Study and Non-participant Study, both estimated to be completed in Q1 2022 (see Upcoming Evaluations below), the Company plans to implement targeted outreach and marketing efforts to newly identified customers representing large apartments, five to 20 unit small- and medium-sized multifamily owners, newly identified income eligible properties, and other properties that have not been served by the programs to date. In addition, the Company continues to leverage other market research as they become available. For example, in 2021 the Company will be selecting a vendor to lead qualitative customer interviews with residential customers based on their experience and satisfaction with the energy efficiency program(s) they participated in. Similarly, the Company also lead research in early 2021 to understand the type of marketing channels and messaging that will resonate most with customers as customers regain a sense of normalcy following Covid-19. This research helps the Multifamily program to ensure offerings are aligned with customer needs. For example, property managers who were interviewed in early 2021 noted that any out of pocket expense for energy efficiency upgrades was something they could not justify as this time as their primary focus was to receive regular rent payments from tenants in the near-term. With this information, the Company sees value in exploring a financing opportunity specifically for landlords and property managers to help offset project copayments. The Company sees this offer being most compelling to small-to-medium sized multifamily property managers and landlords. **Research customer motivators.** The Company has incorporated questions with regards to the potential value of tax incentives into the Non-participant study that is currently underway and to be completed in Q1 2022. Including questions pertaining to tax incentives in this research with help the Company to understand and identify potential new drivers and motivations for increasing customer participation in multifamily programs in future years. Additionally, based on stakeholder feedback, the Company is exploring how Non-Energy Impacts (NEIs) such as health and safety benefits could increase program attractiveness and increase participation.

	For, example, the Company sees value in leveraging the research from a recent Health and Safety NEI Study Massachusetts recently completed. **Improve customer financing options.** Current options for financing of energy efficiency upgrades in multifamily buildings are limited to individual condo owners through the HEAT Loan program, with no option for landlords looking to finance upgrades to their renter-occupied property. In 2022, the Company will explore an option that will provide financing options for landlords and/or property managers of both commercially and residentially metered multifamily buildings. This improvement would make it easier for owners to fund larger improvements to renter-occupied buildings, and therefore achieve deeper energy savings. Specifically, a financing option could increase multifamily participation within the five-20 unit building segment if the upfront co-pay cost was able to be financed over time. **Training & Upskilling:** As the Multifamily Programs shift from inexpensive, direct install measures to more complex and expensive measures, energy assessors will need increased sales acumen to help customers understand the value of energy efficiency upgrades. As part of its increased focus on workforce development, the Company will continue to invest in relevant professional development opportunities for energy assessors in the Multifamily programs. The Company believes these trainings should increase the amount of deeper energy savings measures adopted by multifamily participants. In 2021, The Company organized a workforce development training for 10 auditors from the Lead Vendor to attend. The subject matter of the training provided individuals with sales training when discussing deeper measures with customers and the benefits associated when installing the measures. Based on the positive feedback from our Lead Vendor, this training will continue to be offered as a refresher training on an annual basis to our Lead Vendor and other potential sub-contractors, as appropriate. Additional Workforce Development trainings will be considered and offered throughout the program year. Recognizing trainings may benefit all residential programs, The Company will coordinate across programs to ensure Workforce Development trainings are offered to all Lead Vendors, Sub-contractors, etc. as needed. **Marketing and outreach enhancements.** In 2020 and 2021 the Company co-branded marketing collateral with the Lead Vendor following the Company's co-branding guidelines. The Company's marketing team collaborated with the Lead Vendor's marketing team when developing customer collateral for the Tiered Incentive pilot. The Company sees value

	in leveraging a co-branding approach moving forward with the program's Lead Vendor, especially for piloted offers to customers. Additionally, in lieu of adopting a market segmentation approach based on the analysis from the Multifamily Census, the Company sees value in enhancing its Multifamily and Income Eligible Multifamily marketing and outreach efforts in 2022 with the goal of creating collateral specifically for large apartments, small and medium five-20 unit buildings, trade allies, unit owners, and income eligible properties with the goal to offer customers deeper transparency and clarity of program offerings based on the building type. In an effort to engage the Multifamily and Income Eligible Multifamily target with a customized approach, we are exploring different tactics that provide opportunities to offer relevant content in a more personalized way. For 2022, we are planning to create a custom content hub that is connected to an industry specific publication. Content hubs offer a unique opportunity to showcase our industry expertise and segment the content based on specific audiences and building type making a personalized user experience. Continuing with the connection to industry publications, we want to explore industry specific events targeting property owners/managers that we can sponsor and also take part in as a speaker or as part of a panel. Complimenting the aforementioned tactics, we want to refresh both the Multifamily and Income Eligible Multifamily landing pages. The refresh is a critical component to the customer journey and continues to provide an opportunity to customize the experience for the different target customers and meet their desire for more information. The company will work with the Lead Vendor to identify customer(s) that may be interested in having a case study developed based on their experience as a participant in the Multifamily program and/or Income Eligible Multifamily program. The goal of the case study will be to highlight the customer journey when going through the program(s), the benefits of the program, and savings the customer realized by participating in the program (both energy and cost savings). The case study is a way to showcase program successes which will aim to resonate with prospective customers in Rhode Island. The case study will be posted on the Company's website and infused into the program's 2022 marketing collateral as appropriate. Finally, the Company will revisit co-branding marketing with the Lead Vendor and will consider more prominent Company placement with the goal to increase customer trust, ease, and ultimately increase program participation.

	Program evolution. The Company will continue exploring ways to assist customers to overcome pre-weatherization barriers. Specifically, the Company will work with the Lead Vendor to create a step-by-step resource including a list of program allies and/or contractors that can perform the necessary pre-weatherization work needed to be completed for a customer to be able to participate in the Company's Multifamily Program. The Company will work with the programs' Lead Vendor to determine the most effective way to provide this resource to customers. Additionally, in lieu of the lighting market's transformation, 2022 will be the last year lighting savings can be claimed through the Multifamily programs and as such, the Company will explore emerging technologies that could bring cost effective electric savings to the program. The Company is examining a variety of technologies to serve a range of Multifamily customers and building types. For example, some large apartment buildings may benefit from building monitoring-based commissioning (MBCx), similar to the MBCx pathway of the ESPO program. Some MBCx service providers specialize in serving the unique needs of multifamily buildings and occupants, providing energy, water, and comfort benefits. Other buildings with old steam heat systems may benefit from radiator enclosures, which can save significant energy and increase occupant comfort for poorly balanced systems. Further, the Company anticipates findings from the ongoing 2021 Pre-Fab Whole House Energy Refurbishment Assessment will have some findings relevant for the Multifamily program. It is prudent for the Company to explore emerging technologies such as the ones noted above in order for the Company to continue to meet its savings goals. For example, in 2019 lighting made up 18% of the Multifamily program's total savings across all fuel types.
Rationale for Changes	From 2018 through 2020, the Multifamily program's energy goals have been challenged due to a rapid decline in lighting opportunities and reduced opportunities in large multifamily buildings due to market saturation. Annual participation data for 2012-2019 also indicate that the multifamily sector programs, particularly market rate electric and gas and, to a lesser extent, income eligible electric, are approaching market saturation. From 2012-2019 in market rate multifamily, 41% of gas customers and 47% of electric customers were repeat participants, compared with 8% in gas and 13% in electric for Energy*Wise* Single Family. In Income Eligible Multifamily during the same period, 21% of gas customers and 31% of electric customers were repeat participants, compared with 6% in gas and 21% in electric for Income Eligible Single Family. In order for this program to meet its goals in 2022 and beyond, changes need to be made to accommodate a shift in focus on large apartment

	buildings to condos and smaller (5-20 unit) apartment buildings. It is also critical that the program be able to transition from a reliance on energy savings from direct install measures to more comprehensive energy retrofits. The changes proposed in this plan focus on these important changes to the multifamily market as well as overall customer experience and process improvement.
Upcoming Evaluations	**Multifamily Census Study:** In 2021 the Company went out to bid and selected a vendor to undertake a census of all multifamily properties in Rhode Island, using best available data to both understand where these properties are located, their ownership status, whether they are likely to be income-eligible or market rate, and whether they have already been served by the Multifamily Program. After examining best practices from the Massachusetts Multifamily Census Study, the Company determined that the building stock in Rhode Island varies enough from that of Massachusetts to merit a separate study. Moreover, the Company will improve upon the research techniques of the Massachusetts study to yield the most relevant data to both understand Multifamily Program market penetration and identify additional targeted outreach opportunities to customers who have not yet participated in the program. **Non-Participant Study:** In 2021 the Company went out to bid and selected a vendor to execute a Nonparticipant Study. The objective of the Nonparticipant Study is to provide in-depth research to characterize customers that have not participated in National Grid's Rhode Island residential programs, assess barriers to their participation, and identify opportunities to engage them. The qualitative research will include characterization of customers, exploring barriers of participation, and understanding best communication channels to reach customers. Each participant will receive a $100 electronic gift card for their time following the interview. The Nonparticipant Study will help the Company to understand how landlords, property managers, and tenants (both owner occupied and renters) can be better engaged and served through the Multifamily Programs. The feedback from these qualitative interviews will be incorporated into the Company's marketing and outreach strategy and the Company will also review what program design elements could be enhanced to improve customer ease and ultimately increase participation. **Non-Energy Impact Study:** The objective of this study was to quantify and monetize the health- and safety-related NEIs attributable to improvements in the energy efficiency of multifamily buildings served through the Mass Save® income-eligible coordinated delivery initiative.

	Monetization entails valuing the impacts of weatherization services on program recipients by calculating money saved, or the dollar value of costs avoided, due to changes in health issues and household budgets resulting from weatherization. As the report is finalized, initial findings show successful monetization of NEIs occurred for Arthritis, Thermal Stress (Cold), Home Productivity, and Reduced Fire Risk. Although this study was focused primarily in Massachusetts, there are learnings that apply to Rhode Island's income eligible multifamily buildings and as such the Company sees value in utilizing resources efficiently to apply learnings of this study to the Income Eligible Multifamily program in Rhode Island once the results of the study are finalized.

Market Rate Multifamily – Electric Program Goals, Metrics, Budgets, Participation for 2022

Fuel	Lifetime MWh (Electric)	Annual MWh (Electric)	Annual Passive Demand Reduction kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget ($000)	Participation
Electric	20,783	1,424	143	96,255	3,279	3,600

Market Rate Multifamily – Gas Program Goals, Metrics, Budgets, Participation for 2022

	Lifetime MMBtu (Gas)	Annual MMBtu (Gas)	Budget ($000)	Participation
Gas	147,064	8,279	1,502	4,000

4. Income Eligible Services (Electric and Gas)

Eligibility Criteria	The Income Eligible Services (IES) Program serves Rhode Island customers who meet the following criteria: Discount rate customers with either an electric or gas National Grid account can participate. Homeowners, renters, and landlords are all encouraged to participate. Customers with any heating fuel type, including delivered fuels, are served if they have a National Grid account. Delivered fuel customers can receive services through their electric account. • Household income equal to, or less than, 60% of Rhode Island's State Median Income Levels which are set each program year[3] **or** enrolled in National Grid's fuel discount rate plans, Electric A-60 rate and/or Gas 11, 13 rates[4]. • Customers enrolled in the Low-Income Home Energy Assistance Program (LIHEAP)[5], also known as "fuel assistance". • Homeowners and renters who live in a one to four unit building with either an electric or gas National Grid Discount Rate account can participate, including customers with delivered fuel heat (oil, propane, wood, or coal) if they have an electric account. • Additional eligibility criteria, including the 50% rule,[6] shelter and group home eligibility, renter eligibility and repair or replacement eligibility are available in the RI WAP/IES Operations Manual. All criteria adhere to 10 CFR 440 requirements.
Offerings	IES consists of two, no-cost[7], in-home services to increase comfort in the home and decrease a customer's energy costs. **Appliance Management Program (AMP) Assessment** • The energy specialist educates the homeowner or tenant about their energy bill and monthly usage; assesses the home and learns about the day-to-day activities that consume energy in the home;

[3] http://www.dhs.ri.gov/Programs/LowIncomeGuidelines.php.
[4] https://www.nationalgridus.com/RI-Home/Bill-Help/Payment-Assistance-Programs
[5] https://www.benefits.gov/benefit/1572
[6] Customers that are not on the income eligible rate but live in a two- to four-unit building where more than 50% of the units are income eligible are also eligible to receive weatherization and health and safety services. This exception is referred to as the "50% rule".
[7] 100% incentive via the systems benefit charge (SBC) that funds all National Grid's energy efficiency programs. Customer incurs no cost for audit, weatherization or equipment replacement.

	discusses ways the customer can save energy and money, educates the customer to properly operate energy efficient equipment and how to identify signs that indicate if weatherization or heating system replacement is needed. • Installation of instant energy savings measures such as energy efficient LED bulbs, advanced power strips, water saving measures (faucet aerators and low-flow showerheads). • Evaluation of existing appliances: refrigerator, freezer, window air conditioning unit(s), clothes washer and dehumidifier to determine energy efficiency and eligibility for a no-cost replacement with an energy efficient appliance model. ○ Replacement of eligible existing inefficient appliances (including delivery and installation)[8]. **Weatherization and Heating System Assessment** • An industry-certified energy specialist conducts a comprehensive assessment of the building envelope and heating and cooling systems including visual and equipment-required inspections, infrared camera thermal imaging, combustion safety testing of heating system, energy efficiency testing of heating and cooling systems. • Air sealing, duct sealing and insulation upgrades in attic, walls and basement. • No-cost replacement of eligible heating or cooling systems if they are determined to be inefficient or unsafe. Applicable to all existing heating/cooling systems: electric, gas, oil and propane. • If home has existing electric resistance heat, the customer will be offered to replace it with energy efficient air source heat pumps (ASHP) that provide heating and cooling. **Virtual/Remote AMP Assessment** In 2020, the COVID-19 pandemic prompted innovation with virtual/remote AMP Assessments allowing some program benefits to be delivered virtually. These virtual/remote assessments will remain as an option in 2022 for

[8] All appliances are purchased/supplied through a central organization, SMOC, a nonprofit agency, to ensure that all delivery personnel meet National Grid's security and liability criteria, and all appliances meet IES Program requirements, warranty calls are handled expeditiously and properly documented and non-efficient appliances are removed and recycled safely and properly.

	customers who prefer this service. Customers participating in the virtual/remote AMP Assessments receive the energy saving devices traditionally installed by the energy specialist during the in-home visit through the mail. Customers are able to self-install the products or they can be installed by the energy specialist at a later date. In 2021 customers were able to choose whether to have an in-person assessment or a virtual assessment. Based on customer preference, about X% of customers have selected the in-person assessment over the virtual.

Implementation and Delivery	**Program Delivery:**
	
	• IES Program is administered through a Lead Vendor that is responsible for managing the implementation of IES work through the six Rhode Island geographically-based Community Action 8Program (CAP) Agencies. The CAP Agencies serve as a trusted entity where income eligible customers can obtain essential resources within their respective community.
	• The primary point for customers to enroll in the IES Program is through the CAP Agencies as they provide income verification and comprehensive resources for income eligible customers.
	• Other channels for enrollment in the IES Program are:
	  ○ Low-Income Home Energy Assistance Program (LIHEAP);
	  ○ Community Expos;
	  ○ Consumer Advocate appointments; and
	  ○ National Grid's Customer Service Center[9].
	• The IES Program collaborates with the State of Rhode Island Department of Human Services (DHS) Weatherization Assistance Program (WAP)[10] and the Low-Income Home Energy Assistance Program (LIHEAP)[11] to create synergy between the programs, which improves outcomes of all the programs.
	  ○ Leveraged Funding: The IES Program benefits from leveraging LIHEAP funds, resulting in more customers being served. The amount of funds leveraged is approximately 25% of total customer incentive benefits for weatherization and heating system replacements. The LIHEAP funds also

[9] (1-800-322-3223)
[10] overseen by the U.S. Department of Energy. http://www.dhs.ri.gov/Programs/WAPProgramInfo.php
[11] overseen by the U.S. Department of Health and Human Services. https://www.benefits.gov/benefit/1572

	help pay for the remediation of non-energy related health and safety improvements, that if not remediated, would prevent a customer from receiving weatherization and/or heating system upgrades, i.e., roof repair and/or replacement, knob and tube removal, glass repair/replacement and carpentry. See ▪ Figure 8, ▪ Figure 9, ▪ Table 2 below for illustrative examples that represent 2012-2020 funding sources, allocation of funding sources, and services provided with funding sources, respectively. ○ Starting in 2021, WAP (DOE) funding is leveraged/integrated in the IES Program. ○ DHS provides training and equipment to weatherization Auditors. ○ DHS provides the IES Program with important operational data including demographics, participation, amount of DHS funding leveraged with IES Program funds, and customer data for those on fuel assistance (LIHEAP), but not the National Grid discount rate. • CAPs provide the full suite of energy efficiency services including: ○ Income-eligibility verification ○ Customer education regarding energy and cost savings opportunities ○ Energy assessments ○ Installation of instant energy savings measures ○ Recommendations for energy savings measures ○ Coordination of home performance/HVAC contractors and appliance vendors that install weatherization, heating (space and hot water), and appliance measures. ▪ If the CAP Agency does not have the capacity to complete the weatherization work, the CAP will refer the job to a third-party entity to do the weatherization. The referred jobs will get accounted for in the referring CAP Agencies participation and job completion goals. ○ Quality assurance/quality control (QA/QC)

	• KPIs are tracked to measure/improve consistency of Program delivery as well as drive performance of the CAPs. KPIs include: timeliness of administrative reporting, monthly/year to date spending compared to goals, participation numbers for AMP, electric & gas weatherization and heating system installations and cost. • The IES Program is marketed through the Program's marketing specialist as well as cross marketed at Community Expos, via the Consumer Advocates dedicated to the RI IES consumers, and the Company's call center. • Quarterly IES Best Practices meetings are held with the Company, the Lead Vendor, the CAPs, DHS, program vendors (i.e., lighting vendor, appliance delivery vendor), or speakers to address a pertinent topic. • Monthly engagement of the Company, the Lead Vendor, Executive Directors of the CAPs, and DHS to review the overall performance of the IES Program and coordination of best practices across the CAPs. • On-going customer feedback and communication. **Customer Journey:** • A customer begins the process for a no-cost home energy assessment by going to their local CAP Agency to submit their information to determine if they meet the income eligibility requirements for participation in IES. • After the CAP Agency verifies income eligibility, the CAP will schedule a no-cost AMP and/or Weatherization/Heating System assessment. In some cases, the AMP and Weatherization/Heating System assessments are separate due to the customer's past assessments, renting vs. owning, time availability or the CAP Agency's availability of two-person assessment teams. In 2022 the CAPs will continue a process using two-person teams where applicable to provide all energy assessment services in one visit. • Energy education is provided to the customer regarding the pre- and post-energy assessment process, opportunities to save energy, processes for receiving appliance or heating/cooling system upgrades and/or weatherization.

	• The CAP Agency will schedule all necessary follow-up services for insulation, air sealing, appliance and heating/cooling system replacements. All services and appliance and heating/cooling system replacement are provided at no cost to the customer. • Customer receives a "comment card" to provide their feedback on all aspects of their journey through the IES Program.
Customer Feedback	In 2020, the IES Program began a new post-installation survey for weatherization and heating system services to compliment the AMP Assessment customer survey. Results from 2020 customer surveys: Through a more general process and to collect timely feedback from customers, following the AMP energy assessment as well as heating system and weatherization services, customers are provided with a pre-stamped survey card. To date in 2021, XX[12]% of customers who responded were satisfied with the IES services (compared to 95% in 2020), XX% of customers who responded were satisfied with the improvements to their homes (compared to 96% in 2020), and XX% of the customers who responded were satisfied with the professionalism of the CAP employees (compared to 100% in 2020), (2020 n=79). The Lead Vendor provides a tabulation of the survey results, and the anonymized data is presented at the IES Quarterly Best Practices meeting. This feedback provides the Lead Vendor and the CAPs with information about how to improve the program as well as celebrate the successes. Discussing the data as a whole at the IES Best Practices meeting allows the opportunity to create solutions if problems exist, position CAPs to help other Agencies if needed, as well as celebrate the success of the collective efforts of the six CAPs.
Changes for 2022	In 2021, the IES Program implemented **a third-party vendor model to expand the CAPs capacity to readily complete weatherization jobs and improve equity across CAP territories**. Due to the COVID pandemic, the third-party vendor model took longer than expected to establish and to test. Several improvements have been made to the model to provide timely and seamless services between the CAPs and the vendor with the biggest focus being on the length of time to complete the weatherization jobs. In 2022 this model will remain available as a strategy to increase

[12] These yellow highlighted numbers will be updated in August when we have more data.

	weatherization jobs throughout the State and the IES Program will continue to take the lessons learned from 2020 and 2021 to develop an RFP for these services in 2023. Determination of success of this model will include: • CAPs meeting/exceeding year end weatherization participation goals. Each year, goals are based on the total weatherization goals divided by the number of eligible customers in the agency territory. Both numerical goals and spending goals are determined for each CAP and are measured and communicated throughout the year. • Improved timeliness for completion of weatherization services. • Timeline from recommendation to completion of weatherization job and customer satisfaction. Due to the impact of the Covid Pandemic on the IES population in 2020 and 2021, several improvements that were recommended in **2019 Process Evaluation** will remain a focus in 2022. Specific focus will remain on the following key areas. • Rebuild and stabilize **the number of qualified AMP/weatherization and heating assessors**. Due to workforce layoffs, furloughs, extended unemployment benefits, and workforce transition, the CAP Agencies' workforce was significantly impacted. The IES Program will prioritize assisting CAPs to train, hire and retain assessors. Indicators of success include training and hiring new assessors and regularly tracking the number of assessors • **Focused communication and engagement with landlords** on behalf of interested tenants. The Company aims to increase renter participation, via landlord outreach, to effectively improve the equitable share of program resources. In 2021 a working group convened to examine the **IES emergency heating system replacement** for income eligible customers that heat with oil or propane. The desired outcome of the working group is to propose recommendations to reduce the number of emergency heating system replacements and to find supplemental funding that can offset the cost of fuel switching from oil/propane to more efficient and less carbon-intensive heating system alternatives. The working group will provide recommendations in the Fall of 2021 that will be incorporated into the IES Program as appropriate, and as approved funding allows, in 2022.

	In 2021, National Grid co-sponsored the RI Equity Working Group (RI EWG) with a goal of developing a set of recommendations addressing equity in relationship to energy efficiency. These recommendations will be presented to the RI Energy Efficiency team in the Fall of 2021 and will be incorporated into the IES Program as appropriate, and as approved funding allows, in 2022. The program will **develop a training process for offering smart thermostats to homes with central AC to improve energy efficiency and operability** and align with ConnectedSolutions when possible.
Rationale for Changes	**Increase completion of weatherization jobs:** In the income eligible housing stock, it is common for maintenance and/or improvements to be deferred due to many possible factors including cost, time, lack of information, concern about potential code violations and/or undocumented status, existing conditions preventing weatherization, etc. Weatherization of a home is the priority to prevent energy loss through cracks, holes, and uninsulated walls. Insulating a home saves energy and money and improves thermal comfort for the occupants. By having a third-party vendor available to assist the CAP Agencies in completing weatherization jobs means more energy savings, less cost for customers, and if necessary, may result in smaller heating and cooling systems if replacement is needed. **Stabilize the number of qualified AMP/weatherization and heating assessors:** 2020 and 2021 resulted in the loss of several AMP/weatherization and heating assessors due to many factors. Due to the requirements of the IES Program requirements, hiring new staff can take several months. The IES Program poses several hurdles for new staff as the required training is time-intensive, all assessors going into a home have to pass a background check, and then the assessor has to gain in-field experience. To help to filter potential applicants and streamline the hiring process, the IES Program is working with Rhode Island Builders Association to develop a comprehensive training program that will set the path for a person to obtain the necessary training to apply for an energy assessor position. This program will be launched in 2021 and fully instituted in 2022. Maintaining qualified assessors is critical to the success of the IES Program as the time it takes to hire and train an assessor can significantly impede an Agency from completing any energy efficiency work. **Focused communication and engagement with landlords:** Landlord participation in the IES Program is important for the success of reaching

	potentially older homes that often have deferred maintenance. In 2022 the IES Program will develop a targeted communication and marketing strategy aimed at landlords to improve their trust in the IES Program, share examples of similar projects, effectively communicate all the short-term and long- term benefits. Without landlord commitment to the IES Program, renters cannot gain the benefits of energy efficiency which causes an issue with equity of program resources. Success for this improvement will include the number of types of channels for communicating with landlords, and the number of landlords that move forward with the IES Program. **IES emergency heating system replacement**: Currently, if an income eligible customer heats their home with oil or propane and they have a heating system failure or the system is deemed unsafe, the original oil or propane heating system is replaced with a more efficient oil or propane heating system. This 1:1 replacement is the most efficient solution to satisfy the emergency nature of a customer's heating needs. Ideally the Program would prefer to upgrade the oil/propane heat systems with more energy efficiency heat pumps, however the RI EE Programs are not able to provide fuel switching with ratepayer funds. Even if fuel switching was allowed, the time to design and install a completely different system takes many weeks, and a customer cannot be without heat for many weeks in the winter. It is important to note other barriers for heat pumps are that not all homes are well-suited for ASHPs; the IES Program pays for 100% of equipment, labor and inspection costs, which can become very expensive for fuel switching; and currently fuel switching cannot be paid for with energy efficiency dollars. The PUC recommended that the Company look into possible solutions to stop the installation of new oil/propane heating systems for emergency heating system replacements as they perpetuate the burning of carbon-intensive fuels. A working group, convened to address this topic, will provide recommendations in the Fall of 2021, and the recommendations will be incorporated into the IES Program in 2022 as appropriate, and as approved funding allows.
Proposed Upcoming Evaluations	None planned for 2022. In 2019, Cadeo conducted a Process Evaluation for the Income Eligible Services Program and which built off a report conducted by The Cadmus Group in 2014.
Notes	

Income Eligible Services – Electric Program Goals, Metrics, Budgets, Participation for 2022

Fuel	Lifetime MWh (Electric)	Annual MWh (Electric)	Annual Passive Demand Reduction kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget ($000)	Participation
Electric	38,506	3,314	480	358,466	13,249	3,583

Income Eligible Services – Gas Program Goals, Metrics, Budgets, Participation for 2022

	Lifetime MMBtu (Gas)	Annual MMBtu (Gas)	Budget ($000)	Participation
Gas	218,847	10,942	6,367	1,098

Figure 8. 2012-2020 Funding Sources - Single Family Income Eligible EE Services

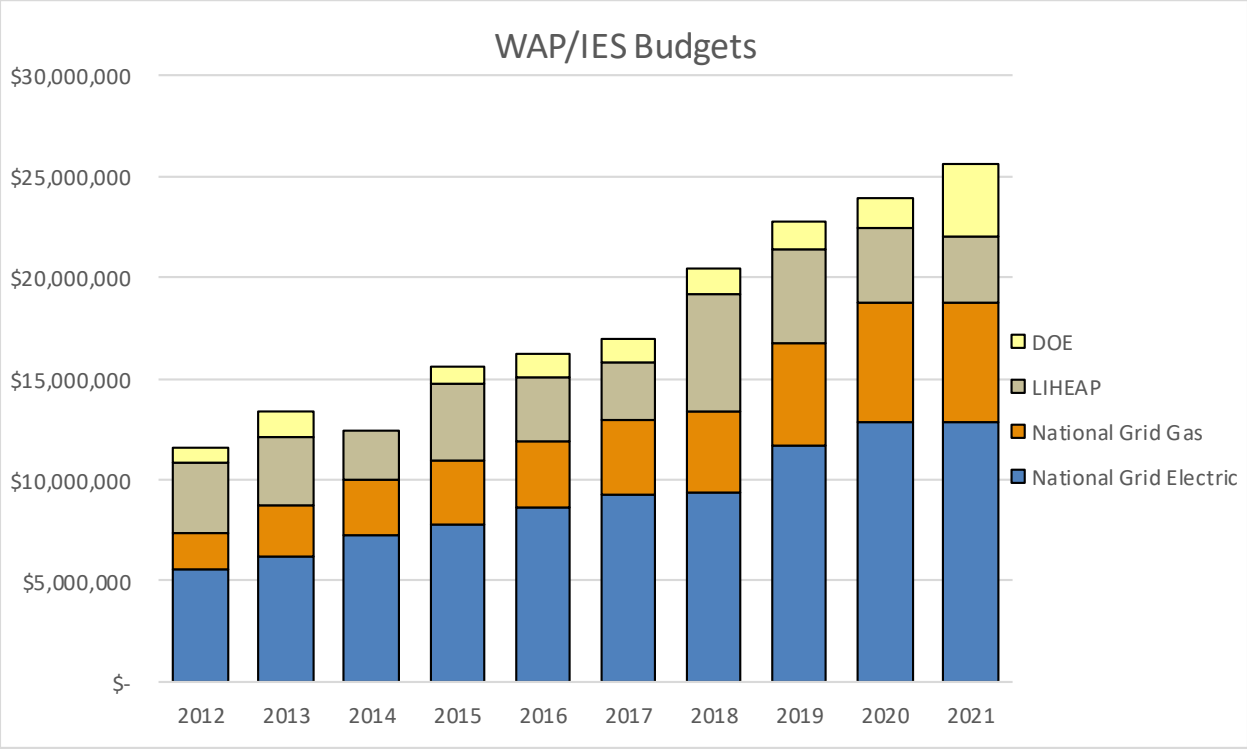


Figure 9. Allocation of Funding Sources - Single Family Income Eligible EE Services

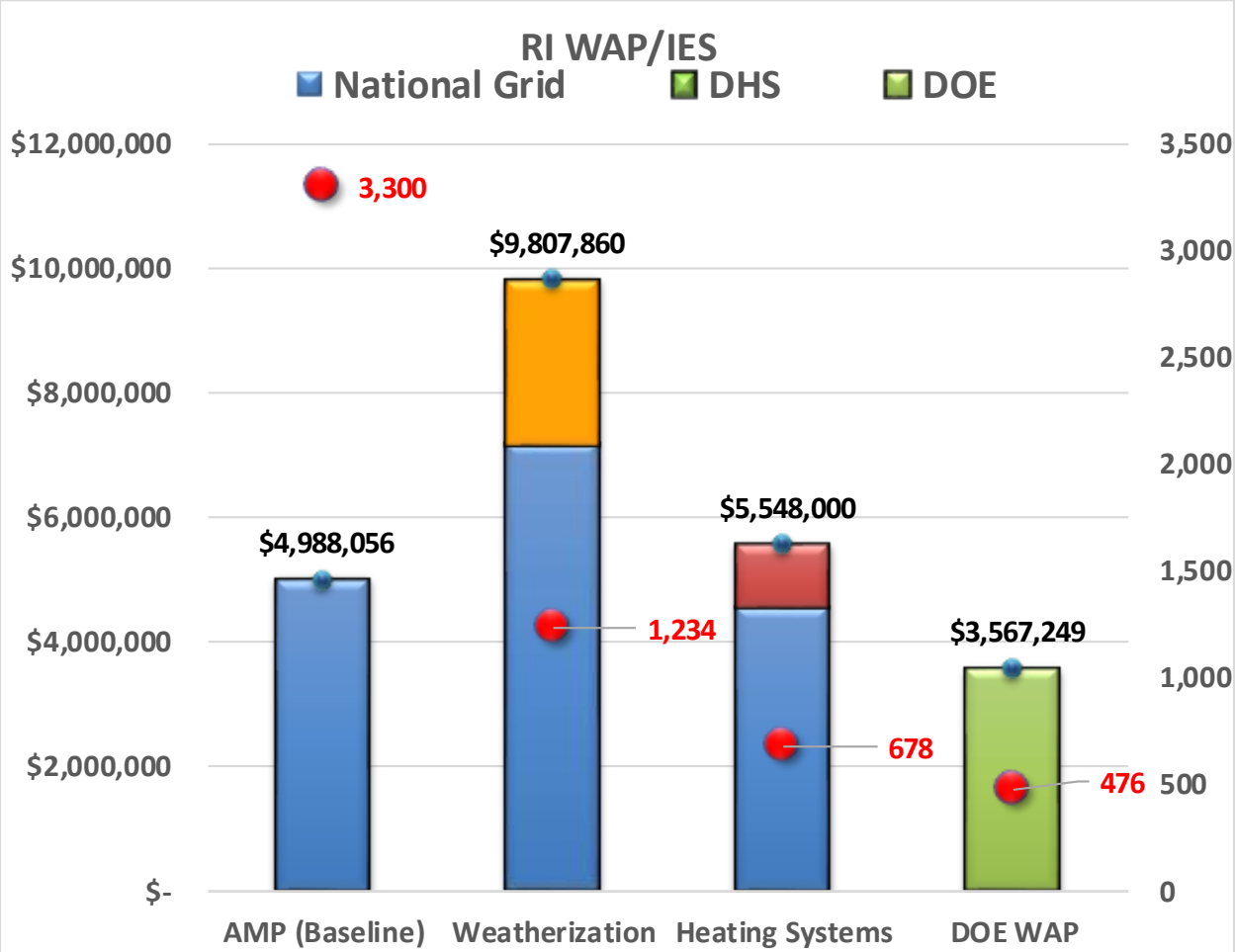


Table 2: Services Provided – IES Program and Low-Income Home Energy Assistance Program

Single-Family Income Eligible Services (IES) Program*	Low-Income Home Energy Assistance Program (LIHEAP)*

• Conduct whole house Energy Assessment and provide customer education
  ○ Lighting and Appliance (AMP) Assessment
  ○ Heating and Weatherization Assessment
• Review utility bills
	• Conduct whole house audit/ energy efficiency evaluation for Heating Systems and Weatherization (not appliances)
	• Install weatherization measures (insulation, air sealing, duct sealing)

• Replace incandescent and halogen bulbs with LED bulbs • Install smart power strips and domestic hot water savings measures • Talk with homeowner about opportunities to save energy and money through upgrading appliances and mechanical equipment and weatherizing the home. • Coordinate the installation of weatherization measures and/or space/water heating system and air conditioning replacements if needed • Install weatherization measures if needed • Replace eligible appliances • Conduct field inspections and testing, i.e., quality assurance/quality control.	• Replace inefficient heating equipment if deemed eligible • Improve minor health and safety issues that are barriers to energy efficiency measures • Conduct field inspections and testing, i.e., quality assurance / quality control.

*Both IES and LIHEAP offer all services and products at no-cost to the customer.

5. Residential New Construction (Electric and Gas)

Eligibility Criteria	The Residential New Construction (RNC) program is designed to advance the Rhode Island housing market toward Zero Energy homes. The program provides technical services, inspection services, and project incentives for new construction, additions, and major renovations to both one to four unit and five plus unit buildings. The program also supports major renovation of adaptive reuse projects (e.g. mill building conversions). The RNC program supports both market rate and income eligible housing units.

Offerings	**Design and Construction Assistance**
	• Energy modeling and design assistance to verify compliance with the RNC requirements and justify the respective incentives.
	• In-field training and inspections to verify compliance with the RNC requirements and promote efficiency in subsequent projects.
	Market Development
	• Technical training on high efficiency and Zero Energy building practices, as well as energy code compliance, to build necessary market capacities.
	• Training and certifying Home Energy Rating System (HERS) raters to increase the number of qualified raters based in RI.
	• Rating and certification services, including HERS, DOE Zero Energy Ready Home, Passive House, and ENERGY STAR, to promote visibility of energy efficiency in the marketplace and support increased use of the RI Residential Stretch Code.
	Incentives
	• Whole-home efficiency incentives for 1-50 unit buildings based on achieved level of efficiency and number of units.
	  ○ Path to Energy Efficiency incentives ranging from $200 to $4,000 per home.
	  ▪ Four efficiency tiers, with an entry threshold of 15% more efficient than baseline and progressive maximum air leakage requirements.
	  ▪ Additional incentive options of $250-$1,000 per home for all-electric home and $100-$200 per home for ENERGY STAR® certification.

	○ Path to Zero Energy Ready incentives ranging from $500-$1,500 per home in addition to Path to Energy Efficiency. ▪ Projects must meet a minimum base efficiency level, be all-electric, and achieve DOE Zero Energy Ready Home, Passive House, or equivalent certification. ○ Projects with >50 units are eligible for custom incentives. ○ Adaptive Reuse projects are incentivized based on a separate set of prescriptive measures tailored to mill conversion projects. • Certification incentives provided to support third-party verification of energy efficiency measures. • Equipment rebates for qualifying high efficiency heating, cooling, and hot water equipment. • Complimentary ENERGY STAR LED bulbs and WaterSense showerheads.
Implementation and Delivery	**Design and Construction Assistance, Incentives:** The RNC project pipeline is developed primarily through coordination with RI permitting departments, engagement of the building industry, and referrals from Energy*Wise* and Rhode Island Housing. A participating customer/project team begins the process by calling or emailing the RNC program. The project team meets with RNC staff to discuss the project design, learn how to modify design or mechanical systems to improve energy efficiency, and initiate energy modeling of the project to determine the potential for incentives. Once construction has begun, RNC staff provides on-site training as needed and conducts inspections of the completed project to determine energy efficiency and respective incentives. When the project is complete and has met program requirements, the performance and equipment incentives are issued. **Market Development:** RNC identifies opportunities to build necessary market capacities to advance toward Zero Energy Homes and delivers programming designed to achieve this goal.
Customer Feedback	A survey will be conducted annually to program participants and/or the broader market targeted by this program to collect feedback.

	Project teams are offered an opportunity to highlight their project in a case study for further promotions. Case studies have proven a good channel for customers to express satisfaction with the Program.
Changes for 2022	In 2022, RNC will codevelop with the ENERGY STAR HVAC program a HVAC consulting service to support the high efficiency performance levels required to achieve standards such as Zero Energy and Passive House. This will include contractor training, design review, and in-field support. Program content related to codes and standards will be refreshed to reflect the State's code update expected in early 2022.
Rationale for Changes	The changes for 2022 will continue to increase the visibility and effectiveness of all electric homes and significantly improve thermal performance, both resulting in further reduction of energy use. These changes also contribute to advancing the State's greenhouse gas emissions reduction goals.
Proposed Upcoming Evaluations	Residential New Construction Baseline and Code Compliance Study (RI-21-RX-CSNC)
Notes	

Residential New Construction – Electric Program Goals, Metrics, Budgets, Participation for 2022

Fuel	Lifetime MWh (Electric)	Annual MWh (Electric)	Annual Passive Demand Reduction kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget ($000)	Participation
Electric	17,937	990	75	118,405	1,630	462

Residential New Construction – Gas Program Goals, Metrics, Budgets, Participation for 2022

	Lifetime MMBtu (Gas)	Annual MMBtu (Gas)	Budget ($000)	Participation
Gas	77,018	4,111	593	289

6. Home Energy Reports (Electric and Gas)

Eligibility Criteria	The majority of Rhode Island residential Electric and Gas customers are eligible for the Home Energy Reports (HER) program. Customers with an email address on record will also receive an electronic version of the report (eHER). All customers have access to the online home energy assessment and related insights. Randomly compiled control and treatment groups are necessary for accurate savings reporting. Thus, some customers will not receive print or electronic reports (control group), while others receive both print and electronic HERs (treatment group).
Offerings	The HER program is a state-wide energy efficiency program that provides benefits for Rhode Island residential customers through the mailing of customer-specific energy usage reports and insights. While over 300,000 customers receive HERs (i.e., the treatment group) by way of direct mail and/or e-mail, all account holders have access to insight into their energy consumption via the web tools located on the National Grid website. The program has evolved since 2013 from offering only mailed insights to now being integrated into the Company's website with online assessment tools, sending Non-Advanced Metering Infrastructure (AMI) High Usage Alerts, and utilizing segmentation to target different populations with relevant messaging.
Implementation and Delivery	The program is administered by a Lead Vendor, a company with subject matter expertise selected by the Company to deliver the program. This Lead Vendor also developed and launched the first HERs in the country. Since 2013, the Company has employed the Lead Vendor to implement the HERs in all three of its jurisdictions (Massachusetts, New York, and Rhode Island). The Lead Vendor is responsible for maintaining HER distribution groups, tracking data, managing the Web Portal, and documenting energy savings. The Lead Vendor works with the Company to craft the messaging and delivery of the HERs, and also works with the Company to introduce additional program enhancements, aligning with the Company's state-wide comprehensive marketing efforts. All eligible customers will receive a minimum of 6 print versions of the report a year and up to 4 gas specific reports in the winter season. All customers with email on record will receive up to 12 reports a year. The reports include marketing messages informing customers of other program opportunities so that they may be made aware of the most current and relevant energy efficiency offerings. For customers interested in learning

	more about energy saving tips and their home's energy consumption, they may log into the online portal and use the available tools.
Customer Feedback	The Company's Customer Energy Management team overseeing program strategy continues to work with the Customer Contact Center to ensure customer complaints are addressed. In each report there are multiple options for the customer to contact the Company to learn more or opt-out of the reports. The Lead Vendor completes a Customer Engagement Tracker (CET) annually to assess customer perception of the program. Some of the customer's verbatim feedback from the CET include: *It gives me a comparison with other similar homes in the area and whether I need to be doing things different especially because of winter.* *I like that they send it to my computer so that I don't have to wait on the mail.* *I like the comparison between my usage and my neighbors and how much I save using solar.*
Changes for 2022	In 2021 HER launched a targeted 1-click promotion module within digital HERs in Rhode Island which allowed the Company to quickly gather updated information on customer's homes and provide personalized program recommendations. In 2021, multifamily customers were targeted and responses provided additional learnings about the size of the multi--unit dwellings. The 1-click promotion results in a 10% click-to-open rate on the module (compared to avg. 3% eHER module click rate), driving energy efficiency program awareness, and establishing a pool of self-identified MF customers in 5+ units for future targeted marketing. The new 1-click promotion modules will continue in 2022. Areas of interest include collecting information on customers who cool their homes with a central air conditioning unit to promote purchase of Smart thermostats and Connected Solutions.
Rationale for Changes	The goal of collecting additional insights on the customer's home is to provide meaningful, specific promotions and energy savings tips that resonate with customer.
Proposed Upcoming Evaluations	None are planned for 2022 as the program recently completed an impact evaluation in 2020.

Notes	

Home Energy Reports – Electric Program Goals, Metrics, Budgets, Participation for 2022

Fuel	Lifetime MWh (Electric)	Annual MWh (Electric)	Annual Passive Demand Reduction kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget ($000)	Participation
Electric	26,852	26,852	3,692	91,619	2,638	323,248

Home Energy Reports – Gas Program Goals, Metrics, Budgets, Participation for 2022

	Lifetime MMBtu (Gas)	Annual MMBtu (Gas)	Budget ($000)	Participation
Gas	93,548	93,548	442	152,324

7. Residential Consumer Products (Electric)

Eligibility Criteria	Residential Consumer Products serves all residential customers by offering incentives on electronics, ENERGY STAR® consumer appliances, and other high use energy saving devices.
Offerings	Residential Consumer Products incorporates both the federal Environmental Protection Agency (EPA) ENERGY STAR and Department of Energy (DOE) categories of consumer appliances, select building products, and some energy saving items not included by the federal agencies. The largest savings elements of the Consumer Products program come from recycling older refrigerators and freezers and the sale of new advanced power strips that assist in removing the standby power load from devices that are plugged into wall sockets. In 2022 the program will also support dehumidifiers, dehumidifier recycling, dryers, refrigerator and freezer recycling, room air cleaners, room air conditioners, efficient shower heads, pool pumps, and low-emissivity storm windows. Consumers can purchase products at a local retailer, online through any online retailer as long as the product meets product specifications and there is a receipt, or at the National Grid marketplace (ngrid.com/shop).
Implementation and Delivery	There is a Lead Vendor for this program that works with retailers, so they are knowledgeable about the products and ensure proper signage within the stores. The Lead Vendor also jointly provides staff at customer outreach events at retailer locations. The program supports a combination of upstream and midstream incentives as well as post-purchase consumer incentives. The upstream and midstream incentives encourage retailers and manufacturers to support ENERGY STAR with increased production and availability of products. Consumer incentives are designed to bring efficient product costs in line with less efficient equipment, thereby encouraging the adoption of the more efficient item. A rebate processing vendor verifies and processes post-consumer incentives which can be submitted electronically or by traditional mail. This vendor also processes upstream and midstream incentives.
Customer Feedback	Much of the customer feedback for this program comes from our Lead Vendor, as they work with retailers and staff customer educational events at the retail location and through the pop-ups. Lead Vendors report general customer interest in learning which products have incentives.

Changes for 2022	The Company will **assess the cost effectiveness of joining the ENERGY STAR Retail Products Platform (ESRPP) in 2022 and join if cost effective**. ESRPP is a midstream initiative of energy efficiency program sponsors, retailers, and other key ENERGY STAR program partners and stakeholders. ESRPP aims to transform markets by streamlining and harmonizing energy efficiency programs with retailers, making them less complex and more cost-effective. The program reviewed the ESRPP in 2018, at which time there were limited products yielding savings opportunities for RI, with the cost of data reporting exceeding the benefits. The minimum cost of entry was greater than possible savings. Since then, more products have been added to the ESRPP, which may improve the savings and economics of this offering. Currently assessing the most efficient appliances support by RPP which include clothes washers, clothes dryers, refrigerators, and room air conditioners. Relatedly, the recent Market Potential Study identified products such as clothes washers and refrigerators, which are not currently offered by the program. These products were removed from the program in prior years, as high free ridership values meant they were not cost effective. The ESRPP offers an opportunity to reduce costs from a traditional downstream approach and perhaps once again include these offers in the program.
Rationale for Changes	**ESRPP:** The ESRPP would allow the program to include more products within the program portfolio, provide incentives to more customers, potentially allow the program to reduce incentive costs, and increase savings, thus exploration of joining the platform is warranted.
Proposed Upcoming Evaluations	No planned evaluations for 2022.
Notes	

Residential Consumer Products – Electric Program Goals, Metrics, Budgets, Participation for 2022

Fuel	Lifetime MWh (Electric)	Annual MWh (Electric)	Annual Passive Demand Reduction kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget ($000)	Participation
Electric	40,877	6,285	1,063	143,198	2,864	34,692

8. Residential High-Efficiency Heating, Cooling, and Hot Water (ENERGY STAR® HVAC) (Electric and Gas)

Eligibility Criteria	Residential High-Efficiency Heating, Cooling, Ventilation and Hot Water (ENERGY STAR® HVAC) serves all residential customers by offering incentives on high-efficiency equipment and equipment maintenance. Energy efficient equipment must be installed by a licensed heating or cooling contractor or plumber.

Offerings	The High-Efficiency Heating, Cooling, Ventilation and Hot Water Programs (HVAC Programs) promote and incentivize the installation of high efficiency electric and gas equipment through:
	• Customer rebates on energy efficient equipment
	  ○ Boilers
	  ○ Combined condensing boilers with on-demand water heating unit
	  ○ Furnaces
	  ○ Hot water heaters
	  ○ Heat recovery ventilators
	  ○ Air source heat pumps (space and water heating)
	  ○ Air Conditioners
	  ○ Smart thermostats
	  ▪ Ability to enroll in the Demand Response program for additional energy savings
	• Quality Installation Verification
	• Contractor training
	• Contractor incentives
	• Upstream incentives (discount taken at the distributor level)
	• Heat Loan Financing
	Customers who complete a Home Energy Assessment through the Energy*Wise* Program can apply for 0% Heat Loan financing for qualified high-efficiency space heating and cooling and hot water equipment upgrades.
	The HVAC Electric and Gas Program is cross-promoted through the Energy*Wise* Home Energy Assessment, Multifamily, Residential New Construction, Community-Based Initiative and Home Energy Reports Programs. Training elements and best practices of the Program are also provided to the Income Eligible Services Program to maintain consistency in

	contractor skills for accurate sizing, design, installation and performance verification of the high efficiency HVAC systems.
Implementation and Delivery	The program is administered by a Lead Vendor that is responsible for contractor training, maintaining distributor relationships, tracking data, providing content for marketing and documenting monthly, quarterly and annual energy savings. The Lead Vendor works closely with the Company to deliver the HVAC Program and provide strategic insight for program improvements. Contractor training and education is a primary component of the program to ensure accurate sizing, design, installation and performance verification of heating, cooling, and hot water equipment and results in energy savings and customer satisfaction. The Lead Vendor provides regular communication and in-store time with distributors to provide training and information on the equipment and gain feedback on customer interactions. The Lead Vendor also ensures distributors have proper promotions and marketing signage within the distribution stores. The Company and Lead Vendor work with manufacturers to develop special offers, or "flash sales", to further incentivize customers to participate in the Program to gain the benefit of the energy savings. Product channels for ease of customer use and for product adoption: • Energy*Wise* single family or multifamily Home Energy Assessment Program; • HVAC contractors during routine maintenance service, emergency service, or contractors' marketing communications • Residential New Construction/Major Renovation energy advisors during project design consultation. • Upstream and midstream incentives • Comprehensive National Grid Energy Efficiency marketing channels including emails, Home Energy Reports, bill inserts and radio and media advertisements. • RI Online Marketplace https://ri.home.marketplace.nationalgridus.com offers customers the ability to purchase instant discount rebates on energy efficient equipment. • The program supports a combination of upstream and midstream incentives as well as post-purchase consumer incentives. The

	upstream and midstream incentives encourage retailers and manufacturers to support ENERGY STAR products with increased production and availability of products. Consumer incentives are designed to bring efficient product costs in line with less efficient equipment, thereby encouraging the adoption of the more efficient item. • Implement a customer optimization strategy to identify electric resistance heated homes where air source heat pumps would be an ideal solution. A rebate processing vendor verifies and processes post-consumer incentives which can be submitted electronically or by traditional mail. This vendor also processes upstream and midstream incentives.
Customer Feedback	The Company's HVAC quality assurance (QA)/quality control (QC) staff meet with every customer when they perform an onsite inspection and ask them for feedback or questions. Staff often have extended discussions with customers about their new system and how to best operate and maintain it for optimal performance. The QA/QC staff also frequently meet with HVAC service technicians and installation crews on project sites. The purposes of these visits are to perform QA/QC inspections, test the equipment and installation, capture customer feedback, and provide additional 1:1 training. The QA/QC staff frequently meet with HVAC distributors at their distribution centers to share new program information and provide feedback from contractors, customers, and the utility program administrators. Finally, these same staff lead larger HVAC contractor trainings and annual contractor meetings where the lessons learned from field visits are shared. The program's central focus is on these frequent direct interactions with customers, contractors, and distributors to obtain feedback and share lessons learned from the field, while mentoring and training HVAC service providers.
Changes for 2022	In both the electric and gas HVAC Programs, the heat loan has been added to the Program budget. In the Gas HVAC Program, the lower efficiency boiler and combo condensing measures were removed to increase participation in the higher efficiency boiler and combo condensing measures. The Electric HVAC Program and the Residential New Construction/Major Renovations Program will work closely together to develop and implement

	an HVAC contractor training for the design and installation of heating/cooling/ventilation systems in projects striving to meet Zero Net Energy and Passive House. • HVAC Contractors will be listed on the Program's webpage as having completed the training and/or for the completing Zero Net Energy and Passive House projects.
Rationale for Changes	In both the electric and gas HVAC Programs, the heat loan has been added to the Program budget. Historically this budget was in the Energy *Wise* Program, however, to provide reflective budgets for the respective programs, the heat loan budget was allocated across the Programs that utilize the incentive. Removal of the lower tier Boilers and Combination Boilers to encourage customers to upgrade to the higher efficiency equipment. The HVAC Program will coordinate on strategic communication and technical support to assist HVAC contractors engage with Zero Net Energy and Passive House projects to ensure the mechanical system is ideally designed and installed to meet the very low energy requirements of the homes. Consideration of requirements for contractors to participate in Zero Net Energy and Passive House training or successful completion of a project to be listed as a Zero Net Energy and Passive House participating HVAC contractor.
Proposed Upcoming Evaluations	RI-21-RG-GasHPDemo – Gas Heat Pump Demonstration Evaluation. This study will assess the savings potential for a possible new measure offering, gas heat pumps. The savings will be used to determine if the measure is cost effective. Furthermore, the study will review and determine if this technology is market ready and should be considered as a measure to be included as a full program offering. Some key questions will be how efficient these units work at different temperatures, if they perform close to their rated efficiency, and whether they can be a home's sole heating source.
Notes	

High-Efficiency Heating, Cooling and Hot Water – Electric Program Goals, Metrics, Budgets, Participation for 2022

Fuel	Lifetime MWh (Electric)	Annual MWh (Electric)	Annual Passive Demand Reduction kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget ($000)	Participation
Electric	64,797	3,915	205	290,677	4,227	5,982

High-Efficiency Heating, Cooling and Hot Water – Gas Program Goals, Metrics, Budgets, Participation for 2022

	Lifetime MMBtu (Gas)	Annual MMBtu (Gas)	Budget ($000)	Participation
Gas	470,156	28,671	3,975	3,218

9. Residential ConnectedSolutions

Eligibility Criteria	ConnectedSolutions is National Grid's active demand reduction program that focuses on electric demand reduction during peak demand periods during the year. Consumers with eligible controllable equipment can enroll to participate in active demand reduction.
Offerings	**Thermostats** The Company has offered a Smart thermostat-based demand response program since the summer of 2016. There are nine different smart thermostat manufacturers supported in the program. This program precools the customers' home before the grid peak and then sets back the thermostat setting during peak periods. This lowers the chance of customers' central air conditioning units running during grid peaks. A customer may opt out of the program or events at any time. Customers receive an initial enrollment incentive and an annual incentive for staying in the program. **Batteries** The Company has offered a battery-enabled demand response program since 2019. There are six different smart inverter manufacturers supported in the program. The Company added two more inverter manufacturers since the summer of 2020. The inverters control the battery systems. This program sets batteries to discharge during grid peaks. Often, this means that power is being exported to the grid during peak times, which reduces the load on the grid. This export is supported in both the Net Metering and RE-Growth programs. Customers may apply for a seven-year, 0% interest Heat Loan for the cost of the battery system. Customers receive no other upfront incentives. Customers are incentivized based on the average performance (kW) of their battery system over the 30 to 60 summer events each year. **Electric Vehicles Through On-Board Telematics** Starting in 2022, the Company will offer an electric vehicle (EV) based demand response program. This program will use the on-board telematics included in most new EV and PHEV (plug-in hybrid electric vehicles) to automatically stop vehicles from charging when the electric grid is at or near its annual peak. These peak events will be called on the same dates and times as the battery-based demand

	response program. Customers will receive an enrollment incentive for joining the program, and an annual incentive for staying in the offering. The purpose of this offering, as with all electric demand response measures, is to cost-effectively reduce peak electric load on the grid. The Company's Off-Peak Charging Rebate Pilot, which pays customers an incentive for charging their vehicles at night, aims to understand customer responsiveness to time-differentiated price signals. The Company's Off-Peak Charging Rebate Pilot is set to end in 2022. The Company will run both programs concurrently in 2022 without negatively effecting either program. Customers in the Off-Peak Charging Rebate Pilot will not be eligible to participate in the EV Demand Response program. The EV Demand Response program will not open for enrollments until 2022, at which point the Off-Peak Charging Rebate Pilot will not be accepting new enrollments. In designing the EV demand response program, the Company applied lessons learned from the Company's Off-Peak Charging Rebate Pilot, including the need to focus incentives and participation on peak days and times, and the need to simplify the incentive structure. **EVSEs** Starting in 2022, the Company will offer an electric vehicle supply equipment (EVSE) based demand response program. This program will control internet connected EVSEs to automatically stop vehicles from charging when the electric grid is at or near its annual peak. These peak events will be called on the same dates and times as the battery-based demand response program. Most EVs and PHEVs more than 3 years old do not have functioning on-board telematics. This is because not all auto manufacturers offered on-board telematics to all models and trim levels, because some manufacturers require customer to subscribe to this service, and because many on-board telematic systems were not upgraded when the cellular network changed from 2G to 4G. To address these vehicle's charging, the company needs to have an EVSE-based demand response program. However, the enrollments and incentives in both the EV on-board telematics option and the EVSE option will be managed by the same DERMS (Distributed Energy Resource Management System) to prevent customers from getting enrollment incentives and both measures and to prevent double counting of savings.

	Solar Inverters Starting in 2021, the Company conducted a demonstration where customers opted into a program which allowed the Company to adjust customer-owned solar inverter settings to reduce energy use (kWh) and peak energy demand (kW) on the grid. The first results from the evaluation of the demonstration shows it to be cost effective. Starting in 2022, the company will run this as a normal measure, not a demonstration. The setting changes causes the solar inverters to absorb or generate reactive power depending on the voltage measured by the solar inverter. This is known as a Volt-VAR curve. This increases the power factor of the grid leading to kWh and kW savings. **Pool Pumps** Starting in 2022, the Company will offer a pool pump-based demand response program. This program will control internet connected pool pumps to automatically stop pumps when the electric grid is at or near its annual peak. These peak events will be called on the same dates and times as the battery-based demand response program. This program will control internet connected pool pumps. Customers will earn an enrollment incentive and an annual incentive for staying in the program.
Implementation and Delivery	**Thermostats** In this BYOD (Bring-Your-Own-Device) program, customers are free to purchase a thermostat from any of the nine supported manufacturers. After purchase, thermostat manufacturers send emails and in-app notifications to customers inviting them to enroll in the ConnectedSolutions program. Enrollments in smart thermostat-based demand response options have historically exceeded expectations. In 2019, the program planned to enroll 2,479 thermostats, but enrolled 3,936. This overachievement was largely the result of a coordinated marketing effort with the largest thermostat vendor, enrolling their existing customers. In 2022, the program plans for an enrollment increase of 42%.

Number of Thermo-stats	Historic Numbers						Proposed Number
	2016	2017	2018	2019	2020	2021	2022
	96	813	1,674	3,936	4,526	5,459 (vs. 6,409 planned)	9,101 (42% increase)

Device	Enrolment Incentive	Annual Incentive	Heat Loan Eligible	Performance Incentive
Thermostats	$25 per thermostat	$20 per thermostat	No	None

Batteries

In this BYOD program, customers are free to purchase an inverter from any of the supported inverter manufacturers and have it installed by the customer's preferred installer. Inverters control the battery systems. Enrollments in the residential battery-enabled demand response program have been lower than expected even though generous incentives are offered in RI for batteries through other programs. For 2022 the Company is expecting a 50% increase in enrollments.

Number of Batteries	Historic Numbers			Proposed Number
	2019	2020	2021	2022
	24	100	199 (vs. 300 planned)	300 (50% increase)

Device	Enrolment Incentive	Annual Incentive	Heat Loan Eligible	Performance Incentive
Batteries	None	None	Yes	$400/kW-year

Electric Vehicles

The EV-based demand response measure will be new in 2022. In this BYOD program, customers will receive emails and/or in-app notifications from their supported automobile manufacturer after the purchase of their EV inviting them to enroll in ConnectedSolutions. The Company's platform currently supports 5 different EV manufacturers, and we expect at least 2 more manufacturers will be added in 2022.

This type of on-board telemetry-based EV control was demonstrated by the Company in the Company's Massachusetts service area in 2021 and was found to be cost effective and popular with customers.

The Company has set the goal of enrolling 250 vehicles into the program in the first year. As with other demand response measures, marketing will be a coordinated effort between the Company and the device manufacturers, in this case auto manufacturers.

Device	Enrolment Incentive	Annual Incentive	Heat Loan Eligible	Performance Incentive
EVs	$50 per EV	$20 per EV	No	None

Electric Vehicle Supply Equipment

The EVSE-based demand response measure will also be new in 2022. In the BYOD program, customer earn an upfront incentive to cover some of the incremental cost of installing an internet connected EVSE instead of a standard EVSE, and customers earn $20 per year for staying in the program. The Company's platform currently supports 3 EVSE manufacturers, and we expect at least one more will be added in 2022.

The Company has set the goal of enrolling 100 EVSEs into the program the first year. Marketing for this program will be mostly through the EVSE manufactures to let existing and potential customers know of the incentives which will help to offset the incremental cost of customers installing an internet connected EVSE instead of a standard EVSE.

Device	Enrolment Incentive	Annual Incentive	Heat Loan Eligible	Performance Incentive
EVSEs	$150 per EVSE	$20 per EVSE	No	None

Solar Inverters

The solar inverter-based demand response measure was a demonstration in 2021 and will be offered as a normal measure for the first time in 2022. In this BYOD program, customers earn and incentive for signing up for the program and for each year they stay in the program. In the 2021 demonstration, only one inverter manufacturer was supported. In 2022, the company plans to add at least one more major inverter manufacturer to the program.

The Company has set the goal of enrolling 540 customers in to the solar inverter program in 2022. Marketing for this program will be mostly through the inverter manufactures and solar installers to let existing and potential customers know about the program.

	Historic Numbers	Proposed Number
Number of Inverters	**2021**	**2022**
	360 (vs. 360 planned)	540 (50% increase)

Device	Enrolment Incentive	Annual Incentive	Heat Loan Eligible	Performance Incentive
Solar Inverters	$25 per utility account	$20 per utility account	No	None

Pool Pumps

The pool pump demand response program will also be new in 2022. In 2021 Guidehouse completed a report showing that pool pumps could cost effectively be added to the Company's demand response programs[13].

In this BYOD program, customers earn and incentive for signing up for the program and for each year they stay in the program. In 2022 only one pool pump

[13] When it is made public, cite the Guidehouse Appliance Study here and give the link to the report on the EEAC website.

<table>
<tr><td></td><td>manufacturer may be supported by the Company's DERMs. However, the Company expects this number to grow in 2023.

The Company has set the goal of enrolling 25 customers in to the pool pump program in 2022. Marketing for this program will be mostly through the pool pump manufacturer to customers who already have a supported internet connected pool pump, and to new customers considering the purchase of a new pool pump. The incentives will help to offset the incremental cost of customers installing an internet connected pool pump instead of a standard pool pump.

<table>
<tr><th>Device</th><th>Enrolment Incentive</th><th>Annual Incentive</th><th>Heat Loan Eligible</th><th>Performance Incentive</th></tr>
<tr><td>Pool Pumps</td><td>$100 per utility account</td><td>$20 per utility account</td><td>No</td><td>None</td></tr>
</table>
</td></tr>
<tr><td>Customer Feedback</td><td>Feedback from customers and vendors is used to continuously improve all of the Company's programs. This is especially important for new measures such as the EV, solar inverter, and pool pump demand response measure.</td></tr>
<tr><td>Changes for 2022</td><td>In 2022, the Company will offer an electric vehicle-based demand response program to demonstrate cost-effective peak load reduction from EVs for the first time in Rhode Island. In 2022 the company will transition the solar inverter demonstration into a normal program. In 2020 the company will launch a pool pump-based demand response program. Additional detail about these new offerings is described in Offerings above.</td></tr>
<tr><td>Rationale for Changes</td><td>Rhode Island is seeing an increase in the adoption of electric vehicles, solar, and pool pumps. These devices can act as actively controlled distributed energy resources to shape the use of electricity to reduce the cost of running the grid for all customers.</td></tr>
<tr><td>Proposed Upcoming Evaluations</td><td>The Company will conduct a third-party evaluation of the pool pump program in 2022, in conjunction with an identical program and evaluation in the Company's Massachusetts service area.</td></tr>
<tr><td>Notes</td><td>The program is planning to achieve demand reductions above the set Targets for Active demand response (i.e. the maximum scenario in the Market Potential Study).</td></tr>
</table>

Residential Connected Solutions – Electric Program Goals, Metrics, Budgets, Participation for 2022

Fuel	Lifetime MWh (Electric)	Annual MWh (Electric)	Annual Active Demand Reduction kW (Electric)	Budget ($000)	Participation
Electric	0	0	7,126	1,802.4	4,178

10. Marketing, Outreach & Education

11.1 Overview

The goals of the Company's marketing efforts are to build awareness of and drive participation in the Company's efficiency offerings and services, while providing a positive customer experience. The Company uses an integrated, multichannel approach featuring consistent messaging and visual design elements (as appropriate) across communications. General awareness tactics (i.e. print ads and radio) as well as digital and direct one-to-one tactics (such as e-mail, online banner ads, social media, and direct mail) generate customer interest and program participation. All ratepayers receive bill inserts and quarterly 'We Connect' printed newsletters and can access www.nationalgridus.com at any time (provided they have internet access). Face-to-face interactions at events provide an opportunity to educate customers at a personal level.

The Company promotes energy education to private and public schools and youth groups through the National Energy Education Development (N.E.E.D) Program. This program provides curriculum materials on www.need.org, as well as training to students and teachers in grades K-12.

11.2 Delivery and 2021 Successes

Familiarity of energy efficiency programs among RI customers remained strong and stable with respect to 2019 levels, per the Company's monthly online survey of a representative sample of National Grid customers. 65.9% of the customers surveyed between April 2019 and June 2019 were "very familiar" or "somewhat familiar" with "energy savings or rebate programs from National Grid that help you with ways to use less gas or electricity." Other response options include "not very familiar," "not at all familiar," and "not sure."

National Grid uses a multichannel marketing approach to generate interest and drive adoption of solutions across the portfolio, as well the use of residential segmentation to enable personalization and optimize a channel strategy based on customers' preferred communication channels. The Company continued to align marketing efforts with residential customer research, customer segmentation,

propensity modeling, media habits research, and behavior data. Due to COVID-19 pandemic, initial marketing plans were adjusted and new campaigns were developed to reflect changes to energy efficiency programs, strategies to engage customers during this time, and customer communications.

New campaign launches included the virtual home energy assessment and contactless fridge recycling pickups. While marketing for point of sale programs paused and then resumed per state reopening guidelines, National Grid continued to help customers save energy and money during these challenging times with enhanced online product sale offers through vendors and the Company's ecommerce Marketplace at www.ngrid.com/shop. Additionally, The National Grid website, www.ngrid.com/save, remained an important resource for information on products and services as well as rebates available to customers. As part of an augmented ongoing communication strategy during the COVID-19 pandemic designed to help customers with their bills, National Grid embedded seasonal energy efficiency tips and videos, which linked to websites to learn more about energy saving programs. A new portfolio level awareness campaign will be launched in the fall of 2020 to support education and value of energy efficiency, along with simple and easy steps customers can take.

Messaging continued to focus on the benefits of energy efficiency products and programs while aligning with overall Company communications and demonstrating an understanding of current customer sentiment and needs based on internal research. Given customer concerns regarding finances, core to our messaging was helping customers save energy and money while spending more time at home and potentially using more energy. Where appropriate, messaging around safety was incorporated into marketing materials given health and safety concerns. Overall message tone was helpful, empathetic, and informative to ensure the Company reflected our role as a trusted advisor who truly cares about customers' needs.

Due to the pandemic, the annual Rhode Island Home Show – a key residential customer event in which National Grid participates and sponsors the Energy Expo – was cancelled and will be re-evaluated for 2022. National Grid will continue to support these efforts in future years and look at new ways to engage RI residential customers safely through online and virtual formats in the current environment.

11. Residential Measures and Incentives

The following tables list the groups of measures offered in the residential programs, their planned quantities and incentives. Each group may be comprised of many measures.

Table 3. Electric Programs

Electric Programs					
Program	**Measure**	**Units**	**Incentive / Unit**	**Total Incentives**	**Shared Costs**
EnergyWise Single Family	Air Sealing Kit - Electric	11	Average Incentive based on measure mix and is applied per participant (see line below)		
	Air Sealing Kit - Oil	26			
	Air Sealing Kit - Others	11			
	Pipe Insulation - Electric	410			
	Pipe Insulation - Oil	3,499			
	Pipe Insulation - Others	120			
	Pre-Wx	629			
	Wx - OIL	1,868			
	Wx Elec - Elec Heat only	219			
	AERATOR - Electric	200			
	AERATOR - Oil	300			
	AERATOR - Others	11			
	Showerhead - Electric	350			
	Showerhead - Oil	550			
	Showerhead - Others	18			
	Programmable thermostat - Electric	500			
	Programmable thermostat - Oil	2,500			
	Programmable thermostat - Other	110			
	Wifi thermostat - Electric	12			
	Wifi thermostat - Oil	140			
	Wifi thermostat - Others	59			
	LED Bulbs	57,600			
	LED Bulbs (EISA Exempt)	38,400			
	LED Bulbs Reflectors				
	LED Indoor Fixture				
	LED Outdoor Fixture				
	Smart Strip	12,724			
	Refrigerator Brush	10,499			
	Participant	12,000	$1,112	$13,338,340	
	Heat Loans			$250,000	
	Program Planning & Administration				$377,011
	Marketing				$392,987
	Sales, Technical Assistance & Training				$1,469,784
	Evaluation & Market Research				$287,841

Electric Programs					
Program	**Measure**	**Units**	**Incentive / Unit**	**Total Incentives**	**Shared Costs**
EnergyWise Multifamily	Custom	32	Average Incentive based on measure mix and is applied per participant (see line below)		
	AIR SEALING ELEC WITH AC	1,400			
	AIR SEALING OIL	10			
	INSULATION ELEC WITH AC	1,800			
	INSULATION OIL	200			
	AERATOR	300			
	AERATOR Oil	50			
	Pipe Wrap DHW Elec	225			
	SHOWERHEAD Elec	200			
	SHOWERHEAD Oil	10			
	TSV Showerhead Elec	65			
	TSV Showerhead Oil	10			
	THERMOSTAT Elec with AC	600			
	THERMOSTAT OIL	20			
	Common Ext LED Bulbs	209			
	Common Ext LED Fixture	92			
	Common Ext Reflector	18			
	Common Int EISA Exempt	8			
	Common Int LED Bulbs	350			
	Common Int LED Fixture	301			
	Common Int Reflector	15			
	Dwelling Ext LED Fixture	18			
	Dwelling Ext Reflector	16			
	Dwelling Int EISA Exempt	241			
	Dwelling Int LED Bulbs	1,000			
	Dwelling Int Reflector	700			
	Smart Strip	1,000			
	Refrig rebate				
	Vending Miser				
	Participant	3600	$712	$2,563,800	
	Heat Loans			$50,000	
	Program Planning & Administration				$92,726
	Marketing				$90,905
	Sales, Technical Assistance & Training				$441,073
	Evaluation & Market Research				$40,988

Electric Programs					
Program	**Measure**	**Units**	**Incentive / Unit**	**Total Incentives**	**Shared Costs**
Residential New Construction	Adaptive Reuse	132	Average Incentive based on measure mix and is applied per participant (see line below)		
	CODES AND STANDARDS	1			
	Renovation Rehab CP	15			
	Renovation Rehab Tier 1 Home	25			
	Renovation Rehab Tier 2 Home	10			
	Renovation Rehab Tier 3 Home	2			
	Tier 4 Home	10			
	CWASHER	120			
	DISHWASH	522			
	SHOWERHEAD	25			
	LED Bulbs	8,833			
	Refrig rebate	602			
	CP Home - Heating	10			
	CP Home - Cooling	10			
	CP Home - Water Heating	10			
	Tier 1 Home - Heating	100			
	Tier 1 Home - Cooling	100			
	Tier 1 Home - Water Heating	100			
	Tier 2 Home - Heating	80			
	Tier 2 Home - Cooling	80			
	Tier 2 Home - Water Heating	80			
	Tier 3 Home - Heating	75			
	Tier 3 Home - Cooling	75			
	Tier 3 Home - Water Heating	75			
	Participants	462	$1,734	$800,884	
	Program Planning & Administration				$79,045
	Marketing				$24,911
	Sales, Technical Assistance & Training				$525,366
	Evaluation & Market Research				$200,140
Residential High-Efficiency Heating, Cooling, and Hot Water (ENERGY STAR® HVAC)	ACQIVES	18	$175	$3,176	
	ACS16SEER13EER	200	$50	$9,983	
	Central Heat Pump	32	$350	$11,088	
	DOWNSIZE	53	$250	$13,310	
	ECM Pumps	7,387	$100	$738,705	
	Elec Res to MSHP	307	$4,000	$1,226,147	
	HP Mini-split QIV	587	$175	$102,699	
	HPQIVES	31	$175	$5,506	
	HPTUNE	13	$175	$2,329	
	HPWH < 55 gallon UEF 2.7	545	$600	$326,700	
	HPWH >=55 gallon UEF 2.0	13	$150	$1,997	
	Mini-Split Heat Pump	1,386	$350	$485,100	
	WiFi Tstat-cool only,Elec	1,597	$75	$119,790	
	WiFi Tstat-heat and cool,Gas	160	$75	$11,979	
	HVAC Financing			$410,000	
	Program Planning & Administration				$85,978
	Marketing				$294,742
	Sales, Technical Assistance & Training				$523,823
	Evaluation & Market Research				$263,536

Electric Programs					
Program	**Measure**	**Units**	**Incentive / Unit**	**Total Incentives**	**Shared Costs**
Residential Consumer Products (ENERGY STAR® Products)	Energy Star Products Thermostatic Shutoff Valve, Elec	21	$11	$231	
	Energy Star Products Thermostatic Shutoff Valve, Oil	5	$11	$55	
	Energy Star Products Thermostatic Shutoff Valve, Other	5	$11	$55	
	Energy Star Products LowFlow Showerhead with TSV, Electric	92	$15	$1,380	
	Energy Star Products LowFlow Showerhead with TSV, Other	26	$15	$390	
	Energy Star Products Room Air Conditioner 10.8	840	$40	$33,600	
	ES Storm Windows	110	$25	$2,750	
	ES Storm Windows Elec heating	110	$25	$2,750	
	ES Storm Windows Others	110	$25	$2,750	
	Energy Star Products Dehumidifier Rebate	2,500	$30	$75,000	
	Energy Star Products Dehumidifier Recycling	473	$30	$14,190	
	Energy Star Products Energy Star Dryer	998	$50	$49,900	
	Energy Star Products Pool Pump variable	525	$500	$262,500	
	Energy Star Products Room Air Cleaners	415	$40	$16,600	
	Energy Star Products Smart Strip	11,813	$10	$118,130	
	Energy Star Products Tier 2 APS	9,188	$35	$321,580	
	Energy Star Products Tier 2 APS OS	7,875	$35	$275,625	
	Energy Star Products Freezer Recycling	341	$95	$32,395	
	Energy Star Products REFRIG RECYCLING	4,400	$95	$418,000	
	Program Planning & Administration	-			$75,919
	Marketing	-			$595,398
	Sales, Technical Assistance & Training	-			$541,988
	Evaluation & Market Research				$23,049
Home Energy Reports	New Mover electric	18,428			
	New movers dual fuel	10,342			
	Optout dual fuel	123,401			
	OptOut electric	171,077			
	Program Planning & Administration	-			$50,636
	Marketing	-			$13,820
	Sales, Technical Assistance & Training	-			$2,551,470
	Evaluation & Market Research	-			$21,626

Electric Programs					
Program	**Measure**	**Units**	**Incentive / Unit**	**Total Incentives**	**Shared Costs**
Income Eligible Single Family	AMPEDUC TLC	3,583	$180	$644,940	
	AMPWx DelFuel	573	$5,000	$2,865,000	
	AMPWx Elec	36	$5,000	$180,000	
	AMPDHWELEC	20	$10	$200	
	AMPDHWGAS	20	$10	$200	
	AMPDHWOIL	20	$10	$200	
	AMPWATERBED	2	$650	$1,300	
	Early Retirement CW Elec DHW & Elec Dryer	107	$700	$74,900	
	Early Retirement CW Elec DHW & Gas Dryer	341	$700	$238,700	
	AMPACREPLACE	1,875	$350	$656,250	
	AMPHEATSYSTEM	427	$5,000	$2,135,000	
	AMPMinisplit Heat Pumps Electric Resistance	48	$15,000	$720,000	
	AMPProgrammable Thermostat, Gas	25	$125	$3,125	
	AMPProgrammable Thermostat, Oil	25	$125	$3,125	
	AMPProgrammable Thermostat, Other	25	$125	$3,125	
	AMPTHERMOSTAT, Electric	25	$125	$3,125	
	AMPLED Bulbs	46,577	$9	$395,905	
	AMPAPREMOV	7	$51	$357	
	AMPDehumidifier Rebate	625	$250	$156,250	
	AMPSmart Strip	4,299	$20	$85,980	
	Early Retirement CW Gas DHW & Elec Dryer	5	$700	$3,500	
	Early Retirement CW Gas DHW & Gas Dryer	229	$700	$160,300	
	Early Retirement CW Oil DHW & Elec Dryer	135	$700	$94,500	
	Early Retirement CW Propane DHW & Elec Dryer	9	$700	$6,300	
	AMPFREEZER	247	$550	$135,850	
	AMPRefrig rebate	1,866	$1,050	$1,959,300	
	Program Planning & Administration				$312,229
	Marketing	-			$142,222
	Sales, Technical Assistance & Training	-			$1,963,760
	Evaluation & Market Research	-			$74,756

Electric Programs					
Program	**Measure**	**Units**	**Incentive / Unit**	**Total Incentives**	**Shared Costs**
Income Eligible Multifamily Retrofit	Participant (NEB)	3,600	Average Incentive based on measure mix and is applied per participant (see line below)		$ -
	Custom	45			$ -
	AIR SEALING ELEC WITH AC	100			$ -
	AIR SEALING OIL	100			$ -
	INSULATION ELEC WITH AC	100			$ -
	INSULATION OIL	100			$ -
	AERATOR Elec	100			$ -
	AERATOR Oil	100			$ -
	SHOWERHEAD Elec	100			$ -
	SHOWERHEAD Oil	100			$ -
	TSV Showerhead Elec	100			$ -
	THERMOSTAT Elec with AC	200			$ -
	THERMOSTAT OIL	50			$ -
	Common Ext LED Bulbs	50			$ -
	Common Ext LED Fixture	50			$ -
	Common Ext Reflector	3			$ -
	Common Int LED Bulbs	50			$ -
	Common Int LED Fixture	700			$ -
	Common Int Reflector	7			$ -
	Dwelling Ext Reflector	7			$ -
	Dwelling Int EISA Exempt	17			$ -
	Dwelling Int LED Bulbs	100			$ -
	Dwelling Int Reflector	7			$ -
	Smart Strip	50			$ -
	Refrig rebate	0			$ -
	Vending Miser	0			$ -
	Participants	3,600	$840	$3,024,000	
	Program Planning & Administration				$105,256
	Marketing				$17,648
	Sales, Technical Assistance & Training				$343,484
	Evaluation & Market Research				$40,242
Residential ConnectedSolutions	Thermostats New	2,692	$45	$121,140	
	Thermostats Existing	6,409	$20	$128,180	
	Battery Daily (number of unit)	300	$2,200	$660,000	
	Solar Inverters	540	$45	$24,300	
	Pool Pumps	25	$120	$3,000	
	EVSE	100	$170	$17,000	
	Program Planning & Administration				$37,628
	Marketing				$11,970
	Sales, Technical Assistance & Training				$368,094
	Evaluation & Market Research				$37,612

Table 4. Natural Gas Programs

Gas Programs					
Program	**Measure**	**Units**	**Incentive / Unit**	**Total Incentives**	**Shared Costs**
EnergyStar® HVAC	BOILER RESET	10	$225	$2,250	
	Boiler90	0	$450	$0	
	Boiler95	475	$1,000	$475,000	
	COMBO CONDENSING	0	$600	$0	
	COMBO CONDENSING 95	1410	$1,200	$1,692,000	
	ENERGY STAR COND WATER HEATER 0.80 UEF	5	$250	$1,250	
	Furnace95ECM	350	$500	$175,000	
	Furnace97ECM	125	$800	$100,000	
	HEAT RECOVERY VENT	10	$500	$5,000	
	ENERGY STAR STORAGE WATER HEATER .64 UEF (med draw)	45	$100	$4,500	
	ENERGY STAR STORAGE WATER HEATER .68 UEF (high draw)	50	$100	$5,000	
	ENERGY STAR ON DEMAND WATER HEATER 0.87 UEF	300	$600	$180,000	
	LOW_FLOW_SHOWERHEAD	325	$7	$2,113	
	TSV	16	$12	$184	
	TSV_SHOWERHEAD	120	$15	$1,800	
	WiFi Thermostat cooling and htg	160	$75	$12,000	
	WiFi Thermostat gas ht only	1800	$75	$135,000	
	Programmable Thermostat	200	$25	$5,000	
	Combo Furnace	20	$700	$14,000	
	Water Heater, Indirect, Gas	187	$400	$74,800	
	Program Planning & Administration				$113,992
	Marketing				$216,134
	Sales, Technical Assistance & Training				$237,314
	Evaluation & Market Research				$90,384
EnergyWise	Aerator	500	Average Incentive based on measure mix and is applied per participant (see line below)		
	Weatherization	2024			
	Air Sealing Kit (Gas)	594			
	Showerhead	500			
	Pipe Wrap	5123			
	THERMOSTAT	1550			
	WiFi THERMOSTAT	261			
	Participants	1,761	$3,997	$7,037,705	
	Program Planning & Administration				$194,666
	Marketing				$73,847
	Sales, Technical Assistance & Training				$1,168,825
	Evaluation & Market Research				$167,300

Gas Programs					
Program	**Measure**	**Units**	**Incentive / Unit**	**Total Incentives**	**Shared Costs**
EnergyWise Multifamily	Air Sealing_MF	3900			
	CUST NONLGT_MF	20			
	Duct Sealing_MF	140			
	Faucet Aerator_MF	500	Average Incentive based on measure mix and is applied per participant (see line below)		
	INSULATION_MF	3600			
	Pipe Wrap (Water Heating)_MF	882			
	Programmable Thermostat_MF	500			
	TSV Showerhead_MF	200			
	WiFi thermostat gas_MF	200			
	Participant_MF	4000	$304	$1,216,000	
	Program Planning & Administration				$47,531
	Marketing				$69,759
	Sales, Technical Assistance & Training				$153,561
	Evaluation & Market Research				$15,140
Home Energy Reports	New movers dual fuel	10342	$0	$0	
	Optout dual fuel	123401	$0	$0	
	Optout gas only	18581	$0	$0	
	Refill				$9,647
	Program Planning & Administration				$20
	Marketing				$429,118
	Sales, Technical Assistance & Training				$3,169
	Evaluation & Market Research				
Residential New Construction	CODES AND STANDARDS	1			
	CP	15			
	CPDHW	15			
	RR CP	9			
	RR CPDHW	9			
	RR Tier 1	10			
	RR Tier 1 DHW	10			
	RR Tier 2	10			
	RR Tier 2 DHW	10			
	RR Tier 3	2			
	RR Tier 3 DHW	2	Average Incentive based on measure mix and is applied per participant (see line below)		
	RR Tier 4	0			
	RR Tier 4 DHW	0			
	SHOWERHEAD	21			
	Tier 1	46			
	Tier 1 DHW	46			
	Tier 2	98			
	Tier 2 DHW	98			
	Tier 3	15			
	Tier 3 DHW	15			
	Tier 4	0			
	Tier 4 DHW	0			
	Adaptive Reuse	83			
	Participants	289	$1,148	$332,161	

	Program Planning & Administration				$34,468
	Marketing				$2,196
	Sales, Technical Assistance & Training				$134,989
	Evaluation & Market Research				$88,836

Gas Programs					
Program	**Measure**	**Units**	**Incentive / Unit**	**Total Incentives**	**Shared Costs**
Income Eligible Single Family	HEATSYSTEM	280	$5,000	$1,400,000	
	WEATHER	704	$5,000	$3,520,300	
	Participants	818	$6,131	$5,016,386	
	Program Planning & Administration				$131,061
	Marketing				$25,934
	Sales, Technical Assistance & Training				$1,165,624
	Evaluation & Market Research				$28,121
Income Eligible Multifamily	Air Sealing_LI	420	Average Incentive based on measure mix and is applied per participant (see line below)		
	BOILER Commercial_LI	65			
	BOILER_LI	30			
	CUST NONLGT_LI	9			
	Faucet Aerator_LI	900			
	Insulatioin_LI	1000			
	Pipe Wrap (Water Heating)_LI	500			
	Programmable Thermostat_LI	300			
	TSV Showerhead_LI	200			
	Participant (NEB)_LI	3150	$786	$2,474,500	
	Program Planning & Administration				$70,834
	Marketing				$10,877
	Sales, Technical Assistance & Training				$362,626
	Evaluation & Market Research				$29,979