

2020 Residential and Income Eligible Energy Efficiency Solutions and Programs

Table of Contents

1. Introduction.....	1
2. EnergyWise Single Family (Electric and Gas)	7
3. Multifamily (Electric and Gas)	11
4. Income Eligible Services (Electric and Gas)	17
5. Residential New Construction (Electric and Gas)	30
6. Home Energy Reports (Electric and Gas).....	36
7. ENERGY STAR® Lighting (Electric).....	38
8. Residential Consumer Products (Electric)	42
9. High-Efficiency Heating, Cooling, and Hot Water (Electric and Gas)	45
10. Residential Connected Solutions.....	49
11. Marketing, Outreach & Education.....	57
a. Overview.....	57
b. Delivery and 2019 Success	57
Residential Measures and Incentives.....	61

1. Introduction

The Company continues to implement its nationally recognized energy efficiency program¹ with a continued focus on developing new services that give customers control of their energy, improve financial well-being, and provide equity for all.

National Grid's Residential Energy Efficiency (EE) portfolio of solutions provides customers with incentives and support for their every-day energy choices. From ensuring customers are assigned the correct rates, to providing energy modeling to improve the design of a new home, to presenting the customer a visual of their energy use, to offering tried and true energy saving products in an online platform to ease the adoption process, the Company continues to evolve its offerings to help customers save energy.

The following sections cover these residential energy solutions, the energy saving goals the Company has set for 2020, and how the Company plans to achieve these goals in an ever-changing energy landscape.

In order to streamline PUC, stakeholder, and reader access to the most pertinent program information in the 2020 annual plan, the Company has adopted the following structure for each of the programs:

Eligibility Criteria	Criteria for participation.
Offerings	Can include training, outreach, technical support, incentives, rebates, quality assurance/quality control
Process	Ways in which the offerings are delivered to customers to help them save energy.
Customer Feedback	Ways in which the Program teams collect feedback from customers and how the feedback informs the Program.
Changes for 2020	New offerings or processes in 2020 vs. 2019.

¹ <https://aceee.org/state-policy/scorecard>

Rationale for Changes	Presentation of what drives the new change including evaluation results, customer feedback, streamlining delivery/costs, innovation, policy, regulatory requirements.
Upcoming Evaluations	Information about when the Program will be evaluated and thus perspective as to when the Program may be affected by changes in savings, cost or process modifications.

Program Name - 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Annual MMBtu Delivered Fuels Carveout ² (Oil, Propane)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane ³)	Budget (\$000)	Participation ⁴
Electric						
Fuel	Annual MMBtu (Gas)			Total Net Lifetime MMBtu (Gas)	Budget (\$000)	Participation
Gas						

The below figures 1 – 8 compare a sector’s energy goals when measured in annual MWh/MMBtu savings vs. lifetime MMBtu savings. These pie charts are meant to highlight two key differences in terms of how a program’s energy savings can be measured. The first key difference is annual vs. lifetime. Figure 1 shows the proportion of how much energy savings the Residential Electric sector programs will achieve in one year, 2020. In contrast, Figure 2 shows the proportion of how much how much energy savings the Residential Electric sector programs will achieve over the programs’ average measure life. The lifetime metric captures the long-term energy savings whereas the annual metric only counts one year. The second key difference is MWh vs. MMBtu in the electric and delivered fuels portfolio. A MWh energy savings metric only measures electric related energy savings achieved. In contrast, a MMBtu energy savings metric measures electric related energy savings, as well as delivered fuels and gas energy savings (which includes carbon

² The Annual MMBtu Delivered Fuels Carveout Goal is only included for programs that have a MMBtu Delivered Fuels Carveout. This includes the following programs: ENERGY STAR® HVAC, EnergyWise Single Family, and Single Family - Income Eligible Services.

³ For a breakdown of program level energy savings goals see Attachment 5, table E6-A and Attachment 6, table G6-A for more details.

⁴ For information on the metric used to measure participation by program, please reference the Main Text, Section 6.xii.

savings). The MMBtu metric provides a more holistic picture of the total energy savings occurring as a result of measures being installed in the electric and delivered fuels portfolio.

Figure 1: 2020 Planned Annual MWh Goals for Residential Electric Sector

2020 Planned Annual MWh Goals for Residential Electric Sector

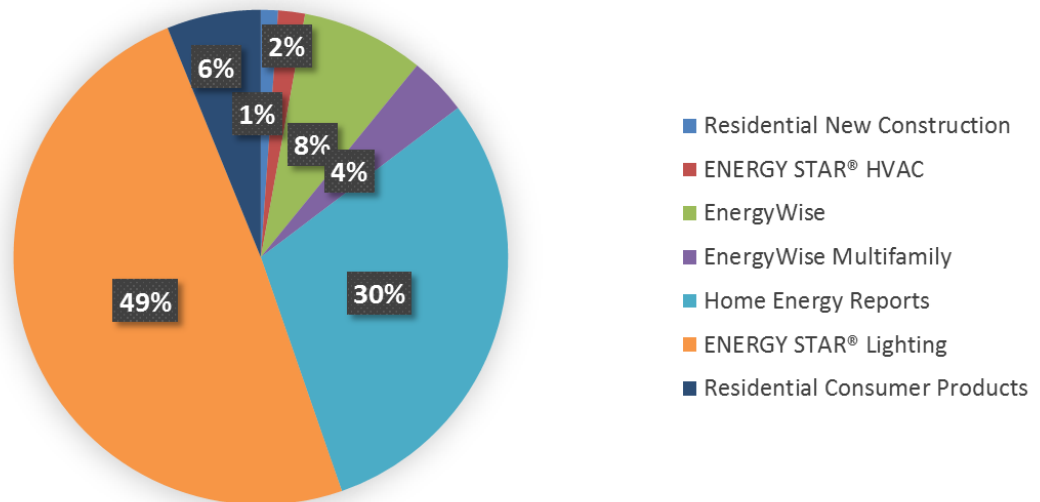


Figure 2: 2020 Planned Lifetime MMBtu Goals for Residential Electric Sector

2020 Planned Lifetime MMBtu Goals for Residential Electric Sector

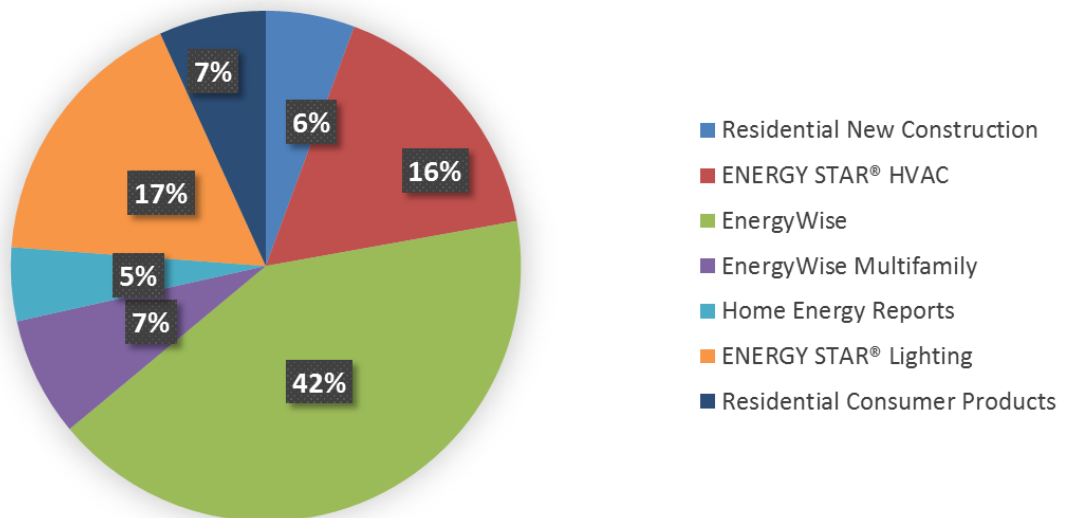


Figure 3: 2020 Planned Annual MMBtu Goals for Residential Gas Sector

2020 Planned Annual MMBtu Goals for Residential Gas Sector

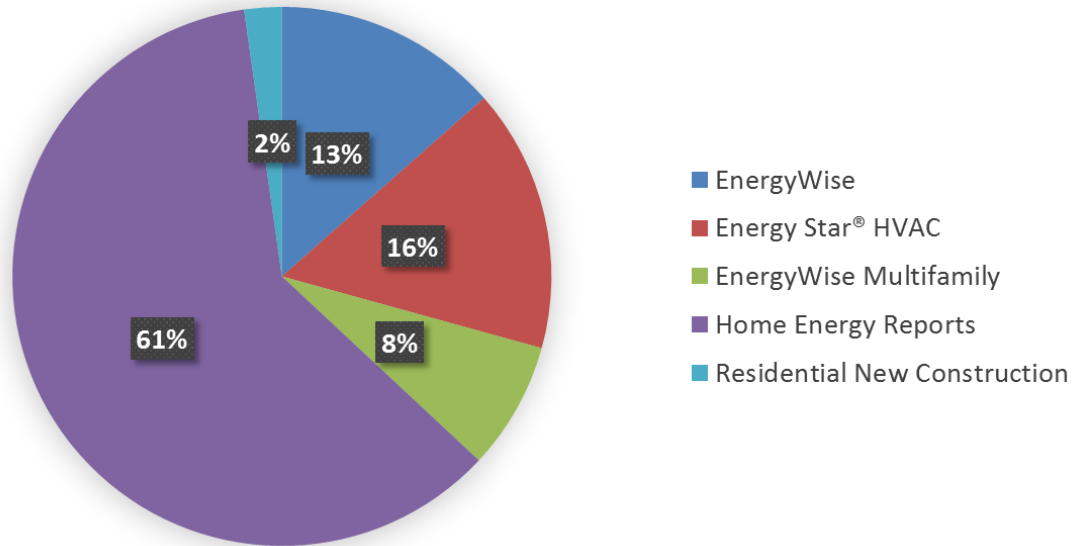


Figure 4: 2020 Planned Lifetime MMBtu Goals for Residential Gas Sector

2020 Planned Lifetime MMBtu Goals for Residential Gas Sector

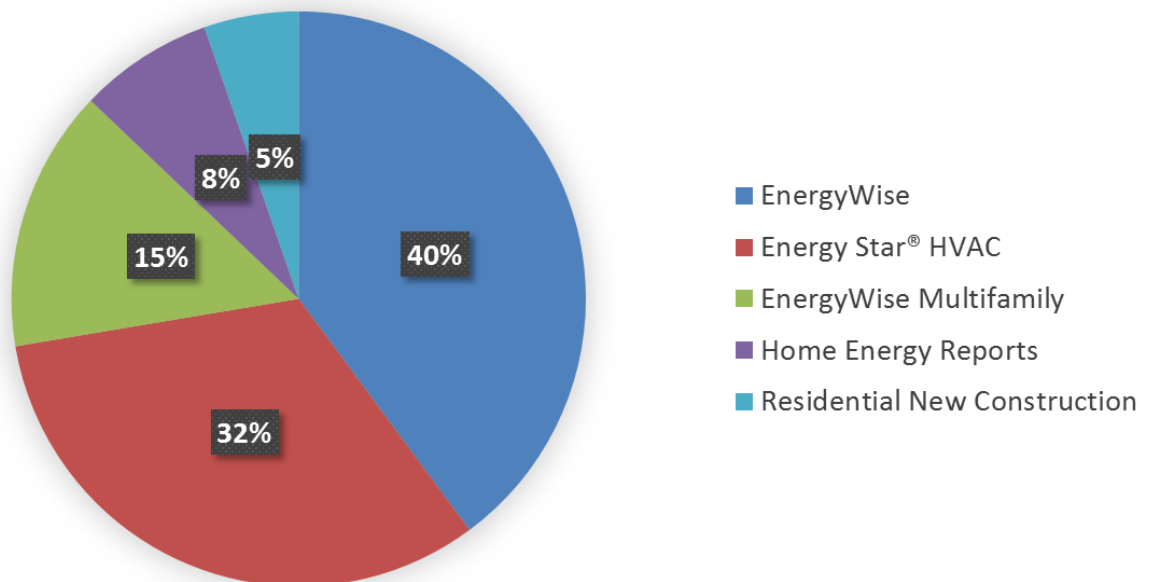


Figure 5: 2020 Planned Annual MWh Goals for Income Eligible Electric Sector

2020 Planned Annual MWh Goals for Income Eligible Electric Sector

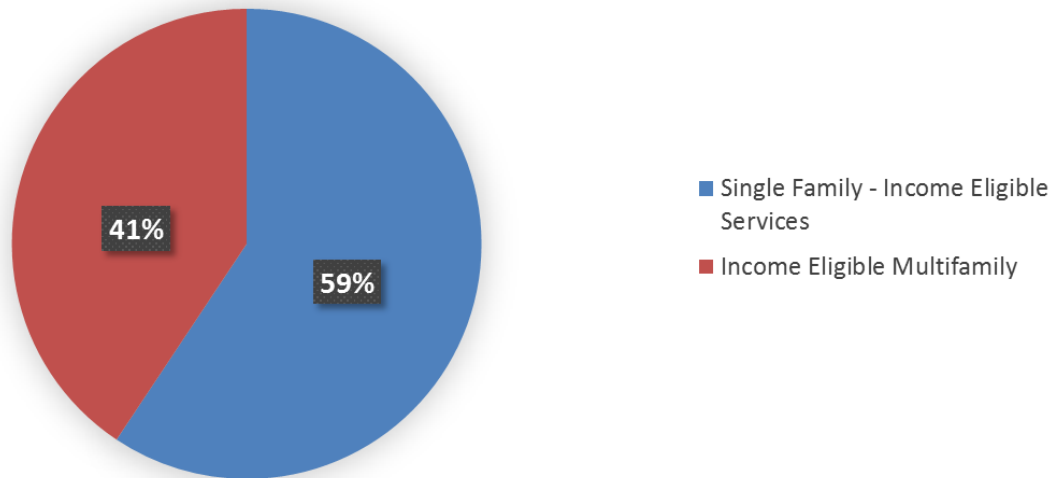


Figure 6: 2020 Planned Lifetime MMBtu Savings for Income Eligible Electric Sector

2020 Planned Lifetime MMBtu Goals for Income Eligible Electric Sector

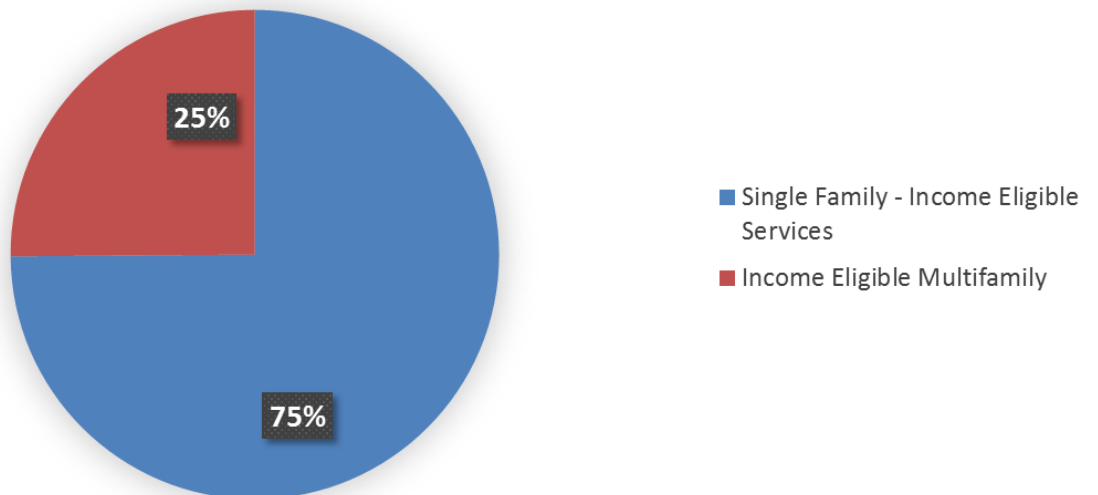


Figure 7: 2020 Planned Annual MMBtu Goals for Income Gas Eligible Sector

2020 Planned Annual MMBtu Goals for Income Eligible Gas Sector

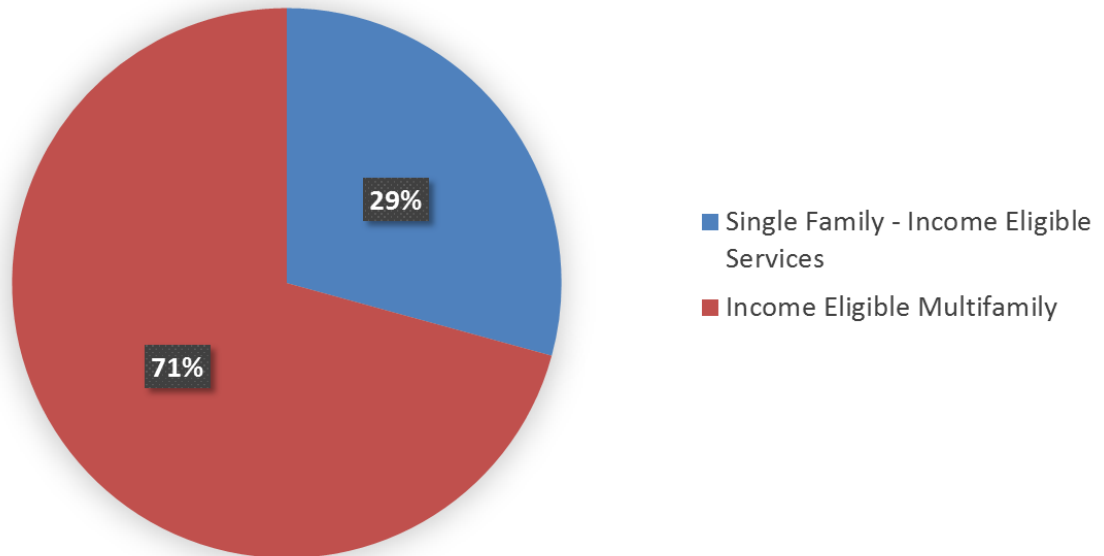
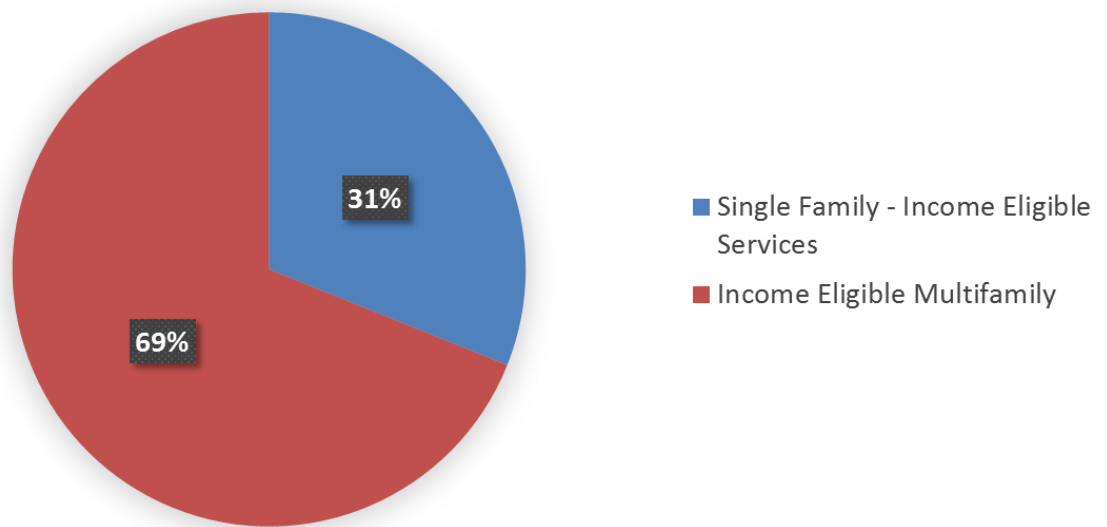


Figure 8: 2020 Planned Lifetime MMBtu Goals for Income Gas Eligible Sector

2020 Planned Lifetime MMBtu Goals for Income Eligible Gas Sector



2. EnergyWise Single Family (Electric and Gas)

Eligibility criteria	EnergyWise is a program that serves market rate customers living in single family residences with 1-4 units.
Offerings	<p>EnergyWise consists of two major components. The first is a no-cost, in-home energy assessment that focuses on educating participants on the home's energy use and addresses opportunities for energy upgrades. During this initial visit, the energy specialist(s) will upgrade lighting, provide advanced power strips, and look for water saving opportunities. A comprehensive, whole-house approach is used looking at major energy systems such as the heating and water heating systems, appliances, lighting, water saving measures, plug loads, and tightness of the building envelope. One of the most cost-efficient ways to improve a building's performance is to improve the shell of the residence and decrease the number of air leaks through air sealing and weatherization.</p> <p>The Energy Action Plan presented at the end of the assessment recommends a path to upgrading the home's weatherization and any available incentives for other proposed energy upgrades. Opportunities for financing the customer share of the project improvements are also provided at this time. If a customer decides to weatherize the home, an independent insulation contractor will be recommended, and the customer will schedule a date for weatherization work.</p> <p>EnergyWise also identifies opportunities for other energy saving programs. Energy Specialists in the home capture age and condition of heating systems, heating fuel type, levels of floors in the home which are all used to identify if homes are candidates for electrification of heating and water heating systems. Likewise, information about whether a home has central air conditioning and the presence of a smart thermostat aligns well with the requirements for Connected Solutions. The energy specialist will also do a quick survey to assess whether the home is a good candidate for solar.</p> <p>EnergyWise supports moderate income customers with the 100% landlord incentive which encourages landlords to weatherize homes by removing any customer costs. Renters then benefit with lower energy</p>

	<p>bills and a more comfortable home. Homeowners with less than perfect credit scores can take advantage of the lender of last resort that makes 0% Heat Loans available to customers with less than perfect credit scores.</p>
Process	<p>A customer begins the process for a home energy assessment by either calling, emailing, or mailing an expression of interest for a home energy assessment and the initial visit will be scheduled. The home energy assessment generally takes 2-3 hours with an energy specialist(s) going through the home with the customer, so they can learn about how the home is currently operating and understand the areas where upgrades are recommended. At the completion of the assessment, participants can decide whether to take action on recommended energy upgrades. If the customer proceeds with weatherization, another visit will be scheduled for the 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.</p> <p>Prior to the actual weatherization day, communication occurs with the customer to ensure their home is prepared for the activity. Most importantly, the insulation contractors will need access to the attic, basement and exterior walls with all personal items removed from those areas. An adult is required to be at home during the work in case questions arise about specific work. Before the job is completed, there is 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.</p>
Customer feedback	<p>Customer satisfaction surveys are sent to customers both after initial assessments and subsequent weatherization work and both programs show respondents ranking satisfaction at or above 97% out of 100%. In 2019 there was public feedback that wait times for an audit was considered long. Immediate actions were taken to hire more energy specialists to reduce the wait time and in the interim communication was set up to let customer know they were still on the list to receive a home</p>

	<p>energy assessment while also receiving other energy saving tips. Customer are generally pleased with the upgrades provided during the assessment and impressed with the professionalism and care taken by the insulation contractors.</p>
Changes for 2020	<p>In 2020 National Grid is planning to serve 11,000 participants in the program, the largest planned number in the program's history. In 2019, the program has seen a decrease in per home electric savings due to a decrease in available lighting sockets that can be upgraded. Lighting transformation will continue to decrease the electric savings available through the home and in anticipation of this opportunity disappearing, this program has strategically increased participation to capture available potential. EnergyWise is still seeing a high percentage of customers moving from the assessment to weatherization. Through June of 2019, over 40% of customers that received an assessment had proceeded to weatherize their homes. This movement from assessment to weatherization is a primary goal of the program to ensure that the benefits of a properly weatherized home continues to provide energy and health benefits for decades into the future.</p> <p>EnergyWise will continue to work as a source of energy information for other energy saving programs. For example, energy specialists can verify the presence of central air conditioning and Smart thermostats, two criteria that are needed for Connected Solutions participation. Also, homes meeting optimal building design and heating fuel type for the electrification of the heating and water heating systems are provided information about enhanced incentives and automatically referred to the HVAC program for follow up.</p> <p>New program elements that began in 2019 will also continue in 2020 until they can be evaluated. These offerings include an enhanced landlord incentive (100% incentive), optimizing the customer contact center so that qualified customers can sign up for a home energy assessment, and testing airborne duct sealing. The Company will also support building asset labeling by investigating opportunities for creating a residential energy usage score based on software solutions that combine publicly available data with Company information. The online assessment, which</p>

	is anticipated to be deployed in Q3 of 2019, will continue in 2020 and will be an instrumental aid in understanding specific household attributes. In 2020, the program anticipates offering online assessment scheduling and will determine whether an assessment of smart plugs could yield additional energy savings.
Rationale for proposed changes	<p>The increased target participation allows the Company to capture lighting savings while still available but also provides actual insight into a home's energy operations. Energy information is then used to provide the customer with additional follow on services that increase homeowner's comfort while assisting the state achieve greenhouse gas goals. The Company will continue to monitor that an increased number of assessments align with desired weatherization outcomes.</p> <p>Program elements that began in 2019 will continue until evaluated or until there is enough data to determine overall impact to the program.</p>
Upcoming evaluations	Both a process and impact evaluation are planned in 2020 for the EnergyWise program. Prior year tests of the Department of Energy Home Energy Score and 100% landlord incentive will also be assessed.

EnergyWise Single Family - 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Annual MMBtu Delivered Fuels (Oil, Propane)	Total Lifetime MMBtu (Electric Gas, Oil, Propane)	Net Budget (\$000)	Participation
Electric	6,210	985	24,362	711,614	\$15,791.9	11,000
Fuel	Annual MMBtu (Gas)			Total Lifetime MMBtu (Gas)	Net Budget (\$000)	Participation
Gas	25,621			608,029	\$8,127.6	2,050

3. Multifamily (Electric and Gas)

Eligibility criteria	<p>Eligible Multifamily program participants are defined as the following:⁵</p> <ul style="list-style-type: none">• Buildings with 5 or more dwelling units• Properties consisting of four or more 1-4 dwelling buildings that meet both of the following requirements:<ul style="list-style-type: none">○ Are within a reasonable geographical distance⁶ from each other, or to a 5+ unit building, and○ Are owned by the same individual or firm. <p>Both market-rate and income-eligible multifamily properties are subject to the above-outlined multifamily eligibility requirements for coordinated services. For the income-eligible properties, co-payments for energy efficiency services and measures are waived.</p> <p>The income-eligible multifamily sector is defined by properties that meet one of the following criteria:</p> <ul style="list-style-type: none">• Owned by public housing authorities or community development corporations
----------------------	---

⁵ Stand-alone 1-4 unit buildings that do not meet these requirements are considered “single-family” and are served traditionally through *EnergyWise* Single Family or Income Eligible Services Single Family programs, as appropriate.

⁶ “Reasonable geographical distance” is determined at the discretion of the vendor. The prior program guidelines required buildings to be neighboring each other. This revised guideline will allow the vendor to treat more units for a single owner where those units may be located down the street from each other.

	<ul style="list-style-type: none"> • Receive affordable housing tax credits or any type of low-income funds/subsidies from the state or federal government • 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) <p>Furthermore, 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.⁷</p>
Offerings	<p>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.</p> <p>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.</p>
Process	<p>A customer contacts the EnergyWise Multifamily vendor to express interest in receiving an energy assessment. A “pre-assessment” is done</p>

⁷ For the past four years the vendor has offered a Multifamily Coordinator for RI customers interested in participating in the multifamily program to reduce any confusion and ensure a smooth enrollment process.

	<p>over the phone or in person to determine if the customer is eligible for participation in the program based on the criteria in the section above. An energy assessment is then scheduled with the facility's authorized representative.</p> <p>An energy assessment is completed by an energy specialist to identify ways to conserve electricity, natural gas, or delivered fuels. 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.</p> <p>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. 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.</p>
Customer feedback	<p>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? And 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 2019 is 90.4.</p>
Changes for 2020	<p>Commitment to Examine Program Redesign</p> <p>In 2020 the Company is committed to examining a redesign of the Multifamily program based on research and evidence. Contributing to this will be the results of the Rhode Island Potential Study that will inform the savings goals of the program in the future. In addition, the proposed multifamily impact and process evaluations to be completed in 2020 will also help inform this potential program redesign. The Company will examine the possibility of moving up the completion date of these evaluations in 2020. This data will also help inform a Request for Proposal</p>

	<p>(RFP) for the Rhode Island multifamily program’s vendor for the upcoming three-year plan (2021-2023).</p> <p>Rebalancing energy savings targets, 2019 vs. 2020</p> <p>Recognizing that opportunities for lighting savings identified by the vendor have been declining at a faster pace than anticipated, the Multifamily market rate electric program and the Multifamily Income Eligible electric program have lowered their goals for energy savings attributable to lighting. The Company will continue to pursue all cost-effective lighting savings that remain. To help balance this decline in savings from lighting, the program has increased its energy goals for custom projects. Included within this are increased goals for air source heat pumps (ASHPs). Specifically, increasing the multifamily income eligible goal from 75 ASHPs to 125 ASHPs and the multifamily market rate goal from 0 ASHPs to 50 ASHPs.</p> <p>Examine a tiered incentive approach</p> <p>A tiered incentive approach would encourage building owners and facility managers to include more residential unit owners in multifamily projects. Offering an additional incentive for additional residential units to participate would benefit the program as a whole and help to increase customer participation and energy savings.</p> <p>Providing greater customer choice to the Condominium Market</p> <p>As the program shifts from more lighting offerings which are easier to install, to deeper, more custom measures that are more complex and take a longer period to install, serving certain segments becomes more challenging. One such segment are condominium customers. When working with a condominium association, not all individual condominium owners may wish to participate. Arranging contracts with individual owners can slow down work progress. Therefore, being investigated in 2019, and tentatively planned for 2020 based on results, the multifamily vendor, in addition to providing a turnkey project approach, is also exploring allowing customers to choose their own preferred HVAC contractor. In these instances, the vendor facilitates participation in the</p>
--	---

	<p>multifamily program by allowing customers to select and contract directly with any licensed contractor of their choice. Taking this step would provide customers with greater choice, open energy efficiency project opportunities to more contractors, and may increase participation among townhouse condominium sites.</p> <p>Increased Marketing and Community focus</p> <p>In 2020 the Company will review and assess multifamily marketing efforts to identify how the program can make improvements in its marketing efforts. Included in this will be outreach to Community Development Corporations (CDCs) to see how the Company and its vendor can best work with these organizations to identify additional project sites. The Company will also look at opportunities to expand services to smaller sites such as condominiums. Beyond this the Company will be more holistic in the delivery of the program beyond energy efficiency through efforts such as providing customers with information about community solar opportunities, green leases, electric vehicle programs, and other useful energy information.</p> <p>Optimizing Best Practices</p> <p>The Company will continue its efforts to optimize and apply best practices to the Multifamily program. Specifically, the Company will consider best practices stemming from the Massachusetts Multifamily census study and Massachusetts' Program Administrator's recent program modifications.</p>
Rationale for Changes	<p>In 2018 and 2019 the Multifamily program's electric energy goals have been challenged based on vendor feedback of a more rapid decline in opportunities for lighting savings than was anticipated. Energy savings from LED lighting makes up the majority of the electric energy savings goals for the multifamily programs. In 2018, this led to underperformance of the multifamily market rate electric program (achieving 67% of the annual MWh goal) and the multifamily Income Eligible electric program (achieving 75% of the annual MWh goal). In 2019, early signs indicate that the multifamily Income Eligible electric program will finish the year closer</p>

	<p>to its annual MWh goal, however the market rate electric program is on track to perform below 2018 levels.</p> <p>Given these challenges faced by the program, the Company has proposed the changes for 2020 in the section above.</p>
Upcoming evaluations	<p>In 2020 Impact and Process Evaluations of the EnergyWise Market rate and EnergyWise Income Eligible Multifamily programs will take place. The purpose of the impact evaluations is to verify energy and demand savings estimates for measures offered through the programs. The purpose of the process evaluations is to examine customer participation, vendor participation, and overall program processes. For more information on these evaluations see Attachment 3, 3.2.c. – 3.2.f. The completion of these evaluations will help to inform program design and goal setting for the multifamily programs starting in 2021. These results will help supplement the results of the RI Potential Study due to be completed in early 2020.</p>

Market rate Multifamily – 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget (\$000)	Participation
Electric	2,793	364	125,597	\$2,820.4	4,000
Fuel	Annual MMBtu (Gas)		Total Net Lifetime MMBtu (Gas)	Budget (\$000)	Participation
Gas	14,561		225,079	\$1,512.1	4,000

Income Eligible Multifamily - 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget (\$000)	Participation
Electric	2,392	155	1,119	131,145	\$3,553.7

Fuel	Annual MMBtu (Gas)		Total Net Lifetime MMBtu (Gas)	Budget (\$000)	Partici- pation
Gas	24,413	0	N/A	447,962	\$3,009.5

4. Income Eligible Services (Electric and Gas)

Eligibility criteria	<p>The Income Eligible Services (IES) Program serves the following customers:</p> <ul style="list-style-type: none"> Homeowners and renters who live in a 1 – 4 dwelling unit building that is heated with electricity, natural gas, oil, wood, coal, or propane⁸. Household income equal to, or less than, 60% of Rhode Island's State Median Income Levels which are set each program year⁹ or enrolled in National Grid's fuel discount rate plans, Electric A-60 rate and/or Gas 11, 13 rates¹⁰. Customers enrolled in the Low-Income Home Energy Assistance Program (LIHEAP)¹¹, also known as "fuel assistance". Additional eligibility criteria, including the 50% rule, 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	<p>IES consists of two, no-cost¹², in-home services to increase the comfort in the home and decrease a customer's energy costs.</p>

⁸ 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".

⁹ <http://www.dhs.ri.gov/Programs/LowIncomeGuidelines.php>.

¹⁰ <https://www.nationalgridus.com/RI-Home/Bill-Help/Payment-Assistance-Programs>

¹¹ <https://www.benefits.gov/benefit/1572>

¹² 100% 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.

	<p>Appliance Management Program (AMP) Assessment (~2 hour process):</p> <ul style="list-style-type: none"> • The energy specialist educates the homeowner or tenant about their energy bill; assesses the home and learns about the day-to-day activities that consume energy in the home; discusses ways the customer can save energy and money, educates 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 products 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 appliances (including delivery and installation)¹³. <p>Weatherization and Heating System Assessment (~2 – 3 hours):</p> <ul style="list-style-type: none"> • An industry-certified energy specialist conducts a comprehensive assessment of the building envelope and heating system 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 heating or cooling systems if it is determined to be inefficient or unsafe and eligible for replacement. Applicable to all existing heating/cooling systems: electric, gas, oil and propane.
--	--

¹³ 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.

	<ul style="list-style-type: none"> If home has existing electric resistance, oil or propane heat, the customer will be offered to replace it with energy efficient air source heat pumps (ASHP) that provide heating and cooling.
Process	<p>Program Delivery:</p> <ul style="list-style-type: none"> 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 Program (CAP) Agencies. <ul style="list-style-type: none"> KPI reporting for the CAPs will be instituted in 2020 to improve consistency of Program delivery as well as drive performance/indicate underperformance of the CAPs. KPIs to be considered for 2020 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, the Company's call center. Customer pipeline is created through customers reaching out to the CAPs, Community Expos, marketing campaigns, Consumer Advocate appointments and the National Grid Customer Service Center¹⁴. Coordination of energy efficiency services are through the lead vendor and delivered by the RI CAPS. CAPs provide the full suite of energy efficiency services: <ul style="list-style-type: none"> Income-eligibility verification Customer education Energy assessments Installation of instant savings measures Recommendations for energy savings measures

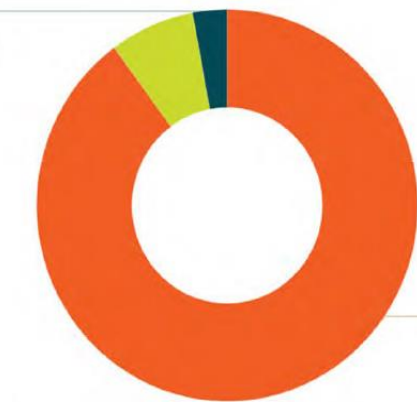
¹⁴ (1-800-322-3223)

	<ul style="list-style-type: none"> ○ Coordination of home performance/HVAC contractors and appliance vendors that install weatherization and heating (space and hot water) measures ○ Quality assurance/quality control (QA/QC) • Collaboration between IES program, the State of Rhode Island Department of Human Services (DHS) Weatherization Assistance Program (WAP)¹⁵ and the Low-Income Home Energy Assistance Program (LIHEAP)¹⁶ creates synergy between the programs which improves outcome of all the programs <ul style="list-style-type: none"> ○ Leveraged Funding: The IES Program benefits from leveraging LIHEAP funds resulting in more customers being served. The amount of funds leveraged is approximately 35% of total customer incentive benefits for weatherization and heating system replacements. The LIHEAP funds also 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 Figures 9 and 10, and Table 1 below for illustrative examples that represent 2012 - 2019 Funding Sources, Allocation of Funding Sources, and Services Provided with funding sources. <ul style="list-style-type: none"> ▪ WAP funding is not leveraged/integrated but WAP provides training and equipment to weatherization Auditors. • 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. • Quarterly engagement of the Company, the lead vendor, CAPs, and DHS to ensure consistent implementation of IES best practices across Rhode Island.
--	--

¹⁵ overseen by the U.S. Department of Energy. <http://www.dhs.ri.gov/Programs/WAPProgramInfo.php>

¹⁶ overseen by the U.S. Department of Health and Human Services. <https://www.benefits.gov/benefit/1572>

	<ul style="list-style-type: none"> On-going customer feedback and communication. <p>Customer Journey:</p> <ul style="list-style-type: none"> 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. The CAP Agency will then 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 2020 the CAPs will begin 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 feedback	<p>In 2019, a Process Evaluation for the Income Eligible Services Program was completed and included a random survey of 150 IES Program participants.</p> <p>"Surveyed participants expressed a high level of satisfaction with their overall IES experience. As seen in Figure 3, 90% of respondents indicated they were satisfied with the program overall, while only 3% reported low satisfaction. The remaining 7% provided a neutral response – meaning they were neither satisfied nor dissatisfied." (Page 16)</p>

	<p style="text-align: center;">Figure 3. Overall Program Satisfaction (Participants)</p> <div style="text-align: center;">  <p>Only ~3% of respondents reported low satisfaction</p> <p>~90% of respondents expressed satisfaction with the program overall</p> <p>● Satisfied ● Neither satisfied nor unsatisfied ● Unsatisfied</p> </div> <p>Through a more general process and to collect timely feedback from customers, following the energy assessment, customers are provided with a pre-stamped survey card. To date in 2019, 98% of customers who responded were satisfied with the IES services, the improvements made to their homes, the reduction in their energy bills, and the professionalism of the CAP employees. (n=128).</p> <p>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 as well as celebrate the success of the collective efforts of the six CAPs.</p>
Changes for 2020	<p>In 2020, the IES Program will focus on streamlining the income eligible program, measuring program success through KPIs, and incorporating the recommendations from the 2019 Process Evaluation (verbatim from the Process Evaluation - recommendations are the main bullet and details are the sub-bullet)¹⁷:</p>

¹⁷ August 20, 2019, Process Evaluation, Income Eligible Services Program, National Grid Rhode Island. Developed by Cadeo, Portland, OR, 97214.

	<ul style="list-style-type: none"> • Develop and implement an expedited assessment approach for IES that ensures the collaboration of HHS. <ul style="list-style-type: none"> ○ Stakeholders’ previous decision to standardize the weatherization assessment approach statewide—and to do so using the most rigorous required approach—was well-intended goal and logical decision. However, requiring SWS for all non-AMP projects, regardless of the funding source, has slowed CAPs ability to serve more customers, required high levels of QA/QC, and generally frustrated IES stakeholders. National Grid should work with stakeholders to determine if an alternative approach can strike a better balance between consistency, rigor, cost, and efficiency. As one measure of National Grid’s success identifying an expedited solution, National Grid should consider tracking the amount of time assessors spend on each time of assessment (AMP, weatherization, and comprehensive). • Work with IES stakeholders to help pilot the Hancock mobile application and provide additional training. <ul style="list-style-type: none"> ○ National Grid should support the piloting of the Hancock mobile application to determine its effectiveness on reducing administrative burden on assessors, as well as support mobile application-specific or additional general Hancock training. <i>(Not a quote from the evaluation: First step will be to determine if Hancock is the correct software for conducting/documenting IES energy assessments.)</i> • Set consistent, data-driven expectations with participants. <ul style="list-style-type: none"> ○ Using available program data, National Grid should work with program stakeholders to determine the appropriate installation timing expectations to set with participants and communicate them consistently to all customers receiving the related measures. • Investigate causes of current longer-than-targeted timeline and explore opportunities to reduce installation timelines by increasing contractor capacity.
--	--

	<ul style="list-style-type: none">○ National Grid should work with stakeholders to identify opportunities, whether through procedural efficiencies or mechanisms that increase contractor capacity (i.e., the number of contractors that CAPs are comfortable working with, as well the number of total jobs they can complete). Doing so may reduce median participant weatherization installation timelines and bring them into alignment with the program’s internal targets.● Implement post-installation survey and follow-up processes.<ul style="list-style-type: none">○ CLEAResult currently administers an internal customer survey to solicit feedback on their assessment. However, the timing and focus of survey does not enable them to identify—and address—concerns related to weatherization or heating systems. We recommend that National Grid work with CLEAResult to either expand the focus and change the timing of the current survey, or to administer a second survey to weatherization and heating system participants after their installations are complete. National Grid should also establish a process for addressing customer concerns identified via the survey.● Increase direct engagement with landlords.<ul style="list-style-type: none">○ To overcome this persistent and significant barrier, National Grid should explore implementing policies that require CAPs to engage directly with landlords on behalf of interested tenants as CAP staff are best positioned to explain IES and successfully enlist their participation. Increasing renter participation will also ensure that renters, who also contribute to IES via the system benefits charge, receive an equitable share of program resources.● Prioritize rebuilding and stabilizing the number of qualified AMP/weatherization and heating assessors.<ul style="list-style-type: none">○ The evaluation team understands that program stakeholders are already taking steps to mitigate recent assessor attrition. We also understand that National Grid has limited visibility into and control over assessor salaries and benefits, which is the purview of the CAPs. However,
--	--

	<p>National Grid’s ability to meet increasing IES goals is directly related to the size and quality of the assessor pool. As a result, National Grid should do whatever it can to promote assessor retention and track the number of assessors, as well as assessor turnover, as indicators of success.</p> <ul style="list-style-type: none"> • Clarify waiver process. <ul style="list-style-type: none"> ○ Through direct communications with CAP managers/assessors and/or revisions to the Operations Manual, clarify the process for approving waivers. • Collect as many of the identified missing data elements as feasible. <ul style="list-style-type: none"> ○ Collecting these data (elements that will help future evaluators better understand the existing conditions within participating homes, which serves as the baseline/counterfactual for determining savings) will help future evaluators better evaluate IES. However, our team recognizes that additional data collection requires assessors to spend additional time in a participant’s home and on paperwork, which this process evaluation found is already an issue. We recommend that National Grid work with IES stakeholders to collect as much of this information as feasible within the larger context of delivering this program. A <p>In addition, in 2020, the IES program will address the following changes:</p> <ul style="list-style-type: none"> • Working with the CAPS on utilizing two-person energy assessment teams to conduct both AMP and Weatherization/Heating System services at the same time to streamline the energy assessment process. • Developing a protocol for offering Smart thermostats to homes with central air conditioning to improve efficiency and operability and align with the possible connection with Connected Solutions. • Workforce Development: Collaborating with the CAPS and DHS to increase the number of qualified AMP/weatherization and
--	---

	<p>heating auditors. The IES auditor training is available through organizations including: RI Department of Labor and Training Workforce Development Services and RI vocational schools.</p> <ul style="list-style-type: none"> • Coordinating with National Grid’s Consumer Advocacy Team to cross-promote the IES Program when customers enroll in the discount rates. • Developing a new, holistic e-mail marketing strategy that leverages personalization to promote Income Eligible Services, displaying the regionally appropriate Community Action Program (CAP) agency based on the customer’s service address. Income Eligible Services will also benefit from personalization’s promotion of non-energy efficiency solutions, such as discount rate enrollments and forgiveness program enrollments. • Outlining the Company’s role with the interplay of benefits between energy efficiency, healthcare (i.e. health inspectors) and renewable energy industries. Programmatic enhancements and partnerships will be pursued with local and national stakeholders if deemed appropriate and or potential conflict of interest.
Rationale for proposed changes	<p>Results from 2019 Process Evaluation clearly outlined opportunities to improve the delivery model for improved performance and stakeholder and customer satisfaction.</p> <p>CAPS would like to maintain excellent energy efficiency services for customers but move away from the stringent and time-consuming DOE requirements.</p>
Upcoming evaluations	None planned for 2020.

Income Eligible Services - 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Annual MMBtu Delivered Fuels (Oil, Propane)	Total Net Lifetime	Budget (\$000)	Participation

				MMBtu (Electric Gas, Oil, Propane)		
Electric	3,492	566	8,580	390,916	\$12,845.7	3,150
Fuel	Annual MMBtu (Gas)			Total Net Lifetime MMBtu (Gas)	Budget (\$000)	Partici- pation
Gas	10,096			201,916	\$5,952.3	902

Figure 9: 2012 - 2019 Funding Sources - Single Family Income Eligible EE Services

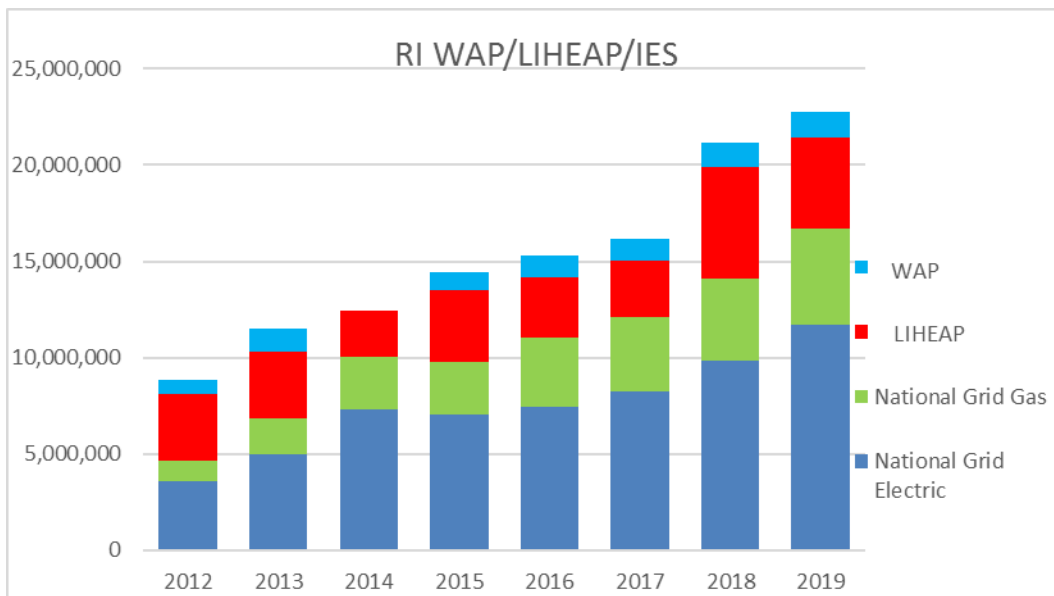


Figure 10: 2012 - 2019 Allocation of Funding Sources - Single Family Income Eligible EE Services

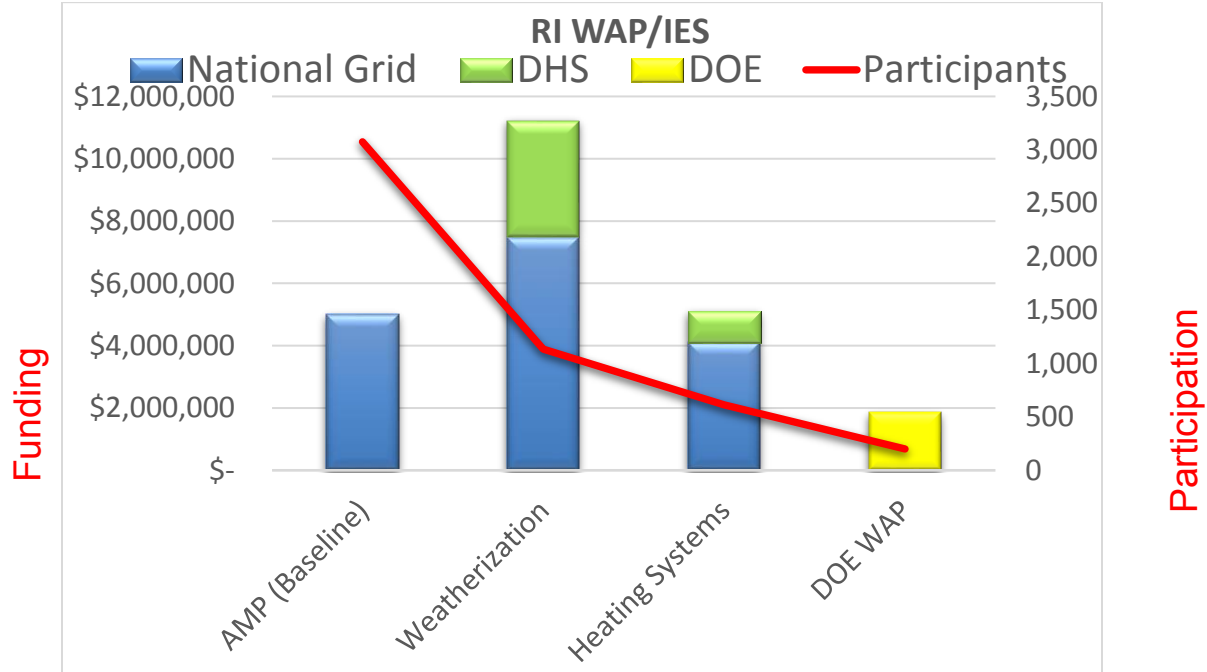


Table 1: Services Provided – IES Program and WAP/LIHEAP

Single-Family Income Eligible Services (IES) Program*	Low-Income Home Energy Assistance Program (LIHEAP)*
<ul style="list-style-type: none"> Conduct whole house Energy Assessment and provide customer education <ul style="list-style-type: none"> Lighting and Appliance (AMP) Assessment Heating and Weatherization Assessment Review utility bills 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 	<ul style="list-style-type: none"> Conduct whole house audit/ energy efficiency evaluation for Heating Systems and Weatherization (not appliances) Install weatherization measures (insulation, air sealing, duct sealing) 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.

<p>money through upgrading appliances and mechanical equipment and weatherizing the home..</p> <ul style="list-style-type: none">• 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.	
---	--

*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 provides technical services, inspection services and project incentives for new construction additions, and major renovations in both one to four unit and 5+ units buildings. The Program also supports major renovation of adaptive re-use projects (e.g. mill building conversions). The RNC program supports both market rate and income eligible housing units.
Offerings	<p>RNC consists of the following major components.</p> <ul style="list-style-type: none"> • <u>Design and Construction Assistance</u>: Working in partnership with the builder and/or owner, the Residential New Construction (RNC) Program offers the following resources: <ul style="list-style-type: none"> a. Energy modeling and design assistance to verify compliance with the RNC requirements and will justify the respective incentives. b. In-field training and inspections to help customers achieve energy efficient homes c. Code compliance and technical trainings d. Home Energy Rating System (HERS) Index e. Optional ENERGY STAR® Homes verification for projects seeking the EPA label • <u>Incentives</u>: <ul style="list-style-type: none"> a. Building envelope performance: Whole-house performance incentives ranging from \$200 to \$4,000 per home. Financial incentives based on the level of the energy efficiency of the building envelope and equipment compared to the 2017 Baseline. See "2020 Residential New Construction Incentive Levels" below with the 2020 Residential New Construction Incentive Levels <ul style="list-style-type: none"> i. Projects with >50 units are eligible for custom incentives. ii. Adaptive Reuse/mill conversion provides a strong opportunity to influence larger projects and support the transformation of the renovation and

rehabilitation market to achieve energy efficient projects			
2020 Residential New Construction Incentive Levels			
Tier Level	2018 % More Energy Efficient Than 2017 Baseline*	2019 % More Energy Efficient Than 2017 Baseline*	2020 % More Energy Efficient Than 2017 Baseline* + Additional Prescriptive Requirements
Tier I	15% - 30%	15-24%	15-24%
Tier II	31% - 44%	25-34%	25-34%
Tier III	45% or more	35-44%	35-44%
Tier IV		45%+	45%+
High Efficiency All-Electric			<ol style="list-style-type: none"> 1. Electric heating, cooling and appliance incentives based on KWH savings over baseline* 2. Air leakage requirement of 3 ACH50 3. Meet minimum efficiency requirements for heating, cooling and hot water systems
<p>* Final 2017 UDRH Inputs for the Rhode Island Residential New Construction Program, Prepared by NMR Group, Inc. and submitted to National Grid Rhode Island.</p> <p>b. Qualifying high efficiency heating, cooling, and hot water equipment.</p>			

	<ul style="list-style-type: none">i. A significant number of projects that are already in the 2019 RNC pipeline for both single family and multifamily incorporate electric heat pump heat and hot water, a trend that we expect to continue to increase in 2020.c. Complimentary ENERGY STAR LED bulbs and WaterSense® showerheads• <u>HERS Training</u>: Training and certifying HERS raters to increase the number of qualified raters based in RI.• <u>Zero Energy</u> – The Zero Energy Pilot that includes the following components will be integrated into the RNC Program in 2020 contingent on cost effectiveness.<ul style="list-style-type: none">a. Zero Energy engagement and awarenessb. Zero Energy workforce development/professional certificationc. Advanced technical support to achieve zero energy performanced. Marketinge. Performance incentives• <u>Code Compliance Enhancement Initiative (CCEI)</u> – includes robust stakeholder engagement and industry group outreach, in-person classroom and hands-on trainings, project-specific technical assistance circuit riding, development and dissemination of documentation/compliance tools, and other services.<ul style="list-style-type: none">a. Delivery Savings listed below are included in the 2020 Goals listed for RNC. Note that these values are the ones established in the 2017 evaluation study and do not incorporate the November 2019 state energy code update: the energy savings potential from improving code compliance increases only slightly under the state’s new code (less than one percent before considering local amendments), so the previously projected 2012 IECC-based savings values are a reasonable, conservative estimate of the savings that will be realized in 2020 from
--	--

	<p>CCEI activities. The new code baseline will be incorporated for the 2021-2023 Plans.</p> <table> <tr> <th>Electric: Energy Savings (Annual MWh)</th><th>Gas: Energy Savings (Annual MMBtu)</th></tr> <tr> <td>248</td><td>1,507</td></tr> </table>	Electric: Energy Savings (Annual MWh)	Gas: Energy Savings (Annual MMBtu)	248	1,507
Electric: Energy Savings (Annual MWh)	Gas: Energy Savings (Annual MMBtu)				
248	1,507				
Process	<p>The RNC project pipeline is developed primarily by networking, outreach, coordination with RI permitting departments, participation in building industry events and referrals from EnergyWise and Rhode Island Housing.</p> <p>A customer/project team begins the process for working with the RNC staff by calling or emailing the RNC program. The project team will meet with the RNC staff to discuss the project design, learn how to modify design or mechanical systems to improve energy efficiency, and to initiate the energy modeling of the project to determine the potential for incentives for the project.</p> <p>Once construction has begun, the RNC staff provides on-site training as needed and conducts an insulation inspection as well as a HERS inspection of the completed project to determine energy efficiency and respective incentives.</p> <p>Once project is complete and has met program requirements (HERs), the performance and equipment incentives are issued.</p> <p>Zero Energy Pilot – A customer will enroll in the RNC Program as outlined above and will work with the RNC team to determine Zero Energy Pilot eligibility. The process for moving the project from concept to completion is the same as the RNC program, with additional trainings, inspections, and required certifications. The Zero Energy Pilot supports the RI Stretch Code as a pathway to Zero Energy.</p> <p>See Attachment 3 - Pilots for more information.</p>				
Customer Feedback	<p>Customer feedback about the program in 2019 focused on the more stringent savings baseline that went into effect in 2018 and resulted in a 30% decrease in heating, cooling and hot water savings per participating</p>				

	<p>home. This change in baseline made it more difficult for project teams to meet program standards and required them to modify their design and construction practices.</p> <p>In response, the Program instituted a new four-tiered incentive structure to keep project teams engaged in the program and maintain participation, minimize the impact on better performing projects and provide achievable steps to facilitate performance improvement.</p> <p>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.</p>								
Changes for 2020	<ul style="list-style-type: none"> • High Efficiency All-Electric Incentive Path: This incentive path will require homes to be all-electric, meet a stringent air leakage tightness standard and install high efficiency heating, cooling and hot water equipment. This incentive path will incentivize per kWh saved to promote reduced energy loads. These homes will be coordinated with the ConnectedSolutions and battery storage programs to encourage additional energy savings. • Air Leakage Requirements were introduced in mid-2019 and applicable to projects after that date. Beginning on January 1, 2020 all projects in the RNC pipeline, and any new project enrollments, will need to meet these more stringent air leakage requirements. This will encourage project teams to advance their project to tighter air leakage standards. <table border="1"> <thead> <tr> <th>RNC Tier Level</th><th># of Air Changes</th></tr> </thead> <tbody> <tr> <td>Tier 1</td><td>5 ACH50</td></tr> <tr> <td>Tier 2</td><td>4 ACH50</td></tr> <tr> <td>Tier 3 & 4</td><td>3 ACH50</td></tr> </tbody> </table>	RNC Tier Level	# of Air Changes	Tier 1	5 ACH50	Tier 2	4 ACH50	Tier 3 & 4	3 ACH50
RNC Tier Level	# of Air Changes								
Tier 1	5 ACH50								
Tier 2	4 ACH50								
Tier 3 & 4	3 ACH50								

	<ul style="list-style-type: none"> Zero Energy – The Zero Energy Pilot components will be integrated into the RNC Program in 2020 contingent on cost effectiveness. Codes and Standards - Program content will be refreshed reflecting the state’s code update
Rationale for proposed changes	<p>The RNC program has helped to drive market transformation as demonstrated by a steady increase in the number of homes that achieve high levels of energy efficiency, and zero energy and passive house projects are no longer just for early adopters.</p> <p>The changes outlined in the “Changes for 2020” section will increase visibility and effectiveness of all electric homes and significantly improving thermal performance – both resulting in further reduction of energy use.</p>
Upcoming evaluations	None planned for 2020. Anticipated for 2021.

Residential New Construction - 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget (\$000)	Participation
Electric	870	74	95,950	\$973.4	668
Fuel	Annual MMBtu (Gas)		Total Net Lifetime MMBtu (Gas)	Budget (\$000)	Participation
Gas	4,270	0	81,136	\$629	316

6. Home Energy Reports (Electric and Gas)

Eligibility criteria	All 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. All customers have access to the online home energy assessment and related insights. A control group and treatment group are necessary for accurate savings and thus, some customers will not receive print or electronic reports.
Offerings	The HER program is a territory-wide energy efficiency program that provides benefits for all Rhode Island residential customers. 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.
Process	<p>The program is administered by a Lead Vendor that 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.</p> <p>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. For customers interested in learning more about energy saving tips and their</p>

	home's energy consumption, they may log into the online portal and use the available tools.
Customer feedback	<p>The Company's Customer Energy Management team has worked with the Customer Contact Center to ensure that customer complaints are addressed. There are several avenues printed on the reports that direct customers how to opt-out of the reports or contact the Company to learn more. In 2019, the Frequently Asked Question (FAQ) component of the report was updated to address customer feedback given through the contact center. Customers also stated they would like a different experience for when they consistently use more energy than their neighbors. The Changes for 2020 address this feedback.</p> <p>Further, in addition to annual Customer Engagement Tracker (CET) that is conducted, a new user feedback module will be used in reports to solicit feedback from the customers on usefulness of these reports to help to test and evaluate the experience that yields the best customer outcome.</p>
Changes for 2020	<p>Target Rank Campaign</p> <p>In addition to Summer and Winter editions rolled out in 2019, Rhode Island will take advantage of the Target Rank edition in 2020. Target rank is a sequence of email reports delivered over six months showing customers their energy use rank compared to 100 of their similar neighbors and set a target rank for the customer to achieve. Each report in the Target Rank program tracks the customer's progress towards reaching this rank and provides personalized tips for how to save more energy. Target Rank reports are designed to encourage consistently high users to lower their energy use by providing an alternative experience and an achievable goal</p> <p>Context Aware Tips and Personalized Savings</p> <p>Customers want to be better educated on ways to save money and energy, and in response, context-aware tips and personalized tip savings estimates will be provided within the electronic and print reports. Context aware tips will be added to the existing powerful, intelligent tip</p>

	targeting algorithm in 2020. Context-aware tips tell customers why they are receiving a tip and thus help drive them to take further action. Additionally, personalized tip savings will be launched in 2020. Personalized tip savings are calculated based on a customer's total energy usage and estimated energy disaggregation to provide more accurate tip savings on a customer-by-customer basis, an improvement to the current territory-wide tip savings estimates.
Rationale for proposed changes	Both updates to the report are in response to customer feedback requesting a more unique experience to their living circumstances. For example, to keep customers encouraged who may consistently find themselves using more energy than their neighbors, the Company proposed the "Target Rank" campaign in order to give the customer an achievable number to reach for and see how they performed against their own historical usage.
Upcoming evaluations	Impact Evaluation

Home Energy Reports - 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget (\$000)	Participation
Electric	23,239	3,195	79,292	\$2,728.0	323,248
Fuel	Annual MMBtu (Gas)		Total Net Lifetime MMBtu (Gas)	Budget (\$000)	Participation
Gas	115,426	0	115,426	\$471.5	152,324

7. ENERGY STAR® Lighting (Electric)

Eligibility criteria	ENERGY STAR Lighting serves all residential customers in Rhode Island. Special areas of concentration are with Food Banks, Schools, and designated hard to reach areas.
----------------------	---

Offerings	<p>ENERGY STAR® Lighting reduces the cost of energy efficient lighting to all residential RI customers. Pricing of efficient lighting is automatically discounted at the retail level to facilitate the consumer transaction. Any ENERGY STAR qualified lighting product can apply for an incentive through this program.</p> <p>The original three-year Energy Efficiency plan had 2020 slated as a transition year where the majority of residential lighting products would be required to meet the Energy Independence and Security Act (EISA) 2007 legislation that granted the Department of Energy (DOE) the authority to improve the efficiency of light products. There was a two-step approach to implement lighting efficiency. The first step was to increase efficiency of general service lamps (GSL) to approximately 25% more efficiency during the 2012 to 2014 period. Step two improved standards for all GSLs to an automatic backstop standard of 45 lumens/Watt by January 2020. In January 2017, DOE published rules that implemented the 45 lumens/Watt backstop and expanded the range of light bulbs included in GSL definition.</p> <p>In early July of 2019, DOE sent its final rule on GSL definition which withdraws seven categories of lightbulbs from the GSL definition. The Office of Management and Budget has up to 90 days to review and release the final rule. The policy update indicates that there is uncertainty in the specific federal ruling for efficient lighting with a definitive ruling unavailable during the 2020 planning timeline.</p> <p>In RI, the <i>Rhode Island 2018 Lighting Sales Data Analysis</i> evaluation completed in 2019 reported the following findings:</p> <ul style="list-style-type: none">• The sales data analysis, as well as the cumulative body of evidence, suggests that the National Grid Rhode Island ENERGY STAR Retail Lighting Program had an important effect on the long-term evolution of the lighting market. Based on evidence in this report, that effect appears to be waning, as non-program areas begin to catch up with program areas.
-----------	--

	<ul style="list-style-type: none"> • Market share of LEDs is highest in reflector and A-Line categories at 81% and 60% respectively. Candelabra and Globe LEDs are at 25% and 53% of market share. • LED sales dominate in lumen (a measurement of brightness) ranges that are most closely associated with 60-Watt and 40-Watt incandescent bulbs. In contrast, lumen ranges that are exempt from EISA, including really low lumen and really high lumen ranges, remained dominated by incandescents. <p>Given the uncertainty on the regulatory level, ENERGY STAR Lighting is proposing a robust ENERGY STAR lighting program in 2020. Even with reduced savings that adjusts lighting attribution for natural market transformation, lighting remains the most cost-effective residential program. It is still an important offering in capturing all cost-effective savings.</p>
Process	<p>ENERGY STAR Lighting products are promoted in retail stores, offered at no cost in RI Food Banks (two bulbs per customer with a pamphlet indicating other income eligible energy efficiency services), at RI schools as a fundraising activity along with an educational energy efficiency orientation, online through the National Grid marketplace at ngrid.com/shop, and through a pop-up retailer that brings lighting sale opportunities to non-traditional retail locations. The Program brings down LED lighting products pricing through a negotiated cooperative promotion (NCP) process. The NCPs require manufacturers and retailers to work together and present proposals for products and quantities that will be sold for either short promotional periods or for the calendar year. Customers pay the final incentivized price and are not required to apply external coupons or rebates. The Lead Vendor organizes the NCPs and conducts retailer support and training through in-store visits, online training, and customer outreach events. A rebate processor manages tracking of sales and incentives to the parties entered in the NCP. A pop-up retailer works with businesses and provides staff for special events where lighting and product sales can be offered. Finally, there is a vendor that manages National Grid's online marketplace where customers receive instant incentives and the convenience of online shopping.</p>

	<p>National Grid will continue to offer short term flash sales of specially priced products to customers throughout the year on the marketplace. In addition to working with the RI Food Banks there is a focus on hard-to-reach areas which include the following criteria:</p> <ul style="list-style-type: none"> • Income Level: 60% - 120% of the state's median income • Primary Language: Non-English • Ethnicity: Non-Caucasian, Ethnic Minorities • Education Level: Below 4-year college degree
Customer feedback	<p>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 locations and through the pop-up retailer. In general, customers are pleased with the quality of lighting produced from LEDs. One initial concern was a desire to purchase lighting with a similar color as incandescent lighting. The pop-up retailer offers both bright white and daylight options at all events they attend, and retailers are now carrying a range of color options.</p>
Changes for 2020	<p>In 2019 ENERGY STAR lighting tested marketing campaigns that promoted short term sales at retail locations through electronic means such as email and online paid search ads. These promotions will continue in 2020 to support local retail partners. The Company will focus on tracking policy changes to residential lighting standards and the market to adapt the ENERGY STAR® lighting program appropriately. The goal is to support the market as needed without a negative impact to market transformation as incentives decline and ultimately are no longer required.</p> <p>Incentives for standard LEDs are reduced in 2020 due to the rate of naturally occurring market adoption in RI.</p>
Rationale for proposed changes	<p>The ENERGY STAR lighting program will pursue untransformed lighting opportunities while still cost effective to do so. The focus in this current year is on keeping costs in line while working to transform sockets that have not adopted efficient lighting.</p>

Upcoming evaluation	Residential lighting market assessment will be conducted in 2020.
---------------------	---

ENERGY STAR® Lighting - 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget (\$000)	Participation
Electric	38,093	6,201	289,960	\$15,375.2	256,082

8. Residential Consumer Products (Electric)

Eligibility criteria	Residential Consumer Products serves all residential customers by offering incentives on electronics, ENERGY STAR® consumer appliances as well as 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 2020 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).

Process	<p>Similar to the ENERGY STAR Lighting program, 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.</p> <p>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.</p>
Customer feedback	<p>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-up retailer. Consumers are generally interested in learning which products have incentives.</p>
Changes for 2020	<p>In 2020, the Company is planning to test instant consumer rebates. Consumers will be able to prequalify for a retailer's in store coupon and have the incentive applied during the sale transaction of select consumer products. The benefit is that post purchase consumer incentives will not be required along with the wait time that results with post purchase processing. The Company will also be continuing the low-e storm windows effort that began in late-2019. Finally, the Online Marketplace (ngrid.com/shop), which was refreshed in 2019, will include modules that assist the consumer in selecting more efficient consumer products.</p>
Rationale for proposed changes	<p>The changes proposed in 2020 will simplify the transaction for customers and allow them quicker access to the product incentives.</p>

Upcoming evaluation	None planned for 2020.
---------------------	------------------------

Residential Consumer Products - 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Total Net Lifetime MMBtu (Electric Gas, Oil, Propane)	Budget (\$000)	Participation
Electric	4,768	714	115,666	\$2,199.1	26,905

9. High-Efficiency Heating, Cooling, and Hot Water (Electric and Gas)

Eligibility criteria	<p>Residential High-Efficiency Heating, Cooling, and Hot Water (Electric and Gas) serves all residential customers by offering incentives on high-efficiency equipment, and equipment maintenance.</p> <p>Energy efficient equipment must be installed by a licensed heating contractor or plumber.</p>
Offerings	<p>The High-Efficiency Heating, Ventilation, Air Conditioning and Hot Water Programs (HVAC Programs) promote and incentivize the installation of high efficiency electric and gas equipment through:</p> <ul style="list-style-type: none"> • Customer rebates on energy efficient equipment <ul style="list-style-type: none"> ○ Boilers ○ Boiler outdoor reset controls ○ Furnaces ○ Heat recovery ventilators ○ Air source heat pumps (space and water heating) ○ Air Conditioners ○ Hot water heaters ○ Smart thermostats <ul style="list-style-type: none"> ▪ Ability to enroll in the DemandResponse program for additional energy savings • Contractor training • Contractor incentives • Upstream incentives (discount taken at the distributor level) <p>Customers who complete a Home Energy Assessment through the EnergyWise Program can apply for 0% Heat Loan financing for qualified high-efficiency space heating and cooling and hot water equipment upgrades.</p> <p>This Program is cross-promoted through the EnergyWise Home Energy Assessment, Residential New Construction, Multifamily, Community and</p>

	Home Energy Reports Programs. Training elements and best practices of the program are also provided to the Income Eligible Services Program.
Process	<p>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.</p> <p>Contractor training and education is a primary component of the program to ensure accurate sizing, design, installation and verification of heating, cooling and hot water equipment to ensure savings and customer satisfaction.</p> <p>Working with distributors ensures that they are knowledgeable about the products and ensure proper signage within the stores.</p> <p>Working with manufacturers presents opportunities to do flash sales if production numbers are low.</p> <p>Product channels for ease of customer use and for product adoption:</p> <ul style="list-style-type: none"> • Customers are informed of the program when they receive their EnergyWise single or multifamily program Home Energy Assessment, through their HVAC contractor, or during consultation with the Residential New Construction energy advisors about project design. In addition, customers receive marketing information through various channels including email, Home Energy Reports, bill inserts, radio and media advertisements. The RI Online Marketplace (https://marketplace.nationalgridus.com) offers customers the ability to purchase energy efficient equipment through National Grid's website. • 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

	<p>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.</p> <p>Rhode Island and the Company continue to advance their focus on electrification and carbon reduction and opportunity for electrification of space and water heating to serve as a primary source for meeting carbon reduction goals. As such there is a tremendous need and opportunity to accelerate the adoption of electrification of heat and hot water systems. The HVAC Program is focusing on contractor training and customer education to gain expertise in the market and understanding of the benefits in order to support the call for rapid adoption. Specific areas that will be addressed in 2020:</p> <p>Electrification of Heat and Hot Water:</p> <ul style="list-style-type: none">• The Company is proposing to increase the number of homes by 110% (85 in 2019 to 180 in 2020) that will be incentivized to displace their existing oil, propane, or electric resistance heat with high efficiency electric heat provided by air source heat pumps. Electrification of heating supports the goals of RI state policy, the Revised Standards and National Grid's Northeast 80 x 50 Pathway.• Continuing to strengthen the strong vendor networks and training capabilities to build a knowledge HVAC contractor workforce.• Develop a customer optimization strategy to identify homes where air source heat pumps would be an ideal solution for displacing oil, propane or electric resistance heat.• Coordination and collaboration among the Company, The Division, RI OER, Oil Heat Institute, Northeast Energy Efficiency Partnerships (NEEP), and other stakeholders will strive to effectively accelerate electrification strategies across RI.• The program will continue to concentrate on the following program elements:<ul style="list-style-type: none">○ Establishing a plan for accelerating electric heat adoption to meet State and utility greenhouse gas goals
--	--

	<ul style="list-style-type: none"> ○ Training contractors on accurate sizing, installation and customer education ○ Educating customer pre-purchase and post-installation ○ Coordinating with National Grid Regulatory Strategy and the RI System Reliability Plan on locational benefits and incentives ○ Supporting the advancement of effective integrated controls ○ Supporting the development of customer-facing tools for choosing heating type ○ Collaborating with stakeholders to accelerate the decarbonization of the residential heating sector by reducing barriers (National Grid EE, Gas Growth and Regulatory programs, RI OER, RI Oil Heat Institute, NEEP and manufacturers). ○ Incorporating high efficiency electric heat and hot water as a metric in the Community challenge. <p>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.</p>
Customer feedback	<p>In 2019, contractors provided feedback from their perspective and on behalf of their customers on the financing process and timing for electrification of heat. With that feedback, the financing process was improved to better support the adoption of the electric heating systems.</p>
Changes for 2020	<p>Online Marketplace</p> <p>In 2019, National Grid launched the refreshed Online Marketplace (www.ngrid.com/shop) as a channel for providing Rhode Island ratepayers an easy way to purchase energy efficient equipment. Products that will be offered for the first time via an on-line tool include:</p> <ul style="list-style-type: none"> • Water heater • Thermostat • Water Savings Equipment • Air Source Heat Pump

	<ul style="list-style-type: none"> Heat Pump Water Heater
Rationale for proposed changes	The Marketplace will provide a more direct channel for customers to quickly access the energy efficient equipment with the incentives already incorporated in the cost, so customer doesn't wait for rebates to be processed.
Upcoming evaluations	

High-Efficiency Heating, Cooling and Hot Water - 2020 Goals, Metrics, Budgets, Participation

Fuel	Annual MWh (Electric)	Annual kW (Electric)	Annual MMBtu Delivered Fuels (Oil, Propane)	Total Lifetime MMBtu (Electric Gas, Oil, Propane)	Net Budget (\$000)	Participation
Electric	1,359	160	6,835	281,678	\$2,783.2	1,832
Fuel	Annual MMBtu (Gas)			Total Lifetime MMBtu (Gas)	Net Budget (\$000)	Participation
Gas	29,994			495,828	\$2,693.1	3,677

10. Residential Connected Solutions

Eligibility criteria	<p>Connected Solutions is National Grid's 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 while all consumers can participate in behavioral demand response.</p> <p>This Plan is being coordinated with the SRP Plan to ensure that the customer offerings are cohesive, and a comprehensive marketing plan is being implemented.</p>
----------------------	--

Offerings	<p data-bbox="428 296 594 327"><u>Thermostats</u></p> <p data-bbox="428 365 1373 575">The Company has been offering a Smart thermostat-based demand response program since the summer of 2016. Originally, this offering was rolled out supporting only a single thermostat manufacturer. Now there are 9 different Smart thermostat manufacturers supported in the program.</p> <p data-bbox="428 617 1373 869">In this program the Company 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.</p> <p data-bbox="428 911 548 942"><u>Batteries</u></p> <p data-bbox="428 980 1373 1316">This is the first year the Company has offered a residential battery-enabled demand response program. The program launched in the early summer of 2019 with three participating battery integrators and now there are four battery integrator options for customers. These battery integrators not only market the program, but they also enable the Company to communicate with the battery behind the meter to discharge during demand response events and retrieve the performance data after events.</p> <p data-bbox="428 1358 1373 1610">In this program, the customers' batteries are set to discharge during peak times, reducing load on the grid. Incentives are paid based on the performance of their batteries during peak events. The performance-based approach incentivizes customers and vendors to design, install, and maintain systems that can maximize their discharge for a 2 to 3-hour duration demand response events.</p> <p data-bbox="428 1652 639 1684"><u>Electric Vehicles</u></p> <p data-bbox="428 1722 1373 1848">The Company proposed an electric vehicle-based DR program for 2019. This program would use the existing telemetry and controls included in most electric vehicles to measure and verify savings from a DR program.</p>
-----------	---

	<p>The Company will carefully design and conduct this program in coordination with stakeholders and the Power Section Transformation Off Peak EV Charging Rebate Pilot evaluation vendor to ensure that the program can be evaluated appropriately and will not interfere the evaluation of Off Peak EV Charging Rebate Pilot currently underway in Rhode Island.</p> <p><u>Behavioral Demand Response</u></p> <p>Starting in the summer of 2018, the Company has sent out emails to all residential and small/medium business customers with an email on file asking them to decrease their electric use on peak times during peak days.</p>																				
Process	<p><u>Thermostats</u></p> <p>Enrollments in the Smart thermostat-based-DR options have historically exceeded expectations. For example, in 2019 the program planned to enroll 2,479 thermostats but ended up enrolling 3,936. This overachievement in 2019 was mostly a result of a large coordinated marketing effort with the largest thermostat vendor enrolling their existing customers. In 2020, the program is planning for a more modest increase of 15%, because we are nearing enrollment saturation with the largest thermostat vendor.</p> <table border="1"> <tr> <th rowspan="3">Number of Thermostats</th><th colspan="4">Historic Numbers</th><th>Proposed Number</th></tr> <tr> <th>2016</th><th>2017</th><th>2018</th><th>2019</th><th>2020</th></tr> <tr> <td>96</td><td>813</td><td>1,674</td><td>3,936 (vs. 2,479 planned)</td><td>4,526 (15% increase)</td></tr> </table> <p><u>Batteries</u></p> <p>Enrollments in the residential battery-enabled DR program have been lower than expected. This is the result of several factors including:</p>					Number of Thermostats	Historic Numbers				Proposed Number	2016	2017	2018	2019	2020	96	813	1,674	3,936 (vs. 2,479 planned)	4,526 (15% increase)
Number of Thermostats	Historic Numbers				Proposed Number																
	2016	2017	2018	2019	2020																
	96	813	1,674	3,936 (vs. 2,479 planned)	4,526 (15% increase)																

	<ul style="list-style-type: none">• Negotiations with battery integrators talking longer than expected, and the program not launching until May of 2019.• The discovery that batteries are not currently compatible with the RE-Growth program, preventing existing RE-Growth customers from installing batteries and participating in Connected Solutions.• An identical program was proposed by the Company in the Massachusetts service territory. Unlike Rhode Island, the Massachusetts regulators decided to limit this effort to a demonstration. The uncertainty of being a demonstration, and whether the program will continue after 2019 or not, has made it more difficult to attract battery integrators into the program. <table><tr><td></td><td>Historic Numbers</td><td>Proposed Number</td></tr><tr><td></td><td>2019</td><td>2020</td></tr><tr><td>Number of Batteries</td><td>24 (vs. 50 planned)</td><td>100 (4.12x increase)</td></tr></table> <p><u>Behavioral DR</u></p> <p>The number of emails sent this year was higher than planned</p> <table><tr><td rowspan="3">Number of emails sent</td><td colspan="2">Historic Numbers</td><td>Proposed Number</td></tr><tr><td>2018</td><td>2019</td><td>2020</td></tr><tr><td>260,639</td><td>286,703 (vs. 286,703 planned)</td><td>??? (??% increase)</td></tr></table>		Historic Numbers	Proposed Number		2019	2020	Number of Batteries	24 (vs. 50 planned)	100 (4.12x increase)	Number of emails sent	Historic Numbers		Proposed Number	2018	2019	2020	260,639	286,703 (vs. 286,703 planned)	??? (??% increase)
	Historic Numbers	Proposed Number																		
	2019	2020																		
Number of Batteries	24 (vs. 50 planned)	100 (4.12x increase)																		
Number of emails sent	Historic Numbers		Proposed Number																	
	2018	2019	2020																	
	260,639	286,703 (vs. 286,703 planned)	??? (??% increase)																	
Customer feedback	<p><u>Thermostats</u></p> <p>The Company has performed evaluations on the thermostat-based demand response programs in 2016, 2017, 2018, and is conducting another evaluation in the Massachusetts service area in 2019. Each of these evaluations collected customer feedback through customer interviews or surveys. This feedback has been used each year to further refine the program rules.</p> <p><u>Batteries</u></p>																			

	<p>The Company is conducting an evaluation of the battery-enabled demand response program this year in Massachusetts. This evaluation will include a survey sent out to participating customers. The information collected from this survey will be used to refine the program rules for next summer.</p> <p><u>Electric Vehicles</u></p> <p>The company has not yet launched the EV-based DR option. However, Connected Solutions is working with several large EV manufacturers to collaboratively create a program that will work for reducing peaks, maintain the relationship of EV manufacturers to their customers, and create a customer friendly program.</p> <p><u>Behavioral Demand Response</u></p> <p>The Company conducted a behavioral-based demand response program in the summer of 2018 and 2019. This included sending both emails to customers and postings on social media. The responses received on social media posts were mixed. Some customer appreciated knowing when the most important time is for saving energy, while other customers were frustrated to be asked to conserve energy citing other concerns such as high rates or winter outages.</p>
Changes for 2020	<p><u>Thermostats</u></p> <p>In 2020, the Company plans to launch new marketing efforts to drive further adoption of Smart thermostat enrollments in to Connected Solutions. The Company plans to offer an instant demand response incentive to customers who purchase their thermostat on the Company's marketplace to further reduce the upfront cost of Smart thermostats.</p> <p><u>Batteries</u></p> <p>In 2020, the Company expects this program to be much more successful. Four battery integrators are already in the program, and the Company expects to expand the number of integrators. The Company is planning on an email marketing campaign to inform both customers who already have solar and customers who do not have solar about the Connected Solutions program. The Company is looking for ways to adjust the</p>

	<p>requirements of the RE Growth program to allow batteries that can participate in Connected Solutions.</p> <p><u>Electric Vehicles</u></p> <p>The Company continues to work with our residential DERMS (Distributed Energy Resource Management System) vendor and automobile manufacturers on this program. Unfortunately, no major automobile manufactures currently have the infrastructure in place to support this program. Two automobile manufacturers are working on infrastructure upgrades now to enable this program launch in 2020.</p> <p><u>Behavioral DR</u></p> <p>The main challenge of the Behavioral DR program has been how to calculate peak reductions that result from peak day email messages. The Company plans to work with a 3rd party consultant in 2019 to explore ways to estimate these savings. Nineteen other utility led behavioral DR programs have been identified from across the country which should provide the data needed to conservatively deem savings in the future.</p> <p><u>Additional Devices</u></p> <p>In 2019 the Company commissioned an evaluation study on the cost effectiveness and DR potential for controlling various devices and appliances found in residences. The results of that study were that the devices with the best cost effectiveness and DR potential are battery storage, thermostats, and electric vehicles. Accordingly, the Company created a new option for battery storage, is in the process of creating a new option for electric vehicles, and increased our investment into thermostat-based demand response. Other technologies, such as pool pumps, show promise if and when DR-ready devices come to the market. The Company will continue to monitor changes in the market for devices that could be incorporated into the DR program cost effectively.</p>
Rationale for	<p><u>Thermostats</u></p>

proposed changes	<p>The proposed changes aim to increase participation in the thermostat-based demand response program.</p> <p><u>Batteries</u></p> <p>The proposed changes aim to give customer and installers more options to participate in the battery-enabled demand response programs and to open the program to RE Growth customers.</p> <p><u>Electric Vehicles</u></p> <p>The proposed changes aim to launch an EV-based demand response program in 2020.</p> <p><u>Behavioral DR</u></p> <p>The proposed changes aim to quantify the benefits of behavioral demand response so that the Company can be sure we are using rate payer funds judiciously and giving this program the correct level of resources.</p>
Upcoming evaluations	<p><u>Thermostats</u></p> <p>After conducting evaluations annually since 2017 for the thermostat-based demand response program, the Company does not foresee the need of another evaluation in 2020.</p> <p><u>Batteries</u></p> <p>Based on the results of the 2019 evaluation of the battery-enable demand response program the Company will assess whether additional evaluation is needed.</p> <p><u>Electric Vehicles</u></p> <p>The EV-based demand response program will be new in 2020 and will probably require an evaluation in the future. The scope of this evaluation will be determined after the program structure has been finalized in the fall of 2019.</p> <p><u>Behavioral DR</u></p>

	<p>The Company is currently conducting a literature review of Behavioral demand response programs to better understand the savings behind behavioral demand response. Depending on the results of this study, further evaluations or studies may be needed in the future.</p>
--	---

11. Marketing, Outreach & Education

a. 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 We Connect printed newsletters that are inserted quarterly with bills and can access the www.nationalgridus.com website at any time (so long as 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.

b. Delivery and 2019 Success

The Company has successfully driven strong residential familiarity levels of energy efficiency in Rhode Island, with year-to-date performance at 65% through August 2019 per the Company's monthly online survey of a representative sample of National Grid's customers. 65% of the customers surveyed between Jan 2019 and Aug 2019 are "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."

In 2019, National Grid launched multichannel product marketing campaigns to drive adoption of solutions across the portfolio. Marketing leveraged a centralized theme and messaging focused on improving a home's well-being and overall wellness. The Company continued to align marketing efforts with residential customer research, customer segmentation, propensity modeling, media habits research, and behavior data.

In 2019, marketing campaigns leveraged new residential segmentation to enable personalization and optimize a channel strategy based on customers' preferred

communication channels. The Company targeted customers with specific solutions based on their needs as well as their general attitudes, energy attitudes, and product interest.

National Grid is a trusted advisor who truly cares about customers' needs. By presenting the Company as a friend through our communications and interactions, we can help drive effective, lasting connections with our customers. The Company has identified customer needs, the core assets National Grid provides to meet those needs, and the customer benefits of those solutions. National Grid's customer database includes information such as service address, fuel type, usage, age, income, household size, education, and past energy efficiency participation. The development of segmentation and understanding of customers' needs and wants was based on conducting over 2,000 online customer interviews with additional focus groups.

The National Grid website, www.ngrid.com/save, continues to serve as a resource for information on products and services as well as rebates available to customers. A new, comprehensive effort provided further support to Contact Center representatives in their communications with existing and new move customers alike. Turnkey marketing templates enabled Contact Center representatives to deploy follow-up letters and e-mails upon the conclusion of calls with customers, describing relevant energy efficiency products and solutions.

An enhanced, centralized online marketplace for Rhode Islanders launched in April 2019 at www.ngrid.com/shop. This online store, hosted by National Grid, offers energy efficient products at instantly discounted prices. It serves as a one-stop-shop for both year-round purchases as well as limited time ecommerce sales. Products include LED light bulbs, advanced power strips, low-flow showerheads, and smart thermostats (products that generally have fewer barriers to self-installation). Three heat pump water heaters are also offered for sale, with an option for customers to upgrade to a professional installation bundle. National Grid recently began the evaluation process for air source heat pumps, which could be packaged similarly to heat pump water heaters on the marketplace.

The marketplace is "Where healthier homes meet happier lives" as these products save customers energy, enhance their comfort, and bring peace of mind. By centralizing all online sales through one comprehensive platform, the Company expects a significant uptick in return visits with customers completing multiple transactions and product purchases.

To facilitate brick and mortar sales, we continue to work with our vendors to execute point of sale marketing for lighting, products, and large heating, water heating, and cooling equipment in retail stores.

In April 2019, National Grid participated in the annual Rhode Island Home Show and sponsored the Energy Expo. Our energy efficiency experts showcased whole-home solutions, from rooftop to basement, to over 25,000 event attendees. At our booth we promoted the Innovation Hub, Zero Net Energy Runway, and no-cost Home Energy Assessment, with more than 270 customers signing up for a Home Energy Assessment while at the Home Show.

Energy Innovation Hub: The Rhode Island Energy Innovation Hub (Hub), located in the southwest corner of the Dunkin' Donuts Center, Providence, RI, is a community engagement destination designed to expand customer education and outreach and enrich understanding of energy efficiency, renewable energy, active demand response programs, electric vehicles, innovation happening in the energy market, storm management and core utility services. The exhibits are designed to encourage customers to take action and sign up for the many services and incentives offered to help reduce energy consumption. Approximately 650 people have toured the Hub year to date in 2019 (through September 11, 2019). The Hub also serves as a convening space for gatherings to discuss, and elevate, energy-related issues.

The Hub is used for energy-related meetings, trainings, tours, events and field trips. The Hub is available on Thursdays for organizations to hold private meetings and events. The Company continues to reach out to organizations that have a role in the RI energy market to encourage them to visit the Hub as well as reserve the space for meetings. Phone calls, e-mails, social media campaigns, and referrals have yielded meetings from organizations and stakeholders of the following varieties:

- State and local government
- Elected Officials
- Non-Profit organizations
- Businesses (owners, developers, tenants)
- Residents
- Energy Thought Leaders
- Universities and Colleges, Technical/Vocational Schools, Schools K – 12

- Youth Organizations
- Trades
- Media
- Employees and Executives
- Economic Development Organizations

By partnering with local colleges and universities, the Company envisions the Hub as a multi-faceted nexus thriving with innovation, excitement and passion. The Company employs local college students to work as interns, some of whom have accepted full-time employment at the Company, and encourages the students to invite faculty and classmates to translate their traditional course work in ways that could benefit the energy market. The Company hopes that by engaging many levels of expertise that the Hub will serve as a platform to bring the topic of energy to everyday studies and elevate the conversation around creating clean energy solutions for the future.

The Company envisions the Hub as a community center which continues to inspire and engage customers face-to-face with new solutions, innovation and the future of energy. With a full complement of vibrant university students, the Hub will continue to partner with the Dunkin Donuts Center, local schools, non-profits and public organizations to create new and innovative ways to bring customers in and help them reduce their energy costs.

The Hub will continue the successful Consumer Advocacy Days, during which income eligible customers meet one-on-one with National Grid Consumer Advocates and discuss bill payment options while learning about ways to save. The Hub outreach will be robust and expansive; programming will be current and topical with a goal to have something for everyone.

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 2. Electric Programs

Electric Programs					
Program	Measure	Units	Incentive / Unit	Total Incentives	Shared Costs
EnergyWise Single Family	AC Timer	-	Average Incentive based on measure mix and is applied per participant (see line below)		
	Aerator - Electric	40			
	Aerator - Oil	10			
	Aerator - Others	10			
	Air Sealing Kit - Oil	25			
	Air Sealing Kit - Electric	10			
	Air Sealing Kit - Others	10			
	LED Bulbs	130,900			
	LED Bulbs (EISA Exempt)	7,700			
	LED Bulbs Reflectors	15,400			
	LED Fixture	1,000			
	LED Outdoor Fixture	10			
	Pre-Wx	537			
	Refrigerator Rebate	25			
	Refrigerator Brush	9,000			
	Showerhead - Electric	24			
	Showerhead - Oil	160			
	Showerhead - Others	15			
	Smart Strip	12,000			
	Programmable Thermostat - Electric	750			
	Programmable Thermostat - Oil	2,500			
	Programmable Thermostat - Other	100			
	LED Torchiere	-			
	Ventilation - Other	1			
	WiFi Thermostat - Electric	10			
	WiFi Thermostat - AC Only	-			
	WiFi Thermostat - Oil	300			
	WiFi Thermostat - Others	50			
	Wx - Oil	1,700			
	Wx Elec - Elec Heat Only	200			
	Pipe Insulation - Electric	350			
	Pipe Insulation - Oil	3,000			
	Pipe Insulation - Others	100			
	Participants	11,000	\$1,127	\$12,401,275	
	Heat Loans			\$1,350,000	
	Program Planning & Administration				\$345,754
	Marketing				\$393,453
	Sales, Technical Assistance & Training				\$1,023,734
	Evaluation & Market Research				\$170,294

EnergyWise Multi Family	Aerator	500	Average Incentive based on measure mix and is applied per participant (see line below)		
	Aerator Oil	100			
	Air Sealing Electric With AC	1,000			
	Air Sealing Oil	50			
	Common Exterior LED Fixture	720			
	Common Exterior Reflector	90			
	Common Interior EISA Exempt	45			
	Common Interior LED Fixture	900			
	Common Interior Reflector	180			
	Dwelling Exterior LED Fixture	45			
	Dwelling Exterior Reflector	90			
	Dwelling Interior EISA Exempt	1,350			
	Dwelling Interior LED Fixture	-			
	Dwelling Interior Reflector	1,800			
	Heating System Retrofit-Boiler	-			
	Heating System Retrofit-Furnace	-			
	Insulation Electric With AC	1,000			
	Insulation Oil	120			
	Pipe Wrap DHW Elec	65			
	Pipe Wrap DHW Oil	-			
	Pipe Wrap Heating Oil	-			
	Refrigerator Rebate	25			
	Showerhead Elec	50			
	Showerhead Oil	80			
	Smart Strip	1,000			
	Thermostat Electric With AC	1,200			
	Thermostat Heat Pump	-			
	Thermostat Oil	20			
	TSV Showerhead Elec	65			
	TSV Showerhead Oil	-			
	Common Exterior LED Bulbs	1,171			
	Common Interior LED Bulbs	3,930			
	Dwelling Interior LED Bulbs	7,200			
	Custom	31			
	Vending Miser	1			
	Participants	4,000	\$535	\$2,140,000	\$79,314 \$43,054 \$405,116 \$103,042
	Heat Loans			\$50,000	
	Program Planning & Administration				
	Marketing				
	Sales, Technical Assistance & Training				
	Evaluation & Market Research				

The Narragansett Electric Company
d/b/a/ National Grid
Docket No. XXXX
Attachment 1
Page 63 of 58

Electric Programs					
Program	Measure	Units	Incentive / Unit	Total Incentives	Shared Costs
Residential New Construction	Codes and Standards	1	Average Incentive based on measure mix and is applied per participant (see line below)		
	CP Home	2			
	Clothes Washer	98			
	Dishwasher	423			
	Fixtures	150			
	LED Bulbs	7,350			
	Renovation Rehab CP	2			
	Refrigerator rebate	488			
	Renovation Rehab Tier 1 Home	12			
	Renovation Rehab Tier 2 Home	9			
	Renovation Rehab Tier 3 Home	8			
	Renovation Rehab Tier 4 Home	1			
	Showerhead	5			
	Tier 1 Home	82			
	Tier 2 Home	56			
	Tier 3 Home	70			
	Tier 4 Home	10			
	Adaptive Reuse	100			
	Participants	668			
	Program Planning & Administration				\$57,900
ENERGY STAR® HVAC	Marketing				\$2,239
	Sales, Technical Assistance & Training				\$325,973
	Evaluation & Market Research				\$50,150
	ACQIVES	25	\$175	\$4,375	
	ACS16SEER13EER	150	\$50	\$7,500	
	DOWNSIZE	40	\$250	\$10,000	
	Central Heat Pump	20	\$350	\$7,000	
	Mini-Split Heat Pump	700	\$350	\$245,000	
	ECM Pumps	5,550	\$100	\$555,000	
	HP Mini-split QIV	265	\$175	\$46,288	
	HPQIVES	78	\$175	\$13,650	
	HPTUNE	10	\$175	\$1,750	
	WiFi Thermostat - cooling and oil heating	120	\$75	\$9,000	
	WiFi Thermostat - cooling and gas heating	1,200	\$75	\$90,000	
	Water Heater, Heat Pump <55 gallon	550	\$600	\$330,000	
	Water Heater, Heat Pump >55 gallon, UEF 2.70	10	\$150	\$1,500	
	Central Ducted Heat Pump Fully Displacing Furnace - Oil	8	\$3,000	\$24,000	
	Central Ducted Heat Pump Fully Displacing Furnace - Propane	2	\$3,000	\$6,000	
	Central Ducted Heat Pump Partially Displacing Furnace - Oil	50	\$3,000	\$150,000	
	Central Ducted Heat Pump Partially Displacing Furnace - Propane	3	\$3,000	\$9,000	
	Central Ducted Heat Pump Partially Displacing Furnace w/o Controls - Oil	10	\$2,000	\$20,000	
	Central Ducted Heat Pump Partially Displacing Furnace w/o Controls - Propane	5	\$2,000	\$10,000	
	Ductless Mini-Split Fully Displacing Boiler - Oil	10	\$3,000	\$30,000	
	Ductless Mini-Split Fully Displacing Boiler - Propane	4	\$3,000	\$12,000	
	Ductless Mini-Split Replacing Electric Resistance	38	\$3,000	\$112,500	
	Ductless Mini-Split Partially Displacing Boiler w/o Controls - Oil	50	\$2,000	\$100,000	
	Ductless Mini-Split Partially Displacing Boiler w/o Controls - Propane	1	\$2,000	\$2,000	
	Ductless Mini-Split Partially Displacing Boiler with Integrated Controls - Oil	10	\$3,000	\$30,000	
	Ductless Mini-Split Partially Displacing Boiler with Integrated Controls - Propane	2	\$3,000	\$6,000	
	HVAC Financing			\$120,000	
	Program Planning & Administration				\$69,999
	Marketing				\$252,015
	Sales, Technical Assistance & Training				\$605,879
	Evaluation & Market Research				\$21,702

The Narragansett Electric Company
d/b/a/ National Grid
Docket No. XXXX
Attachment 1
Page 64 of 58

Electric Programs					
Program	Measure	Units	Incentive / Unit	Total Incentives	Shared Costs
ENERGY STAR® Products	Dehumidifier Rebate	1,400	\$30	\$42,000	
	Dehumidifier Recycling	500	\$30	\$15,000	
	Energy Star Dryer	792	\$50	\$39,600	
	Freezer Recycling	500	\$65	\$32,500	
	Ladybug Electric	60	\$11	\$660	
	Ladybug Gas	5	\$11	\$55	
	Ladybug Oil	-	\$0	\$0	
	Ladybug Other	5	\$11	\$55	
	Pool Pump - 2 speed	-	\$0	\$0	
	Pool Pump - variable	275	\$500	\$137,500	
	Refrigerator Recycling	1,500	\$65	\$97,500	
	Refrigerator Recycling (Primary)	2,200	\$65	\$143,000	
	Roadrunner Gas	7	\$15	\$105	
	Roadrunner II Electric	70	\$15	\$1,050	
	Roadrunner Oil	-	\$0	\$0	
	Roadrunner Other	330	\$15	\$4,950	
	Room Air Cleaners	340	\$40	\$13,600	
	Smart Strip	9,000	\$10	\$90,000	
	Tier 2 APS	7,000	\$35	\$245,000	
	Room Air Conditioners	346	\$40	\$13,840	
	Storm Windows	100	\$25	\$2,500	
	Storm Windows Electric	100	\$25	\$2,500	
	Storm Windows Others	100	\$25	\$2,500	
	Tier 2 APS OS	6,000	\$35	\$210,000	
	Program Planning & Administration				\$62,498
	Marketing				\$519,076
	Sales, Technical Assistance & Training				\$519,450
	Evaluation & Market Research				\$4,195
ENERGY STAR® Lighting	LED Bulb	970,000	\$2.40	\$2,328,000	
	LED Bulb (Specialty)	211,000	\$3.40	\$717,400	
	LED Bulb (Hard to Reach)	480,000	\$3.50	\$1,680,000	
	LED Bulb (Food Pantries)	160,000	\$5.00	\$800,000	
	LED Bulb (School Fundraiser)	8,500	\$5.00	\$42,500	
	LED Bulb (Reflectors)	387,549	\$5.00	\$1,937,745	
	LED Bulb (Linear LED)	187,100	\$12.00	\$2,245,200	
	LED Bulb (Fixture)	463,000	\$9.00	\$4,167,000	
	Program Planning & Administration				\$338,268
	Marketing				\$577,379
	Sales, Technical Assistance & Training				\$418,722
	Evaluation & Market Research				\$123,506
Home Energy Reports	New Mover electric	18,428	\$7.86	\$144,844	
	New movers dual fuel	10,342	\$7.86	\$81,288	
	Opt-out dual fuel	123,401	\$7.86	\$969,932	
	Opt-Out electric	171,077	\$7.86	\$1,344,665	
	Program Planning & Administration				\$73,820
	Marketing				\$10,598
	Sales, Technical Assistance & Training				\$10,071
	Evaluation & Market Research				\$92,853

The Narragansett Electric Company
d/b/a/ National Grid
Docket No. XXXX
Attachment 1
Page 65 of 58

Electric Programs					
Program	Measure	Units	Incentive / Unit	Total Incentives	Shared Costs
Single Family - Income Eligible Services	AC Replace	1,848	\$350	\$646,800	
	AP Remove	6	\$51	\$306	
	Dehumidifier Rebate	528	\$250	\$132,000	
	Early Retirement Clothes Washer Electric DHW & Electric Dryer	156	\$700	\$109,143	
	Early Retirement Clothes Washer Gas DHW & Electric Dryer	495	\$700	\$346,833	
	Early Retirement Clothes Washer Electric DHW & Gas Dryer	7	\$700	\$4,851	
	Early Retirement CW Oil DHW & Electric Dryer	333	\$700	\$232,839	
	Early Retirement CW Gas DHW & Gas Dryer	196	\$700	\$137,440	
	Early Retirement CW Propane DHW & Electric Dryer	13	\$700	\$8,893	
	DHW - Electric	10	\$10	\$100	
	DHW - Gas	10	\$10	\$100	
	DHW - Oil	10	\$10	\$100	
	Education - TLC	3,300	\$180	\$594,000	
	Fixtures	-	\$0	\$0	
	Freezer	244	\$550	\$134,310	
	Heating System	396	\$5,000	\$1,980,000	
	Heat Pump Water Heaters	5	\$2,750	\$13,750	
	LED Bulbs	46,200	\$9	\$392,700	
	Programmable Thermostat, Gas	10	\$125	\$1,250	
	Programmable Thermostat, Oil	10	\$125	\$1,250	
	Programmable Thermostat, Other	10	\$125	\$1,250	
	Refrigerator rebate	2,046	\$1,050	\$2,148,300	
	Smart Strip	4,620	\$20	\$92,400	
	Thermostat - Electric	10	\$200	\$2,000	
	WATERBED	2	\$650	\$1,300	
	Wx Delivered Fuel	528	\$4,500	\$2,376,000	
	Wx Electric	46	\$4,500	\$207,900	
	Minisplit Heat Pumps - Electric Resistance	20	\$15,000	\$300,000	
	Minisplit Heat Pumps - Oil Fuel Switching	20	\$15,000	\$300,000	
	Program Planning & Administration				\$288,256
	Marketing				\$143,418
	Sales, Technical Assistance & Training				\$2,133,456
	Evaluation & Market Research				\$115,112
EnergyWise Income Eligible Multifamily Retrofit	AERATOR Elec	130			
	AERATOR Oil	100			
	AIR SEALING ELEC WITH AC	-			
	AIR SEALING OIL	50			
	Common Ext LED Fixture	1,100			
	Common Ext Reflector	100			
	Common Int LED Fixture	3,000			
	Common Int Reflector	65			
	Custom	46			
	Dwelling Ext LED Fixture	5			
	Dwelling Int LED Fixture	-			
	Heating System Retrofit-Boiler	-			
	Heating System Retrofit-Furnace	-			
	INSULATION ELEC WITH AC	-			
	INSULATION OIL	100			
	Participant (NEB)	4,800			
	Pipe Wrap DHW Elec	10			
	Pipe Wrap DHW Oil	10			
	Pipe Wrap Heating Oil	10			
	Refrig rebate	50			
	SHOWERHEAD Elec	100			
	SHOWERHEAD Oil	100			
	Smart Strip	200			
	Standalone WH Oil	-			
	Standalone WH Other	-			
	Tankless WH Oil	-			
	THERMOSTAT AC Only	-			
	THERMOSTAT Elec with AC	-			
	THERMOSTAT Heat Pump	-			
	THERMOSTAT OIL	50			
	TSV Showerhead Elec	-			
	Common Int EISA Exempt	-			
	Dwelling Ext Reflector	50			
	Dwelling Int EISA Exempt	50			
	Dwelling Int Reflector	50			
	Common Ext LED Bulbs	200			
	Common Int LED Bulbs	200			
	Dwelling Int LED Bulbs	500			
	Vending Miser	4			
	Participants	5,000			
	Program Planning & Administration		\$586	\$2,928,000	\$92,023
	Marketing				\$9,113
	Sales, Technical Assistance & Training				\$403,795
	Evaluation & Market Research				\$120,921

Residential Measures and Incentives

Electric Programs					
Program	Measure	Units	Incentive / Unit	Total Incentives	Shared Costs
Residential ConnectedSolutions	Thermostats New	372	\$45	\$16,740	
	Thermostats Existing	2,214	\$20	\$44,280	
	Battery Daily (number of unit)	100	\$1,600	\$160,000	
	EVs Peak (customers)	37	\$100	\$3,700	
	Water Heater Daily (units)	0	\$0	\$0	
	Behavioral Peak (customers)	315,373	\$0	\$0	
	Program Planning & Administration				\$13,344
	Marketing				\$221
	Sales, Technical Assistance & Training				\$145,254
	Evaluation & Market Research				\$0

Table 3. Natural Gas Programs

Gas Programs					
Program	Measure	Units	Incentive / Unit	Total Incentives	Shared Costs
EnergyStar® HVAC	Boiler Reset	30	\$100	\$3,000	
	Boiler90	65	\$450	\$29,250	
	Boiler95	275	\$800	\$220,000	
	Combo Condensing	35	\$600	\$21,000	
	Combo Condensing 95	1,100	\$1,200	\$1,320,000	
	Energy Star Cond Water Heater 0.80 UEF	5	\$250	\$1,250	
	Furnace95 ECM	325	\$300	\$97,500	
	Furnace97 ECM	50	\$500	\$25,000	
	Heat Recovery Vent	20	\$250	\$5,000	
	Energy Star Storage Water Heater .64 UEF (Med Draw)	40	\$100	\$4,000	
	Energy Star Storage Water Heater .68 UEF (High Draw)	45	\$100	\$4,500	
	Energy Star On Demand Water Heater 0.87 UEF	100	\$600	\$60,000	
	Low Flow Showerhead	50	\$7	\$325	
	TSV	25	\$12	\$288	
	TSV Showerhead	35	\$15	\$525	
	Wifi Thermostat - Cooling And Heating	425	\$75	\$31,875	
	Wifi Thermostat - Gas Heat Only	2,750	\$75	\$206,250	
	Programmable Thermostat	400	\$25	\$10,000	
	Combo Furnace	10	\$700	\$7,000	
	Water Heater, Indirect, Gas	200	\$400	\$80,000	
	Program Planning & Administration				\$83,571
	Marketing				\$172,317
	Sales, Technical Assistance & Training				\$273,092
	Evaluation & Market Research				\$37,299
EnergyWise	Aerator	100	Average Incentive based on measure mix and is applied per participant (see line below)		
	Weatherization	2,050			
	Air Sealing Kit (Gas)	575			
	Showerhead	325			
	Pipe Wrap	5,000			
	Thermostat	1,500			
	WiFi Thermostat	250			
	Participants	2,050	\$3,227.07	\$6,615,500	
	Program Planning & Administration				\$217,647
	Marketing				\$89,547
	Sales, Technical Assistance & Training				\$963,774
	Evaluation & Market Research				\$231,095

Gas Programs					
Program	Measure	Units	Incentive / Unit	Total Incentives	Shared Costs
EnergyWise Multifamily	Air Sealing	3,900	Average Incentive based on measure mix and is applied per participant (see line below)		
	cust non-lgt	58			
	Demand Circulator	0			
	Duct Sealing	10			
	Faucet Aerator	1,866			
	Insulation	3,200			
	Low-Flow Showerhead	0			
	Pipe Wrap (Heating)	0			
	Pipe Wrap (Water Heating)	882			
	Programmable Thermostat	400			
	Thermostatic Shut-off Valve	0			
	TSV Showerhead	200			
	WiFi thermostat gas	500			
	Participants	4,000			
	Program Planning & Administration		\$304	\$1,216,000	\$52,274
	Marketing				\$35,795
	Sales, Technical Assistance & Training				\$152,119
	Evaluation & Market Research				\$55,858
Home Energy Reports	New movers dual fuel	10,342	\$3	\$28,751	
	New movers gas only	0	\$0	\$0	
	Opt-out dual fuel	123,401	\$3	\$343,055	
	Opt-out gas only	18,581	\$3	\$51,655	
	Refill	0	\$0	\$0	
	Program Planning & Administration				\$18,166
	Marketing				\$1,326
	Sales, Technical Assistance & Training				\$5,029
	Evaluation & Market Research				\$23,524
Residential New Constructon	CODES AND STANDARDS	1	Average Incentive based on measure mix and is applied per participant (see line below)		
	CP	10			
	CP-DHW	10			
	RR CP	5			
	RR CP-DHW	5			
	RR Tier 1	20			
	RR Tier 1 - DHW	20			
	RR Tier 2	10			
	RR Tier 2 - DHW	10			
	RR Tier 3	5			
	RR Tier 3 - DHW	5			
	RR Tier 4	1			
	RR Tier 4 - DHW	1			
	SHOWERHEAD	10			
	Tier 1	55			
	Tier 1 - DHW	55			
	Tier 2	85			
	Tier 2 - DHW	85			
	Tier 3	30			
	Tier 3 - DHW	30			
	Tier 4	2			
	Tier 4 - DHW	2			
	Adaptive Reuse	100			
	Participants	316	\$1,476	\$466,550	\$31,971
	Program Planning & Administration				\$3,648
	Marketing				\$123,710
	Sales, Technical Assistance & Training				\$9,101
	Evaluation & Market Research				

Gas Programs					
Program	Measure	Units	Incentive / Unit	Total Incentives	Shared Costs
Single Family - Income Eligible Services	Heating System Replacement	242	\$5,000	\$1,210,000	
	Weatherization	660	\$5,000	\$3,300,000	
	Participants	902	\$5,000	\$4,510,000	
	Program Planning & Administration				\$149,343
	Marketing				\$36,834
	Sales, Technical Assistance & Training				\$1,166,366
	Evaluation & Market Research				\$89,742
Income Eligible Multifamily	Air Sealing	1,554	Average Incentive based on measure mix and is applied per participant (see line below)		
	Boiler Commercial	32			
	Boiler	30			
	Cust Non-Lgt	110			
	Demand Circulator	0			
	Duct Sealing	0			
	Faucet Aerator	2,400			
	Furnace	0			
	Indirect	0			
	Insulation	3,884			
	Low-Flow Showerhead	500			
	On Demand Water Heater	0			
	Pipe Wrap (Heating)	0			
	Pipe Wrap (Water Heating)	700			
	Programmable Thermostat	450			
	Tank Water Heater	0			
	Thermostatic Shut-Off Valve	0			
	TSV Showerhead	100			
	WiFi Thermostat Gas	0			
	Participants	3,500	\$707	\$2,474,500	
	Program Planning & Administration				\$84,754
	Marketing				\$13,260
	Sales, Technical Assistance & Training				\$309,683
	Evaluation & Market Research				\$127,271