

November 23, 2022

Chairman Ronald T. Gerwatowski
Commissioner Abigail Anthony
Commissioner John C. Revens, Jr.
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

Dear Commissioners,

Acadia Center appreciates the opportunity to submit comments in Docket 22-33-EE, Rhode Island Energy's (The Company) FY 2023 Energy Efficiency (EE) Plan. These comments are intended to supplement discussions held during Energy Efficiency Technical Working Group (EETWG) meetings and during public comment opportunities before the Energy Efficiency and Resource Management Council (EERMC).

Comments on FY 2023 Energy Efficiency Plan

Increase Energy Savings Targets and Program Budgets

Acadia Center recommends the Public Utilities Commission (PUC) require the Company deploy all efforts to meet the full approved FY2022 Energy Efficiency budgets and savings and also increase the proposed FY2023 investments and savings levels to provide critical climate, health, safety, and energy benefits to Rhode Islanders. In particular, Acadia Center urges the Commission focus the Company's delivery of weatherization and other energy, health, and safety improvements in the income-eligible customer segment.

Given rising and volatile fossil fuel energy supply costs as well as perennial warnings regarding the region's winter fuel resources, the Commission should require the Company to pursue all-cost effective energy efficiency that is prudent, reliable, environmentally responsible, and lower than the cost of procuring additional supply. This should result in increased FY2023 investments aligned with the energy saving targets reflected in the Maximum Achievable Scenario illustrated in the [Rhode Island Energy Efficiency Market Potential Study](#) (MPS). As the Company itself notes, energy efficiency investment costs are lower than the cost of procuring additional traditional supply—measures which “lower long-term base load and peak demand and can reduce the need for additional generation, distribution, and transmission infrastructure, benefiting all customers, regardless of direct participation in the Company's efficiency programs.”¹

Using the Market Potential Study as guidance for annual and triennial plan formulation would also contribute significantly to fulfilling the Commission's obligations under the Act on Climate to meet mandatory and legally enforceable greenhouse gas (GHG) emissions reductions of 45% by 2030, 80% by 2040, and net-zero by 2050, relative to 1990 baselines. As the Company states, “energy efficiency has long been recognized as often the most cost-effective way to meet customers' energy needs and a foundational element of any approach for meeting our climate mandates

¹ Pre-filed Testimony of Moreira, Feldman, Li, Kessler, Crayne. Bates pg. 10

and renewable energy strategies cost-effectively.”² Yet, for the FY2023 plan, the Company is again leaving significant energy and GHG savings opportunities on the table.

At the very least, the Commission should require the Company to propose a revised program budget and measures aligned with the targets approved by the PUC in Docket 5076, the FY2021-FY2023 Three-Year Plan (3YP)—FY 2023 levels of \$128,755,600 for the electric programs and \$38,558,829 for the gas programs. Instead, the Company is proposing a more limited \$105.5 million budget in the electric programs—18 percent below the anticipated level included in the 3YP. The Company is also proposing a gas efficiency program of \$36.9 million or 4.3 percent below the anticipated funding level approved in the 3YP.³ It should be noted the targets in the 3YP already represent a compromise well below the preferred positions of the EERMC, Acadia Center and other members of the EETWG to pursue maximum achievable savings potential identified in the MPS.

Acadia Center repeats its concern expressed throughout the FY2022 and FY2023 planning processes that the Company is developing the FY 23 plan by first imposing a 5% budgetary limitation in response to PUC guidance from Docket 5076’s [Order 24225](#) and Docket 5189’s [Order 24440](#), which reads:

“The Parties could propose budgets higher than the 5% incremental increase. However, in the event that National Grid [now RI Energy] proposed a spending budget, or savings targets, that deviated from the spending boundaries, [RI Energy] must present evidence that facts or other information presented at the time when the PUC set the target have since changed justifying those deviations.”

The Company’s approach for FY 2022 and, thus far, for FY 2023 was to set their sights no higher than the 5% guidance, contrary to the repeated pleas of EERMC members and EETWG members to develop a plan based on first identifying all cost-effective savings opportunities. Notably, the FY2022 Energy Efficiency plan was the first in the history of the program to proceed through the regulatory process without the EERMC and stakeholders as settling, supportive parties. Throughout the FY2022 and FY2023 plan development process, Acadia Center repeatedly urged RI Energy to propose and justify robust potential savings and investment targets in excess of the above guidance based on the following significant changes since the Dockets 5076 and 5189:

- **Energy Efficiency Measures Reduce Inflationary Pressures for Energy Consumers.** Energy efficiency combats inflation by helping lower fuel consumption broadly, locking in long-term savings. Energy efficiency investments can also help lower base load and peak demands and reduce, delay, or avoid the need for more expensive generation, distribution, and transmission infrastructure spending.
- **Enactment of Mandatory Emissions Reductions in the Act on Climate.** The FY 2023 EE plan is the first to be *fully*⁴ developed under the Act on Climate which requires significant GHG emissions reductions relative to 1990 baseline levels. Furthermore, RI General Laws Section 42-6.2-8 of the Act on Climate

² Pre-filed Testimony of Moreira, Feldman, Li, Kessler, Crayne. Bates pg. 25

³ The Company’s FY2023 Filing, Bates 46.

⁴ While the Act on Climate was signed in April 2021 and the majority of the FY 2022 Plan was developed in subsequent months, internal discussions and framing of the plan by the Company may have occurred in the preceding months.

updates the powers and duties of all state bodies and instrumentalities, including the Public Utilities Commission (PUC) which adjudicates this filing:

- *“Addressing the impacts on climate change shall be deemed to be within the powers, duties, and obligations of all state departments, agencies, commissions, councils, and instrumentalities, including quasi-public agencies, and each shall exercise among its purposes in the exercise of its existing authority, the purposes set forth in this chapter pertaining to climate change mitigation, adaptation, and resilience in so far as climate change affects its mission, duties, responsibilities, projects, or programs.”*
- **100% Renewable Energy Standard.** Governor McKee has signed legislation requiring 100% of electricity consumption be offset with renewable energy resources by 2023. Making more robust early investments in the FY 2023 EE plan will deliver critical savings for the electric sector and will help offset long-term additional electrical load growth resulting from beneficial electrification of heating and transportation.
- **Repeated ISO-NE Fuel Shortage Warnings.** Energy efficiency across all programs can help alleviate concerns around fuel shortages that have prompted repeated warnings from ISO-New England for both summer and winter periods. Energy efficiency investments can reduce demand for all fuels—natural gas, oil, propane, and electricity.
- **Enhanced Understanding of Energy and Environmental Justice.** Interested and affected parties in these proceedings continue to stress the need to address equity in the context of seeking energy and environmental justice—not just across broad customer segmentations. Each plan development phase must be executed with deeper community engagement informed by increasing awareness of these multi-faceted challenges. Acadia Center urges the Commission to require Rhode Island Energy to propose innovative solutions to address these historical inequities and injustices and not limit itself to only imagining measures that can be contained within a 5 percent illustrative budget growth cap.

Earlier this year, RI Energy transmitted the findings of recent Participant, Non-Participant, and Multi-Family studies and surveys. This data should help inform robust investments to address long-standing challenges and improve delivery of energy efficiency benefits to overburdened and underserved customers.

Taken together, these significant changes since Docket 5076 and Docket 5189 provide ample justification for Rhode Island Energy to propose savings and investments beyond the illustrative 5 percent cap guidance. As Acadia Center has recommended in the past, the Company could file a supplemental menu of additional proposed savings and investments in excess of the illustrative cap, citing stakeholder and council member advocacy for such an initiative.

Program Inertia Prolonging Fossil Fuel Consumption

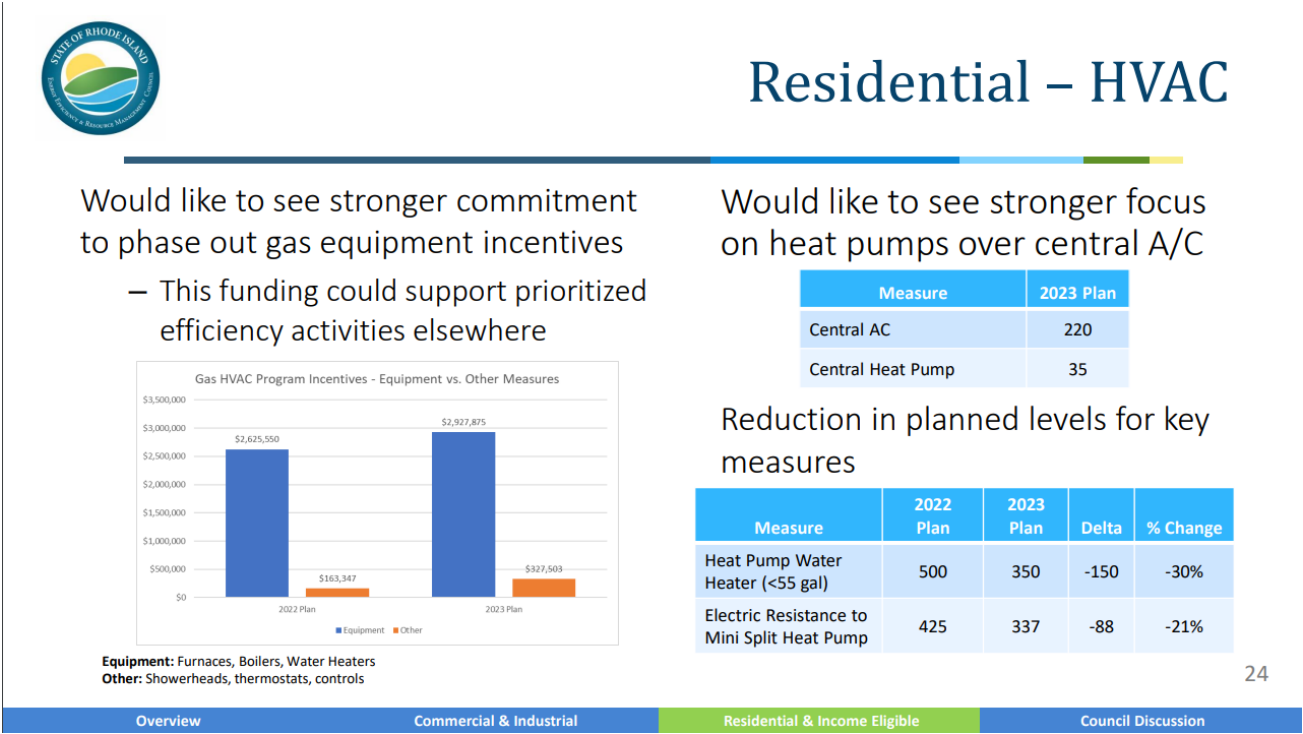
Beyond concerns regarding the overall scale and ambition of the energy efficiency programs, Acadia Center urges the Commission to eliminate the Company's proposed ratepayer-funded incentives which encourage prolonged long-term fossil fuel consumption contrary to the requirements of the Act on Climate. The Commission should instead redirect the budget for those incentives to enhanced weatherization and other decarbonization efforts which provide near- and long-term energy savings and also prepare customers and buildings for clean heating electrification in the future. Eliminating ratepayer-funded incentives for new fossil fuel equipment does not altogether block consumers from purchasing replacement gas equipment if they so choose. Nor does it block the Company from using shareholder funds to offer existing gas customers incentives to purchase new fossil fuel appliances, though Acadia Center would still recommend instead using those funds to supplement efforts towards weatherization and electrification.

In particular, the Company should look back to the robust performance of the 2021 EnergyWise Gas Programs to establish more ambitious weatherization savings goals. The success of the 2021 weatherization efforts demonstrated gas customers are ready, willing, and able to install measures that reduce their energy consumption without locking into new long-lived appliances. Scaling back those programs from those historic achievements is imprudent. Further, weatherization of buildings is a key step to properly sizing electric heat pump systems whether those heat pumps are installed using state, federal, or future energy efficiency funds. As evidenced by the July 28th announcement of Rhode Island's High-efficiency Heat Pump Program (HHPP), many more heat pump installations will occur over the coming years and the energy efficiency programs play a key role in optimizing deployment and operation of those systems.

Additionally, the Commission should direct incentives for cooling-only central air conditioners and instead direct all funds envisioned for that program measure to support central heat pump installations instead. For reference, Massachusetts' energy efficiency programs have taken this step and no longer incentivize cooling only central air conditioners. Central heat pump installations require much of the same work, skills, and costs as cooling-only central air conditioners and the difference in equipment costs is negligible. By installing central heat pumps, either as a primary or secondary heating system, the Company can help customers save energy and money, improve health and safety, help insulate customers from volatile and unregulated fossil fuel prices, and reduce carbon emissions. By preserving incentives for cooling-only central air conditioning systems, the Company is helping perpetuate an outdated status quo of maintaining separate appliances for heating and cooling which increases overall expenses such as fueling and maintenance costs.

Overall, the Company is scaling down obvious opportunities to achieve significant energy savings and prepare for an increasingly decarbonized future. Proposing a 30 percent reduction in heat pump water heater installations and a 21 percent decrease in electric resistance to mini split heat pumps, while simultaneously increasing incentive budgets for new gas appliances is wholly contrary to the goals of the energy efficiency programs and state climate policy. Acadia Center, EERMC members, and the state's own consultant team have repeatedly raised concerns about this approach. Acadia Center urges the Commission to consult slide 24 of the EERMC's Consultant Team presentation on July 28th included below as Figure 1.

Figure 1: Consultant Team’s Presentation on Opportunities for Improvements to Residential HVAC Measures



Similarly, the Company should drastically increase its support for Zero Net Energy Buildings, including code support and trainings for builders and designers. Establishing a more ambitious building and energy code would be a low cost, high impact measure to help reduce carbon emissions from the building sector at a far more rapid pace than our state’s current trajectory.

Finally, the Commission cannot continue relying on utility and fossil fuel industry promises that expansive quantities of so-called “renewable” natural gas (RNG) will magically appear as a justification for spending ratepayer money on new gas incentives and infrastructure to prolong fossil fuel reliance today. As the American Gas Foundation found in its 2019 study, *Renewable Sources of Natural Gas*, RNG production potential is severely limited and only a small fraction of that is estimated to cost less than \$20/MMBtu. Even if RNG production could somehow increase and become more cost competitive, RNG is only “decarbonized” from an accounting perspective, meaning that it is predominately methane and its distribution results in damaging and dangerous methane leakage on both sides of the meter. RNG combustion still results in air pollution, both indoors and outdoors, and significant GHG emissions are still released into the atmosphere.

As the “All Options”⁵ pathway from the Massachusetts 2050 Decarbonization Roadmap found, widespread adoption of electrification paired with increased energy efficiency measures are a lower cost decarbonization strategy in buildings than the use of “alternative fuels,” including RNG, biodiesel, hydrogen, and synthetic natural gas (SNG). In the “All Options” pathway, none of these alternative fuels are used in residential and commercial buildings, as these supply-constrained fuels were found to be most efficiently used in decarbonizing the most difficult-to-electrify portions of the transportation and industrial sectors.⁶ Utility promises to use RNG in pipelines as part of the supply to buildings is inconsistent with meeting long-term GHG emissions requirements. Accordingly, weatherization paired with electrification remains the most feasible, realistic, and cost-effective⁷ pathway to decarbonized heating in Rhode Island and the PUC should end ratepayer-funded incentives that perpetuate reliance on fossil gas.

These recommendations are not meant to be exhaustive, but rather illustrative to demonstrate a sample of program reforms that would tangibly advance climate goals and heating market transformation efforts. Acadia Center urges the Commission to direct the Company to reframe its approach to the energy efficiency programs from one that is today merely seeking iterative and sometimes detrimental changes to the direction of the energy efficiency programs to one that seeks to identify areas for significant progress on shared cost-effective objectives, such as improving equitable outcomes for overburdened and underserved customers, avoiding the purchase of additional supply, delivering health and safety improvements, and enabling near- and long-term emissions reductions required by law.

Recommendations for Continued Development of FY 2023 and Future Plans

Acadia Center respectfully restates its general recommendations from previous EE plan filings, namely that the Commission direct the Company to pursue a model of “Next Generation Energy Efficiency,” including efforts to:

- Require the Company to include all health, safety, comfort, and environmental benefits associated with energy efficiency and electrification investments in all Company marketing materials.
- Devote resources to aggressively coordinating remediation of pre-weatherization barriers, especially in underserved and environmental justice neighborhoods.
- Embrace whole-home electrification and weatherization measures to increase savings from retrofits.
- Offer the same robust incentives for weatherization to every home, regardless of fuel.
- Fully incorporate the value of health, safety, and environment benefits of energy efficiency in cost-effectiveness accounting.
- Design heat pump incentives to reflect electric energy and summer peak demand savings that cold-climate heat pumps achieve compared to standard or single-stage heat pumps.
- End incentives for new gas space heating and water heating equipment in new construction.

⁵ The “All Options” pathway specifically answered the question: *“Under the most likely assumptions, what is the least-cost deployment of energy system technologies that achieve deep decarbonization?”*

⁶ Massachusetts 2050 Decarbonization Roadmap: Energy Pathways to Deep Decarbonization, page 35
<https://www.mass.gov/doc/energy-pathways-for-deep-decarbonization-report/download>

⁷ Most recently confirmed by the American Council for an Energy Efficient Economy.
<https://www.aceee.org/research-report/b2205>

Next Generation Energy Efficiency Can Maximize Benefits for Customers

Rhode Island has been a national leader in energy efficiency. But far more must be done to improve the efficiency of our homes and businesses and to ensure that all communities reap the full benefits of energy efficiency. Despite the substantial progress made to date, there is still more that can be done to ensure that efficiency programs deliver benefits equitably across all communities and income levels. At the same time, Rhode Island has an opportunity to elevate energy efficiency programs as a key tool for reducing emissions, including through improved electrification efforts and more weatherization jobs.

Acadia Center's Next Generation Energy Efficiency Initiative brings together these complex but overlapping issues. Next Generation Energy Efficiency addresses these challenges through a new approach—one that focuses on energy savings as a core energy system resource, but is also centered on meeting climate, environmental justice, and electrification goals. The four pillars of Next Generation Energy Efficiency are:

- **Strengthen the role of efficiency in improving housing quality.** Rhode Island's efficiency programs have not delivered benefits equitably across all communities and income levels. Renters, low-and-moderate income households, and non-English speakers often face the worst impacts of climate change and poor housing quality, but many have been unable to access program incentives. Both poor insulation and indoor pollution from heating and cooling systems negatively impact health, leaving residents, especially in poorly ventilated buildings, vulnerable to toxic pollutants.
- **Reduce emissions and support environmental justice.** Energy efficiency programs are a crucial tool for reducing emissions in Rhode Island. However, because program investments are screened through outdated cost-effectiveness tests that only measure certain benefits and costs, efficiency programs are increasingly misaligned with other important state policies. It is time to update cost-effectiveness testing to fully account for emissions, equity, and public health benefits.
- **Align energy efficiency and electrification.** Efficiency programs must be better aligned with opportunities to electrify buildings—a key strategy for accelerating the deployment of clean energy resources and transitioning away from fossil fuels. Existing program designs and cost-effectiveness tests are not fully aligned with accelerating building electrification.
- **Sustain investments in energy efficiency as a leading energy resource.** Rhode Island has historically been a leader in energy efficiency savings and going forward we must maintain and grow investments in energy efficiency as the least-cost energy resource.

The Commission Should Direct New Measures That Advance Heating Electrification

Divert Gas Connection Requests and Encourage Electrification

The FY2023 Plan serves as an opportunity to propose new measures designed to encourage more efficient energy consumption in the heating sector. In coordination with the System Reliability Procurement (SRP) program, the EE programs should include a diversionary program to avoid new gas connections and instead encourage customers transition to electric heat pumps and other electric appliances as necessary. Heating electrification and weatherization are cost-effective strategies, and heat pumps are at least 300% more energy efficient than even the most efficient gas furnaces. This approach will help leverage energy efficiency investments to achieve the energy saving goals of Least Cost Procurement, the decarbonization requirements of the Act on Climate, and reduces

ratepayer costs by avoiding the unnecessary and expensive buildout of energy infrastructure including unnecessary gas connections to individual buildings already served by the electric distribution system.

Acadia Center [analysis](#) prepared in response to the Company's gas infrastructure proposals on Aquidneck Island in EFSB Docket 2021-04 demonstrate investments in energy efficiency, electrification of gas end uses, and demand response programs are proven, lower-cost strategies that meet consumer energy needs while reducing overall energy consumption. The Company should repurpose its marketing budgets that currently promote gas connections and system expansion to instead aid in the delivery of these diversionary efforts.

Encourage Central Heat Pumps in Lieu of Central Air Conditioning

The Company should adapt and/or leverage existing high efficiency central air conditioner incentive offerings typically available in the Residential High-Efficiency, Cooling, and Hot Water Program. Diverting the installation of central air conditioning systems that only provide cooling and dehumidification capabilities to electric heat pump systems can provide customers with an additional, highly efficient heating technology. In the case of a gas customer, the installation of a central heat pump system (or any heat pump systems) also provides the gas distribution system with a peak-shaving and resilience opportunity that is not available with a cooling-only technology. Similarly, as the price of delivered fuels like oil and propane can and have fluctuated significantly from year to year and even month to month, the installation of electric heat pump systems in lieu of cooling-only systems provides consumers with more options to control their energy budgets. As these space conditioning appliances can be long-lived, it is imperative to help customers avoid installations of less capable and less beneficial fossil-fuel burning technologies.

Further, central air conditioning systems and central heat pump systems share much of the same installation requirements and evidence suggests the incremental costs for heat pump technology are nominal in terms of overall project costs. The Company could offer incentives through the Energy Efficiency and System Reliability Procurement Programs where possible and supplement incentives by coordinating with available funding from the Regional Greenhouse Gas Initiative or other sources.

EnergyWise and EnergyStar HVAC Program

As the Company realizes fewer savings from lighting measures, it has an opportunity to pivot to impactful new strategies in 2023, including:

- Accelerated conversion of electric resistance space heating to efficient heat pumps.
- Conversion of fossil fuel-fired and electric resistance water heaters and clothes dryers to highly efficient electric heat pump water heaters and clothes dryers.
- More robust workforce development and other vendor support in the air-source and ground-source heat pump market segments.
- Development/review/refinement of approved contractor lists for heat pump water heaters and ground-source heat pumps.
- Continuing education for vendors on "Approved Contractor" lists.
- Pathways for contractors delivering measures as part of the "Bring-your-own-contractor" program to join the "Approved Contractor" lists.

- Education opportunities for sales staff at retail vendors to better inform customers on the energy-efficiency, health, safety, and climate benefits of products, particularly the higher efficiency offered by technologies like heat pump water heaters, heat pump clothes dryers, and induction stoves.
- Education opportunities for contractors that work to install appliances on behalf of or in partnership with retail locations, to ensure they understand how to properly install “newer” technologies like heat pump water heaters, heat pump clothes dryers, and induction stoves.

Residential New Construction Should be All-Electric

The Commission should immediately end any incentives or code support for fossil fuel space heating, water heating, and cooking equipment in new residential construction. As noted above, air-source heat pumps are at least three times as energy efficient than gas furnaces, and ground source heat pumps are even more efficient. Allowing new construction to connect to the gas system commits that building and its occupants to decades of inefficient energy consumption in direct opposition to clear public policy mandates enshrined in the Act on Climate. Furthermore, all-electric construction is cost-competitive with new fossil-fuel construction across all housing types. There are many grounds on which the Commission should work to disincentivize fossil-fuel construction, and specifically new gas connections, including:

- Achieving mandatory greenhouse gas emissions reductions under the Act on Climate law.
- Industry forecasts of limited availability and higher prices for so-called “decarbonized” gas which still emit greenhouse gases through transmission and distribution leakage and eventual combustion.
- Risks of stranded infrastructure assets given state climate mandates.
- Additional customer charges for connecting to the gas distribution system when the electric system could be more economically utilized to meet customer energy needs.
- Considerations for health and public safety for customers and utility workers alike.

Equity & Inclusion Must be Central Principles

Energy efficiency can be a key tool in addressing housing quality burdens that are disproportionately borne by low-income populations and communities of color. These communities also face higher energy burdens, as well as more significant barriers to participation in efficiency programs.

- The Commission, Company, and all stakeholders must ensure that low- and moderate-income households and renters have a meaningful opportunity to participate in programs. Building relationships with community organizations, social service agencies, and municipal governments in multiple languages can help to make sure that the benefits of the energy efficiency programs accrue more reliably to the people who need them most.

- The Commissions should direct the Company to fully incorporate the health and safety benefits^{8,9} of energy efficiency into program offerings and cost-effectiveness measurements. For example, asthma imposes significant health and lost productivity costs on Rhode Islanders. By valuing the non-energy benefits that energy efficiency provides and the role it can play in alleviating health and safety burdens, Rhode Island Energy could help customers save money and improve the health and comfort of its most vulnerable citizens.
- Marketing efforts for the multifamily programs should specifically include the value of health, safety, comfort, and environmental benefits associated with energy efficiency and electrification investments for landlords, property managers, condominium owners, and renters.

Pre-weatherization Barriers

- Acadia Center encourages the Commission to direct the Company to coordinate the delivery of measures to overcome pre-weatherization barriers, leveraging other available sources of funding where available. Customers, particularly in the income-eligible segment, may not have the time, knowledge, or authority to coordinate those services, nor the funds to pay for them.
- Low-income communities also face disproportionate impacts from indoor and outdoor air pollution, further emphasizing the need for housing repairs. In neighboring states, pre-weatherization barriers for low- and moderate-income customers are paid for through federal funding—such as from the Weatherization Assistance Program (WAP)—state grants, and Regional Greenhouse Gas Initiative proceeds, enabling the delivery of much-needed weatherization services to these vulnerable populations. The Company should coordinate and leverage similar types of funding to help remediate pre-weatherization barriers.

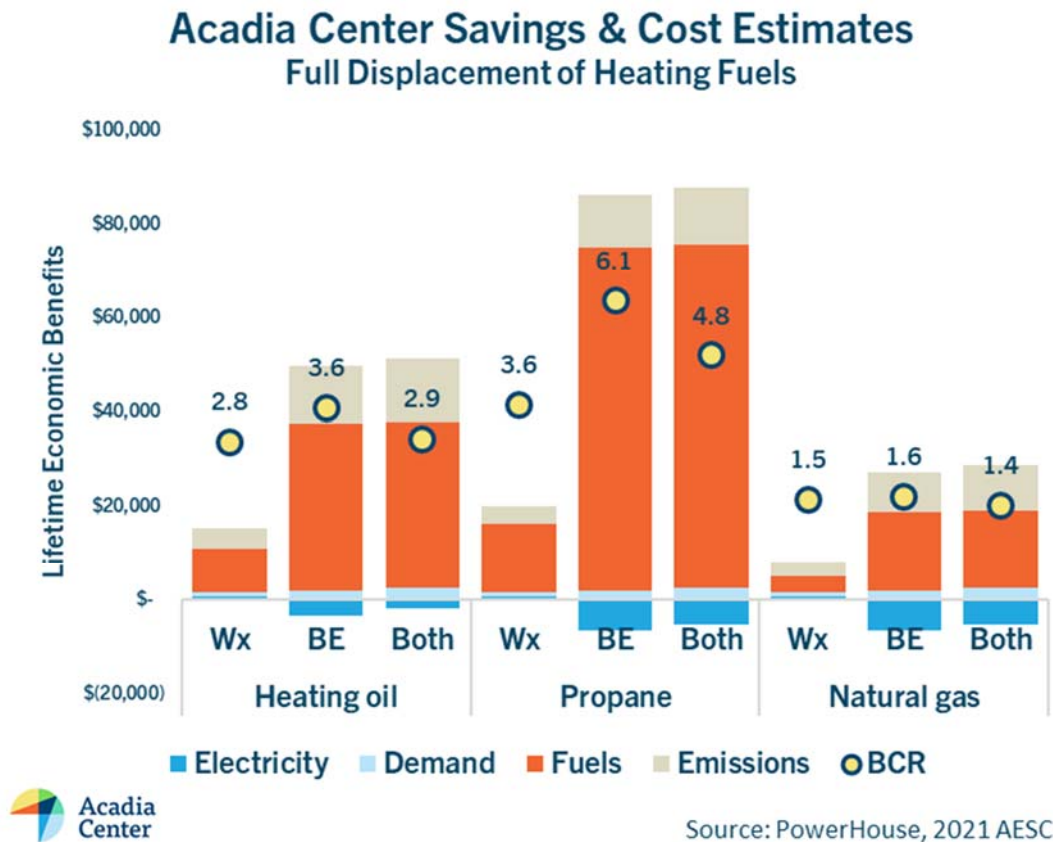
Whole-Building Residential Measures

Acadia Center analysis of the 2021 AESC avoided costs shows that whole-home electrification and weatherization projects would generate more net benefits than current measure categories while remaining cost-effective for every fuel type, as demonstrated by Figure 2 below. Meeting Rhode Island’s climate targets will require displacing not just fossil fuels used for heat, but fossil fuels used for any purpose in a building. A robust whole-home electrification and weatherization offering from Rhode Island Energy would demonstrate the value of this type of retrofit.

⁸ Three³, Inc. and NMR Group. “Low-Income Single-Family Health- and Safety-Related Non-Energy Impacts (NEIs) Study.” August 5, 2016. [Accessible here.](#)

⁹ Three³, Inc. and NMR Group. “Low-Income Multifamily Health- and Safety-Related NEIs Study: Preliminary Findings Report. October 15, 2018. [Accessible here.](#)

Figure 2: Savings from Full Displacement of Heating Fuels



Conclusion

Acadia Center appreciates the opportunity to provide comments on the FY 2023 Energy Efficiency Plan and looks forward to working with the Commission, Rhode Island Energy and all interested and affected parties to improve delivery of program benefits, improve equitable outcomes, and reduce GHG emissions.

Sincerely,



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