



Key Program Design Questions and Recommendations

Home Energy Rebate Program

Provided to:

Virginia Department of Energy

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Table of Contents

Introduction	3
1. Use of Funds and Rebate Eligibility	4
1.1. Use of Funds.....	4
1.2. Rebate Conditions and Levels.....	5
1.3. Low Income Homes.....	8
1.4. Community Benefits Plan	9
1.5. Processing and Delivering Rebate Funds to Eligible Rebate Recipients.....	10
1.6. Data Collection and Evaluation.....	11
2. Consumer Experience	11
2.1. Education and Outreach.....	11
2.2. Qualified Electrification Projects	12
2.3. Installation Incentives	12
2.4. Home Assessments	13
2.5. Measured Approach	13
2.6. Consumer Protection through Quality Assurance	14
3. Maximizing Rebate Impact	15
3.1. Supporting the Clean Energy Economy Through Market Transformation	15
3.2. Integrating with Other Programs.....	16
Appendix A. Public Briefing Session.....	18
Appendix B. Stakeholder Outreach Plan.....	19

Introduction

The Inflation Reduction Act (August 16, 2022) authorized the U.S. Department of Energy (DOE) to carry out two Home Energy Rebate programs: IRA Section 50121 established the Home Efficiency Rebates (HOMES) program, and IRA Section 50122 established the Home Electrification and Appliance Rebates (HEAR) program. The two programs are collectively called Home Energy Rebate programs. The Home Energy Rebates together authorize \$8.8 billion in funds for the benefit of U.S. households and home upgrades to be distributed to households by state energy offices and Indian Tribes. The Commonwealth of Virginia, through the Virginia Department of Energy (Virginia Energy) is allocated \$188,334,635 (about \$94 million in total funding for each program) for consumer rebates and program administration to design and implement these Home Energy Rebate programs.

Virginia Energy started its planning for the two programs by identifying key questions needed for informing the program design, conducting stakeholder engagement, and developing an understanding of market conditions in Virginia. The market assessment includes estimating the scope and potential for Home Energy Rebate programs in Virginia and an asset inventory of all existing programs offered by agencies and utilities in the Commonwealth of Virginia. Virginia Energy conducted extensive stakeholder outreach to gather feedback and information to develop robust, well-thought-out programs. This includes:

- One-on-one interactions with utilities, community agencies and government agencies relevant to these programs.
- Public webinars to solicit feedback from utilities, governmental, and non-governmental agencies.
- Presentations at conferences.
- A public input questionnaire to gather feedback from households and non-profits.

Appendix B of this document provides additional details of all the stakeholders who attended one or more of Virginia Energy's stakeholder discussions.

This document includes the key questions identified by Virginia Energy as relevant for their program design and address key topics required for the application. The questions are categorized based on topical areas defined in DOE's application. Each question also includes a check mark where a similar question exists in DOE's application and, what program the question is applicable for, i.e., HOMES, HEAR or both.

Virginia Energy used the information gathered from the stakeholders along with desktop research, market assessment, and asset inventory to develop responses for all questions. Each question includes a specific call out for recommendations that identifies the next steps Virginia Energy should consider while working with an implementation partner for developing the program design. The answers to each question end with a recommendation that outlines considerations, options, and next steps for Virginia Energy to work toward.

Section 1–3 in this document lists all the key questions, responses, and recommendations to support Virginia Energy with their program design for the Home Energy Rebate programs.

1. Use of Funds and Rebate Eligibility

1.1. Use of Funds

Q1. What portion of the rebate funds will the state reserve for low-income households and multifamily households?

Applicable Programs: HOMES and HEAR

Related Application Question: ✓

A1. Virginia Energy seeks to reserve a percentage of rebates for multifamily to be commensurate with the percentage of eligible population living in multifamily.

In the public working session, commenters offered several suggestions for reserving rebate funds for low-income households. Generally, the commenters suggested reserving 50-65% and 20-40% of the rebate funds for low-income and low-income multifamily households, respectively. Some commenters suggested focusing on households whose income makes them ineligible for participating in existing programs.

Initial analysis performed by Virginia Energy identified a low-income multifamily resident population to reserve rebate funds for. In the 60-100% Area Median Income (AMI) segment, the breakdown of residential building stock is: ~75% single-family, 25% multifamily. Further, more than 70% of multifamily buildings that house residents earning <80% AMI have 20 units or less. These residents would be ideal for a multifamily reserve.

Further, analysis to date indicates that making HOMES and HEAR available for households up to 100% AMI would serve those with most need while providing a diversity of residents for contractors to serve.

Recommendation: At the outset of the program, Virginia Energy should reserve 40% and 10% of rebate funds for low-income and low-income multifamily households, respectively, i.e., in line with DOE's requirements. Currently, there are several areas of ambiguity around the program design and customer journey for low-income multifamily buildings:

- Identifying the eligible entity or entity representatives who are the right recipients for the funds.
- Ability to leverage categorical eligibility successfully.
- Identifying modeled or measured pathways and assessment for multifamily buildings.
- Based on the market assessment, only 12% of households in Virginia are low-income multifamily tenants.

DOE plans to release additional guidance on multifamily which will likely provide more clarity. Until then, the recommendation would be to stick to the minimum allocation of 10% rebate funds for low-income multifamily.

Virginia Energy should not limit eligibility to households with income less than 80% or 100% of AMI. Keeping the rebate open for other income categories (like the survey respondents) could be beneficial from a positive public perception that the rebates are accessible to all. Instead, Virginia Energy can increase rebate levels for low-income households which will organically drive more participation for low-income households.

Q2. Does Virginia Energy allow rebates to be used for new construction buildings?**Applicable Programs: HEAR****Application Question: ✓**

- A2.** New construction buildings are eligible for rebates under the HEAR program. All new construction buildings are required to meet the applicable Virginia **building energy code**. These requirements tend to enhance energy efficiency for new construction buildings. Most utility programs require new construction buildings to exceed state and local energy code requirements to be eligible for rebates. For example, Appalachian Power Company (APCo) requires new construction buildings to be ENERGY STAR certified to be eligible for rebates. In the survey, Virginia homeowners offered mixed responses. Some were supportive of offering rebates for new construction. Others argued that other existing rebates are already available for new construction buildings. One of the nonprofit organizations argued against paying rebates to developers citing that the benefits would likely accrue to the developer. Investor-owned utilities (IOUs) recommended new construction buildings should not be eligible for rebates. Virginia Department of Housing and Community (DHCD) commented that new construction buildings already require to install equipment that is ENERGY STAR certified to be eligible for funding from affordable housing programs.

Recommendation: Virginia Energy should exclude new construction buildings from being eligible to receive HEAR rebates. It is unclear how influential HEAR rebates would be for new construction buildings that already require ENERGY STAR and receive funding from other programs. Instead, HEAR would have a greater impact in upgrading homes that are not touched by affordable housing programs.

1.2. Rebate Conditions and Levels

Q3. For multifamily, does Virginia Energy calculate the “per dwelling unit” rebate at the less than 80% AMI amount for all units or based on the ratio of Low-Income (LI) to non-LI units?**Applicable Programs: HOMES****Application Question: ✓**

- A3.** DOE states that if the building is a low-income building (i.e., it has 50% units with income less than 80% of AMI), a state may calculate the “per dwelling unit” value at the less than 80% AMI amount for all units. Alternatively, a state may calculate the “per dwelling unit” value at less than 80% AMI amount in proportion to the ratio of low income to non-low-income units. This process requires income verification for all tenants in the building to verify that 50% of the tenants have income less than 80% of AMI.

Administering income verification for all tenants in a large building would be complex and time-consuming. Making use of categorical eligibility through existing affordable housing, Virginia DHCD, and federal programs like Low-Income Housing Tax Credit (LIHTC) would increase the efficiency of administering the program. Categorical eligibility allows Home Energy Rebate programs to automatically deem a participant to be eligible for low-income rebate levels by virtue of their participation in other income eligible programs that have similar or more stringent income limits. By using categorical eligibility to identify low-income households, Virginia Energy can effectively bypass the need to conduct an income verification for all tenants. During the one-on-one discussions with DHCD, they offered that their programs meet the income levels required for the Home Energy Rebate programs.

Recommendation: Virginia Energy should calculate the “per dwelling unit” rebate at less than 80% AMI amount by using categorical eligibility to identify buildings eligible to receive low-income rebates.

Q4. How will homeowners and multifamily building owners be informed of additional program funding available from non-federal funds and grants?

Applicable Programs: HOMES and HEAR

Application Question: ✓

A4. Stakeholders provided the following recommendations to Virginia Energy:

- Use a website and public media for announcements/postings.
- Discuss, coordinate, and engage with local governments, community action agencies, neighborhood associations and individual associations within communities, agencies servicing low-income people, trade groups, partners, nonprofit partners, and contractors.
- Integrate Virginia Energy’s program outreach into existing tactics implemented by utilities operating in Virginia, where these utilities typically enact a multi-pronged approach to marketing, including emails, call centers, bill inserts, social media postings, websites/microsites, online marketplaces, and contractor/service provider training.

On a similar question on maximizing awareness for low-income households, stakeholders recommended a one-stop-shop approach where contractors and community groups can share information for all utility, state, local, and federal programs.

Recommendation: Virginia Energy should work closely with utilities and state agencies to define the structure for establishing a one stop shop. This approach will provide contractors with the tools and material to share information about other programs and funding opportunities for which participants may be eligible.

Q5. Identify the maximum rebate amounts that will be offered to eligible entities and eligible entity representatives if lower than the allowed amounts.

Applicable Programs: HEAR

Application Question: ✓

A5. Virginia Energy has the option to specify appliance rebate levels lower than the “not to exceed” rebate amount prescribed in the HEAR program. The “not to exceed” rebate levels generally do not cover the full cost of the project (equipment and labor). Reducing the rebates further could make the project less viable for low-income households and thereby reduce program participation.

Recommendation: Virginia Energy should not reduce the “not to exceed” rebate amount prescribed in the HEAR program.

Q6. Should Virginia Energy request a higher rebate amount for low-income households?

Applicable Programs: HOMES

Application Question: ✓

A6. In the survey, respondents were in unanimous agreement with Virginia Energy’s suggestion to increase rebate levels for low-income households. Nonprofit organizations who responded to the survey suggested a \$12,500 rebate level based on the cost of a heat pump (\$9,500) and minimal weatherization (\$3,000). Utilities also indicated that 100% coverage of project costs will make it easier for contractors to advocate their clients for participation.

Recommendation: Virginia Energy should consider increasing rebate levels to cover 100% of the project costs for low-income households. Based on the market assessment, a low-income participant would typically incur an average out-of-pocket cost of \$3,200. This level of out-of-pocket cost makes the upgrade economically unviable for low-income households. For reference, the 80% AMI level income for a four-person family household living in Scott, Washington or Bristol Counties is \$56,250. Maximizing low-income rebates (for the modeled approach) from \$4,000 and \$8,000 to \$10,000 and \$16,000 for savings between 20% and 34%, and greater than 35%, respectively results in a \$1,800 reduction in out-of-pocket costs.

Virginia Energy may also seek to reduce out-of-pocket costs by combining programs run by utility companies and state agencies with Home Energy Rebate programs. This may be a more effective approach as it would help spread the rebates to a wider population base.

As a next step, Virginia Energy should consider developing customer journeys and scenarios of the total project cost, HOMES and HEAR rebates, other program rebates, and out-of-pocket costs that households would expect to incur for different types of upgrades. This will help Virginia Energy determine the level of rebates appropriate for low-income households in Virginia.

Q7. How will energy savings based on time, location, or greenhouse gas (GHG) emissions be valued?

Applicable Programs: HOMES

Application Question: ✓

A7. Virginia Energy will seek to find value to prioritize energy savings based on time, location, and GHG emissions such as:

- Time: Virginia Energy will consider identifying technologies that reduce peak demand (summer and winter) and make use of utility time-of-use rates to maximize value to participants where these rates are available.
- Location: Virginia Energy will explore with utilities approaches such as enrolling rebate residents with utility demand response programs in geographic areas where the distribution grid is constrained.
- GHG emissions: Virginia Energy will explore approaches to value GHG emissions from replacement of fossil fuel-based heating systems, peak demand reduction, and identifying grid-enabled technologies for future demand response applications. The savings calculated from these technology upgrades and replacements would be used to estimate GHG reduction accrued through the program.

APCo commented that Virginia Energy may be able to get a list of the overloaded feeders through a non-disclosure agreement. This data can help Virginia Energy target efficiency rebates to these areas and help in reducing demand. Washington Gas recommended targeting GHG emissions.

Recommendation: DOE requires states to track metrics that value energy savings by time, location, and GHG emissions. Virginia Energy should decide what metrics it should use for tracking program progress. Virginia Energy should explore opportunities to target regions with overloaded feeders, target upgrades in homes with fossil fuel-based heating systems and incentivize grid-enabled technologies. Virginia should also explore ways to integrate with Solar for All to report out combined impacts of the two programs. Another consideration may be to align with utility to report energy savings in addition to GHG emissions.

1.3. Low-Income Homes

Q8. What programs should Virginia Energy allow to prove categorical eligibility, and should Virginia Energy request authorization to base participation outside of a one-year period?

Applicable Programs: HOMES and HEAR

Application Question: ✓

A8. Virginia Energy wants to allow categorical eligibility and plans to develop a list of programs that are currently running in Virginia that can be used to identify programs for categorical eligibility. In addition, Virginia Energy is strongly considering requesting authorization to base participation outside of a one-year period.

In addition to programs the DOE has approved for categorical eligibility (not included in the list below) Virginia Energy is considering leveraging LIHTC and other low-income housing programs that are categorically eligible. Through stakeholder feedback Virginia Energy is considering the following programs as that can be used to prove categorical eligibility:

- Low-Income Household Water Assistance Program (LIHWAP)
- Temporary Assistance for Needy Families (TANF)
- Affordable and Special Needs Housing (ASNH)
- Sponsoring Partnerships and Revitalizing Communities Program (SPARC)
- Virginia Energy's Future Solar for All Program
- Fuel assistance lists like the Washington Area Fuel Fund
- Local rental assistance programs
- Federal Home Loan Bank

Recommendation: Virginia Energy should use the information gathered in the landscape analysis to identify income eligible programs then determine whether the eligibility requirements are more stringent than those for Home Energy Rebate programs to determine what additional programs may be eligible for categorical eligibility. Virginia Energy may discuss data sharing arrangements to get leads for participants from such programs with state government partners executing programs such as DHCD's Weatherization Assistance Program (WAP) and Department of Social Services (DSS) programs using the categorical eligibility model.

Q9. Does Virginia Energy plan on implementing enforcement requirements for low-income renters?

Applicable Programs: HOMES and HEAR

A9. Stakeholders believe that implementing enforcement requirements applicable to low-income dwelling units occupied by renters is a reasonable feature of the HOMES and HEAR rebates. A suggestion was made to explore what existing enforcement mechanisms are used by the WAP Program (or similar programs). While these requirements are important to protect tenants from unjustified rent increases, it would be difficult for Virginia Energy to enforce them. Other agencies such as DHCD run affordable housing programs that include similar enforcement provisions. It would be easier for Virginia Energy to identify ways to integrate with these programs or use categorical eligibility to indirectly comply with these enforcement requirements.

Recommendation: Virginia Energy should use categorical eligibility to bypass these requirements. Affordable housing programs already require similar renter protection requirements.

Q10. What documentation will be required to support income eligibility?***Applicable Programs: HOMES******Application Question: ✓***

- A10. Stakeholders recommended using state and/or federal tax returns from the previous year, bank statements, social security income verification, proof of any income or public benefits (SNAP, SSI/Disability, pay stubs, child support, self-employment information, TANF, WIC, etc.). Additionally, stakeholders suggested working with social services or local organizations, like community action programs, that already have experience in verifying income and to make sure to provide administration fees from using their support. Some attendees also mentioned making it possible for people who may be undocumented to participate in the program as they may not qualify under categorical eligibility.

Recommendation: Virginia Energy should conduct a comparative analysis on the documentation existing programs require to determine income eligibility, such as tax filing information, IRS-related documents, and/or W2s to support income eligibility. Where possible, Virginia Energy should continue using categorical eligibility to get leads of income eligible participants. Virginia Energy should consider exploring existing programs that include benefits for undocumented individuals.

Q11. Will the state allow self-attestation?***Applicable Programs: HOMES******Application Question: ✓***

- A11. Virginia homeowners had differing comments on this topic. They questioned documents that Virginia Energy would use to verify income. Some were concerned about administrative burden associated with 100% income verification and some suggested removing barriers for participation. Comments received during the public working session also recommended going down the self-attestation path as it could, result in inflated income levels to gain higher rebates. Nonprofit organizations and Washington Gas agreed with not allowing self-attestation. They strongly encouraged Virginia Energy to establish that categorical eligibility is allowed for income verification if self-attestation is not allowed. Categorical eligibility can help some customers participate in the program with reduced paperwork if they demonstrate eligibility in another program with equivalent income requirements.

Recommendation: Virginia Energy should not allow self-attestation.

1.4. Community Benefits Plan

Q12. Does Virginia Energy have its own definition of disadvantaged communities (DACs)? Or will it default to using Climate and Economic Justice Screening Tool (CEJST) definition? How will Virginia Energy align with Justice40 guidelines?***Applicable Programs: HOMES and HEAR******Application Question: ✓***

- A12. The application requirements and guidance document include targeting 40% of federal funding toward DACs in line with the Justice40 initiative. Virginia Energy uses Historically Economically Disadvantaged Communities (HEDCs) as its definition for disadvantaged communities.

Recommendation: Virginia Energy should review both the federal definition of DACs and HEDCs the extent of overlap between the two definitions. Based on this review, Virginia Energy should consider whether to use the federal DAC, HEDC, or a combination of DAC and HEDC as definition for disadvantaged communities for meeting Justice40 goals. Virginia Energy should seek DOE's approval in its application if it decides on a definition that is different from the federal definition of DACs.

Q13. Does Virginia Energy want to consider any specific segmentation or customer targeting for households?

Applicable Programs: HOMES and HEAR

Application Question: ✓

A13. In the survey, non-profits recommended to focus on Justice40 communities and regions with higher poverty rates, older buildings, mobile/manufactured homes in southwest Virginia, and homes with natural gas/heat pumps.

Recommendation: Virginia Energy should consider specific segmentations like geographic distribution, population/income levels, building stock (single-family, multifamily, and manufactured housing), communities (rural, distressed community), energy burdened, existing utilities (existing resources/rebate programs), regions not covered by IOUs, vintage, and households using electric resistance and oil as key target segments. Virginia Energy will also explore region-specific characteristics such as population and income levels in identifying key target segments. Specific examples include those from Virginia Energy's market assessment. The market assessment identified residential buildings with oil and electric resistance as heating fuel as prime targets for rebates. Upgrading from oil-heating and electric-resistance heating systems is likely to result in significant reduction in operating costs and energy savings. Additionally, switching from electric resistance to heat pumps would not require panel upgrades and rewiring which could save on total project cost. Lastly, switching over from oil heating to electric heat pump may also help improve indoor air quality, a non-energy benefit associated with the upgrade. The market assessment also showed that meeting the 10% multifamily allocation for Virginia might pose a challenge given the lower proportion of low-income multifamily households in VA (12% of the total residential stock). Therefore, low-income multifamily buildings will be a key focus area for Virginia Energy. Virginia Energy also plans to explore integrating operations and processes with its Solar for All program.

1.5. Processing and Delivering Rebate Funds to Eligible Rebate Recipients

Q14. Will participants be able to access rebates directly without engaging a contractor or home assessment?

Applicable Programs: HEAR

Application Question: ✓

A14. Whether a participant can access rebates directly depends on the measure installation type. Typically, measures such as electric stoves, cooking ranges, and ovens could be accessed directly. Other measures require contractor installation or electrician to help with wiring. Some heat pump clothes dryers can be plugged directly into an 120V outlet connected to a dedicated breaker on their panel. However, some models may require 240V which requires panel upgrade. These models would not be simply plug and play and would likely require rewiring.

Recommendation: Only 120V electric stoves, cooking ranges and ovens, and 120V heat pump clothes dryers should be offered without engaging a contractor. Any heat pump, electrical upgrades, and weatherization should involve a contractor for preassessment and installation.

Q15. Does Virginia Energy want to allow point-of-sale (POS) rebates at in-person retailers? How will the state process rebate applications when partnering with retail partners?
Applicable Programs: HEAR

A15. POS rebates through retailers or online marketplaces introduce risks of double-dipping, fraud, or encouraging customers to self-install measures they may not be licensed for. Working through professional contractors (including licensed and insured plumbers, electricians, etc.) could be an alternative to administering rebates. DOE has also provided workflows on the Pacific Northwest National Laboratory coupon system that can be used to deliver POS rebates.

Recommendation: Where a contractor is not required for the installation or home assessment (Q14 of this document), a POS rebate would make it easier for contractors and participants to access rebates. Where a contractor needs to be involved, Virginia should allow the contractor to access the rebates directly through POS. This will make it a lot easier for contractors to directly access the rebates and pass discounts down to the customer. As next steps, Virginia Energy should explore partnering with retail chains to develop rebate processing approach. Additionally, Virginia Energy should engage in more discussions with contractors and community partners engaged in affordable housing to define the customer journey for multifamily buildings to access POS rebates.

1.6. Data Collection and Evaluation

Q16. Does Virginia Energy plan on conducting its own evaluation?
Applicable Programs: HOMES and HEAR

Application Question: ✓

A16. DOE requires states to determine whether the state energy offices will conduct their own evaluation or defer to DOE.

Recommendation: Virginia Energy should consider handing off evaluation to DOE so they can focus on program delivery.

2. Consumer Experience

2.1. Education and Outreach

Q17. How does Virginia Energy maximize engagement by low-income households, including homeowners, renters of single-family homes, and renters of multifamily homes?
Applicable Programs: HOMES and HEAR

A17. Stakeholders from VA's Community Housing Partners (CHP), Viridian, and Alliant Energy pointed to many other organizations for potential partnerships and to leverage their existing outreach programs (such as Virginia Association of Counties, Virginia Municipal League and the VA Association of Planning District Commissions, PDCs, Virginia Organizing, New Virginia majority, VPLC, VA IPL, C3, Generation 180, Appalachian Voices, Sierra Club, unions, social

service agencies, healthcare providers, Association of Energy Conservation Professionals, Virginia Energy Efficiency Council, and Energy Efficiency for All-Virginia, WAP network, community action agencies). Commenters also recommended Virginia Energy to work with other programs offered in Virginia and offer a one-stop shop or one trusted point of contact who can provide personalized recommendations about all relevant programs.

Recommendation: Virginia Energy should engage with contractors and community groups to maximize engagement by low-income households. They should continue to work with utilities and other agencies to explore a one-stop-shop approach to share information, co-deliver and co-promote all state and utility programs that a participant may be eligible for. Virginia Energy also has plans to launch a dedicated consumer energy awareness effort to support the Home Energy Rebate programs and Solar for All.

Q18. What are the education and outreach methods (e.g., print, media) that Virginia Energy plans to leverage for effectively marketing these programs?

Applicable Programs: HOMES and HEAR

- A18. Virginia Energy's dedicated consumer energy awareness effort will address these plans. Stakeholders including those from the Virginia Energy Efficiency Council (VAEEC) recommended the use of traditional outreach materials in addition to digital for those who do not have broadband. There are also recommendations to use template language for uniformity and coordinate outreach efforts to be aligned with implementer availability.

Recommendation: Virginia Energy to explore these and other methods with their implementation contractor.

2.2. Qualified Electrification Projects

Q19. Does Virginia Energy want to place any additional restrictions on the type of technologies the rebates can cover?

Applicable Programs: HEAR

- A19. The overall recommendation from stakeholders is to not limit the eligible measures. Virginia Energy may consider not allowing rebates for heat pump clothes dryers because there is data suggesting minimal net benefits for this technology. A VAEEC stakeholder recommends removing the restriction on replacement of in-situ electric heat pumps because older models of heat pumps are much less efficient than modern models; however, the restriction on replacement of older heat pumps is a DOE requirement and may not be something that Virginia Energy can remove.

Recommendation: Virginia Energy may consider keeping all technology options listed in DOE's appliance list eligible for rebates. Additionally, Virginia Energy may want to compare the appliance level eligibility criteria for utility and HEAR programs to identify any product specific restrictions to enable integration with utility programs or for the one-stop-shop approach.

2.3. Installation Incentives

Q20. How much of an incentive (up to \$200) should Virginia Energy provide to contractors providing services to DACs?

Applicable Programs: HOMES

Application Question: ✓

A20. As per DOE guidance, contractors can get up to \$200 for projects completed in disadvantaged communities. Contractors can get additional rebates up to \$500 for specific appliance upgrades under the HEAR program. DOE has defined a payment schedule for maximum incentive for installers based on type of upgrade under the HEAR program.

Recommendation: Based on DOE's guidance there does not appear to be any flexibility in changing the amount of installer incentive for contractors. Virginia Energy should coordinate with their implementation contractor on contractor incentives, which tend to be a powerful contractor incentive to drive participation.

2.4. Home Assessments

Q21. Should Virginia Energy require envelope improvements prior to installation of other upgrades?

Applicable Programs: HOMES

Application Question: ✓

A21. Many stakeholders including those from Community Housing Partners (CHP), Habitat for Humanity, Viridiant, and utility programs agree that the focus should be on "encouraging and incentivizing" envelope improvements rather than a strict requirement. This will require customers having expert advice available to them about financing and education. A nonprofit organization points out that low-income homes that receive a 100% rebate should be required to do envelope improvements. Some VA homeowners say that this requirement should only be put in place if it is free or incentivized.

Recommendation: Virginia Energy's market assessment indicates opportunities for bundling weatherization with heat pump or whole-home electrification measures. Based on [National Renewable Energy Laboratory's \(NREL's\) ResStock data](#), the market assessment found a 15% increase in energy savings when heat pump measures are bundled with weatherization for the HOMES program. These additional savings could lead to more rebates under the measured approach and allow for higher rebate level for the modeled approach and should be explored with the implementation contractor.

Virginia Energy should also explore getting leads of participants from the Weatherization Assistance Program who have already weatherized or are in the process for weatherizing their homes. These households could be targets for HVAC upgrades rebated through the HEAR program. These options should be explored while working with the implementation partner.

2.5. Measured Approach

Q22. Does Virginia Energy plan to use measured approach for multifamily buildings? If so, how would it work?

Applicable Programs: HOMES

Application Question: ✓

A22. A VA homeowner responded that Virginia Energy should engage with condo associations for their opinions. There was no further stakeholder input on this question. DOE is expected to provide additional guidance on program design for multifamily buildings.

Recommendation: To determine which approach to use, Virginia Energy should conduct a more detailed analysis to identify the differences between modeled and measured in multifamily buildings and can discuss with their implementation contractor.

2.6. Consumer Protection through Quality Assurance

Q23. Should there be one point of contact for these rebate programs that consumers across Virginia can contact for guidance?

Applicable Programs: HOMES and HEAR

A23. Yes. Questions about program participation and issues will be directed to the implementer, and Virginia Energy can answer other general questions. There are recommendations from stakeholders for an online one-stop-shop to simplify the process.

Recommendation: Virginia Energy's implementation partner should be the key point of contact for these rebate programs. Typically, the implementation partner would set up a call center to help address questions from participants, customer complaints and help participants access the program.

Q24. How can Virginia Energy balance the bill impacts of efficiency upgrades with the overall benefit from incentives especially in households where utility bills will likely increase?

Applicable Programs: HEAR

A24. Non-profits emphasized the importance of educating clients about the costs of their utility bills and their capabilities to pay them. On this topic, Washington Gas shared that the program and contractors can provide accurate information about the realistic impacts to energy bills that result from the installed measures. Most measures in Virginia energy are likely to increase bill savings. Based on the market assessment, high-efficiency heat pump measures and whole building retrofits that include heat pumps are likely to result in bill savings. In the market assessment, savings are greater when replacing oil and electric resistance heating systems.

Recommendation: Virginia Energy may consider allowing only those projects that result in positive bill savings. Based on the market, these projects would be sufficient to meet the required allocations.

3. Maximizing Rebate Impact

3.1. Supporting the Clean Energy Economy Through Market Transformation

Q25. How can Virginia Energy use the Home Energy Rebate Programs to make Virginia's grid and homes Virtual Power Plant (VPP)-ready?

Applicable Programs: HOMES and HEAR

A25. Nonprofit groups remarked that rural areas will adopt VPP energy at a slower rate than other areas and that legislation will be needed to require utilities to deploy the technology needed for VPP. To assist homeowners with the transition, consider enabling an implementation vendor to pursue demand-saving technology deployments at customers' homes during Home Energy Rebate program installations.

Recommendation: Electrification as part of the Home Energy Rebates Programs is a step toward being VPP-ready. Virginia Energy should consider rebating Wi-Fi-enabled technologies that allow for a future deployment of demand response capabilities. Virginia Energy should also explore integrating Home Energy Rebate Programs with solar for all to deploy additional distributed energy resources as a key step toward making homes in Virginia VPP-ready.

Q26. What training/workforce development initiatives will Virginia Energy provide for training contractors? Does Virginia Energy plan on using IRA 50123 for workforce development?

Applicable Programs: HOMES and HEAR

A26. APCo mentioned some programs require a Building Performance Standards certification. Anyone performing an audit needs to have a certification from the Building Performance Institute, Inc. (BPI) and HVAC work requires a certification from the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). Washington Gas' contractor requirements for their Residential Home Energy Savings Program can be found here: <https://wgcp.customerapplication.com/>.

Based on the feedback, several programs require contractor credentials similar to what is required for serving on utility programs. Virginia Energy could leverage existing training opportunities offered by utilities in addition to Training Residential Energy Contractors (TREC) to help contractors develop the skills to be eligible to participate in the program.

Recommendation: Virginia Energy should explore programs that are listed in the asset inventory of existing programs to identify programs offered by utilities and state agencies that have contractor requirements like those required for the Home Energy Rebate programs. Virginia Energy's implementation partner should also explore existing training programs offered by utilities and third parties. Lastly, Virginia Energy should leverage DOE's TREC program for training up contractors to support program delivery.

3.2. Integrating with Other Programs

Q27. How will Virginia Energy integrate with existing programs, including leveraging existing processes? Will integration include data sharing? And which programs?

Applicable Programs: HOMES and HEAR

Application Question: ✓

A27. Virginia Energy received several comments on this topic through one-on-one interactions with utilities and the State Corporation Commission (SCC), public comments, and the survey. Nonprofit organizations suggested weatherization services under DHCD as well as Local Energy Alliance Program (LEAP) and C3 for “Resource Hubs” that are currently in place for Charlottesville and Albemarle as options for stacking. Washington Gas believes that the largest opportunity for integration is in utility programs and believes that Virginia Energy needs to gain an understanding of the scope of existing utility programs before implementing any overlapping or competing offerings.

DSS sees potential opportunities to collaborate with Virginia Energy in the form of referring customers, having one eligibility system, as well as efficiently sharing information on all the opportunities (e.g., through WAP information sharing).

DHCD’s programs align with DOE’s requirements on AMI levels for low-income and most of their applicants are multifamily. They recommend that HEAR funds are more applicable for rehabilitation than new construction.

Old Dominion Electric Cooperative (ODEC) mentioned on-bill financing programs that might be ways for ODEC and other co-ops to support the Home Energy Rebate programs. ODEC also expressed interest in identifying target households that have high usage. They also expressed difficulties in utility bill data sharing because of concerns of confidentiality and security.

APCo shared that it believes low-income and multifamily federal programs are good for rebate stacking and recommend adding a tier for moderate income as well, which is more relevant to APCo customers. APCo currently does not have a singular directory to support data sharing—the data is under program implementers. It is also expensive to share data, and this may affect the cost effectiveness of their programs as well.

Dominion expressed concerns about the privacy implications of data sharing and shared that it would have to be on an individual customer basis to be shared with Virginia Energy. The level of integration between utility programs and Home Energy Rebate programs requires greater discussion with the Commission’s input because utilities cannot claim free ridership/savings associated with those integrated programs. Dominion also suggested that Dominion and Virginia Energy pay for separate measures rather than stacking up the rebates on top of each other for the same set of measures.

The SCC commented that not finding a way to integrate with utility programs could be a missed opportunity.

Virginia Energy’s market assessment found that stacking utility and state agency rebates with

Home Energy Rebate programs can result in a significant reduction in out-of-pocket cost for low-income households.

Recommendation: The asset inventory includes several programs that may be good candidates for integration with Home Energy Rebate programs. For example, income eligible, affordable housing, residential HVAC, and whole-home retrofit programs. Virginia Energy's implementer can use the inventory as a starting point and work with commonwealth agencies and utilities to identify ways to integrate with existing programs. There are several options available for Virginia Energy to integrate with other programs. These options include but are not limited to:

- Identify programs and rebates that maybe stacked together to maximize value for participants.
- Utilize shared pool of contractors to deliver programs jointly between utility, commonwealth agencies and Home Energy Rebate programs.
- Coordinate with existing contractor base to increase marketing and outreach.
- Streamline the application process and income verification for simpler customer experience.

Virginia Energy's implementer should work with each utility and agency to help set up the structure for partnership and collaboration. Integrating programs and processes used by different agencies and utilities can be complex but it is important that the result is a simple unified experience for the customer.

Utilities are a key stakeholder in helping Virginia Energy deliver an effective program for all eligible Virginians. The implementer must explore setting up data sharing agreements, streamlining product offerings and contractor eligibility requirements to enable integration between the programs.

Appendix A. Public Briefing Session

Below is a summary of information from the feedback from the stakeholders during the public information session: [Non-Governmental Partner Briefing.pdf](#)

Appendix B. Stakeholders who attended Virginia Energy’s stakeholder discussions

Stakeholder	Stakeholder Group	Method
A&N Electric Cooperative	Utility co-op	Virginia Energy Survey
Appalachian Community Action & Development Agency, Inc.	Community Action Agency	Virginia Energy Survey
Appalachian Power Co. (APCO)	Investor-owned Utility	One-on-One Interview (virtual)
Arlington Initiative Rethink Energy	State & Local Government	Virginia Energy Survey
Building Performance Association	Industry Association	Virginia Energy Survey
Citizens Utility Board	Non-profit	Public Briefing
City of Charlottesville	State & Local Government	Virginia Energy Survey
Climate Action Alliance of the Valley	Non-profit	Virginia Energy Survey
Community Housing Partners (CHP)	Non-profit	Public Briefing
Department of Treasury	State & Local Government	Public Briefing
Dominion Energy	Investor-owned Utility	One-on-One Interview (virtual)
Fairlington Commons Council of Co-owners	Community Association	Virginia Energy Survey
Greenbound Consulting	Consumer Advocacy	Virginia Energy Survey
Habitat for Humanity Virginia	Non-profit	Public Briefing
Local Energy Alliance Program (LEAP)	Non-profit	Virginia Energy Survey
Natural Resources Defense Council	Non-profit	Public Briefing
New Virginia Majority	Non-profit	Public Briefing
Old Dominion Electric Cooperative (ODEC)	Utility co-op	One-on-One Interview (virtual)
Pearl Certification	Private Company	Public Briefing
Piedmont Housing Alliance	Non-profit	Public Briefing
Sierra Club	Non-profit	Virginia Energy Survey
State Corporation Commission (SCC)	State & Local Government	One-on-One Interview (virtual)
Thomas Jefferson Planning District Commission	Non-profit	Public Briefing
Virginia Association of Counties (VACo)	Non-profit	Public Briefing
Virginia Clean Energy Summit	Non-profit	Public Briefing
Virginia Community Action Partnership (VACAP)	Community Action Agency	Conference
Virginia Department of Emergency Management	State & Local Government	Public Briefing
Virginia Department of Environmental Quality (DEQ)	State & Local Government	Public Briefing

Virginia Department of Housing and Community Development (DHCD)	State & Local Government	Public Briefing
Virginia Department of Labor and Industry (DOLI)	State & Local Government	Public Briefing
Virginia Department of Social Services (DSS)	State & Local Government	One-on-One Interview (virtual)
Virginia Housing	State & Local Government	One-on-One Interview (virtual)
Virginia Energy Efficiency Council (VAEEC)	Industry Association	Public Briefing
Virginia, Maryland & Delaware Association of Electric Cooperatives (VMDAEC)	Utility co-op	One-on-One Interview (virtual)
Virginia Municipal League (VML)	Non-profit	Public Briefing
Virginia Organizing	Non-profit	Virginia Energy Survey
Virginia Poverty Law Center	Non-profit	Public Briefing
Virginia Works	State & Local Government	Public Briefing
Viridiant	Non-profit	Public Briefing
Washington Gas	Investor-owned Utility	Virginia Energy Survey