Alliance to Save Energy Response to U.S. Department of Energy Request for Information on Inflation Reduction Act Home Efficiency and Electrification Rebate Programs: DE-FOA-0002981 Submitted via DOE Online Form March 3, 2023

B. Accessible and Equitable Program Design

2. What best practices can program administrators and other relevant stakeholders (e.g., retailers, contractors, or community-based organizations) use to ensure that disadvantaged communities and low-income households are aware of and have easy access to the Home Energy Rebate programs?

To help ensure success and awareness of the Home Energy Rebate programs, DOE should strongly encourage that Rebate programs are not stand-alone activities but part of comprehensive targeted energy efficiency strategies within low-income and disadvantaged communities. To increase access for disadvantaged communities and low-income households, IRA funding will need to be braided with other funding (utility efficiency incentives, low-income weatherization incentives, etc.) as it will be critical to cover the full cost of the project (i.e., that the customer's financial responsibility is at or near \$0). Additionally, particularly for electrification rebates, leveraging midstream incentive delivery channels will allow for seamless braiding of funding—so that the customer does not have to fill out multiple applications—and midstream incentives can flexibly layer into existing local incentive programs.

That said, at the owner-occupied level, strategies should focus on whole-home energy efficiency including LEDs, insulation, and sealing the building envelope— and whenever applying the rebate program also include a home energy assessment or audit, and a proposed plan for affordable retrofit. To ensure the effectiveness of these strategies, DOE should work closely with EPA to ensure that the Greenhouse Gas Reduction Fund (GHGRF) specifically targets energy efficiency and associated home readiness applications. A similar approach could also prove effective in the multi-family market.

With the above in mind, the Alliance recommends that DOE provide guidance that confirms that use of the GHGRF is allowable when providing grants and loans, including low-interest and forgivable loans to support retrofit affordability in low-income and disadvantaged communities.

That said, DOE should also leverage Weatherization Assistance Program (WAP) grantees and subgrantees, and develop more active coordination with HHS and its LIHEAP grantees and subgrantees, to maximize awareness, access, and coordinated delivery of funds and services.

3. How can DOE encourage program administrators to design their rebate programs to align with the Justice40 Initiative, which commits to delivering forty percent of the overall benefits

(home improvements, jobs, etc.) from certain federal investments to disadvantaged communities that are marginalized, underserved, and overburdened by pollution?

For the rebate programs, a simplified approach would require that at least 40% of relevant state rebate allocations are set aside specifically for serving disadvantaged communities that are marginalized, underserved, and overburdened by pollution, as determined by various tools identified by DOE. As connected to jobs and business development, program administrators should be encouraged to track and report on participation levels of individuals and organizations representative of Justice40 communities, and relevant administrator partnerships should seek to achieve commitments furthering Justice40 objectives. It is also recommended that DOE encourage use of the Administration's Climate and Economic Justice Screening Tool to focus efforts on qualifying census tracts and other geographies, while also allowing states to apply their own geographic/other DAC criteria.

4. How can DOE and program administrators ensure that community-based organizations, residents of disadvantaged communities, renters, and marginalized groups such as low-income residents, residents of color, rural residents, and Tribal residents are meaningfully engaged for the Home Energy Rebate programs? What other groups should be included?

Rebate program outreach should be connected to multiple program services accessed by lowincome and disadvantaged communities, and tribal residents. Outreach and messaging to all eligible communities are critical to ensure that all eligible consumers are aware of their eligibility, and to help ensure the overall success of the program.

Additionally, DOE should take advantage of existing networks between the communities and local government representatives (e.g. non-profits, community organizers, local CDFIs, etc.). It is always advantageous when the outreach message comes from "trusted sources" that are part of a community's existing service network. DOE and the program administrators should work to ensure that the "trusted sources" are equipped with the proper and relevant information, including data from actual cases, to inform the communities. DOE should also allow technical assistance funds to be used to provide stipends for disadvantaged communities' members to participate in the engagement, outreach, and education processes, e.g., by making them "energy efficiency ambassadors" in their neighborhoods.

5. How can the Home Energy Rebate programs help to minimize energy burden and costs, particularly in low- and moderate-income (LMI) and high energy burden households?

As indicated above, when targeting low-income and disadvantaged communities, Home Energy Rebate programs should first target full-home energy efficiency retrofits, including insulation and sealing the building envelope, as guided by an energy audit or assessment. Programs should also immediately look to low-hanging fruit such as installation of LED lighting and related smart technologies. Programs should then target those items achieving the greatest energy savings and energy burden relief. Necessary retrofits should seek to achieve the greatest levels of affordability, including use of utility programs and the Greenhouse Gas Reduction Fund (GHGRF).

6. What types of program design approaches, guidelines, tools, savings analyses, policies or reviews can help discourage contractors from using rebates for upgrades that will likely result in higher annual household energy bills, particularly for low-income households?

Specific to owner-occupied upgrades in low-income and disadvantage communities, rebate upgrades should only occur if they place the owner in a better financial position than she or he would have been in but for the upgrade, the calculation of which could include energy cost savings. Utilization of additional programs such as the Greenhouse Gas Reduction Fund, utility programs, and other initiatives in coordination with the rebate programs will be critical in successfully achieving the desired result.

That said, DOE should also seek to avoid situations that are created when natural gas is master metered and electricity is tenant metered, which is sometimes the case for older multifamily buildings in some regions. Electrification of heating in such cases should be disincentivized when resulting in an increase in tenant energy bills.

7. What types of policies or requirements can be used to ensure that owners of rental properties receiving rebates targeted for low-income households continue to offer affordable rents for a reasonable time after improvements are made? How might DOE also incentivize multifamily affordable housing property owners to participate in these programs?

As a possible strategy, when rebates are provided to owners of rental properties in low-income and disadvantaged communities, owners should be required to certify a 5-year rental lookback analysis demonstrating rental rate increases over the identified period. To participate in the rebate program, owners would agree to the same rate of increases over the subsequent five years, beginning on the date of the purchase of the most recent upgrade. Rebate programs serving owners of rental properties could be administered through state-based energy efficiency revolving loan programs, which could provide relevant rebates through a forgivable loan structure, which would mature at the conclusion of the 5-year period after the most recent upgrade. To assist with administration, owners could be incentivized to conduct whole-building upgrades at one time, and should be encouraged to utilize existing utility and other programs to assist in lowering overall costs. DOE should encourage complimentary use of low-interest loans through the Greenhouse Gas Reduction fund to incentivize whole-building upgrades, led by insulating and sealing the building envelope, in addition to installation of LED and smart technologies. The proposed structure requires additional specificity, and the Alliance to Save Energy welcomes the opportunity to work further with DOE in perfecting the recommended structure.

9. What are best practices for implementing successful 'point of sale' rebates, including when considering contractor needs?

The 'point of sale' portion of the program needs to be made as easy as possible for both the consumers and contractors to participate. Onerous or confusing participation rules, procedures, and paperwork can be a major deterrent to participation for contractors and consumers. Applications and other forms should be clear and require a minimum amount of information.

Given that most energy efficiency improvements are made at the time of either equipment failure or retrofit, timing can be critical. A program that potentially delays equipment installation or requires additional customer or contractor time for participation will have fewer participants.

Because many of the measures eligible for IRA funding may not be products that customers can buy off-the-shelf, 'point-of-sale' means that the customer will use a contractor who will buy the equipment on the customer's behalf, typically from a distributor. Many utilities offer midstream programs that provide incentives to distributors and retailers, who then pass that on to the contractors, who then pass it on as a line-item discount on the invoice to the customer. It's a best practice to use distributors and retailers for incentive delivery because there are far fewer distributors than contractors—so there is lower administrative cost—and because distributors are able to front the cost of incentive dollars while they wait for the administrator to reimburse them—which contractors, particularly small businesses, are not able to do. Additional effort may be needed to work with retailers on the more complex transactions that major appliances and HVAC systems typically entail.

10. For federally subsidized, low-income housing, what specific program design parameters are necessary to ensure rebates can be used at these properties?

Owners and tenants connected to federally subsidized housing should each have access to the rebate programs to accelerate adoption of energy efficiency technologies. At the owner level, DOE should incentivize insulation and building envelope improvements consistent with relevant model performance standards, in addition to inexpensive conversion to LED lighting and related technologies, in coordination with investments in qualifying HVAC equipment. To assist owners with the relevant cost, DOE should provide guidance that would affirm use of other programs, such as the Greenhouse Gas Reduction Fund, either when not being combined with relevant rebate investments or when provided through debt instruments, including forgivable loans. In addition to the guidance, DOE should provide targeted outreach to the building owners to assist them through the analysis, project development, financing, and construction phases.

When tenants in federally subsidized housing seek to use the rebate programs, DOE should consider use of vouchers for eligible purchases. A voucher system will act as a coupon to provide for a discount at the time and place of sale. Rebates that require consumers to wait until after the sale takes place to receive funds could act as a disincentive for program

participation. A voucher approach may also avoid consumers confusing the energy efficiency rebates with consumer experiences with manufacturer rebate programs, that may require extensive paperwork post purchase. Confusion with these programs could chill efficiency program participation.

D. Designing Programs for Maximum Impact

18. How should DOE, states, tribes, and territories measure success? Examples may include high customer satisfaction, measured or estimated benefits (e.g., impacts on energy, bills, emissions, health, or peak demand), quality job creation, valuation of home upgrades or overall efficiency, etc. What specific data is needed to evaluate progress toward these recommended metrics of success?

Success of the rebate programs should be measured by multiple metrics, including but not limited to:

- A. Low-income owner-occupied households receiving upgrades and the energy cost savings achieved.
- B. Rental units impacted by owner upgrades, including reductions in energy use and emissions(projected) achieved by identified upgrades.
- C. Meeting Justice40 goals, especially achieving energy burden reductions for low-income households.
- D. Job creation and business development.
- E. Job creation and business development representatives of Justice40 communities.
- F. CO2 emission reductions.
- G. Energy cost and usage savings to all participants.

22. Should program administrators establish set-asides or limits concerning the distribution of the rebates (e.g., bundled packages, disadvantaged communities, income or other definitions, incumbent heating fuel in the home, high-impact measures)?

As indicated above, DOE should set aside at least 40% of relevant rebate allocations for serving disadvantaged communities that are marginalized, underserved, and overburdened by pollution, as determined by various tools identified by DOE.

27. While the electrification rebates allow for application in both new construction and existing buildings, are certain uses more likely to deliver greater benefits? For example, should electrification rebates focus primarily on existing buildings where such improvements are less likely to happen without additional funds? Are there important other applications (e.g., new construction of affordable housing, other?)

As a general rule, new construction will be subject to the most recent energy codes, with the largest need for upgrades occurring in existing buildings. When permitting use of rebates for

new construction, DOE should require or highly incentivize construction compliance with at least the most recently adopted national model energy codes (regardless of state adoption) in place at the time of purchase of the applicable equipment or appliances.

That said, states should be allowed to allocate 100% of funding to retrofits of existing buildings, based on their analysis of best use of funds, considering that some jurisdictions have already adopted code provisions requiring all-electric, efficient homes and buildings.

E. Integrating Existing Incentives & Programs

28. How can DOE encourage program administrators to build on and coordinate these funds with existing networks and programs to maximize impact? Other programs may include state energy efficiency Revolving Loan Funds (RLF), utility energy efficiency programs, U.S. Department of Health & Human Services Low Income Home Energy Assistance Program (LIHEAP), Weatherization Assistance Program (WAP), tax incentives, among other funding sources.

To the greatest extent possible, DOE should seek to build on existing programs designed to incentivize and encourage investments in energy efficiency, including the Greenhouse Gas Reduction Fund and existing local and utility incentive programs. Utilization of the Greenhouse Gas Reduction Fund (GHGRF) will be critical when targeting low-income and disadvantaged communities and would have the impact of maximizing energy efficiency retrofits and upgrades at a least possible cost. Furthermore, coordinating the rebate programs with the GHGRF will maximize and extend the use of GHGRF capital, and also facilitate deeper retrofits, including sealing the building envelope. To further ensure that program administrators build on and coordinate funds, DOE should consider program guidelines that would set-aside a certain percentage of the available funds for coordination purposes.

Also, the Weatherization Assistance Program (WAP) offers opportunities to capture low hanging fruit, considering funding made available through the Infrastructure Investment Jobs Act (IIJA), which may allow envelope upgrades for up to 500,000 homes. As a general rule, WAP may not cover HVAC, which means that for WAP communities, the braiding of other funding opportunities will be critical, including through grants or very low interest or forgivable loans made available through the Greenhouse Gas Reduction Fund. DOE should encourage state energy offices and state WAP grantees to coordinate, so that state energy offices can target recent WAP participants for electrification rebates.

29. What are the potential barriers to effective program energy savings attribution? Are there best practices to address these barriers?

One significant barrier is the prioritization of energy-saving projects that do not result in the greatest energy savings. For example, high energy efficient HVAC may be quickly chosen over projects that involve more complex changes, like reskinning a building to insulate the building

envelope, although the latter would have a far greater efficiency impact; or programs may also neglect easy low hanging fruit options, such as LED and smart lighting technology conversions, which could also have a significant impact on emissions and energy cost savings—and at a low cost.

DOE should establish clear criteria for prioritizing projects based on their potential for energy savings. This can involve conducting energy audits to identify areas of highest energy consumption/potential savings. To inform future decision-making and ensure that programs remain relevant & effective over time, it is important to (a) involve stakeholders in the decision-making process to ensure that project priorities align with energy savings goals, and (b) regularly evaluate and adjust the prioritization criteria by collecting and analyzing data on the actual energy savings achieved by implemented projects.

31. What safeguards can program administrators put in place to ensure local utility rebates and other local funding that existed before the Home Energy Rebates are not decreased in response to the availability of the Home Energy Rebates?

Rebate and other programs designed to incentivize energy efficiency investments are intended to supplement and not supplant existing utility and local funding. States should be encouraged to coordinate with utilities, utility commissions, and other relevant governmental bodies to ensure that utility and other programs are not decreased due to federal programming. That said, DOE should provide guidance to help ensure that utilities can claim kWh savings for any projects that receive both IRA and utility funding to safeguard against decreased utility incentives.

G. Income Verification

37. What types of documentation should be considered sufficient for rebate applicants to demonstrate that they meet income eligibility requirements (e.g., prior year tax return, verification of other federal benefit program eligibility, or recent paystubs)?

Income verification is potentially a primary barrier to ensuring that the benefits of the rebate programs reach those who need them most. A federal program that can verify income, particularly for people that can't easily provide a tax return, should be a priority for increasing equitable access.

To ensure ease of participation within low-income and disadvantaged communities, income verification procedures should be as simple and easy as possible. Documentation of prior year tax returns, federal program eligibility, and paystubs are all viable options, and could also include use of other databases using SSN identification, provided that sufficient safeguards are in place to protect customer privacy.

If the process of income verification becomes too burdensome, then it is possible that consumers will chose not to participate in the program, leading to the program not fulfilling its mandate. The Alliance recommends that the program be as seamless as possible given the limited funding available per state for these programs., and as such require a single one-page form for consumers when possible, with the appropriate due diligence. Additionally, DOE should work with the states to ensure that income requirements for the program are clearly displayed in all program outreach efforts and advertising.

38. If DOE established a national income qualification system that program administrators could opt into using, what features would be most useful? What features would be duplicative of existing systems?

If DOE wants to pursue a national income qualification system, the Department should review other similar programs at other agencies within the federal government such as the Enterprise Income Verification (EIV) System for Multifamily Housing Program at the Department of Housing and Urban Development. The Alliance recommends that for any large system, that particular attention be given to the security measures, considering that the collection of personal data at a large scale represents a significant risk and therefore should be protected as such.

H. Estimating and Measuring Energy Savings

40. For the Home Efficiency Rebates, how should DOE support program implementers in selecting, developing and implementing the modeled and/or measured energy efficiency path? What factors will drive decisions to implement a modeled program, a measured program or both programs?

As a general rule, measured data is best and likely the most accurate, but would require access to utility data—and not all states have access to utility data. For those states that do not have measured data, they will be incentivized toward a modeled analysis. It is expected that those states may experience multiple obstacles.

While it would be best to get 100% participation from the states, it is important that southern states like Alabama and Arkansas participate as well. It is important that DOE provide guidance to the states on the modeled approach. One possible pathway is a "deemed" qualification where if certain equipment types and certain retrofits are used, then a deemed savings would be recognized—however this may be best for the 20-34% range, but not for the higher standards above 35%.

The Alliance recommends that DOE provide a default model for the overall program such that states can use it without having to develop their own model and incurring the associated costs.

I. Eligible Technologies for Rebate

47. The Home Electrification Rebates specifies that qualified electrification projects must include the purchase and installation of certain equipment or materials. Should other related improvements (e.g., smart thermostats, sensors and controls, LEDs) be allowable as part of a qualified electrification project for the purposes of calculating total project costs which can in turn affect the final rebate amount?

It is critical that the electrification rebates effectively reduce the energy burden in low-income communities, and also result in reducing carbon emissions. However, this will require improvements beyond simple installation of efficient electric heat pump products and other electric equipment. The Alliance agrees that other related improvements should be allowable as part of a qualified electrification project, and that this should include items such as smart thermostats, energy efficient LED light sources, and lighting controls (including sensors). These products save energy, are cost effective, and they are easy to incorporate into qualified electrification projects. Replacing inefficient lighting with LED can have a significant impact on reducing energy consumption, and layering occupancy sensors, timers, dimmers, and other types of controls and/or automation can further cut lighting energy consumption by 50 percent or more. DOE should encourage the use of any and all related improvements that would maximize energy efficiency, as connected to related upgrades.

That said, insulation and sealing the building envelope should be prioritized before installing efficient electric heat pumps. If efficient HVAC is installed as part of the rebate program and homes are not sufficiently insulated and sealed, the result may be dramatically increased electric bills for the low-income community, and potential failure of the overall program. Unfortunately, low-income communities are extremely vulnerable, and significant care should be taken to ensure that residents in these communities are assisted in making decisions that place them in a better financial position than they would have been in but for the energy efficiency improvements. As one possible mechanism to ensure this occurs DOE should consider requiring that aggregators, installers, or program administrators certify that the project meets an identified program standard of "best affordable outcome" identified as a condition precedent.

The Alliance recognizes that this may require additional costs, some of which may not be covered by the rebates. As such, the braiding and inclusion of other programs, such as the Greenhouse Gas Reduction Fund, utility programs, and others will be essential.

48. Should rebates be allowed in instances where use of the rebate-eligible equipment or measure is already required by local code?

Yes, but as recommended above, use of the rebate program with new construction should be linked to construction compliance with at least the most recently adopted national model energy codes (regardless of state adoption) in place at the time of purchase of the applicable equipment or appliances.

J. Data Access and Sharing

49. What should DOE consider when drafting energy usage data sharing guidelines?

Energy usage data that is connected to personal identifiable information, including the actual address of the relevant property, should be guarded with extensive security, and the program should avoid sharing such data with third parties except that sharing is required to facilitate program success (reduction in energy use, reduced carbon emission, lower energy costs). At no time should data be shared with third-party advertisers or others who would use the information to target program participants to sell their goods or for other purposes. This or similar restrictions are particularly critical when considering residents in low-income and disadvantaged communities, who may be easy targets for harmful consumer practices.

L. Job Creation and Quality

56. How can DOE assure that these rebates support quality construction jobs and quality non-construction jobs?

Program guidance should be clear regarding the aims of the program to stimulate or create jobs and business development opportunities in the energy efficiency industry. As programs develop partnerships to ensure success, workforce and business development partnerships should be prioritized. DOE should consider structures that would allow programs to track and report the work performed through the rebate program, and by whom, and further track and report those contractors and employers who pay a prevailing wage, hire employees representative of lowincome and disadvantaged communities, and those who subcontract with business owners representative of low-income and disadvantaged communities.

DOE should allow states to develop flexible requirements for participating contractors so as not to restrict the eligible contractor pool, limit small business participation, and potentially inflate prices. Across the country, the pool of eligible contractors is already very limited and demand for heat pumps exceeds their workforce capacity. Restricting contractor participation will further exacerbate existing installation cost inflation.