Comments of the American Council for an Energy-Efficient Economy (ACEEE) on EPA's Implementation Framework for the Greenhouse Gas Reduction Fund

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The American Council for an Energy-Efficient Economy (ACEEE), a nonprofit research organization, develops transformative policies to reduce energy waste and combat climate change. With our independent analysis, we aim to build a vibrant and equitable economy – one that uses energy more productively, reduces costs, protects the environment, and promotes the health, safety, and well-being of everyone.

Thank you for the thoughtful draft Implementation Framework for the Greenhouse Gas Reduction Fund (GGRF) and for the opportunity to comment. The following suggestions are aimed at better use of energy efficiency to achieve the GGRF objectives you described, and especially to maximize benefits for low-income and disadvantaged communities.

The GGRF is one of the most flexible of all Inflation Reduction Act (IRA) programs. In choosing priority project categories to maximize the long-term impact of the funds in reducing greenhouse gas and other air pollutant emissions, benefitting low-income and disadvantaged communities, and mobilizing capital, we suggest EPA consider both the importance of the category in achieving the objectives and the need for capital in the category—the GGRF should help fill in the "gaps" in key sectors that lack adequate funding in other IRA programs. Careful consideration of the categories is particularly critical if the Clean Communities Investment Accelerator is limited to financing the priority project categories. We also recommend setting clear objectives for the accelerator but giving those recipients and subrecipients more flexibility to identify the gaps in their communities that they can best fill.

Decarbonization Retrofits of Existing Buildings

We support the prioritization of decarbonization of existing buildings, especially in the hard-to-reach sectors of affordable housing and buildings in low-income and disadvantaged communities, a critical and very challenging pillar of addressing climate and equity. We would suggest clarifying that this priority category includes single-family homes, as the term "buildings" is sometimes used as a short form of "commercial buildings" (an example in the draft framework already makes clear that it includes multifamily housing).

In order to enable the many subrecipients to invest in this category, we would suggest clarification of what work qualifies as a decarbonization retrofit and what requirements may apply. The draft framework says projects should be "consistent with the targets and strategies of *net-zero emissions buildings* as specified in Executive Order 14057 (*Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*) Implementing Instructions."

But it is not clear exactly which instructions to federal agencies in that 73-page document grant recipients and subrecipients may be required to follow.

Most obvious would be the language on what constitutes a deep energy retrofit in section 4.4.7. The instructions prioritize "reductions of on-site- emissions to achieve net-zero or near net-zero emissions at the building level;" say the retrofit "leverages whole building approaches and integrative design to maximize energy efficiency and emissions reductions;" and specifically say the project "reduces annual site EUI by at least 40 percent from a pre-renovation, FY 2019 baseline." The instructions also specify that this ambitious reduction could occur over several years. If EPA intends the 40% site EUI reduction as a requirement for decarbonization retrofits, the draft framework should at least clarify that GGRF funding could support a narrower scope of work that is part of a broader long-term plan to reach the target. In particular, air sealing and building envelope improvements could enable future electrification with lower cost, higher efficiency, and greater occupant health and comfort.

The focus in the implementation instructions on energy efficiency more broadly and performance benchmarking (4.4.4), water efficiency (4.4.5), and building electrification (4.4.6) also is critical, though specific project-level criteria are not clear in the agency-wide targets in those sections. These measures should be eligible for GGRF funds.

We would also suggest clarification that just as enabling upgrades can be included in Solar for All projects, work necessary to enable decarbonization retrofits can be included in the scope of the projects, including health and safety repairs in homes of low-income households that are often needed in order to do retrofits (eg roof repairs before adding insulation) and electric panel and wiring upgrades needed for electrification.

In addition to decarbonization of existing buildings, we also support prioritization (or at least eligibility for the Clean Communities Investment Accelerator) of new net-zero-emissions or zero-energy-ready homes and commercial buildings, especially in low-income and disadvantaged communities. This eligibility is consistent with EO 14057, and shifting new construction to high efficiency and low emissions is a critical path to the goals of GGRF.

Transportation Pollution Reduction

We also support GGRF funding for deployment of electric vehicles (EVs) and other zero-emissions transportation modes. Support is especially important for heavy-duty EVs that operate in low-income and disadvantaged communities. Heavy-duty EVs are far behind light-duty EVs in deployment, and they are a major contributor to air pollution in those communities. While EV charging infrastructure in low-income and disadvantaged communities received some support in the Bipartisan Infrastructure Law, that is another area with a need for more capital.

However, EVs are not the only critical path to a zero-emissions transportation system that serves low-income and disadvantaged communities. Transportation system improvements that enable greater mobility with walking, biking, and public transit also are necessary,, and

they receive very little support in the IRA. We urge that such transportation system work be eligible for GGRF support.

Industrial Decarbonization as an Additional Priority

Another key sector that has only limited funding in other IRA programs is the transformation of industrial processes to achieve industrial decarbonization while also often reducing other air pollutants such as fine particles and nitrogen oxides (NOx). Deploying cleaner ways to make industrial products, including energy efficiency and electrification with heat pumps as for buildings, is one of the most challenging and important ways to achieve both decarbonization and reductions in air pollution in low-income and disadvantaged communities. The capital required to transform industry dwarfs even the resources of the GGRF. However, financing could enable early adopters of commercial technologies, reducing the risk for the rest of the industry to follow the path. We urge EPA to add decarbonization of industrial processes as a priority project category, with an emphasis on projects that reduce both carbon and criteria pollutant emissions.

While the Department of Energy (DOE) is investing in decarbonized industry facilities, and is requiring projects to meet Justice40 goals, the funding is inadequate to support community-driven activities to reduce air pollution, create local jobs, and improve local infrastructure such as energy-efficient housing and clean transportation. Hence, additional EPA support for these community benefits also is essential to support industrial projects. We recommend that the agencies align their efforts to advance common goals while amplifying emission reductions and positive public health impacts.

Financial Assistance for Low-Income and Disadvantaged Communities: Grants and Loans

The draft framework states that "EPA does not expect to consider grants as a financial product" for the National Clean Investment Fund or the Clean Communities Investment Accelerator. For some affordable housing projects, loans (including forgivable loans as allowed in the draft framework) are a better form of financing than grants. Developers of Low-Income Housing Tax Credit (LIHTC) projects often cannot use grants because they reduce the tax basis. Also, the Department of Energy's Home Energy Rebates cannot be combined with federal grants for the same work. Such projects should be eligible for loans.

However, loans can be problematic for people in low-income and disadvantaged communities.[1] Members of these communities are more likely to have poor credit scores and hence be unable to qualify for loans. These communities also have frequently been victims

[1] State and Local Energy Efficiency Action Network. 2017. *Energy Efficiency Financing for Low- and Moderate Income Households: Current State of the Market, Issues, and Opportunities*. Prepared by: Greg Leventis, Chris Kramer, and Lisa Schwartz of Lawrence Berkeley National Laboratory. https://emp.lbl.gov/publications/energy-efficiency-financing-low-and

of predatory lending,[2] so loans can be a barrier to participation. Contractors could use GGRF loans for work that does not provide the financial paybacks that enable low-income homeowners to make payments on the loans. Homeowners also could be directed toward loans for work they could have obtained for free through the low-income weatherization program. If borrowers cannot pay back the loans, then they could face even less access to credit and additional financial problems.

These concerns are especially acute for building electrification projects. While electrification with high-efficiency heat pumps is an important pathway to decarbonization, it can be expensive and may not reduce total energy bills, depending on local electricity and natural gas prices, local climate conditions, and building efficiency.[3] Without financial savings, low-income homeowners or residents may have difficulty paying back loans that financed the work. Expecting them to in effect pay for the climate benefits also may be inequitable.

Thus, we would urge you to include grants as an eligible form of financial assistance for individuals and small businesses in low-income and disadvantaged communities for the National Clean Investment Fund and the Clean Communities Investment Accelerator. Grants are an eligible form of financial assistance in Solar for All.

Solar for All

In maximizing the benefits of solar installations for low income and disadvantaged communities and for the climate, building efficiency should be considered a key enabling upgrade. Just as repairing or replacing an old roof or added structural support may be needed before installing solar panels, similarly, air sealing, added insulation, and an efficient HVAC may be needed for effective use of the solar power. Using solar power to heat or cool air that escapes outside is a waste of a precious resource.

Combining home or building energy retrofits with solar power can greatly increase the benefits for low-income and disadvantaged communities. Combining with energy efficiency can:

- Reduce the total cost of achieving the emissions benefits
- Provide direct benefits to members of the community in improved indoor air quality, increased comfort, better health, and greater home quality and longevity
- Enable achieving net-zero emissions from a facility

[2] National Consumer Law Center. 2017. *Residential Property Assessed Clean Energy (PACE) Loans: The Perils of Easy Money for Clean Energy Improvements*. https://www.nclc.org/wp-content/uploads/2022/09/IB_PACE_stories.pdf

[3] We would not recommend support for primary heating with low-efficiency electric resistance heat.

The draft framework mentions leveraging the Department of Energy's Weatherization Assistance Program (WAP), and we strongly encourage coordinating with that program to help low-income households benefit from both programs. But given the limited funding and local administration of that program, it will not be possible to use WAP for all Solar for All homes.

We urge you to clarify that improved efficiency can be an enabling upgrade for projects under Solar for All.

Thank you again for the opportunity to comment. We are excited to see the implementation of this critical climate and equity program.