December 5, 2022

Michael S. Regan, Administrator
U.S. Environmental Protection Agency
Office of the Administrator
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Administrator Regan,

On behalf of the Natural Resources Defense Council (NRDC), we are pleased to respond to the Request for Information (RFI) by the Environmental Protection Agency (EPA) on the Greenhouse Gas Reduction Fund (GHGRF). NRDC is an international nonprofit environmental organization with more than three million members and online activists. Since 1970 our lawyers, scientists, and policy advocates have worked to protect the world’s natural resources, public health, and environment.

Over the last decade, NRDC has increasingly focused on how, using the green bank model, public funds could dramatically increase private investment in the clean energy transition and help to accelerate the shift to a greener, more prosperous economy that benefits everyone. Our experience providing input on various versions of federal green bank legislation dating back to 2010; advocating for and supporting the creation of New York Green Bank in 2012; co-founding and serving as the secretariat of the global Green Bank Network in 2015; in recent years working alongside community development financial institutions (CDFIs) and credit unions charting innovative clean energy models; and working on the ground to equitably deploy clean energy solutions gives us informed insights on the green model and community development finance. We see clearly how critical our financial system is in reducing carbon emissions, bolstering climate resilience, and supporting development that is sustainable and equitable. NRDC’s private/public finance expertise puts us in a unique position to comment on the design and implementation of EPA’s GHGRF, which we believe can be a critical tool in accelerating a more equitable clean energy transition.

Twenty-seven billion dollars is a large amount of federal funding. But it pales in comparison with the capital needed to reduce greenhouse gas (GHG) emissions and other forms of air pollution, while also
addressing the generations of environmental injustice endured by many low-income communities and communities of color who are on the front lines of climate change. Rarely has the mandate or capacity to scale the deployment of clean energy and energy efficiency been combined with efforts to address inequality and poverty.

The green bank community has innovated on how to use scarce public dollars to stimulate private investment in low-carbon or energy efficiency projects. At the same time, over decades, nonprofit community-based lenders like CDFIs and community development credit unions (CDCUs) have built experience providing capital, stimulating additional investment, and building trust in communities long overlooked by broader financial markets. Both of these sectors have had to address issues of market stimulation, additionality, and inclusivity, and both have valuable complementary insights and experience to offer EPA in its efforts to scale clean energy investments that deliver tangible benefits to Americans, particularly those living in low-income and disadvantaged communities (abbreviated in our response as “LI/DAC”).

Twenty-seven billion dollars is a critical down payment to create our equitable and prosperous low-carbon future, and EPA faces a clear challenge in designing a program that can deploy this amount of money in an efficient, equitable, and distributed way that generates measurable benefits for low-income and disadvantaged communities and households, leverages other federal and state investments, mobilizes additional private capital, and creates markets to continue expanding investment.

To give a sense of the deployment scale GHGRF could generate, we estimate that 70,000–80,000 investments could be made with the $20 billion reserved for green banks, CDFIs, credit unions, and other recipients (collectively, “Nonprofit Lenders”) prior to any recycling. The numbers indicate that for a strategy focused on high-impact distributed technologies to succeed, dozens if not hundreds of Nonprofit Lenders across several established industries must be coordinated by a small number of skillful, seasoned intermediaries in a networked fashion. This strategy envisions the mobilization of GHGRF funds delivering economic, health, and quality-of-life benefits to communities, households, and small businesses across the country, with a particular emphasis on low-income and disadvantaged communities. A significant secondary benefit is that several key lending industries and large numbers of lenders can be engaged in a process that leads to market transformation: green banks can grow and proliferate, and more traditional financial institutions that serve the day-to-day needs of Americans can become “green” lenders. Ultimately, “green” investments can become “mainstream” investments.

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1 A 6kW solar panel installation for the average home costs from $10,626 to $13,230, and the national average cost for a heat pump is about $5,500. A multi-measure net-zero decarbonization project for an existing 50-unit apartment building may cost roughly $2 million, or $40,000 per unit. With this range of costs in mind, we can posit that an average GHG-funded loan size (financing 50% of project costs) might be in the range of $200,000 to $250,000. Assuming a $225,000 average loan size, and further assuming that 10% of the $19.97 billion fund is allocated to technical assistance, this implies that initially about 80,000 loans must be originated to deploy the GHGRF one time. With the goal of recycling funds and in support of the opportunity to develop more sophisticated approaches using GHGRF to de-risk loan portfolios and facilitate secondary market investment, this initial number can be multiplied many times. Over time, GHGRF funds can potentially support financing for a million or more qualified projects. Against this backdrop, CDFIs (including banks, credit unions, and loans funds) generally originate, on average, about 2,500 loans each year across all business lines, in addition to the (fewer but increasing) loans green banks originate. We can clearly see both a real deployment challenge and a significant opportunity to positively impact large numbers of households and businesses across the country.
To achieve this vision of a more equitable clean energy economy, EPA will need to ensure that the vast majority of GHGRF dollars work to serve low-income and disadvantaged communities and households. Qualified Projects that reduce GHG and other air pollution while creating community co-benefits like reduced energy burdens, jobs, and improved health are highly additional, and most will not occur, especially not quickly and nowhere near the scale needed, but for GHGRF investments. Many of these investments will need to be flexible and focused on market-building and ecosystem development, meaning that technical assistance and capacity building investments that generate future pipelines of Qualified Projects will be critical to GHGRF’s success. We urge EPA to lean in on its legislative charge for the GHGRF and create a program that expands access to clean energy while producing measurable benefits for low-income and disadvantaged communities.

We look forward to working with EPA to design a GHGRF that can deliver on such a promise.
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Key Concepts for the $19.97 Billion GHGRF Nonprofit Lender Portion

While our RFI response focuses on the entire $27 billion GHGRF program, there are key concepts and definitions involved in the Nonprofit Lenders portion of the program that are important to cover at the outset.

How can the GHGRF be allocated through direct investment and indirect investment to provide both financial assistance and technical assistance and ensure that the goals of the legislation are met?

An allocation approach should be designed with the end goals in mind. Key goals we identify in the GHGRF legislation are (1) reducing GHG emissions and other air pollution; (2) delivering tangible benefits to low-income and disadvantaged communities; (3) additionality, leveraging of additional capital, and recycling; and (4) accelerating market development with technical assistance (TA) and capacity building.

As we discuss in our response, these goals are best met by distributed GHG reduction technologies (e.g., building decarbonization, distributed solar including community solar plus storage, electric vehicles and related infrastructure for low-income and disadvantaged communities, and other small-scale distributed technologies addressing agriculture, small industry, etc.). Many of these distributed technologies lack adequate federal resources through other policies and programs and are in need of financial assistance to scale in markets targeted by GHGRF. This approach ensures robust delivery of benefits to low-income and disadvantaged communities, strongly supports the legislative goal of assisting projects that otherwise lack access to financing, and offers excellent opportunities for leveraging and recycling GHGRF capital.

The general diagram below summarizes how we envision GHGRF capital flowing to Qualified Projects in communities across the country, with high priority given to low-income and disadvantaged communities. This is a simplified version, but it speaks to how we view the role Eligible and Indirect Recipients can play in delivering Qualified Projects. Indirect Recipients will be a critical component in deploying GHGRF capital, and they should not be responsible for all of the same administrative and compliance obligations required of Eligible Recipients. However, this should not weaken the ability for EPA to ensure the GHGRF is implemented with fidelity to program goals and the expectations that come with stewarding taxpayer dollars. It is important to note that Qualified Projects include technical assistance and capacity building, since the legislation in part defines Qualified Projects as “assist[ing] communities in the efforts of those communities to reduce or avoid greenhouse gas emissions and other forms of air pollution.”
EPA Greenhouse Gas Reduction Fund - $27B

Nonprofit Lenders Portion - $19.97B

Eligible Recipients

- Financial Assistance
- Financial + Technical Assistance

Indirect Recipients

- Financial Assistance

Qualified Projects (Including Technical Assistance and Capacity Building)

Projects, Activities, or Technologies that Reduce or Avoid GHGs & Other Air Pollution
Technical Assistance and Capacity Building that Assists Communities in Their Efforts to Reduce or Avoid GHGs & Other Air Pollution
Section 1: Low-Income and Disadvantaged Communities

Section 1.1 What should EPA consider when defining “low-income” and “disadvantaged” communities for purposes of this program? What elements from existing definitions, criteria, screening tools, etc.—in federal programs or otherwise—should EPA consider when prioritizing low-income and disadvantaged communities for greenhouse gas and other air pollution reducing projects?

Given $15 billion of the GHGRF funding is specifically earmarked for low-income and disadvantaged communities (LI/DAC), a key decision facing EPA is how to define such communities. If “low-income and disadvantaged communities” is defined vaguely or inaccurately, an unjust allocation of resources would result and the legislation would fail to meet its stated goals.

Further, if EPA utilizes a measure of LI/DAC to determine allocation of these resources, it is critically important that the resulting investments contribute to addressing or alleviating the persistence of low income or disadvantage experienced by households.

EPA needs to clarify how it will define “low-income” and whether income will be used independently or as a combined indicator to define “disadvantaged communities” (DACs).

The Small Business Administration (SBA) manages a Small and Disadvantaged Business program that allocates a set-aside of 10% of all federal contract dollars, or roughly $50 billion in contracts, to Small Disadvantaged Businesses. The SBA defines small and disadvantaged businesses as those that are “51% or more owned and controlled by one or more disadvantaged persons.” Disadvantaged persons for this program are defined on the basis of the Code of Federal Regulations Title 13, Eligibility Requirements for Participation in the 8(a) “Small and Disadvantaged” Business Development Program. Title 13 defines “socially disadvantaged” persons as “those who have been subjected to racial or ethnic prejudice or cultural bias within American society because of their identities as members of groups and without regard to their individual qualities.”

The Department of Energy Weatherization Assistance Program (WAP), which reduces energy costs (and GHG emissions) for low-income households by increasing the energy efficiency of their homes, using an income-based measure to determine eligibility for services. Rather than rely solely on direct individual income verification, the program automatically qualifies eligible households as those who are -- at or below 200% of the poverty income guidelines; or if they receive Supplemental Security Income or Aid to Families with Dependent Children. In addition, each state or territory may elect to use the U.S. Department of Health & Human Services (HHS) Low-Income Home Energy Assistance Program (LIHEAP) criteria of 60% of state-median income as its criteria for the distribution of WAP services.

The Department of Housing and Urban Development (HUD)’s definition of low-income can also provide important insight. HUD defines households as low-income if they earn less than 80 percent of the Area Median Income (AMI). HUD’s definition is used widely in an array of housing programs. In addition, AMI is a more appropriate measure of need than the federal poverty line because it varies by location and regional income.

EPA should also look to states that have shown leadership in this area, in particular with respect to their targeting funds to communities that are substantially disadvantaged compared to the population as a whole.
• For example, California developed its Cal Enviro-Screen, which can be used to compare the cumulative socio-environmental burdens communities face throughout the state. The state uses that tool to identify disadvantaged communities, drawing on 20 criteria and assessing them along two main parameters: pollution burden and population characteristics. An average score is calculated for each of the two categories for every census tract in the state, and then those scores are multiplied. California requires that at least 25% of funding from the Greenhouse Gas Emissions Reduction Fund (home to the proceeds from California’s cap and trade program) be allocated to disadvantaged communities. The state defined 28.45% of the population as living in disadvantaged communities, which means that, proportionately, these communities are actually being underinvested in.

• Similarly, New York State is developing its own screen to allocate 40% of the climate investments being generated by its climate bill to disadvantaged communities. A Climate Justice Working Group was founded to develop a methodology for defining these communities. To make the list, a census tract must rank relatively high in terms of both “Environmental and Climate Change Burdens and Risks” and “Population Characteristics and Health Vulnerabilities” (or very high in either category). The draft methodology for defining disadvantaged communities categorizes 37.10% of the state’s population as living in disadvantaged communities.

• Illinois defined environmental justice (EJ) communities within a larger piece of legislation (the Illinois Power Agency Act) that included a Solar for All Program. The Act included a goal of allocating 25% of the various solar incentive program funding to EJ communities and delegated authority to the Illinois Power Agency to develop a methodology for defining these communities. The state ended up defining 24.66% of the population as living in an EJ community. We note that EJ advocates in Illinois are working to pass a bill that builds on the approach to defining EJ communities in the Solar for All Program.

The White House Council of Environmental Quality (CEQ) also prepared its own definition of DAC based on input from the White House Environmental Justice Action Council. Under CEQ’s definition, DACs are identified through a threshold method. There are eight environmental categories, each with measurable indicators that determine whether a census tract qualifies, and a ninth, socioeconomic category. To be identified as a DAC, a census tract must meet the socioeconomic criteria and fit into at least one of the eight environmental categories. Under CEQ’s definition, 23,000 census tracts meet the criteria as DACs, covering 28 percent of Americans. Of that population, 64 percent identifies as Black, Indigenous, or person of color (BIPOC). Under the CEQ definition, about 9,000 census tracts (containing 22 percent of the BIPOC population in the United States) have a majority BIPOC population but would not be defined as DACs.

We recommend the careful consideration and use of “indicators” to capture the unique characteristics of communities of color. New York State, for example, utilized two categories of indicators in a cumulative process to effectively capture the experience and needs of communities of color, as well as burdens and vulnerabilities. Burdens include things like pollution, historical discriminatory practices like

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redlining, and climate change risks like extreme heat and flooding projections. Vulnerabilities include socioeconomic factors and health issues like asthma and maternal and child mortality rates.

We recommend applying the White House’s Justice40 Initiative’s definition of disadvantaged communities as a starting point, in line with the Climate and Economic Justice Screening Tool methodology that considers additional environmental, climate, and threshold socioeconomic indicators. These factors can be the primary criteria for identifying place-based investment areas, specifically for the $7B in state, municipality, and Tribal government funds, and $8B for Nonprofit Lenders for LI/DAC areas.

In addition, as we detail later in our RFI response, we strongly recommend that, at minimum, 40% of the $11.97 billion non-restricted GHGRF for Nonprofit Lenders be targeted to projects serving LI/DAC households, businesses, and communities given the high additionality of such projects, and the fact that standard market rate financing cannot or will not serve these projects.

It will also be important for EPA to consider how LI/DAC definitions map to other existing and potentially complementary federal programs that target specific underserved areas, such as CDFI Fund Target Markets, New Markets Tax Credit eligible tracts, HUD Multifamily and Public Housing locations, and Low-Income Housing Tax Credit locations. Programs that have track records of insufficiently or ineffectively targeting disadvantaged communities (e.g., Opportunity Zones) should be excluded or cross referenced with other criteria to ensure the integrity of this program.

Section 1.2 What kinds of technical and/or financial assistance should the Greenhouse Gas Reduction Fund grants facilitate to ensure that low-income and disadvantaged communities can participate in and benefit from the program?

When considering what is needed to deploy GHGRF capital, it may be useful for EPA and applicants alike to consider what each technology or sector (e.g., multifamily affordable decarbonization, electric vehicles, etc.) needs to scale and reach all communities. The financial, technical, and capacity issues associated with delivering community solar to low-income communities, for example, look very different from those associated with net-zero new-construction affordable housing and require different solutions. By having an understanding the common deployment hurdles in each distinct sector, EPA can take a more tailored and informed approach in its GHGRF design and applicant evaluation. In addition, ecosystem needs for low-income and disadvantaged communities may also require different solutions by geography.

NRDC is currently working with the University of New Hampshire’s Center for Impact Finance at the Carsey School of Public Policy to develop “Equitable Strategy Maps” focused on GHGRF deployment in six “Qualified Project verticals.” These verticals are: (1) single-family-home retrofits; (2) multifamily affordable housing decarbonization; (3) low-income community solar; (4) community facilities

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decarbonization; (5) small business; and (6) electric vehicles (EVs)/transportation. Both EPA and prospective GHGRF applicants may find these guides useful.\(^4\)

**Allocation**

Community-based organizations, particularly in low-income and disadvantaged communities, often face challenges related to limited staff time and capacity to assess and identify opportunities for GHG reduction technologies or other design strategies beyond achieving minimum needs and requirements for a project. Therefore, technical assistance, capacity building grants, and financial capital will be needed to successfully develop such ecosystems and to ensure full participation of low-income and disadvantaged communities. Well-designed and accessible technical assistance is critical to the successful uptake of such technologies and design strategies.

We recommend that an estimated 10–15% of the total GHGRF funds (\$2.7B–\$4B) be allocated to the deployment of broad and flexibly defined types of technical assistance, capacity building, workforce development, and predevelopment. This range represents a potential adjustable target directed to Eligible Recipients that can be accessed by downstream lenders and Qualified Projects. Recycled repayments or other revenue received from financial assistance can help to ensure continued funding for technical assistance. Indirect Recipients and downstream lenders would be able to design and allocate technical resources flexibly as needed by sector and geography to best serve markets and disadvantaged communities.

**Structure**

Within this ecosystem, we recommend that Eligible Recipients provide TA and/or capacity building grants to Indirect Recipients and Qualified Projects (for instance, organizations supporting efforts to reduce GHG and air pollution) for a range of activities.

We also recommend that applicants demonstrate that they have assessed concurrent programs providing technical assistance for related activities and how GHGRF funding will complement, supplement, or leverage them.

- For example, EPA’s Thriving Communities Technical Assistance Centers may include existing resources like localized environmental and energy justice grants, resources, analyses, engagement, and partnership building in disadvantaged and environmental justice communities.
- We expect that not all activities would be covered by these existing centers or other programs and that a portion of GHGRF funds will be needed to fill gaps or extend coverage. We recommend that EPA require applicants to submit concepts to create a centralized TA hub or facility that could directly provide TA in the absence of local providers, promote peer learning, and create and maintain the necessary infrastructure—such as databases; case studies; and support for monitoring, verification, and reporting—to ensure high quality and efficient service delivery.
- We recommend that applicants be required to demonstrate in their application the ability to work with community-based organizations, financial institutions, and nonprofit partners in

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developing this database, and the demonstrated ability to reach communities that have historically lacked access to technical and financial assistance.

- We align with the University of New Hampshire’s Center for Impact Finance’s comments on this question specifically to leverage and support existing training and technical assistance providers (such as Relay Network, Emerald Cities Collaborative, Solar United Neighbors, and others). Examples of technical assistance providers that offer these types of services to communities, project developers, contractors, and tenants include Elevate, the Association of Energy Affordability, and Energy Outreach Colorado. The Justice40 accelerator program is another example of well-designed, community-based technical assistance to build the capacity of communities to access public resources for energy, environmental, and climate solutions. The accelerator has already identified cohorts of communities, primarily in underserved areas, that can provide the basis for a pipeline to access the GHGRF.

**Technical Assistance and Capacity Building Examples**

Below, we discuss examples of technical assistance and capacity building across the various stakeholders necessary to deliver a pipeline of GHG and other air pollution–reducing projects with meaningful impacts in low-income and disadvantaged communities.

- **For Indirect Recipients**, technical assistance should include capacity building grants for lenders (e.g., CDFIs, credit unions, minority depository institutions, local green banks) to increase their ability to provide programs, products, and services for GHG-reduction activities. While some lenders have experience and expertise in these activities, additional technical and financial assistance is needed in these specific technologies and sectors.

- **For Qualified Projects (e.g., for households, businesses, borrowers, community-based organizations, or contractors)**, technical assistance may include:
  - Digestible and accessible educational resources, translated into multiple languages as needed, on the benefits of decarbonization and GHG-reducing activities.
  - Energy, water, or transportation assessments and modeling for the project development team to identify GHG-reducing measures and technologies that can be incorporated into project design and implementation.
  - Assessment of projects for eligibility for existing program resources at the state or municipality level to maximize energy reductions and savings, maximize benefits to LI/DAC communities and households, and ensure additionality of GHGRF resources.
  - Connecting interested parties to these project development resources, financing alternatives, and vendors.
  - With respect to mission-driven project developers, technical assistance may include capacity building and grants to work with community-based organizations, small businesses, and minority- and women-owned business enterprises (MWBEs) to help staff, identify sites and projects, support predevelopment, and build a pipeline of investible deals and projects.
  - With respect to contractors, technical assistance activities may include:
    - Education on products and technology, benefits of GHG-reducing strategies and technologies, and methods for holistic deployment of resources (e.g., once under contract ability to assess additional opportunities for solar).
• Workforce development programming to train workers in solar installation, building retrofits, EV charger installation, and other areas.

• **For institutions with different skill sets, fostering collaboration and knowledge sharing that can improve the GHGRF ecosystem.** Green Banks, which have focused on stimulating private investment in low-carbon or energy efficiency projects, can share their expertise in financing such technologies. At the same time, nonprofit community-based lenders like CDFIs and community development credit unions (CDCUs) who have built experience providing capital, stimulating additional investment, and building trust in communities long overlooked by broader financial markets, can share their relevant expertise in working in LI/DAC. Both of these sectors should work together through the GHGRF given their complementary and relevant technical expertise. Examples may include:
  - Knowledge sharing on the benefits of investing in decarbonization activities and underwriting energy efficiency, product and technology information, data sets on performance of technologies to support underwriting assumptions, professional certification standards for third parties, case examples, and peer-to-peer learning opportunities. This can include providing primers for technologies deemed eligible by EPA, as well as resources to understand relevant state and local policies like the status of building performance mandates across the country.
  - Knowledge sharing on the complexities of working in LI/DAC communities, including but not limited to, how to do community engagement and planning equitably, the different financing programs and complex capital stacks it takes to deliver projects in LI/DAC, the network of organizations and stakeholders who have long served these communities, case studies, and peer-to-peer learning opportunities.
  - Supporting modification of existing products or programs to include GHG reduction technologies.
  - Supporting the capacity of lenders to engage robustly with communities and borrowers.
  - Reporting on what technologies have been financed.
  - Enabling or advancing organizational accountability to communities served.

**Identifying Technical Assistance Providers**

Not all applicants will be equally well suited to provide technical assistance. Accordingly, EPA should require that when assessing requests to provide technical assistance, applicants demonstrate the following:

• A mission-driven focus on supporting low-income and disadvantaged communities and households as well as small businesses – organizational mission statement, board representation, and performance track record could be good indicators of such a focus;
• Experience developing ecosystems of relevant project partners, such as borrowers, lenders, and other technical assistance providers;
• Diverse staff and leadership that reflect the community/communities in which they operate;
• Experience with community-owned project models, such as community solar or community land trusts;
• Experience working with community-based organizations and project developers that have historically been left out of traditional financing;
• A geographic footprint in, or experience serving, the community/communities they intend to serve;
• An understanding of relevant local regulatory requirements, such as building codes;
• Experience assisting project sponsors, developers, and customers in accessing state, local, and federal incentives;
• Experience working collaboratively with lending institutions to connect project sponsors and customers with attractive loan products (e.g., Elevate and the Community Investment Corporation in Chicago), or the capacity and willingness to do so;
• An understanding of the challenges associated with decarbonizing project-relevant sectors in a particular geography, including the practical, technical, and economic hurdles to deploying low- and zero-emission technologies;
• Experience in local workforce development;
• An ability to braid existing public funds and identify opportunities for GHGRF additionality; and
• An ability to package and streamline multiple GHG-reducing services with an eye toward customer service and acquisition (e.g., the NY Energy Fit model).

We also support the Strong, Prosperous and Resilient Communities Challenge (SPARCC)’s, of which NRDC is a member, recommendations listed below which apply very much to this section:
• Technical assistance and capacity building are more time-consuming and seemingly less effective when they are standardized, predetermined, or limited to group training. Many times, we have found that rolling up your sleeves and doing some pro forma work, reviewing a document, and being part of the development team can be incredibly effective for the time spent. It can also help capital staff better understand the nuanced issues at the community level.
• Capital work should happen in the light of day. Bringing organizers, residents, and “non-capital” colleagues into conversations about acquisition strategy, feasibility, and deal challenges allows for informal capacity building, unorthodox ideation, and occasional unexpected breakthroughs. It also gives capital staff an opportunity to practice using more accessible language and start to undo the gatekeeping effect of our field’s reliance on technical jargon.
• We recommend that a portion of TA funds are dedicated to strengthening development teams in disadvantaged areas and new markets be set aside for a more tailored approach so lenders, TA providers, and developers can benefit from these more nuanced needs.
• EPA should gear technical assistance and grant funding toward the early project concept and planning phase to help organizations representing disadvantaged communities prepare for later rounds of financing. In addition, as EPA should require applicants to demonstrate a trust-based relationship with CBOs through its TA work, the agency should use its resources to support credit enhancements that improve chances financing will be repaid and/or play a project advocate role as these organizations pursue other capital sources. Also, where appropriate, EPA should support CBOs in equitable partnerships with experienced private developers and public agencies that may be well-suited to lead project development work but might lack the cultural humility, a focus on equity and connection to community voices that are so critical to impact.
• EPA should require Eligible Recipients to demonstrate their experience of providing (and how they will provide) project pre-development aid, which could include energy audits and/or integrated property needs assessments; market analysis for community-based clean energy projects; project team development, siting (and securing site control); design and budgeting;
entitlements; and other elements, which require significant time, attention, and money which SPARCC partners with promising project ideas were struggling to commit.

Section 1.3 What kinds of technical and/or financial assistance should the Greenhouse Gas Reduction Fund grants facilitate to support and/or prioritize businesses owned or led by members of low-income or disadvantaged communities?

Green businesses owned or led by members of low-income and disadvantaged communities and BIPOC entrepreneurs should be high-priority, “safe harbor” projects for GHGRF. In addition, green businesses owned or led by members of these communities but not located in a defined low-income and disadvantaged area should be targeted with the $12 billion GHGRF capital not specifically tied to these areas. Finally, lending or development institutions owned or led by members of these communities should be prioritized for consideration of GHGRF funding as Eligible or Indirect Recipients.

Regardless of where they live or what projects they are working on, BIPOC-owned businesses and businesses operated by members of low-income and disadvantaged communities have a harder time finding capital, growing their business, and ultimately increasing their wealth. Innovators from underrepresented communities are much less likely to have access to the networks that can connect them to the resources they need (e.g., early-stage funding, mentors from elite institutions, etc.) to grow and develop their businesses. This lack of access places them at a distinct disadvantage when competing for funding against businesses that have had greater access to ecosystem resources.

Investments in BIPOC-owned businesses and businesses operated by members of low-income and disadvantaged communities should consider both financial assistance and technical assistance, including:

- **Financial Assistance**
  - Early-stage, patient, working capital for businesses. As mentioned, many businesses owned or led by underrepresented groups are smaller, with limited funding and limited capabilities in terms of staffing and expertise. Investments like this can provide the down payment necessary for businesses to take leaps that will help them grow and deliver greater community impact.
  - Lines of credit to manage cash flow constraints. Being unable to bridge repayments and reimbursements from clients can significantly hamstring business growth. GHGRF capital can help bridge these gaps.
  - Working with contractors to offer client-facing financing. Inclusive Prosperity Capital’s Smart-E Loan Program is one example that could potentially scale to reach more small-business contractors serving thousands of households.

- **Technical Assistance and Capacity Building Investments**
  - Capacity support, including workforce training support, business development services, back-office support, and “switching” support (to help existing businesses transition to clean energy services).

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Specific investments in training and hiring from low-income and disadvantaged communities.

Outreach to underserved businesses, or businesses serving underserved and low-income communities, to spread awareness of funding opportunities.

Application support, including:
- Web-based and in-person guidance on how to apply for funds and the assessment criteria and process for allocating funds, and
- Outreach and application materials and resources in multiple languages.

Specific sectors and projects that should be considered by Eligible and Indirect Recipients as strategic investments that can support BIPOC-owned businesses and businesses operated by members of low-income and disadvantaged communities include:

- Projects that target existing entrepreneurs and contractors from low-income and disadvantaged communities to “switch” to clean energy sectors as a new opportunity. In many parts of the country there simply are very few entrepreneurs from low-income and disadvantaged communities in the clean energy and efficiency sectors most likely targeted by this funding.
- Projects that partner with businesses owned or led by people from low-income and disadvantaged communities
- Projects committed to utilizing minority and disadvantaged business program models to enhance opportunities for BIPOC-owned businesses, particularly those owned or led by women of color.

Finally, we support the recommendations from the University of New Hampshire’s Center for Impact Finance on this question as well:

- EPA should prioritize smaller, community-based projects. These projects are more likely to use local businesses and labor and to have a higher multiplier effect in the community. See University of New Hampshire’s Center for Impact Finance’s response for specific examples of organizations with business models focused on providing low-cost working capital loans to small contractors.
- Loans and investments in green businesses and organizations owned or led by members of low-income or disadvantaged communities should be considered Qualified Projects because supporting such organizations is a way to “assist communities in their efforts to reduce or avoid greenhouse gases.” An example of the kind of small business that should be supported is the minority-owned solar development company EnerWealth Solutions, which itself is a member of the trade association Black Owners of Solar Services (BOSS). Research has found stark disparities in access to capital for minority-owned businesses; for example, a Federal Reserve study found that Black entrepreneurs are denied loans nearly twice as often as white business owners. Perhaps more important, lack of access to equity (not just debt) makes it very difficult for minority-owned clean energy companies to grow, in some cases meaning they have to exit projects earlier than would be optimal or even forgo projects. Capacity building grants or low-cost equity investments in these companies would unlock their growth potential, in turn boosting the pipeline of projects serving communities of color.
Section 2: Program Design

Section 2.1 What should EPA consider in the design of the program to ensure Greenhouse Gas Reduction Fund grants facilitate high private-sector leverage (i.e., each dollar of federal funding mobilizes additional private funding)?

Leverage is one of multiple concepts to consider when designing a public financial assistance program. Our comments below reflect key considerations related to the financial assistance portion of GHGRF, not the technical assistance portion.

In general, leverage provides insight into the role program dollars play in unlocking other capital sources to finance projects that, in theory, would otherwise not move forward. The higher the level of leverage, the bigger the “bang for the buck” of program dollars in crowding in other capital sources. The lower the level of leverage, the greater the role program dollars must play in the financing of projects, which is not necessarily undesirable given GHGRF’s policy priority of serving underserved market segments. Given limited GHGRF program dollars, leverage can help grow the pie of capital flowing to Qualified Projects, but taken to an extreme, it can mean that program dollars flow only to projects that are marginally unfinanceable, limiting impact and neglecting communities and households the market cannot or will not serve due to limited revenue streams and the well-documented legacy of structural racism in financial markets (chronicled in Richard Rothstein’s *The Color of Law* and in the article “Consumer-Lending Discrimination in the FinTech Era”).

**EPA should seek to leverage capital broadly, including both private-sector capital and other sources of capital, including other government funds.** The GHGRF should have a goal of increasing the total amount of capital going to underserved sectors—particularly low-income and disadvantaged communities and households—and this should include leveraging other public dollars. The concept of additionality seeks to answer the question “But for this GHGRF investment, would this project be delivered?” For a project to get off the ground, it frankly does not matter that other capital sources may be other federal, state, or local grants, utility incentives, or other public or quasi-public capital. What is important is that GHGRF unlock all of those capital sources to complete the GHG-reducing project.

It is also important that EPA standardize a methodology for calculating leverage and capital mobilization for all recipients to measure and subsequently report on. This will help ensure transparency and accountability. It will also help track to what extent the financial market is shifting toward clean energy sectors. Different institutions have varying ways of measuring and reporting leverage, and it will be important for EPA to create consistency in reporting across recipients.

**We encourage EPA to apply a project-level leverage tracking methodology and a portfolio-level leverage reporting requirement.** Lenders should track all sources of funds used to pay costs associated with a Qualified Project including soft costs, development and predevelopment costs, equipment costs, labor costs, etc. Sources of funds include GHGRF dollars used and other additional public and private funding sources (i.e., lender capital from non-GHGRF sources; external private capital including sponsor or borrower equity; third-party equity investment; Solar Investment Tax Credit, Low Income Housing Tax Credit, and other tax credit equity; grants; cash incentives and rebates; and any third-party debt contributing to the financing of the Qualified Project). Project-level leverage should be calculated as the ratio of GHGRF dollars allocated to the Qualified Project to all other capital sources required to pay for the full cost of the Qualified Project. This calculation should be made on both an aggregated and
disaggregated basis to delineate between private capital and other nonprivate sources, which can provide key insights into the different flows of capital into GHGRF-funded projects.

In addition to tracking project costs, capital sources, and leverage on a per-project basis, lender recipients should report to EPA and Eligible Recipient funders their cumulative capital multiplier ratio across their portfolios, defined by the ratio of: (a) the sum of all GHGRF dollars received in grant awards to (b) the sum of total additional capital sources used to pay for all costs associated with the cumulative portfolio of Qualified Projects financed by the lender. Tracking cumulative leverage against cumulative GHGRF funds awarded over time will incorporate the benefit of recycling GHGRF funds as well as incremental portfolio-level leverage that may be achieved by the lender recipient. Predevelopment lending, preconstruction lending, and forward capital commitments that do not result in completed Qualified Projects should be excluded from this capital multiplier ratio calculation.

In addition, many catalytic investments are early stage, where little private capital is interested in playing a role, and “but for” that early investment, the project would never move forward. Even though such an investment produces low leverage at the time of investment, when considering the total development capital stack that will deliver a project, it can achieve a very high level of leverage. We encourage EPA to provide for such flexibility in leverage reporting as the project life cycle moves forward. For example, an early-stage predevelopment investment that pays for an integrated property needs assessment (a necessary step in many existing building decarbonization approaches) can be very low leverage at the time of investment. However, such an investment can set the stage in delivering a fully decarbonized building and millions of dollars in additional capital flowing into a GHG-reducing project. EPA’s reporting requirements should allow for such flexibility and changes in ultimate leverage as projects move from predevelopment to completion.

It is critical for EPA to understand that levels of leverage will vary dramatically on the basis of: (1) the Qualified Project type (e.g., building decarbonization, solar, EV, etc.), (2) the market sector served (e.g., low-income versus moderate-income, geographic region, etc.), (3) the level of resulting GHG and air pollution reductions, and (4) the depth of co-benefits associated with the GHGRF investment (e.g., depth of reduced energy burden, employment opportunities, etc.). Given GHGRF’s specific focus on communities thus far overlooked by the clean energy transition, leverage should be one of multiple factors EPA should consider. Arguably more important measures include delivering tangible improvements to people’s lives while significantly reducing GHG emissions and other air pollution. EPA should provide flexibility to awardees to truly meet the needs of underserved communities, where capital does not flow as freely and leverage in projects may be lower or nonexistent.

Finally, we recommend addressing the likelihood that applications will have wildly different claims about the leverage they will achieve. Leverage claims are very difficult to evaluate a priori, especially those from entities without a track record. And as stated earlier, leverage is easier to achieve in some sectors than it is in others. EPA should therefore focus on more concrete elements of applicants’ proposals (lending program design, efficiency in flowing funds to borrowers/beneficiaries, approach to reinvesting earnings, ability to source and deliver pipeline, track record, etc.). Also, leverage calculation methods can vary substantially, so any historical leverage metrics provided need to be scrutinized to ensure an apples-to-apples comparison based on EPA’s own leverage reporting requirements.
Section 2.2 What should EPA consider in the design of the program to ensure Greenhouse Gas Reduction Fund grants facilitate additionality (i.e., federal funding invests in projects that would have otherwise lacked access to financing)?

EPA should design the program to ensure that grants facilitate both financial additionality and nonfinancial additionality. Financial additionality refers to deploying federal funds to entities (e.g., project developers, small businesses, etc.) that would otherwise not have access to financing at adequate terms to be able to deploy green technologies or projects. Nonfinancial additionality can take many forms but can generally be understood as the extent to which the blending of public and private funds helps achieve desired development or policy objective impacts, such as community co-benefits like improved health outcomes, employment opportunities, and reduced energy cost burdens. Importantly, financial additionality does not necessarily mean that the nonfinancial additionality (i.e., the desired policy goal) is achieved.

Having a clearly defined and articulated theory of change and results framework for achieving a balance of financial and nonfinancial additionality will be particularly important for deploying GHGRF dollars to low-income and disadvantaged sectors. These communities and households have an acute need for assistance due to systemic public and private disinvestment and environmental injustices, and there currently exist only limited strategies to protect these households from harm resulting from GHG pollution.

EPA’s program design should recognize that in some cases there may be necessary tradeoffs between additionality and private leverage. Environmental, social impact, and financial additionality may be highest in projects where private leverage is comparatively low or potentially nonexistent. For example, as highlighted by the University of New Hampshire’s Center for Impact Finance, this may be the case with early-stage, market-building investments like working capital grants or lines of credit for mission-based clean energy developers like Groundswell, GRID Alternatives, SunWealth, and Cooperative Energy Futures, among many others. These investments can help organizations, including start-ups and MWBEs, staff up, find project sites, and build a pipeline of investable deals. Such projects will require higher levels of early-stage public support but will send important signals to the market so that future transactions achieve a higher rate of leverage. Projects in very low income communities may also achieve lower levels of leverage but will advance important environmental justice goals and be strongly financially additional. By focusing on these sectors, the GHGRF can be the linchpin that induces additional flows of capital that transform and create markets to deliver tangible benefits in communities long overlooked. Conversely, if the primary goal of an intervention is to achieve a high rate of leverage, this may minimize additionality by failing to reach beyond more established markets.

When designing the program’s approach to setting expectations for and assessing additionality, EPA should consider that additionality has many dimensions and is context- and even case-specific. Factors that may impact the level of financial and nonfinancial additionality achievable include income level, sector policy framework, stage of market entry of a project (e.g., first mover versus repeat transaction), number of developers, project cycle phase, and track record of a technology. Although assessing additionality can be challenging, EPA’s program design should encourage and facilitate a harmonized approach, including by requiring that grantees gather certain baseline data that can be monitored later.
In Section 3.1, we propose a list of eligible technologies and market segments that EPA should consider high-priority, safe-harbor technologies and market segments for additionality considerations. By providing clear guidance to recipients on what technologies are eligible for funding under GHGRF, EPA can ensure that funds go toward projects that reduce GHG emissions and other air pollution while reducing administrative burdens on recipients. GHGRF criteria could, for example, screen out projects that cannot convincingly demonstrate a need for GHGRF capital to (1) be financially feasible and (2) drive project benefits directly to low-income and disadvantaged communities. Projects that could fail this test include mature technologies such as utility-scale renewables; market segments that are well served by current financing, such as transmission; and areas that are well funded via other federal provisions in IRA and IIJA.

The Organisation for Economic Co-operation and Development has come up with a step-by-step approach (see page 44 of linked document) to help policymakers design blended finance interventions at the project, program, or portfolio level that ensure financial and nonfinancial additionality, mobilization, and minimum concessionality. While the underlying principles for this approach were defined in the context of development assistance, there are elements that could be instructive to EPA as it (1) defines any requirement for how grantees should address issues of additionality, (2) assesses grantees’ proposed use of funds; and (3) evaluates grantees’ additionality impact over time.

For example, the indicative guiding questions for determining nonfinancial additionality includes assessing:

- Scope (e.g., likely impact on new underserved communities, sectors, population groups, project life cycle stages, first-mover impacts);
- Scale (e.g., to what extent has the desired impact been—or can the desired impact be—delivered with alternative purely public, blended, or purely commercial interventions);
- Market creation (e.g., economic spillover effect, sustainability, likelihood of short-term commercial finance availability, availability of accompanying TA to ensure desired impact and replication);
- Efficiency (e.g., time, transaction costs, net cost, availability of purely private or purely public alternatives that are more efficient at delivering desired impact); and
- Ecosystem (e.g., can others achieve similar outcomes, is there a track record of commercial investment that risks being crowded out); and
- Theory of change and results framework (are there clear indicators and metrics, are there baseline data).

The indicative list guiding questions for determining financial additionality include assessing:

- Financial viability (e.g., can a project proceed without public funds, how much concessionality is necessary);
- Availability of commercial finance (e.g., are terms adequate, and if not, what is the nature of the gap, are there market instrument gaps, what is the feedback from commercial finance)
- Supply-demand (e.g., are other solutions available that could fill financing gaps, could existing solutions be scaled up or expanded to meet financing gaps).
Section 2.3 What should EPA consider in the design of the program to ensure that revenue from financial assistance provided using Greenhouse Gas Reduction Fund grants is recycled to ensure continued operability?

We agree with comments from the Center for American Progress and the University of New Hampshire’s Center for Impact Finance that GHGRF legislative language focused on recycling is not targeted to maximize returns on investment; rather, it is to ensure sustainability (“continued operability” in the legislation). EPA must appropriately consider the other goals identified in the legislation—to assist low-income and disadvantaged communities, to prioritize investment that is additional, and to achieve rapid and impactful deployment of funds—that at times may be in tension with recyclability. Ultimately, a portion of GHGRF should be dedicated to grants that support market-building investments like capacity building, technical assistance, and additional project-level subsidy, while the remaining funds should focus on sustainability.

For those funds targeted for recycling, EPA should award financial assistance dollars in a way that effectively restricts their use to funding Qualified Projects on a permanent basis. EPA can accomplish this by either permanently restricting the award at the Eligible and Indirect Recipient grantee levels, or by providing an unrestricted award to a special-purpose entity (SPE) established solely to provide financial assistance to Qualified Projects. Both approaches effectively place a permanent restriction on the financial assistance award, limiting it to uses that align with EPA’s definition of a Qualified Project.

EPA should negotiate and set clear deployment timelines with Eligible Recipients, based on milestones that tie future disbursements to a determination of whether an Eligible Recipient has sufficiently obligated their initial GHGRF funds, so that funds are quickly put to work on a realistic timeline. Similarly, Eligible Recipients should be required to include performance-based disbursement milestones for their Indirect Recipients, as well as a provision that requires Indirect Recipients who fail to deploy funds based on an agreed upon timeframe to return funds to the Eligible Recipient. These disbursement milestones should be tied to hard, quantitative results like loan amount closed (not loan amount in underwriting). In addition, EPA should codify permanent restriction (via grantee or SPE-level criteria) and recycling requirements in its grant agreements with Eligible Recipients. Finally, Eligible Recipients should be responsible for tracking and reporting to EPA total GHGRF principal and interest income earned on an annual basis across all their Indirect Recipients as well as themselves. All of these design elements will encourage the recycling of GHGRF outlays to future Qualified Projects.

As initial investments made by a lender into Qualified Projects are repaid by borrowers, the GHGRF principal portion of that investment should then be recycled into future Qualified Projects. Interest revenue earned from borrowers while loans are outstanding could be allowed to cover lender administration costs associated with GHGRF, up to an administrative cost cap established by EPA and codified in grant contracts (and flowed through to Indirect Recipients). This should happen at both Eligible Recipient and Indirect Recipient levels. If Eligible Recipients take on additional responsibilities (Indirect Recipient grant management, more sophisticated reporting, TA engagement, etc.), then there can be a different administrative cost cap for Eligible Recipients. One precedent to consider is the DOE’s Energy Efficiency and Conservation Block Grant Program (EECBG).
A successful model that has delivered significant recycling of limited public capital can be found in the District of Columbia’s Housing Preservation Fund. In that program, the District government competitively awarded grant dollars to three CDFIs to preserve affordable housing. Grant dollars are permanently restricted for specific uses and blended with other loan capital to make below-market-rate loans. Upon loan repayment, the grant portion of the loan is recycled into future loans that meet program requirements. Awardees are required to maintain a 3:1 leverage ratio in their outstanding portfolios associated with the program and recycle dollars in perpetuity, resulting in substantially higher leverage ratios over the life of the program. In addition, grantees are required to deploy or commit funds within a specified timeframe or else return all grant funds. One CDFI awardee under this program, LISC DC, reported a cumulative capital multiplier ratio (see Section 2.1 for definition) of 1:21 since receiving an initial award in 2018, meaning that for every dollar granted to them through this program, $21 dollars of other capital flowed into affordable housing preservation projects.

Following that model, GHGRF grant agreements with Eligible Recipients should seek to include the following requirements:

- Upon receipt of a GHGRF financial assistance award, Eligible Recipients making direct investments should deposit GHGRF funds into a segregated, interest-bearing account.
- All interest earned on GHGRF funds while in that account should constitute a part of the permanently restricted funds to be invested only in Qualified Projects.
- When GHGRF-funded investments are repaid by borrowers (presumably some combination of GHGRF funds and other capital), the GHGRF principal portion should be repaid to this account.
- Both repaid GHGRF principal amounts and interest earned while in the account should be available for redeployment into other Qualified Projects.

Eligible Recipients should be required to establish similar agreements with every Indirect Recipient of GHGRF financial assistance funds.

Finally, another directly relevant example can be found in the EECBG funding for financing programs under the American Recovery and Reinvestment Act (ARRA). This was used to capitalize the New York City Energy Efficiency Corporation (NYCEEC). The award to NYC/New York State Energy Research

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<th>GHGRF Award + Interest Earned From Interest-Bearing Deposit Account</th>
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<tr>
<td>Grantee Level</td>
<td>Restricted and Recycled</td>
<td>Allowed for Administration/Operating Costs of GHGRF Program, Up to a Cap</td>
</tr>
<tr>
<td>SPE Level—Established Only to Finance Qualified Projects</td>
<td>Unrestricted and Recycled</td>
<td>Allowed for Administration/Operating Costs of GHGRF Program, Up to a Cap</td>
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Authority, which was contractually downstreamed to NYCEEC, incorporated effective recycling provisions. The grant is “evergreen,” so it functions as restricted net assets on the balance sheet and represents permanent capital for NYCEEC as long as NYCEEC continues to use this capital to lend in accordance with EECBG program requirements—in this case only for energy efficiency projects. Similar to the DC Preservation Fund example above, NYCEEC was required to deploy or commit funds within a specified timeframe, or return grant funds. NYCEEC commenced operations in 2011. Incorporating recycling into its cumulative capital multiplier calculation, NYCEEC claims a leverage ratio of about 10 times the initial federal capital grant (achieved over 11 years).

**Section 2.4** What should EPA consider in the design of the program to enable Greenhouse Gas Reduction Fund grants to facilitate broad private market capital formation for greenhouse gas and air pollution reducing projects? How could Greenhouse Gas Reduction Fund grants help prove the “bankability” of financial structures that could then be replicated by private sector financial institutions?

Green banks have been grappling with these issues for years, and we encourage EPA to look at case studies and white papers covering a range of topics related to green bank design and approach at NRDC’s Green Bank Network website. Below, we highlight three examples that illuminate how certain approaches can drive toward replicability in private sector finance.

After observing that there were almost no solar installations in low- or moderate-income (LMI) neighborhoods in Connecticut, the Connecticut Green Bank partnered with PosiGen, a private residential solar developer, to bring solar and energy efficiency to underserved communities via a program called Solar for All. Community-based tactics and trusted messengers, as well as the use of utility bill payment history as an alternative to FICO credit scores, helped the program reach lower-income residents. The program, which ran from 2015 through 2021, was so successful in reaching LMI communities that the Connecticut Green Bank and PosiGen found they were no longer the only financiers working in these neighborhoods: They had jump-started a new market for LMI solar installations and investments.

In the Kennedy Energy Park project, the Australian green bank CEFC financed a combined solar, wind, and battery storage project. The site required ample sunshine during the day and wind at night, and the battery storage, funded with a recoupable Australian government grant, was intended to smooth out the energy production. Interestingly, the primary challenges were grid connection issues (regulating the power quality) rather than technology. The goal was to demonstrate the commercial viability of the structure, with shared infrastructure efficiencies.

The NY Green Bank invested with three community solar developers with the goal of accelerating the development of more than 300 New York community solar projects in the pipeline. All community solar projects in the state require developers to put up 25% of interconnection deposits (and eventually interconnection payments) to utilities well before project construction commences. The NY Green Bank provided bridge loans to the three developers, allowing them to bridge the gap during which projects require financing but do not generate revenue. The objective was to enable the community solar industry to establish a more accurate risk–return profile.
These three transaction takeaways demonstrate very different tools used to facilitate private market capital formation for clean energy projects. While we do not believe the GHG Reduction Fund should focus on large-scale projects, the ways in which green banks have used these different tools, depending on the particular barriers to private sector financing of deployment, can provide useful lessons. EPA should build on the successes of these green banks in the design of the GHGRF program by encouraging innovative solutions responsive to the specific market barriers to be overcome.

Finally, warehousing and securitization for private market capital formation represents an important opportunity for some technologies and market segments prioritized under GHGRF. For example, some standardized loan products like solar loans serving LI/DAC could be bundled and sold on the secondary market, allowing for additional private capital to support the growth of such projects under GHGRF. EPA should look, where appropriate, at potential secondary market applications in the proposals received by applicants for GHGRF resources.

Section 2.5 Are there best practices in program design that EPA should consider to reduce burdens on applicants, grantees, and/or subrecipients (including borrowers)?

Use Insights From Recent DOE RFI

In 2021 the DOE issued an RFI and held a roundtable with the National Laboratories to identify the existing challenges and barriers to equity in its funding mechanisms and to explore solutions. While the focus was on DOE funding programs, the recommendations coming from the project should be considered and applied by EPA to ensure that GHGRF-funded entities avoid similar equity barriers and advance solutions. Recommendations included the following:

- Have diverse review teams for funding/loan applications.
- Have an outreach plan and network for engaging with businesses owned or led by underserved populations or serving underserved communities.
- Provide training and applicant counseling and feedback to rejected applicants so they can improve their chances of a successful application in the future.
- Lower barriers to application success, including complexity. Most clean energy companies are small businesses (90% have fewer than 100 employees, and 64% have fewer than 20 employees), so application processes and funding requirements should be easy enough to be handled by staff with nonfinancial backgrounds.
- Actively enable advancement of equity, and provide financing criteria that do not undermine or disadvantage new businesses.

Set GHG Methodologies and Priority Technologies

In addition, to reduce ambiguity and information costs for participants in the program, EPA should provide clear guidance on high-priority, safe-harbor technologies and market segments that reduce GHG emissions and other air pollution (see Section 3.1 for a discussion of this). This will provide specific direction for all lenders on eligible uses for GHGRF dollars and will enable them, in turn, to easily report on what technologies were supported at the project level. EPA should also provide Eligible Recipients with specific methodological requirements and systems for GHG reduction measurement, as well as after-the-fact third-party testing for verification and quality assurance. EPA should allow Eligible
Recipients to invest in the necessary systems and administrative capacity to report on such outcomes and EPA should play an active role in monitoring the quality of such reporting by Eligible Recipients. As noted by the University of New Hampshire’s Center for Impact Finance, EPA should also recognize that some of the most impactful Qualified Projects, such as providing working capital to solar developers serving LI/DAC, will require GHG tracking that is different from the tracking required by funding a solar installation directly.

Focus Technical Assistance and Track Impact

To ensure that technical assistance is impactful, EPA should require Eligible Recipients to focus technical assistance on priority technologies and project types and to collect and share information on TA recipients’ subsequent work in those areas. Building Energy Exchange has an impact framework that could be useful for TA that is not project specific.

Mitigate Unequal Internet Access

In addition, while the pervasiveness of digital infrastructure will only grow, it is important to recognize that not all individuals have access to the internet and broadband networks. Currently, 22.3 percent of Americans in rural areas and 27.7 percent of Americans on Tribal lands lack broadband coverage, compared with only 1.5 percent of Americans in urban areas. It will be important for EPA to require Eligible Recipients to combine online efforts with direct local partner and community engagement, potentially employing community “ambassadors,” and to convene workshops that present issue-based and location-based funding opportunities, with information on the types of grants available, proposal requirements, etc. and with ambassadors, recruited from the local community, providing technical support and additional assistance.

Section 2.6 What, if any, common federal grant program design features should EPA consider or avoid in order to maximize the ability of Eligible Recipients and/or Indirect Recipients to leverage and recycle Greenhouse Gas Reduction Fund grants?

Some features from other federal programs are identified below.

- **Flexibility for various financing activities:**
  - As cited by the University of New Hampshire’s Center for Impact Finance, the CDFI Fund Financial Assistance program has certain design features that would serve the GHGRF well. Notably, the CDFI Fund provides enterprise-level funding to awardees, rather than project-level finance. Awardees can choose to use funding as lending capital or loan loss reserves across various loan products, maximizing the range of approaches they can use to leverage grants. Awardees may also use awards to fund development services (technical assistance) and up to 15 percent of awards for operating costs.
  - Under the EECBG program, DOE provided a range of financing mechanisms, including revolving loan funds comprising any loan products and/or financing contracts, leveraging through partnerships with third-party lenders, co-lending, third-party administration of loans, interest rate buydowns, third-party loan insurance, and loan loss reserves (42 USC 17151 et seq.). This wide range of financing activities greatly benefited recipients, allowing them to establish green banks and expand the activities of
existing green lending programs and organizations. However, DOE also prescriptively imposed allocation of capital funds to loan loss reserves and other lending activities that, in practice, slowed deployment and lessened the program’s ability to meet the needs of borrowers. Prescription concerning the form of financing or financial support should be avoided (https://www.energy.gov/eere/wipo/downloads/guidance-energy-efficiency-and-conservation-block-grant-grantees-financing).

- **Evergreen capital grant structure:**
  - The DOE EECBG program allowed the capital portion of grants to be used as “evergreen capital” that can be re-lent and recycled indefinitely on the condition that funds are used only for eligible GHG-reducing or zero-emission technologies and meet any applicable LI/DAC restrictions on borrower or end-use beneficiary eligibility. Capital used in this manner will generally be reflected as restricted net assets on the recipient’s balance sheet.
  - The Credit Enhancement for Charter School Facilities Program from the U.S. Department of Education functions in a similar manner, allowing direct recipients to employ grants held in a reserve account as a credit enhancement and enabling the construction or rehabilitation of efficient educational buildings (7 CFR part 225).
  - In both examples, this capital functions in an equity-like manner for the recipient and can be leveraged at the lender’s balance sheet level using either asset-based or recourse debt. In addition, when this capital is lent to finance projects—or supplied as project-level grants—significant additional leverage can be generated at the project level (https://www.energy.gov/eere/wipo/downloads/guidance-energy-efficiency-and-conservation-block-grant-grantees-financing).

- **Simplified and/or short-form applications for subrecipients:**
  - Recognizing the burden of its typical application process, the DOE recently offered short-form applications for certain programs aimed at underserved communities. DOE conducts more thorough due diligence for intermediaries with higher capacity, who in turn require only brief narrative applications from subrecipients. This approach leverages the relationships of intermediaries to reduce the paperwork burden on subrecipients. One example is the Energy Transitions Initiative Partnership Program, aimed at high-energy-burden and low-energy-security areas (https://www.nrel.gov/state-local-tribal/etipp-technical-assistance.html). Many businesses in underrepresented communities are of small size and do not have the staffing capacity or time to complete cumbersome paperwork requirements; these businesses would benefit from a more streamlined process. Requirements should be simple and minimal so entrepreneurs can easily complete forms without having to incur the high expense of using professional services such as lawyers and accountants.

- **Formal outreach plan to DACs:** Another feature of the DOE Energy Transitions Initiative that may be useful is a requirement for a formal community outreach plan supported with program funding. This formal outreach plan in disadvantaged communities is beginning to be utilized by other DOE programs such as Communities LEAP, and by deployment funding programs such as the Grid Resiliency Improvement Program and Defense Production Act funding.
• **Matchmaking assistance:**
  - The Small Business Administration (SBA) offers a variety of matchmaking services, mostly through its Lender Match portal ([https://www.sba.gov/funding-programs/loans/lender-match](https://www.sba.gov/funding-programs/loans/lender-match)). This portal allows subrecipients to provide brief, preliminary information to SBA-approved financial intermediaries in order to facilitate a match between borrower need and intermediary products.
  - DOE offers “teaming” lists for some Funding Opportunity Announcements, facilitating partnerships among interested parties. Matchmaking events are also offered by some agencies, including SBA and the Commercial Service of the U.S. Department of Commerce. A related service is offered by the Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization, which provides a list of available energy funding opportunities ([https://energycommunities.gov/funding-opportunities/](https://energycommunities.gov/funding-opportunities/)).
  - The Good Jobs Challenge, funded by the American Rescue Plan, provides a good example of matching labor skills to strategic industrial needs. The GHGRF could replicate its focus on industries of importance to the success of the program ([https://eda.gov/arpa/good-jobs-challenge/](https://eda.gov/arpa/good-jobs-challenge/)).

• **Start-up and regional ecosystem technical assistance:**
  - Some agencies, including the National Science Foundation, the Economic Development Agency of the Department of Commerce (EDA), and DOE, offer start-up and regional ecosystem incubation support.
  - The National Science Foundation’s Innovation Corps (I-Corps™) program focuses on accelerating technology to market, with a strategy around teaming and business planning that could be adapted to GHGRF services. DOE adapted this approach for clean energy technology through its Lab-Corps program and also expanded the approach to several accelerators and incubators to support clean energy start-ups around the country ([https://www.energy.gov/eere/buildings/incubators-and-accelerators](https://www.energy.gov/eere/buildings/incubators-and-accelerators)).
  - EDA’s Build to Scale program (15 USC 3722) focuses on supporting regional innovation in certain technology areas, which could include expansion of GHGRF-related ecosystems, such as low-carbon building materials and building retrofit services, into LI/DAC and other underserved areas. Ultimately, GHGRF awardees should leverage these other established offerings, but in the immediate term EPA could consider a similar approach tailored to GHGRF needs.

• **Low interest rates, subsidized loans, and repayment flexibility:** While EPA should not be in the business of setting loan terms, these are important features that Eligible and Indirect Recipients can deploy to drive GHG-reducing projects:
  - In general, USDA Rural Development loan interest rates for utilities are set by reference to U.S. Treasuries of a similar maturity at the time of borrowing (7 CFR 1738.152). Lower interest rates are available when “hardship” conditions are met (7 CFR 1714.4), and SBA offers low-interest loans through its Economic Injury Disaster Loan (EIDL) program (15 USC 636(b), 13 CFR Part 123). Further, subsidized loans and repayment flexibility can be available when certain conditions are met, such as when existing services do not meet certain minimum thresholds (7 CFR 1738.102).
- **Repayment metrics other than credit score:** Again, while EPA should not be in the business of setting loan terms, these are important features Eligible and Indirect Recipients can deploy to drive GHG-reducing projects:
  - USDA must use approaches to measure the likelihood of repayment that are different from those used by ratings agencies to evaluate for-profit utilities. Primarily, USDA looks at debt service coverage ratios, current ratios (i.e., current assets to current liabilities), and operating ratios (i.e., total annual revenue or earnings to total annual revenue expenses). For households, USDA has developed repayment methodologies that are available in 7 CFR 3555.151. In state programs, such as in Connecticut and New York, similar measures have been tailored to residential borrowers, including debt-to-income ratios and the customer’s track record of paying mortgages and utility bills.
  - The CDFI Fund also provides technical assistance on similar issues ([https://www.cdfifund.gov/programs-training/programs/cdfi-program](https://www.cdfifund.gov/programs-training/programs/cdfi-program)).

- **Working capital:** And again, while EPA should not be in the business of setting loan terms, these are important features Eligible and Indirect Recipients can deploy to drive GHG-reducing projects:
  - Similarly, SBA offers working capital support through its CAPLines revolving credit line program, including Builders CAPLine and Working CAPLine products ([https://www.sba.gov/partners/lenders/7a-loan-program/types-7a-loans](https://www.sba.gov/partners/lenders/7a-loan-program/types-7a-loans)); more attractive working capital support is available through SBA’s EIDL program (15 USC 636(b), 13 CFR Part 123).
  - GHGRF Eligible and Indirect Recipients could offer small business credit cards, revolving credit lines, invoice financing, and other working capital solutions with supplier-friendly collateral terms to enable low-GHG business expansion into underserved markets. On a related issue, GHGRF could offer technical assistance on business credit scores through Dunn & Bradstreet and work with raters to appropriately score GHGRF subrecipients.

**Section 2.7** What should EPA consider in the design of the program, in addition to prevailing wage requirements in section 314 of the Clean Air Act, to encourage grantees and subrecipients to fund projects that create high-quality jobs and adhere to best practices for labor standards, consistent with guidance such as Executive Order 14063 on the Use of Project Labor Agreements and the Department of Labor’s Good Jobs Principles?

N/A

**Section 2.8** What should EPA consider when developing program guidance and policies, such as the appropriate collection of data, to ensure that greenhouse gas and air pollution reduction projects funded by grantees and subrecipients comply with the requirements of Title VI of the Civil Rights Act,
which prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance?

NRDC supports the comments of the Title VI Alliance being submitted on this question.

Section 2.9 What should EPA consider when developing program policies and guidance to ensure that greenhouse gas and air pollution reduction projects funded by grantees and subrecipients comply with the requirements of the Build America, Buy America Act that requires domestic procurement of iron, steel, manufactured products, and construction material?

N/A

Section 2.10 What federal, state, and/or local programs, including other programs included in the Inflation Reduction Act and the Infrastructure Investment and Jobs Act or “Bipartisan Infrastructure Law,” could EPA consider when designing the Greenhouse Gas Reduction Fund? How could such programs complement the funding available through the Greenhouse Gas Reduction Fund?

Eligible Recipients and Indirect Recipients require flexibility to match their funding, particularly given the mismatch of timelines for different applications. As highlighted in Calvert Impact Capital’s RFI response to this question, tax credits or rebates often fail to reach low-income customers and communities. If the new tax credits, rebates, and other incentives in the Inflation Reduction Act are to meet the Biden administration’s environmental and energy justice goals, these incentives need to be paired with extremely attractive financial packages with hands-on technical support provided through trusted local institutions. EPA should require Eligible Recipients to demonstrate how they have developed and will support financial products that ultimately complement these incentives, as they will work together to increase access to these products for low- and moderate-income families and businesses.

Two other IRA-funded EPA grants are particularly compatible to support upstream planning: the Environmental and Climate Justice Block Grants and the GHG Pollution Planning and Implementation grants; each of these grants could build critical capacity and enable local, regional, and state-level planning for inclusive and robust project pipeline development. EPA should also look to leverage other technical assistance and capacity building programs targeting low-income and disadvantaged communities, such as EPA’s Thriving Communities Technical Assistance Centers and the U.S. Department of Transportation’s Thriving Communities Program. Eligible and Indirect Recipients should at minimum be aware of these programs and the potential pipeline of community-based projects that could emerge, align with, and benefit from GHGRF support.

In line with the eligible technologies recommendations in Section 3.1 (below), the following federal programs may be useful sources of complementary funding and capabilities:

**Building Decarbonization (Energy Efficiency and Electrification)**

- Health and Safety (Pre-weatherization): Health and Human Services Low Income Home Energy Assistance Program, DOE energy efficiency revolving loan funds under IIJA section 40502, and Energy Efficiency Block Grant Program that recently received funding through IIJA section 40552
• Low- and Moderate-Income Housing Retrofits: HUD Community Development Block Grants; DOE HOMES rebates under IRA 50121; and Weatherization Assistance Program, particularly the funding under IIJA section 40551
• Efficient All-Electric New Construction: DOE building energy code funding under IIJA sections 40503 and 40511 and IRA 50131, and DOI Bureau of Indian Affairs Climate resilience and adaptation programs under IRA section 80001
• Heat Pumps and Other Electrification: DOE HEERA rebates under IRA section 50122 and smart grid investments under IIJA section 40107, and HUD resilience funding under IRA 30002

Distributed Solar and Storage
• Community Solar: DOE Tribal Energy Loan Guarantee Program and Solar Energy Technologies Office regular appropriations, DOI Bureau of Indian Affairs Climate resilience and adaptation programs under IRA section 80003, and Rural Utilities Service programs under IRA sections 22001 and 22004
• Distributed Renewables: DOE grid resilience programs under IIJA sections 40101 and 40103, and DOE Loan Program Office section 1603

Transportation
• EVs: DOT emissions-reduction programs under IIJA section 11401 et seq., National Electric Vehicle Infrastructure program, National Highway Performance Program and Surface Transportation Block Grant programs, Reconnecting Communities and Neighborhood Access and Equity Grants, Carbon Reduction Program, PROTECT competitive grant and formula programs, RAISE program, INFRA program, and Thriving Communities Program, DOI Office of Insular Affairs—climate change technical assistance and Energizing Insular Communities
• Fleet Electrification: FTA funding under IIJA sections 30017 and 30018

Other
• Agricultural
  o Food-loss and waste-prevention technologies
  o Composting infrastructure
  o Anaerobic digestion: USDA Rural Energy for America Program, DOE Rural or Remote Funding under IRA 40103(c)
  o Farm equipment and processes for small family farms, and IRA section 22007 Eligible Recipients: USDA High Energy Cost Grants
• Low-Carbon Materials: GSA funding under IRA 60503, HUD resilience funding under IRA section 30002, and FEMA funding pursuant to IRA section 70006
• Community-Based Organizations: HHS Community Services block grants

In addition to these federal programs, many cities are actively offering similar services. For example, Denver, Portland, and Seattle have each raised funds for climate activities, with some in Seattle going to affordable housing. In addition, municipal utilities have significant flexibility to design their own incentive programs, such as the Sacramento Municipal Utility District’s electrification program focused on LMI, which is viewed as a key success story. Eligible Recipients should be encouraged to demonstrate
how they will braid GHGRF financing with other public programs so that the efforts complement, rather than duplicate, existing expertise in other agencies and programs.

Section 2.11 Is guidance specific to Tribal and/or territorial governments necessary to implement the program? If so, what specific issues should such guidance address?

One key aspect EPA should address is GHGRF’s applicability to Puerto Rico, the U.S. Virgin Islands, American Samoa, the Northern Marianas, and Guam. Section 134 does not include a separate definitions section covering all defined terms. Section 134 is an amendment to the Clean Air Act and the Clean Air Act defines State to include the Commonwealth of Puerto Rico and other U.S. territories (42 U.S.C. § 7602(d)). Given the short window of time during which funds will be available, it is imperative that the guidance make crystal clear that Puerto Rico is eligible to participate in the program, as it is considered a “State” under the Clean Air Act. This approach would also be consistent with the Presidential Memorandum on the Commonwealth of Puerto Rico dated November 30, 1992, which directs federal agencies “to treat Puerto Rico administratively as if it were a State.”

Section 134(b) further provides that grant funds going to “eligible recipients” can be deployed by way of direct investments at the “national, regional, State and local levels” or through indirect investments that support existing entities that provide financial assistance at the “State, local, territorial, or Tribal level or in the District of Columbia.” Similarly, EPA should also make clear that such direct or indirect deployment of GHGRF dollars can be performed in Puerto Rico and the other territories.
Section 3: Eligible Projects

Section 3.1 What types of projects should EPA prioritize under sections 134(a)(1)-(3), consistent with the statutory definition of “qualified projects” and “zero emissions technology” as well as the statute’s direct and indirect investment provisions? Please describe how prioritizing such projects would:

a. maximize greenhouse gas emission and air pollution reductions;
b. deliver benefits to low-income and disadvantaged communities;
c. enable investment in projects that would otherwise lack access to capital or financing;
d. recycle repayments and other revenue received from financial assistance provided using the grant funds to ensure continued operability; and
e. facilitate increased private sector investment.

General Principles

EPA should provide clear guidance to Eligible Recipients and Indirect Recipients on how to evaluate eligible technologies and Qualified Projects. Eligible technologies and Qualified Projects should demonstrate the ability to deliver on principles stated in the Act: They should otherwise lack access to financing and funding; they should deliver community benefits including, but not limited to, GHG and other air pollution reduction; and they should be tailored to deliver benefits to low-income and disadvantaged communities and households.

• In support of this goal, EPA should develop and maintain a list of high-priority, “safe harbor” projects and technologies, allowing lenders to quickly evaluate whether a project/technology is qualified. This guidance on high-priority, safe harbor project/technology types will reduce transaction costs and allow Eligible Recipients and Indirect Recipients to quickly deploy the funds they are awarded. We believe that LI/DAC-serving projects should be at the top of the high-priority, safe harbor list.

• Relatedly, EPA should indicate projects/technologies that are not eligible. This guidance will avoid suboptimal strategies, guard against potential misuse of funds, and provide clarity to grantees and markets to advance high-priority investment strategies. Specific recommendations for high-priority, safe harbor projects/technologies and ineligible projects/technologies are provided in a subsection of this question below.

• To facilitate GHGRF support for projects not listed, EPA should also provide clear explanations on how those high-priority, safe harbor projects/technologies were characterized, so that lenders can apply this reasoning to evaluate other project types. For example, combining home safety improvements, energy efficiency, and distributed solar to disadvantaged communities should be a priority project. A sufficient rationale from EPA would help lenders understand how project elements could change before high-priority, safe harbor no longer applied, analogous to the safe harbor approach taken by the IRS regarding certain topics. Relatedly, EPA should establish a process whereby awardees may seek approval for additional technologies that are not identified as priorities, based on high-standard, objective

criteria established by EPA. The strong preference, however, should be toward high-priority, safe harbor projects and technologies.

- **Finally, the law is clear that technical assistance and capacity building in communities are key priorities**, as all three funds require recipients to provide both financial and technical assistance, and Qualified Project is partly defined as “assist[ing] communities in the efforts of those communities to reduce or avoid greenhouse gas emissions and other forms of air pollution.” Adequately funding technical assistance and capacity building will help communities take full advantage not only of the financial assistance offered by GHGRF, but also the many other federal, state, local, and private opportunities for grants, loans, and tax incentives that support the deployment and community benefit of zero-emission technologies.

### Considerations for Technology Prioritization

EPA should seek to prioritize eligible technologies on the basis of GHG impact potential, demonstrated financing need, and ability to deliver significant co-benefits to households and communities, such as health benefits, energy cost burden reduction, resiliency, modernization, and jobs.

- Prioritized technologies should clearly align with the goals of economy-wide decarbonization and delivering benefits to LI/DAC. In addition to the $15B targeted for LI/DAC, at least 40% of benefits from the $12B general assistance fund should follow Justice40 principles and go to Qualified Projects benefiting low-income and disadvantaged households and communities. We recommend that EPA target distributed technologies that require expansion of consumer, small business, and real estate financing access with incentivized terms and accompanying technical assistance, to unlock increased investment.

- We agree with the University of New Hampshire’s Center for Impact Finance’s response to Section 3 that the highest and best use of GHGRF funds is to decarbonize low-income communities, alongside supporting efforts to provide clean energy in these communities. In addition to prioritizing LI/DAC, EPA should prioritize projects benefiting low-income and moderate-income households that may not be located in a LI/DAC-designated area. In all of these cases, additionality is not in question — these projects won't happen without the financial and technical assistance GHGRF is designed to provide. In addition, smaller projects with substantial community co-benefits are highly additional given their demonstrated lack of access to capital. These projects are also more likely to engage local businesses that employ local workers, resulting in a higher economic multiplier effect in the community.

- EPA should also prioritize technologies and projects with significant market transformation potential. For example, pipeline construction is a singular event and is unlikely to foster market transformation, whereas using GHGRF to shift underwriting standards and terms in financing housing—where current industry standards fail to incent decarbonization—could impact thousands of building financing transactions for years to come and accelerate the decarbonization of our building stock.

As EPA considers technology prioritization, the agency should do so with an eye toward reaching the following market segments:

- **Built environment serving low-income households or located in LI/DAC**, including single-family homes; multifamily buildings and units; class B- and C-quality commercial real estate; and
facilities that serve communities, including (but not limited to) health facilities, places of worship, schools, qualifying nonprofits, and cultural institutions.

- While some GHGRF capital should support new construction projects that go above and beyond existing building standards (including efficiency, full electrification, and zero-waste principles), efficiency and decarbonization retrofits in existing buildings should receive a much larger share of available capital and subsidies. Retrofitting existing buildings is much more difficult and expensive than building new, efficient, all-electric buildings, and the potential to reduce GHG emissions in existing buildings is far greater than the potential in new construction.

- Maximizing GHG reductions in the building sector requires the development of successful financing and technical assistance delivery mechanisms. The GHGRF has the potential to support the creation of those mechanisms, which can make it possible to decarbonize existing buildings at scale.

- Both the $8B and $12B sub-funds should prioritize this market segment.

**Community ownership models, wealth building, and community infrastructure in LI/DAC.**

There exists great potential for disadvantaged communities to share in the benefits of supplying clean energy. The benefits include:

- Expanding the clean energy workforce to community members;
- Increasing the number of small, BIPOC-, and women-owned businesses directly or indirectly supporting projects;
- Growing the number of lenders investing in improvements to key community-identified local infrastructure needs as part of project financing;
- Investing profits or surpluses in key community assets;
- Supporting community ownership models like community land trusts and cooperatives as they transition to clean energy; and
- Entering into carried interest or profit-sharing arrangements with partner organizations, individuals, or groups.

**Small businesses, microbusinesses, and BIPOC- and women-owned businesses, including those in clean energy development and agriculture.** As stated by the University of New Hampshire’s Center for Impact Finance, investments in green businesses and organizations owned or led by members of low-income or disadvantaged communities should be considered a Qualified Project because supporting such organizations is a way to “assist communities in their efforts to reduce or avoid greenhouse gases.”

- Research has found stark disparities in access to capital for minority-owned businesses; for example, a Federal Reserve study found that Black entrepreneurs are denied loans nearly twice as often as white business owners.
- Perhaps more important, lack of access to equity (not just debt) makes it very difficult for minority-owned clean energy companies to grow, in some cases forcing them to exit projects earlier than would be optimal or even to forgo projects. Capacity building grants or low-cost equity investments in these companies would unlock their growth potential, in turn boosting the pipeline of projects serving communities of color.

- Both the $8B and $12B sub-funds should prioritize this market segment.
• **Moderate-income, working families and communities.** Qualified Projects benefiting moderate-income households and communities may require concessionary financing in order to move forward. The $12B general assistance sub-fund should support these projects, in addition to at least 40% of benefits from that sub-fund following Justice40 principles and benefiting low-income and disadvantaged households and communities.

**Prioritization of Technologies**

With these considerations and cross-cutting market segments in mind, NRDC believes that the GHGRF should prioritize four technology categories: (1) decarbonization of buildings, (2) distributed solar plus storage, (3) transportation, and (4) other technologies. Below, we provide an overview of the specific technologies within each category that should be considered eligible (“safe harbor”), priority (high-priority “safe harbor”), or ineligible (disallowed). We then describe the various rationales for selecting these technology categories.

Importantly, while the second column in the following tables is labeled “Qualified Projects in LI/DACs,” we strongly believe any Qualified Project that is considered eligible or high-priority in these communities should also be considered eligible in low-income and disadvantaged households, even if those households are not in LI/DACs. In other words, if the project benefits LI/DAC households who may not live in a LI/DAC, it should be considered high-priority for $12 billion “Qualified Projects NOT in LI/DAC” column.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Zero-Emission Technologies in LI/DAC</th>
<th>Qualified Projects in LI/DAC</th>
<th>Qualified Projects NOT in LI/DAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-weatherization</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Ineligible</td>
</tr>
<tr>
<td>Energy efficiency &lt;25%</td>
<td>Ineligible</td>
<td>Ineligible</td>
<td>Ineligible</td>
</tr>
<tr>
<td>Energy efficiency ≥25%</td>
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<td>Eligible</td>
<td>Eligible</td>
</tr>
<tr>
<td>Deep EE &gt;60%</td>
<td>Priority</td>
<td>Priority</td>
<td>Priority</td>
</tr>
<tr>
<td>Passive house</td>
<td>Priority</td>
<td>Priority</td>
<td>Priority</td>
</tr>
<tr>
<td>Efficient all-electric new construction</td>
<td>Priority</td>
<td>Priority</td>
<td>Priority</td>
</tr>
<tr>
<td>Heat pumps</td>
<td>Priority</td>
<td>Priority</td>
<td>Priority</td>
</tr>
</tbody>
</table>

7 Pre-weatherization addresses severe conditions that cause a home to be deferred from DOE’s Weatherization Assistance Program (WAP), a holistic energy efficiency program. Examples include moisture or standing water, electrical issues, environmental contaminants, and structural deficiencies.

8 Highly efficient construction that excludes all fossil fuels from the building systems and equipment, including HVAC, hot water, kitchen, laundry, and other appliances.
To maximize the impact of building decarbonization projects, EPA should take the following points into consideration:

- Where possible, EPA should prioritize holistic approaches, such as solar on rooftops to offset increased electricity requirement from heat pumps; EV charging capability at apartment buildings, homes, and garages; approaches that incorporate resiliency measures; and energy efficiency before solar or electrification to ensure that systems are sized appropriately.

- In qualified building decarbonization projects, EPA should permit GHGRF funds to finance building costs that are not directly related to decarbonization (e.g., health and safety improvements, resiliency investments); however, unrelated costs should not exceed a 1:1 ratio with eligible costs. This requirement can be met at the project or portfolio level and should be reported to EPA.

- New building construction should exclude all fossil fuels from the building systems and equipment. “Building systems and equipment” refers to building heating, ventilation, and air conditioning (HVAC), water heating, kitchen, laundry, and other appliances.

- With respect to energy efficiency investments in existing buildings or major building renovation projects, GHGRF funds should not be invested in installing, improving, upgrading, or perpetuating fossil fuel–based equipment or systems.

- In states and local jurisdictions that have implemented a building energy performance standard or stretch code designed to reduce GHG emissions and reliance on fossil fuels, any building project using GHGRF funds should meet any such applicable standard. Compliance should “look forward” five years.

**Benefits of Prioritizing Building Decarbonization**

a. **Maximizes GHG and Air Pollution Reduction**
   - Buildings account for roughly 40% of US GHG emissions.
   - Heat pumps/electrification substantially reduce or eliminate reliance on fossil fuels.
   - Efficiency reduces GHG emissions and reduces both the upfront and operating costs associated with electrification retrofits.

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9. Includes electric water heating, cooking, other household equipment and appliances and measures that enable future electrification, such as electrical system upgrades.

10. In states and local jurisdictions that have implemented a building energy performance standard or stretch code designed to reduce GHG emissions and reliance on fossil fuels, any building project using GHGRF funds must meet any such applicable standard. Compliance should “look forward” five years.
When combined with solar PV and/or clean power grids, zero-emission buildings are achievable.
Buildings are long-lived; inaction has long-term negative impact in terms of missed GHG reduction opportunity.

b. Delivers Benefits to LI/DAC
- Efficiency lowers utility bills; makes solar and electrification more cost-effective; reduces impact of energy price volatility.
- Electric heat pumps provide air-conditioning, a life-saving measure for millions as summer heat intensifies.
- Updated systems help maintain a comfortable temperature and living environment.
- Eliminating fossil fuel combustion in buildings improves indoor air quality and human health.
- Building decarbonization projects create local jobs and training opportunities that can’t be outsourced.
- Projects reduce risk of LMI customers being saddled with stranded fossil gas assets, as wealthier customers electrify.

c. Facilitates Access to Capital or Financing
- Today’s mortgage products—most common building finance—don’t deliver comprehensive decarbonization.
- Supplemental financing options (e.g., PACE, ESAs, lines of credit) are expensive, “niche” products.
- Incentivized financing—particularly but not exclusively mortgage financing—with lower rates, longer terms, and more favorable underwriting can catalyze investment in technologies that decarbonize buildings.

d. Enables Recycling and Continued Operability
- Loans that decarbonize real estate are repayable and can be securitized, providing ample opportunity for recycling revenue and supporting continued operability/sustainability.

e. Increases Private Investment
- Building decarbonization offers real opportunity for market transformation. New lending tools and processes that can be established through GHGRF can impact thousands of building finance transactions for years to come.
- Many private and Environmental, Social, and Governance investors want access to mortgage-backed securities and real estate loans with “green” decarbonization features.
- Investors are aware of emerging state and local BPS and want BPS-compliant investment products.
DISTRIBUTED SOLAR PLUS STORAGE

<table>
<thead>
<tr>
<th>Technology</th>
<th>Zero-Emission Technologies in LI/DAC</th>
<th>Qualified Projects in LI/DAC</th>
<th>Qualified Projects NOT in LI/DAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar PV</td>
<td>Eligible</td>
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<td>Ineligible</td>
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<tr>
<td>Solar PV + storage</td>
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<td>Prioritize</td>
<td>Prioritize</td>
</tr>
<tr>
<td>Community solar</td>
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<td>Eligible</td>
<td>Ineligible</td>
</tr>
<tr>
<td>Community solar + storage</td>
<td>Prioritize</td>
<td>Prioritize</td>
<td>Eligible</td>
</tr>
</tbody>
</table>

Benefits of Prioritizing Distributed Solar Plus Storage

a. Maximizes GHG and Air Pollution Reduction
   - Distributed solar technology produces zero emissions during generation.
   - Distributed solar is a key component enabling buildings to achieve net-zero status.
   - Distributed solar is a resource benefiting the resilience of the electric utility grid.
   - Storage technology allows zero-emission solar electricity generation to be available when the sun is not shining, thereby displacing sources that produce GHG emissions.

b. Delivers Benefits to LI/DAC
   - Rooftop solar reduces utility bills, including demand charges; mission-driven community solar targets bill savings of 20%.
   - Rooftop solar can offset some of the potentially increased costs resulting from whole-building electrification.
   - Rooftop solar plus storage benefits resiliency at the site level, and storage provides emergency power during blackouts.
   - Distributed solar plus storage provides substantial job creation opportunity.
   - Community solar allows LI/DAC households including renters to access solar energy, since it is not necessary to own a roof to participate.
   - Community solar can build community ownership and wealth; many mission-driven developers, such as the People’s Solar Energy Fund, use a cooperative ownership model for solar projects.
   - Storage technology mitigates cost shifting, resulting in greater benefits to installers and all electric customers.

c. Facilitates Access to Capital or Financing
   - Solar has relatively strong consumer acceptance, and therefore latent demand can be unlocked with incentivized financing.
   - Access to capital for solar investment is constrained for LI/DAC; incentivized financing can address this barrier.
   - Existing incentives do not serve LI/DAC, as many residents are renters.
   - Storage costs are declining but not market competitive; incentivized financing can address this barrier.
d. Enables Recycling and Continued Operability
   • Loans that finance solar are repayable and can be securitized, providing ample opportunity for recycling revenue and supporting continued operability.

e. Increases Private Investment
   • Private investment is robust in the distributed solar sector but limited for LI/DAC. Structured properly, LI/DAC investments will appeal to investors familiar with the sector and drive robust ESG compliance.
   • Storage is an emerging sector, appealing to institutional investors due to returns and ability to leverage renewable energy infrastructure (see, e.g., Institutional Investor).
   • Availability of IRA tax credits paired with GHGRF financing means that solar will become much more accessible to the LI/DAC market segment, but it also means that GHGRF support must be strictly limited to LI/DAC to avoid unnecessarily increasing returns to investors in the non-LI/DAC part of the market.

<table>
<thead>
<tr>
<th>TECHNOLOGY</th>
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<th>Qualified Projects in LI/DAC</th>
<th>Qualified Projects NOT in LI/DAC</th>
</tr>
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<tr>
<td>Electric vehicles</td>
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<tr>
<td>Fleet electrification</td>
<td>Eligible</td>
<td>Eligible</td>
<td>Eligible</td>
</tr>
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</table>

Benefits of Prioritizing Transportation

a. Maximizes GHG and Air Pollution Reduction
   • Electric vehicles (EVs) produce zero emissions during operation and are an incredibly effective technology for reducing transportation-sector global warming emissions, and as the U.S. electricity grid gets cleaner (by shifting away from coal and adding renewable energy sources), the emission reduction benefits will continue to grow.
   • The transportation sector is responsible for 29% of U.S. GHG emissions.

b. Delivers Benefits to LI/DAC
   • EVs have the potential to insulate consumers from gas price fluctuations.
   • EV charging infrastructure is not reaching moderate and low-income areas, limiting access.
   • Fleet conversions can get diesel trucks out of poor neighborhoods, improving health outcomes.
   • Car sharing programs can save households thousands of dollars annually.
c. **Facilitates Access to Capital or Financing**
   - Existing policies and incentives are not adequately serving DAC.
   - Investments in loan loss reserve programs may provide low-cost access to capital for LI communities.
   - Leveraging the network of CDFIs and other mission lenders allows reach to LI/DAC.

d. **Enables Recycling and Continued Operability**
   - Loans that finance vehicles are repayable and can be securitized, providing ample opportunity for recycling revenue and supporting continued operability.

e. **Increases Private Investment**
   - Policies supporting the adoption of EVs incentivize the already-booming sector, which has long held interest in private equity firms and the sustainable fund universe throughout the supply chain.

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### OTHER TECHNOLOGIES

<table>
<thead>
<tr>
<th>Technology</th>
<th>Zero-Emission Technologies in LI/DAC</th>
<th>Qualified Projects in LI/DAC</th>
<th>Qualified Projects NOT in LI/DAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food-loss and waste-prevention technologies</td>
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<tr>
<td>Composting infrastructure</td>
<td>12</td>
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<tr>
<td>Anaerobic digestion</td>
<td>13</td>
<td>Eligible</td>
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</tbody>
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11 Preventing food from becoming waste ultimately leads to the most GHG savings. Technologies such as sales forecasting software, technology to reduce fertilizer inputs or limit overproduction, and upcycling foods would help reduce wasted food and associated GHGs. Analysis of current financial and industry data shows that $14 billion in annual funding is needed to accelerate and scale solutions to food waste to reach national and international goals to reduce food waste by 50% from a 2010 baseline by the year 2030. So far, we are nowhere close to that level of investment, and this fund would be critical to unlocking impact.

12 Methane emissions from landfills are responsible for 17% of overall U.S. methane emissions, and food in landfills is the leading cause of those emissions. Increasing communities’ ability to compost, at all scales, will help properly manage food scraps and reduce methane emissions. Composting can also create twice as many jobs as landfilling, with less exposure to hazards. These capital-intensive projects have faced funding barriers because they have high upfront costs and are the most sensitive to variations in financing rates, which can be a differentiator for success.

13 Anaerobic digestion (AD) can be an effective approach to extracting energy from food waste before disposing of it. However, it also has potential pitfalls that any AD project should address in order to receive funding. See Appendix C of NRDC’s report Wasted (2017). Similar to composting infrastructure, these can be capital-intensive projects that the Fund could help jump-start.
The technologies listed above are wide ranging in nature; many of the details on the specific benefits of each category are beyond the scope of this document.

Disallowed Technologies
We believe EPA should disallow the following technologies:

- Technologies that reduce GHG emissions but promote continued or extended use of fossil fuels, including fuel switching from oil to gas, cogeneration projects, and clean fuels.

- Technologies and market segments that can secure adequate access to financing capital, including:
  - Utility-scale renewables, carbon capture and storage (CCS), and nuclear.
  - Utilities, class-A commercial real estate, large and midsize corporations, investment-grade rated institutions, and high-income consumers over 120% AMI.

- Technologies and market segments where investment is deterred by technology or regulatory barriers, including:
  - Pre-commercial technologies that present substantial technology or performance risk, such as untested hydrogen production.
  - Transmission projects that do not have financing barriers but require improved regional and interregional policies, planning, and cost allocation to unlock investment.

- Technologies and project types that are sufficiently supported through tax incentives or other publicly supported financing programs, such as the DOE Loan Programs Office, including:
  - CCS projects that can access tax credits under IRA;
  - Utility-scale renewable projects that can access tax credits under IRA;
  - Decommissioning of coal plants and other project types that are priorities of DOE’s Loan Programs Office; and
  - Solar PV for high-income consumers and entities that can readily monetize tax credits.

Technical Assistance and Capacity Building
Technical assistance and capacity building investments are critical to the success of the GHGRF. As we outline in more detail in Section 3.3 and Section 4.5, EPA should look to make market-building, ecosystem investments to create a pipeline of projects that can qualify for GHGRF financing. An ecosystem of interlinked and mutually supporting organizations across the country needs to be developed and/or strengthened to support the rapid deployment of clean energy projects.
• As detailed in Calvert Impact Capital’s response, technical assistance should be flexible and adaptable to the unique needs of the community being served. This technical assistance plays a dual role in low-income and disadvantaged communities: preparing a borrower or community-based project to be credit- or investment-ready, and building a strong connection to the community for ongoing support. This hands-on and tailored approach, which has been used by the community development finance industry for decades, has resulted in exceptionally low industry write-off rates for loans that are otherwise deemed to be unbankable.

• We agree with Calvert Impact Capital that the GHGRF should, in its grant programs, provide as flexible a definition of technical assistance as possible to ensure maximum adaptation to cultural and community needs. It is crucial that the GHGRF facilitate technical assistance on multiple levels. In addition to providing financial resources for community-based technical assistance, the GHGRF should allow for technical assistance to the lenders and developers who will be implementing these activities.

• Finally, we agree with the University of New Hampshire’s Center for Impact Finance that technical assistance to generate community co-benefits—such as job creation and workforce development, community empowerment and wealth-building, and increased resilience—should be an integral part of the GHGRF. As the Center states, the reality is that generating these impacts is not free and will require a portion of GHGRF funding to be deployed as grants. There is nonetheless a moral imperative to do this, particularly given that the GHGRF is a key part of an overall legislative package framed as reducing energy costs and creating jobs.

Section 3.2 Please describe what forms of financial assistance (e.g., subgrants, loans, or other forms of financial assistance) are necessary to fill financing gaps, enable investment, and accelerate deployment of such projects.

The financial assistance necessary to deliver zero-emission technologies to LI/DAC and to move Qualified Projects forward will vary depending on (1) the type (e.g., buildings, distributed clean energy generation and storage, EVs and related infrastructure), (2) broader macroeconomic trends and exogenous shocks, (3) the needs of the community being served and the corresponding benefits targeted, and (4) the regional environment in which the investment takes place. Thus, it is important that EPA strike a balance between establishing clear guardrails and best practices for financial assistance and allowing the flexibility necessary for lenders to tailor their financial assistance in line with the realities on the ground.

EPA should distinguish between the design goals and best practices for financial and technical assistance provided by retail lenders to end users (in other words, to households, businesses, and communities) and financial and technical assistance provided by Eligible Recipients to Indirect Recipients.

• Direct investment activities, whether performed by Eligible Recipients or Indirect Recipients

Design considerations and recommended best practices include the following:

- Lenders can use funds to provide financial assistance to Qualified Projects in the form of project-level grants, soft debt, subordinated or unsecured low-interest loans or lines of credit, various types of loan products (including equipment loans, ESAs, working capital lines, PPAs, mortgage-secured debt, asset-based facilities), and project-level credit
enhancement (in various forms). Flexibility should be preserved for lenders to
determine best use of funds, assuming the lender is able to successfully deploy capital
into qualifying projects.

- Lenders can use funds to provide technical assistance to projects, either directly or
  through third parties specializing in technical assistance.
- Lenders can earn revenue (interest and fees) on loans and other forms of financial
  assistance they provide and can use this revenue to (1) support all operation and
  overhead costs related to GHGRF deployment up to a reasonable administrative cost
  cap established by EPA, (2) establish and/or maintain appropriate loan loss reserves for
  GHGRF-funded lending activities, and (3) service any debt provided by GHGRF
  intermediaries or by third parties supporting GHGRF lending activity. Any revenue
  earned that is not used to cover the abovementioned costs must be reinvested in
  GHGRF-eligible activities.
- EPA should provide clear and detailed guidance on prioritized eligible technologies and
  market segments for GHGRF, as well as technologies and market segments that cannot
  be supported with GHGRF dollars. GHGRF funds designated for LI/DAC must deliver
  benefits to LI/DAC; financing transactions must meet the additionality criteria (or be
deemed additional if made to LI/DAC recipients).
- Repayments of capital from GHGRF-funded loans and other financial products must be
  reinvested in GHGRF-eligible activities, akin to a revolving loan fund.
- Leverage can be achieved at the project level and portfolio level; lenders can also
  leverage GHGRF grant funds at the balance sheet level. See Section 2.1 for a more
  detailed discussion.
- GHGRF funds should be segregated for tracking and reporting purposes. Financial
  assistance products that blend GHGRF with other lender sources of funds are acceptable
  and encouraged, as long as appropriate impact-tracking methods specific to GHGRF
  funds are used and criteria are met.

**Indirect investment activities performed by Eligible Recipients**

Design considerations and recommended best practices for providing funding and technical
assistance to establish new or support existing public, quasi-public, not-for-profit, or nonprofit
entities that provide financial assistance to Qualified Projects:

- There must be transparency and fairness regarding all costs associated with funds
  provided to Indirect Recipients. Excessive rates, management fees and other fees,
  overhead allocations, or other revenues and cost recovery earned on the provision of
  funding to Indirect Recipients can create substantive barriers to GHGRF participation
  and to deploying funds into Qualified Projects and can diminish the level of benefits
delivered to end-use borrowers, particularly LI/DAC households and communities.
  Excessive application and reporting requirements for Indirect Recipients can create
  burden as well. Eligible Recipients should be prepared to provide tools, systems,
  and support to ease these burdens.
- Earned revenues in excess of (1) operating costs related to GHGRF direct or indirect
  investment activities, up to an administrative cost cap established by EPA, (2) the cost of
  servicing any debt directly supporting GHGRF direct or indirect investment activities,
and (3) the establishment and maintenance of reserves for losses must be reinvested in program activities. Such reinvestment of revenue earned should prioritize and, as needed, subsidize LI/DAC activity, unless and until Justice40 goals are fully met. Unrestricted net assets or accumulated funds (the equivalent of retained earnings) should be maintained at an appropriate level as a cushion against fluctuations in operating revenues and unanticipated risks. Excessive retention of revenues over expenses should be avoided.

- EPA should establish guardrails against private enrichment.
- Recommended products provided by Eligible Recipients to Indirect Recipients could be:
  - Restricted grants to balance sheet
  - Loans that resemble philanthropic program related investments (PRI) (typical rates in the 0.25% to 2% range), and repayment terms that are more flexible than those in the private investment market
  - Guarantees that resemble PRI guarantees, again with flexible terms as well as low fees
  - Standby purchase agreements, provided on favorable terms
  - Secondary-market facilities and services (relatively small resource allocation initially, growing over time).
  - Technical assistance designed to help lenders build pipelines; adjust or develop appropriate underwriting guidelines and loan processes that facilitate investment in GHG-reducing technologies; and address learning needs, for example around GHG reduction technologies
- As an indirect investor, an Eligible Recipient should have a burden of care to ensure that all projects financed by downstream lenders meet GHGRF and EPA requirements for Qualified Projects.
The table below identifies different forms of financial assistance that could address existing barriers in delivering zero-emission technologies to LI/DAC and in moving Qualified Projects forward:

<table>
<thead>
<tr>
<th>Financial Assistance Type</th>
<th>Deployment Method</th>
<th>Barrier Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants</td>
<td>Project Level</td>
<td>Fills gaps in the capital stack that can’t be repaid because income streams generated by project do not support additional debt; likely only for low-income and disadvantaged communities or households</td>
</tr>
<tr>
<td></td>
<td>Sponsor Level</td>
<td>“Free” equity investment in an organization that could provide resources for working capital, pre-development, pipeline development, etc., particularly for smaller entities with limited balance sheet; likely only for mission-based entities specifically serving low-income and disadvantaged communities or households</td>
</tr>
<tr>
<td></td>
<td>Indirect Recipient Level</td>
<td>Restricted grants at the balance sheet level that can be used flexibly as (1) lending capital; (2) credit enhancements or loan loss reserves to mitigate collateral, repayment, operating, or development team risks for investments at the project or sponsor level; (3) operating costs specific to the deployment of GHGRF, limited to nonprofit mission-based entities specifically serving low-income and disadvantaged communities or households; also for new or emerging green banks (nonprofit, public, or quasi-public) or other climate-focused non-profit lenders</td>
</tr>
<tr>
<td>“Recoverable” Grants—0% interest, Unsecured, Soft</td>
<td>Project Level</td>
<td>Typically provides early-stage financing when no collateral is available and no income stream exists yet to repay; could also provide longer-term soft financing to projects that have limited cash flow available to service debt</td>
</tr>
<tr>
<td></td>
<td>Sponsor Level</td>
<td>Can address working capital constraints, particularly for smaller organizations</td>
</tr>
<tr>
<td>Low-interest PRIs</td>
<td>Project Level</td>
<td>PRIs can address limited cash flow and can drive additional capital to projects while preserving senior lender position</td>
</tr>
<tr>
<td></td>
<td>Sponsor Level</td>
<td>PRIs can address working capital constraints, particularly for smaller organizations</td>
</tr>
<tr>
<td></td>
<td>Indirect Recipient Level</td>
<td>Provides access to low-cost capital for indirect recipients to redeploy in their financial assistance projects</td>
</tr>
<tr>
<td>Guarantees</td>
<td>Project Level</td>
<td>Guarantees help to mitigate collateral, repayment, operating, or development team risks for project-level investments</td>
</tr>
<tr>
<td></td>
<td>Sponsor Level</td>
<td>Guarantees can help smaller organizations grow and access additional capital</td>
</tr>
<tr>
<td></td>
<td>Indirect Recipient Level</td>
<td>Guarantees help to mitigate investment risks taken by Indirect Recipients and can help grow their balance sheets</td>
</tr>
<tr>
<td>Subordinated or Unsecured Low-Interest Loans or Lines of Credit</td>
<td>Project Level</td>
<td>Addresses limited cash flow and can drive additional capital to projects while preserving senior lender position</td>
</tr>
<tr>
<td></td>
<td>Sponsor Level</td>
<td>Can address working capital or cash flow/repayment constraints</td>
</tr>
<tr>
<td></td>
<td>Indirect Recipient Level</td>
<td>Provides access to low-cost capital for indirect recipients to redeploy in their financial assistance projects; note that this doesn't work for project-level grants or technical assistance to be provided by the downstream lenders since these are costs not repayable by loans</td>
</tr>
<tr>
<td>Low-Interest Equity Investments</td>
<td>Project Level</td>
<td>Addresses limited access to equity that many smaller and BIPOC developers face; can solve for equity constraints at project level that limit amount of debt lenders are willing to lend to a project</td>
</tr>
<tr>
<td></td>
<td>Sponsor Level</td>
<td>Can help scale or grow the work of mission-based entities, small businesses, and developers who lack access to investors or whose mission-based projects do not allow them to deliver returns equity investors can find elsewhere</td>
</tr>
<tr>
<td>Loan Loss Reserves</td>
<td>Project Level</td>
<td>Can address collateral or operating risks; also can be used to “prove” a market that has yet to attract the investment needed to scale</td>
</tr>
<tr>
<td>Secondary Market Vehicles</td>
<td>Indirect Recipient Level</td>
<td>Can significantly increase liquidity into a market for standardized products and address constraints individual organizations may face around scaling/growth</td>
</tr>
</tbody>
</table>

EPA should strongly vet each Eligible Recipient’s strategy on how it plans to deploy GHGRF capital, and how the proposed form(s) of financial assistance address current financing gaps while minimizing intermediation cost markups. While some level of intermediation is needed for the most effective implementation of the GHGRF, it should come with zero or close to zero cost markups to Indirect
Recipients, as well as minimal markups to end-use borrowers. In the current interest rate environment, the carry earned on significant-size awards to Eligible Recipients should more than cover intermediary operating expenses in most cases. And given that the capital cost of GHGRF is 0%, Eligible Recipients should not need to pass administrative costs and capital costs on to Indirect Recipients or borrowers.

Within the notice of funding opportunity, EPA should require Eligible Recipients to identify the existing problems facing specific project types and/or technologies targeted and explain why the financial assistance and the pricing they are proposing will address those problems. EPA should expect detailed documentation and answers. For example, Eligible Recipients providing low-interest loans to Indirect Recipients need to clearly demonstrate how doing so will affect pricing at the project level, and how that will address current barriers faced in delivering Qualified Projects that benefit LI/DAC. They should also provide to EPA their revenue and cost assumptions, including any carry earned on undeployed GHGRF funds. Intermediaries should not be seeking to engage in institution-building for its own sake. Intermediaries should be evaluated with an eye toward passing the greatest amount of GHGRF funds through to both Indirect Recipients and end-use borrowers at least cost. To the greatest extent possible, Eligible Recipients should (1) regrant funds to Indirect Recipients, and (2) look to the PRI practices of philanthropies as market comparables for how to price and structure debt and guarantees provided to indirect investees.

**Once awards are made, EPA should provide Eligible Recipients that have met performance standards enough flexibility to adapt their approach over time, as the market evolves, and as exogenous economic factors present themselves.** Allowing such flexibility in financial assistance approaches over time can result in more recycling of GHGRF dollars into new GHG-reducing projects that deliver tangible benefits to communities.

**EPA should look to support financial assistance that makes market-building investments.** As the University of New Hampshire’s Center for Impact Finance states, EPA can maximize impacts by also directing a significant share of GHGRF dollars toward financial and technical assistance that builds markets. There are several types of investment that EPA can prioritize to build markets—thus avoiding the problem of low deployment, creating robust pipelines of deals, and ultimately leveraging more money and doing more to support the growth of green lenders than if it kept all the money as balance sheet equity. Some examples of these market-building investments cited by the Center for Impact Finance include:

- **Capacity building and working capital investments in mission-driven clean energy project developers.** Mission-driven solar developers include Groundswell, GRID Alternatives, SunWealth, and Cooperative Energy Futures, among many others. These investments can help such organizations, as well as smaller start-ups and MWBE solar developer businesses, to staff up, find sites, and build a pipeline of investable deals.
- **Support for operating platforms to help project developers/installers and lenders work more efficiently in order to get more deals done and lower costs for everyone.** An excellent example of this kind of platform is the Smart-E program, developed by a trio of green banks and now being expanded nationally by Inclusive Prosperity Capital.

As discussed in other sections and in the University of New Hampshire’s Center for Impact Finance response, the financial assistance necessary to deploy technologies and Qualified Projects benefiting
LI/DAC and households will likely mean lower GHGRF leverage and a higher proportion of grant and grant-like investments when compared with market-rate clean energy projects. This need not stand in direct opposition to the continued operability of GHGRF recipients. In fact, by making market-building investments that grow the pipeline of investable projects, recipients can then further leverage GHGRF and other capital to invest in projects, and in turn build their assets and earned revenues.

Finally, in partnership with the University of New Hampshire’s Center for Impact Finance, NRDC held a series of 12 workshops with over 150 practitioners during November 2022 to develop and refine an “equitable strategy guide” for the decarbonization of each of six sectors (small residential, multifamily residential, commercial real estate, community solar, EVs/transportation, and small business/agriculture), with a focus on driving solutions in low-income communities. Each guide includes the following:

- A discussion of the size of the opportunity, including a review of how existing activity in the sector creates opportunities for GHG reductions;
- A discussion of opportunities to advance social equity goals and create community co-benefits in each space;
- An overview of the stakeholders in each space who should be supported to scale GHG reductions in the space;
- A review of deal economics and both financial and nonfinancial barriers to scale; and
- Recommendations for the impactful deployment of GHGRF dollars.

Each Strategy Guide includes a detailed discussion of the specific forms of GHGRF-related financial assistance that would be impactful to scale impact in that specific sector and initial drafts can be found here. We encourage EPA to review these guides and consider requiring applicants to follow a similar logical approach in their application to clearly connect their proposed design of financial assistance to current barriers faced at achieving performance outcomes.

**Section 3.3 Beyond financial assistance for project financing, what other supports—such as technical assistance—are necessary to accelerate deployment of such projects?**

While financial assistance is important in accelerating the deployment of clean energy investments, particularly in low-income and disadvantaged communities, it is not sufficient. Green banks, CDFIs, and other mission-driven lenders have all pointed to challenges with finding investable projects generally, including market-rate and commercial deals. As one lender put it, “It’s not finding the money I’m worried about; it’s finding the deals.”

The challenges to creating investable deals are complex and somewhat intertwined. Many project developers need business-level, early-stage support to grow and build their project pipelines. The clean energy workforce needs to be expanded and trained to effectively market and sell clean energy solutions. Many lenders need technical assistance to quickly ramp up their clean energy lending, including education on clean energy technologies, standardized term sheets and underwriting standards, and access to secondary markets to which loans can eventually be transferred. End customers need trusted sources of information and technical advice about potential clean energy
projects. Community organizations, which can potentially serve in that capacity as trusted advisers, need to build their expertise on these topics.

In short, an ecosystem of interlinked and mutually supporting organizations across the country needs to be developed and/or strengthened to help support the rapid and equitable deployment of clean energy projects. Project investment economics will vary from state to state depending on state policy goals and state, local, and utility incentives, as well as prevailing weather conditions. The ecosystem will need to reflect this geographic diversity, likely with regional, state, or even local hubs of expertise on state and local incentives and regionally specific technical assistance. For example, advice on what measures a homeowner should invest in to improve their home energy performance, and how much that will cost after relevant federal, state, and local incentives, will vary dramatically depending on whether the homeowner lives in Albany, Houston, or San Francisco.

An emphasis on technical assistance and capacity building is even more important given that the majority of GHGRF dollars will be targeted to support LI/DAC households and communities. For a discussion of technical assistance necessary for GHGRF funds targeted to benefit low-income and disadvantaged households and communities, please see Sections 1.2 and 1.3.

So, what specifically is required?

- **Capacity building**: Invest in capacity building for the ecosystem of community-based lenders, project developers and installers, and “helper” organizations, such as local community groups or housing nonprofits, providing technical assistance and/or facilitating the work of others.
  - For “helper” organizations, provide flexible, predictable, business-level level funding that organizations can use to meet their specific needs and to develop the expertise and resources needed to support the expansion of clean energy deployment. As an example, the HEAT Squad, a nonprofit home energy efficiency program in Vermont, found many of its customers in its first years through the volunteer efforts of community residents; an evaluation of the program found that this people-centered approach boosted by nearly 50 percent the likelihood of low-income homeowners signing up for a home retrofit.
  - For lenders, encourage and financially support the development of shared IT infrastructure or platforms to allow the field to operate more efficiently, and provide those that need it with additional technical expertise related to clean energy technologies and the financing of such projects. As an example, credit union service organizations are providing a range of financial and operational services to member credit unions, such as (but not limited to) IT support, regulatory compliance services, loan servicing and other lending support services, and investment services. These scaled support services help credit unions to reduce the cost of their operations, access specialized expertise, expand services offered to their members, and spread risks of developing new products and services.
  - For project developers and installers, provide technical and/or financial support to expand their business into new geographic regions or additional clean energy technologies, as well as support for workforce training and apprenticeship programs, including connections to other local or statewide efforts. There are also opportunities to help scale this work more effectively. For example, Amicus Solar is a cooperative that helps independent solar developers share knowledge and work together across a
diverse range of areas, including pooled purchasing from suppliers, IT tools for business optimization, project management, marketing, and more.

- **Community focus:** Encourage community-based, bottom-up solutions and the development of effective local systems to address climate change while connecting communities to financing products available through a broad network of green banks and community lenders.
  - Prioritize places, people, and communities that are at risk of being left behind in the clean energy transition, and where there are significant GHG reduction opportunities. Center environmental and energy justice when making funding decisions.
  - Reward approaches that have significant GHG reduction impacts and a positive impact for LMI and disadvantaged communities.
  - Support the creation of regional, state, or local information hubs that can help local community groups and customers access objective, accurate information about clean energy technologies, potential incentives, and detailed information about what is needed to access GHGRF project financing from an Eligible or Indirect Recipient investing into Qualified Projects.
  - Encourage the potential for disadvantaged communities to share in the benefits of supplying clean energy, such as expanding the clean energy workforce to community members; increasing the number of small, BIPOC-, and women-owned businesses directly or indirectly supporting projects; investing profits or surpluses in key community assets; and supporting community ownership models like community land trusts and cooperatives as they transition to clean energy.
Section 4: Eligible Recipients

Section 4.1 Who could be eligible entities and/or Indirect Recipients under the Greenhouse Gas Reduction Fund consistent with statutory requirements specified in section 134 of the Clean Air Act? Please provide a description of these types of entities and references regarding the total capital deployed by such entities into greenhouse gas and air pollution reducing projects.

The Role of Eligible Recipients and Indirect Recipients

With respect to the $19.97 billion allocated in the GHGRF to Nonprofit Lenders, EPA should take an expansive approach to identifying Eligible Recipients, as defined in section 134(c), and Indirect Recipients. Doing so will provide EPA with the flexibility needed to ensure that funds are awarded to a diversified and networked set of entities best equipped to fulfill the purpose of this program.

EPA should steer a significant share of GHGRF investments through existing mission-driven institutions and platforms (described in the pages ahead). By tapping, leveraging, and adapting the vast existing community-based and green finance infrastructure across the United States, the GHGRF can achieve the dual goals of reducing pollution and uplifting underserved communities.

In addition, there may be opportunities to seed fund or partially capitalize new lending institutions, especially green banks. Overall, (1) investment in brand new entities should be a relatively small, capped amount of any large award, (2) separate criteria should be developed by Eligible Recipients for this type of investment and described in their application, and (3) EPA requires that any seed funding for new entities will never be the only source of funding, and that state, local, or private sponsors / stakeholders in such new entities will have financial "skin in the game," as well as a strong governance approach and robust representation on the Board of the new entity.

This section will focus primarily on the role that Eligible Recipients and Indirect Recipients play in providing financial (rather than technical) assistance. However, as described below, it is vital that EPA consider both entities’ role in delivering vital technical assistance.

Eligible Recipients will assume primary responsibility for maximizing the GHGRF’s reach, as it will be incumbent upon them to provide capital to Indirect Recipients. Although both Eligible Recipients and Indirect Recipients are permitted to provide financial and technical assistance, the structure of the GHGRF allows a broader pool of entities to potentially qualify as Indirect Recipients. As a threshold matter, any entity that would qualify as an Eligible Recipient should likewise qualify as an Indirect Recipient. Beyond that, however, Indirect Recipients can and should include a broader set of mission-oriented public, quasi-public, and nonprofit entities.

Identifying Eligible Recipients

Given the critical role of these institutions in developing the GHGRF ecosystem, EPA must ensure that Eligible Recipients, meet certain key criteria:14

14 The qualitative criteria described here should be considered in conjunction with the statutory criteria laid out in section 134(c)(1), which specifies that an eligible recipient must be a nonprofit that:

(A) is designed to provide capital, leverage private capital, and provide other forms of financial assistance for the rapid deployment of low- and zero-emission products, technologies, and services;

(B) does not take deposits other than deposits from repayments and other revenue received from financial assistance provided using grant funds under this section;
Purpose—Any recipient must be able to demonstrate how its use of funds will:
- Accelerate deployment of key anti-pollution projects and technologies in LI/DAC;
- Deliver clear, measurable, equity-based outcomes, in addition to pollution-related ones; and
- Deploy public and private capital to drive new market creation and/or market transformation.

Experience—Any recipient must have a proven track record of:
- Successfully deploying capital, including large sums of capital, either directly or through their networks;
- Successfully deploying capital and delivering results in LI/DACs or to low-income households, either directly or through their networks (explicitly for the $8 billion targeted to LI/DAC, as well as, at minimum, 40% of the unrestricted $11.97 million);
- Successfully deploying climate-oriented capital, either directly or through their networks; and
- Administering federal grants. In the absence of such experience, an applicant must demonstrate partnering, subcontracting, or staffing strategies that will address this need to EPA’s satisfaction.

Financial Expertise—Any recipient must be able to clearly and credibly demonstrate:
- Existing finance products that can be used for Qualified Projects, or a clear and credible commitment to modify existing or create new products that can be used for Qualified Projects;
- Established lending and grantmaking standards, systems, and infrastructure, including reporting frameworks that can be used to track performance;
- A strategy that seeks funding that is right-sized for the deployment capacity within the industry the applicant intends to serve, including quantitative analysis providing details on anticipated loan volumes in relation to historical loan volumes and anticipated asset and origination growth rates within this industry;
- A seasoned CEO or Executive Director and senior management team with deep expertise in clean energy lending and technologies in the subsectors that the Eligible Recipient intends to serve; and
- A governance structure and record that reflects:
  - Best practices for nonprofit and financial management and oversight;
  - Responsiveness and accountability to the communities in which they operate; and
  - A board of directors and/or advisory boards that include subject matter experts and are representative of the communities in which they operate.

Relationships—Any recipient must have:
- Trusted client/borrower networks and relationships in the states, regions, and/or communities in which they intend to operate;

(C) is funded by public or charitable contributions; and
(D) invests in or finances projects alone or in conjunction with other investors.

In most cases, determining compliance with clauses (B), (C), and (D) will be a straightforward matter; with respect to clause (C), EPA should include entities that are funded by public or charitable contributions at a minimum, but should not exclude those that also receive private funding. EPA will then need to assess whether an applicant satisfies the criterion laid out in clause (A) on a case-by-case basis. Within any broad category of entities that might generally qualify as eligible recipients, some applicants may be better equipped than others to provide financial and technical assistance. EPA should assess each applicant on its individual merits when determining the extent to which it is capable of deploying green capital.
• Long-standing and extensive relationships within the lending industry the applicant is proposing to serve as intermediary;
• Relationships with other capital providers and a history of raising and blending concessionary (public or private) capital with commercial capital and accessing the capital markets; and
• Institutions in the industry that are committed to participate as Indirect Recipients via the applicant.

Types of Eligible Recipients and Indirect Recipients
With these criteria in mind, Eligible Recipients and Indirect Recipients should include the entities listed and subsequently described below:

<table>
<thead>
<tr>
<th>Eligible Recipients</th>
<th>Indirect Recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green banks, including green banks that can operate at the national, state, and local levels (nonprofit)</td>
<td>Green banks, including green banks that can operate at the national, state, and local levels (nonprofit, public, and quasi-public)</td>
</tr>
<tr>
<td>Community development loan funds (nonprofit)</td>
<td>Community development loan funds (nonprofit and not-for-profit)</td>
</tr>
<tr>
<td>Nonprofit investment funds</td>
<td>Nonprofit investment funds</td>
</tr>
<tr>
<td>Nonprofit mortgage lenders</td>
<td>Nonprofit and not-for-profit mortgage lenders</td>
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<td>Other mission-driven Nonprofit Lenders</td>
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<td>Other mission-driven nonprofit or not-for-profit lenders</td>
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<td>Housing finance agencies</td>
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<td>Public housing authorities</td>
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• **Green banks** are mission-driven, non-depository institutions that use innovative financing tools to accelerate the transition to clean energy, combat climate change, and advance other environmentally beneficial outcomes.\(^{15}\)
  o Green banks use private sector disciplines to achieve public sector goals, taking their initial public capitalization and investing in perpetuity by recycling their returns.
  o These entities have various legal and operational structures and may be formed as nonprofit, public, or quasi-public entities.
  o As of 2021, 21 green banks in the United States had invested at least $1.9 billion over a 10-year period and, as a result, catalyzed $7 billion in total investment in climate, clean energy, and other environmental projects.\(^{16}\) In other words, every dollar of public green bank investment has spurred nearly $3.70 of overall investment in the clean economy.

\(^{15}\) Coalition for Green Capital.
\(^{16}\) American Green Bank Consortium.
- Just three green banks – the Rhode Island Infrastructure Bank, Connecticut Green Bank and NY Green Bank – collectively reduced 1.829 million tonnes of CO2 emissions in FY21, the equivalent of removing 394,093 passenger cars from the road for one year.
- Some green banks work, such as Inclusive Prosperity Capital (which is also a Nonprofit investment fund) and Solar and Energy Loan Fund (which is also a CDFI), have strong track records of serving LI/DAC populations. Connecticut Green Bank has a strong LMI solar program and reported that in 2019, customers participating in their LMI solar programs saw average savings of $349, which equates to an average of 18% of their annual utility bill. Finally, Finance New Orleans, is both a housing and development finance agency serving low-to-moderate income families and a green bank.

- **Community development loan funds** are nonprofit organizations that provide financing and technical assistance to small businesses, microenterprises, affordable housing developers, and community service organizations. These entities have the relationships, networks, and expertise needed to reach the most underserved communities and markets.
  - Loan funds are one of four types of CDFIs, which play a critical role in providing access to financing in LI/DACs.\(^\text{17}\) According to the U.S. Treasury Department, for every grant dollar received by CDFIs, they are able to leverage $8 of private sector investment.\(^\text{18}\)
  - As of October 2022, there were 573 community development loan funds certified as CDFIs in the United States.\(^\text{19}\) Importantly, loan funds are the only non-depository CDFIs that qualify, as an industry, as Eligible Recipients.
  - These entities primarily make debt investments, but many also originate equity-like investments, hybrid debt/equity tools, loan guarantees, or other types of financial products, often in partnership or collaboration with other investors seeking to infuse capital into underserved markets.\(^\text{20}\)
  - Loan funds act as intermediaries that connect (or serve as consortia for) large segments of community-based lenders, including many Eligible Recipients and Indirect Recipients. These intermediaries have historically played a critical role in expanding access to financing throughout the United States, particularly in LI/DACs. Examples of intermediary entities include Inclusiv and the Opportunity Finance Network.
  - Including loan funds as Eligible Recipients and/or Indirect Recipients has the ancillary benefit of reducing administrative burdens. By disbursing funds to and through these existing networks of community-based lenders, EPA can strategically reach communities without having to award grants to hundreds of individual applicants.
  - Comprehensive data on the amount of green finance deployed by community development loan funds are not available. However, according to the Opportunity Finance Network, CDFIs collectively made more than 1,000 loans and invested at least $444 million in energy-related financing in 2019.\(^\text{21}\) Those figures capture only a portion of the loan fund sector, since some loan funds make green loans without tracking their

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\(^\text{17}\) [CDFI Fund, U.S. Department of Treasury](https://www.cdfifund.gov).

\(^\text{18}\) Remarks by Secretary of the Treasury Janet L. Yellen on $1.25 Billion Award to CDFIs to Support Economic Relief in Underserved Communities Affected by COVID-19, June 15, 2021.

\(^\text{19}\) Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.

\(^\text{20}\) Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.

\(^\text{21}\) [Opportunity Finance Network](https://opportunityfinance.net).
green characteristics. Further, since some non-green loans can have GHG reduction co-benefits, this figure almost certainly undercounts loan funds’ total climate finance activity.  

- **Nonprofit investment funds** are designed to deploy capital to community-based programs and initiatives. In the green finance context, these funds work with communities most impacted by climate change to invest in clean energy and resilience projects.
  - Examples of nonprofit investment funds include Inclusive Prosperity Capital and Calvert Impact, both of which provide clean energy and environmental financing solutions in underserved communities.
  - Comprehensive data on the amount of green finance deployed by nonprofit investment funds are not available. However, case studies of select funds highlight their expansive reach. Calvert Impact, for instance, has worked with 19,000 investors to raise $4 billion in climate-focused projects since 1995. In 2021, Calvert disbursed $268 million to borrowers, ultimately catalyzing $6.9 billion in financing that reached end clients.

- **Nonprofit mortgage lenders** are mission-driven mortgage lenders and investors that provide flexible capital to underserved communities in order to expand access to safe, healthy, and affordable housing.
  - Financing offered by nonprofit mortgage lenders can and has been used to promote clean energy and energy efficiency improvements in both new and revitalized multifamily housing projects.
  - These lenders have strategic relationships with state, local, and federal government agencies, local community groups, banks, and other lenders, allowing them to create customized financing solutions for customers and communities.
  - Comprehensive data on the amount of green finance deployed by nonprofit mortgage lenders are not available. However, one leading nonprofit mortgage lender, Community Preservation Corporation (CPC), has financed nearly 9,000 units of energy-efficient, sustainable housing through loans to both small landlords and large multifamily property owners. The Nonprofit Lender administers the newly created Climate Friendly Homes program, which will leverage $250 million in New York State funding to finance electrification retrofits in at least 10,000 units of multifamily housing that serve economically disadvantaged communities. CPC also plays a vital role in providing technical assistance: It has published two guides that focus on sustainability, underwriting, and incorporating energy efficiency/performance into first mortgage financing and has created a software tool to help building owners calculate potential water and energy savings.

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22 Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.
23 [Calvert Impact](#).
24 Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.
• **Credit unions** are member-owned, not-for-profit depository institutions that provide financial services to communities and businesses in underserved markets, including promoting savings, affordable loans, and other services.\(^{25}\)
  - As of mid-2022, credit unions reached 132.6 million Americans and held $2.14 trillion in assets.\(^{26}\) According to Inclusiv, the trade association for CDFI credit unions, these institutions are generally able to leverage every dollar of public investment more than tenfold.\(^{27}\)
  - Community development credit unions (CDCUs) are credit unions with a mission of serving low- and moderate-income people and communities. There are more than 490 CDCUs in the United States serving 18 million members; 472 of these are certified as CDFIs.\(^{28}\)
  - Comprehensive data on the amount of green finance deployed by credit unions as a whole are not available. However, Inclusiv operates a training program for credit unions, nonprofit CDFI loan funds, and community banks seeking to build and expand green lending programs. It reports that in the past 12 months, 96 of the community-based lending institutions whose staff graduated from Inclusiv training courses have invested more than $2.24 billion in green loans.

• **Other mission-driven nonprofit or not-for-profit lenders** may include nonprofit or not-for-profit arms of minority depository institutions and community development banks, as well as community development venture capital funds.
  - These institutions provide capital in underserved and/or economically distressed communities through targeted lending and investing.
  - Comprehensive data on the amount of green finance deployed by these lenders are not available.

• **Housing finance agencies** (HFAs) are publicly chartered authorities established to help meet the affordable housing needs of the residents in a given jurisdiction.
  - These agencies reach communities in every state, the District of Columbia, and the four organized U.S. territories. The 59 entities are funded, in part, by more than $109.9 billion in state HFA bonds, as of 2021, helping 3.4 million families buy their first home with affordable mortgages. Another 4.6 million rentals have been financed by HFAs, most of them using the housing credit to incentivize private investment in the construction and rehabilitation of housing affordable to low- and moderate-income households.\(^{29}\)
  - Comprehensive data on the amount of green finance deployed by housing finance agencies are not available.

• **Public housing authorities** are publicly chartered authorities established to engage or assist in the development or operation of low-income public housing.

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\(^{25}\) [CDFI Fund, U.S. Department of Treasury, FDIC.](#)

\(^{26}\) [National Credit Union Administration.](#)

\(^{27}\) Inclusiv.

\(^{28}\) Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.

\(^{29}\) [National Council of State Housing Agencies.](#)
There are over 2,800 public housing authorities across all 50 states, DC, and the four organized territories. They are spread out to support low-income households in urban, suburban, and rural areas to geographically emulate the distribution of cost-burdened renters. Over 4.4 million people are assisted annually by public housing authorities through public and assisted housing programs.

Comprehensive data on the amount of green finance deployed by public housing authorities are not available.

To realize the full potential of the GHGRF, EPA should consider a diverse group of potential Eligible Recipients and Indirect Recipients. The entities described above each bring different and valuable strengths to the table, and they should all play a role in the GHGRF ecosystem.

**Section 4.2 What types of entities (as Eligible Recipients and/or Indirect Recipients) could enable Greenhouse Gas Reduction Fund grants to support investment and deployment of greenhouse gas and air pollution reducing projects in low-income and disadvantaged communities?**

In general, the Eligible Recipients and Indirect Recipients described above should also qualify to support investment in LI/DACs. However, deploying capital in these communities presents unique challenges and opportunities. EPA must ensure that any applicant seeking to support projects in LI/DACs has the expertise, experience, and track record needed to effectively work in these communities. In addition to meeting the criteria described in the previous response, an Eligible Recipient or Indirect Recipient that intends to work in LI/DACs should be required to meet certain additional standards. These entities must be able to demonstrate that they have, or have a credible and actionable plan to develop, the following:

- Experience operating in, deploying capital in, and delivering results in LI/DACs;
- Trusted relationships in the LI/DACs in which they intend to operate;
- An understanding of the challenges that LI/DACs and low-income households face in accessing green finance and deploying low- and zero-emission products, technologies, and services;
- An ability to promote and facilitate community ownership of projects; and
- A governance structure and record that reflect:
  - A commitment to equity;
  - Accountability to the communities in which they operate; and
  - A board of directors and/or advisory boards that are representative of the communities in which they operate.

With those criteria in mind, existing mission-driven institutions should be central to ensuring that GHGRF funding reaches LI/DACs. The established lending infrastructure in LI/DACs is expansive, with existing institutions—including CDFI loan funds, community development credit unions, community

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30 Center on Budget and Policy Priorities.
31 HUD Public Housing Data Dashboard.
development banks, state HFAs and public housing agencies, minority depository institutions, and low-income credit unions—collectively holding more than $1.5 trillion in assets.\textsuperscript{32}

CDFIs, in particular, can play a critical role in deploying GHGRF capital in LI/DACs. These experienced, specialized lenders are skilled in offering complex financing solutions in underserved communities, and they have a long history of making investments that create quality jobs; provide affordable housing; and improve health, educational, and financial outcomes for families. By leveraging CDFIs’ experience in LI/DACs, EPA can quickly and efficiently expand access to green capital.

To be certified as a CDFI by the Treasury Department, an entity must:\textsuperscript{33}

\begin{itemize}
  \item Have a primary mission of promoting community development;
  \item Provide both financial and technical assistance to borrowers;
  \item Conduct at least 60\% of its financing activities to eligible target markets, which may include low-income or distressed census tracts, low-income borrowers, borrowers with low-income end users, and other underserved communities;
  \item Maintain accountability to the communities it serves, generally through representation on its board and/or special advisory boards; and
  \item Be a nongovernmental entity, except for Tribal government entities.
\end{itemize}

CDFIs are thus uniquely prepared to deploy GHGRF funds in LI/DACs. The CDFI industry was founded as a direct response to redlining and other discriminatory public and private practices that resulted in significant disinvestment in many communities of color and low-income communities. Its mission is, in part, to drive capital (both its own and that of the broader market) to these communities and invest in people, places, and businesses that have for decades been neglected by mainstream financing.

CDFIs have expertise, local customer bases, and trusted relationships needed to serve the underserved. There are nearly 1,400 of these mission-driven institutions in the United States, including 573 community development loan funds, 472 community development credit unions, 177 community development banks, 143 depository institution holding companies, and 15 community development venture capital funds.\textsuperscript{34} CDFIs serve Black, Latino, Native American, and rural communities, as well as other communities with persistent poverty. All told, CDFIs serve 60\% of borrowers of color, and 84\% of their lending is in low-income and disadvantaged communities, according to the Opportunity Finance Network (OFN).

As of 2020, CDFIs collectively held $245.7 billion in assets and financed a wide range of activities, including affordable housing; commercial real estate; community facilities such as charter schools, health clinics, and child-care centers; small business and microfinance loans; home purchase and repair loans; and consumer and auto loans.\textsuperscript{35} As noted in the previous section, CDFIs leverage every dollar of

\textsuperscript{32} Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.
\textsuperscript{33} \textit{CDFI Fund, U.S. Department of Treasury}.
\textsuperscript{34} Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.
\textsuperscript{35} Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.
grant investment by a factor of 8 to 10, with private sector investment from banks, foundations, and other impact investors, according to the Treasury Department.\textsuperscript{36}

Unfortunately, the Treasury Department does not collect data on green financing; since most CDFIs set up their data systems to comply with Treasury Department reporting requirements, green financing is almost certainly significantly under-reported by this industry.

Even so, it is widely recognized that community lenders have vast potential to support climate and clean energy projects. According to OFN, 55\% of CDFIs in its network already offer green lending products. Moreover, nearly 100 CDFIs have had staff members graduate from Inclusiv and the University of New Hampshire’s solar lending training program. Among program graduates, CDFIs lent $2.25 billion in green products in 2021 alone, according to OFN.

With relative ease, CDFIs can expand and adapt their existing products and tap their existing relationships to deploy green capital in LI/DACs. For example, lenders could help homeowners assess energy-retrofit opportunities when making a home improvement loan, encourage consumers to purchase an electric vehicle with a special car loan product, or help a planned charter school install rooftop solar.\textsuperscript{37}

Community development loan funds, in particular, are uniquely situated to serve LI/DACs. One of the chief strengths of loan funds is their ability to take on credit risk that depository institutions often cannot. They make inherently risky loans, since their goal is to drive financing to communities that are not served by the traditional banking system. In addition, since loan funds offer technical assistance and ongoing, hands-on engagement with borrowers, these “patient lenders” experience far lower losses in their loan portfolios than do traditional banks. Many loan funds, both large and small, have built on these strengths to develop impactful green lending programs.\textsuperscript{38}

In some cases, existing community-based lenders may have limited experience deploying green capital. EPA should ensure that such applicants have a concrete plan in place to work with others in the finance community and the GHGRF’s financing ecosystem—including green banks and other mission-driven lenders—to share accumulated experience and expertise. EPA itself can also play a key role in facilitating this type of learning: If lenders receive a combination of training, financial support, partnership opportunities, and shared operating infrastructure to facilitate green lending, the GHGRF could catalyze a more sweeping transformation of the financing system.

As EPA considers the role that community-based lenders can play in the GHGRF ecosystem, the agency should look to existing institutions for case studies of innovative and highly successful programs. For example:

- Three green banks—Michigan Saves, the Colorado Clean Energy Fund, and the Connecticut Green Bank—developed programming that utilizes community-based lenders as the retail loan

\textsuperscript{36} Remarks by Secretary of the Treasury Janet L. Yellen on $1.25 Billion Award to CDFIs to Support Economic Relief in Underserved Communities Affected by COVID-19, June 15, 2021.

\textsuperscript{37} Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.

\textsuperscript{38} Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.
originator for residential home energy retrofits and rooftop solar installations. Across the three states, the program has 17 active community lenders (including CDFIs such as Capital for Change and CDCUs such as Nutmeg State Financial Credit Union) and has delivered in excess of $500 million in home energy retrofit loans to more than 40,000 households, of which 45% are low income.

- Inclusive Prosperity Capital, a spinoff from the Connecticut Green Bank, is now working to expand this platform to additional states including Arizona, Texas, and New Mexico and has interest from potential partners in another 20 states.

- NYCEEC has mobilized $434 million in capital for clean energy and energy efficiency projects throughout the Northeast and Mid-Atlantic regions, with 86% of projects financed in low- and moderate-income communities. The New York City–based Nonprofit Lender partners with financial institutions like Bank of America, Deutsche Bank, Fannie Mae, Enterprise Community Partners, CDFIs, and affordable housing agencies to provide affordable solutions in underserved communities. NYCEEC offers direct loans to contractors, project developers, and building owners for both construction and permanent financing of energy efficiency and clean energy projects.

Section 4.3 What types of entities (as Eligible Recipients and/or Indirect Recipients) could be created to enable Greenhouse Gas Reduction Fund grants to support investment in and deployment of greenhouse gas and air pollution reducing projects in communities where capacity to finance and deploy such projects does not currently exist?

To deploy capital quickly, equitably, and effectively, the Fund should route a significant share of funding through existing mission-driven institutions, including CDFIs, established green banks, housing finance agencies, public housing authorities, credit unions, and minority depository institutions. See Section 4.1 for more discussion of the types of existing entities and the criteria they should meet.

In areas that lack an existing mission-driven institution or similar public interest fund that can adequately serve low-income and disadvantaged people and communities, EPA could also use GHGRF funds to address persistent gaps in the marketplace by investing in the expansion of existing mission-driven entities into new locations and/or investing in new local, state, or regional green banks, CDFIs, or nonprofit loan funds.

Designing and establishing new mission-based financial institutions can be time and resource intensive. Therefore, when supporting the creation of new local, state, or regional institutions, EPA should prioritize initiatives that can demonstrate sufficient community support, the right mix of financial and sector expertise, established relationships with stakeholders, and a credible pathway for marshaling appropriate financial resources in a timely fashion.

To achieve efficiencies of scale and ensure national reach, including in regions that lack local mission-driven financial institutions, EPA could also invest in a newly created entity that can operate regionally or nationally, provided that it can credibly demonstrate key capacities outlined below.

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39 Based on research conducted by the Center for Impact Finance at the University of New Hampshire’s Carsey School of Public Policy.

40 NYCEEC.
Newly created entities—whether local, state, regional, or national—should (1) be designed with governance practices that are inclusive of, responsive to, and accountable to low-income and disadvantaged communities; (2) adopt best practices for nonprofit and financial governance; (3) have a credible and concrete plan for establishing a lending and asset management infrastructure; (4) be staffed by personnel who have a proven track record of managing large sums of money and deploying capital, experience with other government programs, and existing relationships with stakeholders in the communities they aim to serve; and (5) have a business model that explicitly seeks to complement (not compete with) existing institutions, align with and leverage existing programs, and address known market gaps.

Section 4.4 How could EPA ensure the responsible implementation of the Greenhouse Gas Reduction Fund grants by new entities without a track record?

The GHGRF may spur the creation of new entities or project structures that lack a track record, whether in managing federal funds, focusing on underserved communities, lending, or packaging different GHG reduction technologies together. This risk can be mitigated by evaluating the strength and experience of the team represented in the proposal and their degree of success in undertaking similar activities. Similarly, the CDFI Fund considers a team’s track record in a particular location for certain programs (see, e.g., https://www.cdfifund.gov/programs-training/programs/erp). Also, borrowing from the success of rural electrification, Eligible Recipients making indirect investments into new entities, and their public sector sponsors (as applicable), should have some financial skin in the game to ensure that they are vested in successful outcomes and that the risk of failure is spread. In other words, no new entity should be funded entirely with GHGRF funds.

Agencies that fund research and development, such as DOE, have developed evaluation approaches that rely on applicants’ past experience to accurately weigh their likelihood of success in undertaking novel activities. This approach also focuses on the clarity of the project task descriptions and the thoroughness of risk mitigation strategies. For illustrative purposes, an example of this approach is provided below, borrowing from the four criteria commonly found in DOE evaluations. It is important to emphasize that this example seeks to illustrate only some potential consideration EPA could make, given that this program has key differences in nature when compared to GHGRF.

**Criterion 1: Technical Merit and Impact (20%)**

- Extent to which the application specifically and convincingly demonstrates how the applicant will reduce GHG emissions
- Extent to which the application describes a plan for transitioning or developing the necessary workforce and lending and asset-management infrastructure
- Sufficiency of detail in the application to assess whether the proposal will improve resilience
- Sufficiency of detail regarding relevant data, calculations, and discussion of prior work that supports the viability of the proposed work
- The potential impact of the project on advancing the community from one with lesser resources (due to high energy costs or environmental burdens) to one with greater resources
• Demonstration of governance practices that are inclusive of, responsive to, and accountable to low-income and disadvantaged communities, particularly through existing relationships with stakeholders in the communities they aim to serve
• A business model that explicitly seeks to avoid duplication, complement existing institutions, align with and leverage existing programs, and address known market gaps

**Criterion 2: Project Planning, Community Research, and Data Availability (20%)** This criterion involves consideration of the following factors: project planning approach, data, and project narrative with statement of project objectives.

- Degree to which the project approach and critical decisions have been clearly described and thoughtfully considered
- Degree to which the information submitted with the application accurately identifies low- and moderate-income household beneficiaries and/or underserved community beneficiaries
- Understanding of the key risk areas involved in the proposed work and the quality of the mitigation strategies to address them
- Degree to which the project narrative task descriptions are clear, detailed, timely, and reasonable, indicating a high likelihood that the proposal will succeed in reducing GHG emissions and adequately replenish the GHGRF
- Degree to which the project narrative includes relevant, detailed information
- Degree to which the project planning supports the sharing of lessons learned with other prospective GHGRF subrecipients
- Discussion and demonstrated understanding of the key risk areas involved in the proposed work and the quality of the mitigation strategies to address them
- Level of clarity and degree of detail used to establish a baseline of community conditions, including factors such as greenhouse gas emissions, fuel use, electricity use, and/or environmental contamination
- Thoroughness of the identification of regulations, codes, and/or standards that may impact the proposal

**Criterion 3: Coalition and Resources (40%)** This criterion involves consideration of the following factors:

- Degree to which the broader community in which the project is located supports the proposed project, as indicated in the submitted letters of support
- Capability of the proposed coalition to address all aspects of the proposed work with a high probability of success
- Qualifications, relevant expertise, and time commitment of the individuals in the coalition and the degree to which the required roles are filled
- Degree to which the coalition includes entities in the required roles necessary for the proposal to succeed, such as community organizations, workforce, and/or analysis providers
- Level of participation by project participants as evidenced by letter(s) of commitment and how well they are integrated into the work plan
- Reasonableness of the budget and spend plan for the proposed project and objectives
- Degree to which the proposal supports the development of workforce transition or development strategies
• Experience of team in addressing known or perceived barriers to deployment and other risk mitigation
• Experience of team with customer acquisition in proposed LMI and/or underserved areas, indicating a likelihood that the coalition can successfully create or access distribution channels to facilitate market creation and/or expansion

**Criterion 4: Diversity, Equity, and Inclusion (20%)** This criterion involves consideration of the following factors:

• Quality and manner with which the project incorporates diversity, equity, and inclusion goals
• Extent to which the project benefits LMI and/or underserved communities and mitigates negative impacts
• Extent to which the project includes LMI and/or underserved communities in planning
• Extent to which the project promotes access to project implementation by LMI and/or underserved communities, including mentorship, training, and other opportunities
• Adequacy of project milestones, supported by metrics, to identify and measure the success of the proposal’s DEI strategy

Section 4.5 What kinds of technical and/or financial assistance could Greenhouse Gas Reduction Fund grants facilitate to maximize investment in and deployment of greenhouse gas and air pollution reducing projects by existing and/or new Eligible Recipients and/or Indirect Recipients?

Previous questions (Section 3.2 in particular) have focused on the way that direct capital can be provided to a broad array of eligible lenders—such as green banks, CDFIs, and other community lenders—that demonstrate proficient experience in lending to clean energy projects and/or in working extensively in low-income and disadvantaged communities. Our response here focuses on non-capital funding (both operations/administrative capital and non-financing programmatic capital) that can help support the ramping up of clean energy finance investment in low-income and disadvantaged communities.

Some of this non-capital funding should go to Eligible Recipients, of which we anticipate there would be a small number, while other non-capital funding would go to Indirect Recipients through subgrantees, though the goals of this non-capital funding will differ.

Eligible Recipients will play a key role as the interface between other subgrantees and EPA, and as such will be responsible for overall management and coordination of activities as well as collection and reporting of data from subgrantees to EPA. Eligible Recipients will require some level of support to enable these administrative responsibilities and thus should receive appropriate operations/administrative funding. This amount should be a contract-specific, negotiated award. This could include funding for shared IT infrastructure or platforms that facilitate efficient, accurate, and rapid reporting of GHG savings, loan repayments, etc.

In addition, Eligible Recipients will likely also provide additional support on ecosystem development for the universe of activities that their subgrantees are involved in, such as improving coordination among
lenders, developers, community groups, and other stakeholders on topics related to marketing, communication, workforce development, or standardized terms, all of which contribute to improved ability to scale. This non-financing programmatic capital could support a range of activities, including:

- Provision of grants to clean energy developers to help them build their pipeline of projects in low-income and disadvantaged communities; this might entail hiring staff or investing in infrastructure or technology.
- Provision of grants to community groups that help educate and communicate, working in partnership with lenders to conduct grassroots marketing campaigns (e.g., solarize/weatherize/decarbonize campaigns) and other services (such as energy audits) to drive demand for GHG reduction in homes, consumer appliances, and small businesses.
- Creation of a fellowship to support emerging leaders from low-income and disadvantaged communities to work in the clean energy/decarbonization field, combined with university-level postgraduate training and networking opportunities; this could be modeled after successful community development fellowship programs such as the New York City Urban Fellows program, the Coro Fellowship in Public Affairs, and the State Policy Fellowship Program.
- Funding of a state, regional, or national system of training programs intended to build ecosystem capacity. This would weave together and expand existing training programs at universities and community development and clean energy justice trade associations and also provide funding for network-building and workshop events to convene the field, including training workshops.

Estimates of costs for such ecosystem development will depend on actual proposals of activities, but to provide an order of magnitude, the Northwest Energy Efficiency Alliance, a nonprofit focused on energy efficiency market transformation in the Pacific Northwest, has an annual budget of $50 million to spend on coordinating and marketing activities for that region, while the Massachusetts Clean Energy Center, a quasi-governmental agency focused on upstream clean energy technology commercialization and workforce development in that state, has an annual budget of approximately $44 million.

Indirect Recipients would receive operations/administrative funding alongside their capital funding to invest in the capacity building that their organizations need, including but not limited to hiring, training, and infrastructure investments enabling the programmatic and operational changes needed to facilitate a ramp-up in clean energy investments. In addition, Indirect Recipients should receive non-financing programmatic capital that could be used for project-level technical assistance and capacity building, additional subsidies to make project economics more attractive for low-income customers, pre-development recoverable grants that convert to loans if the project moves forward as a way to compensate upfront expenditures needed to cover early-stage investment costs, etc. We would recommend that non-capital funding be allocated over time, subject to achieving certain performance milestones, such as number of loans made or overall dollar level of investment achieved, to ensure that these valuable, flexible funds go to organizations that are achieving the underlying GHGRF goals. An estimate of 15–20% of total capital allocated to be spent on non-financing programmatic and
operations/administrative investments would seem reasonable for start-up and capacity building expenses, at least in the first three to five years.\textsuperscript{41}

\textsuperscript{41} For instance, utility program administration expenses for ongoing programs range from 7–10%. This is based on a calculation of program administration costs compared with total costs from the annual reports of several large energy efficiency administrators.
Section 5: Oversight and Reporting

Section 5.1 What types of governance structures, reporting requirements, and audit requirements (consistent with applicable federal regulations) should EPA consider requiring of direct and Indirect Recipients of Greenhouse Gas Reduction Fund grants to ensure the responsible implementation and oversight of grantee/subrecipient operations and financial assistance activities?

For this question, we refer EPA to the response submitted by Amber Bell, Beth Bafford, and Susan Leeds, and cosigned by NRDC.

In addition, in regard to civil rights and Title VI compliance, EPA should ensure that review criteria for funding opportunities reflect diversity, equity, and inclusion goals and, where applicable, be in compliance with Title VI of the Civil Rights Act. Eligible and Indirect Recipients should consider including separate criteria for diversity and equity to evaluate Qualified Projects on both the extent to which the project includes underserved and underrepresented communities on the team, and the extent to which the project is designed to benefit underserved communities and advance equity and justice goals. Where relevant, Eligible and Indirect Recipients should include criteria that evaluate projects’ potential to economically benefit underserved communities, support ownership structures and business models that reduce economic inequality, and build long-term wealth in low-wealth and low-income communities (and underserved communities); cut pollution in pollution-burdened communities; and address environmental and health impacts of existing energy infrastructure. Where applicable, Eligible and Indirect Recipients should also increase the diversity of merit reviewers for funding opportunities, working to solicit participation from underrepresented communities.

Section 5.2 Are there any compliance requirements in addition to those provided for in federal statutes or regulations (e.g., requirements related to administering federal grant funds) that EPA should consider when designing the program?

For this question, we refer EPA to the response submitted by Amber Bell, Beth Bafford, and Susan Leeds, and cosigned by NRDC.

Section 5.3 What metrics and indicators should EPA use to track relevant program outcomes including, but not limited to, (a) reductions in greenhouse gas emissions or air pollution, (b) allocation of benefits to low-income and disadvantaged communities, (c) private sector leverage and project additionality, (d) number of greenhouse gas and air pollution reduction projects funded, and (f) distribution of projects at the national, regional, state, and local levels?

EPA should define clear impact standards and metrics for awardees to drive significant GHG and air pollution reductions, as well as meaningful energy and environmental justice impacts for low-income and disadvantaged communities. Awardees should prioritize meaningful improvements to the lived experience of marginalized and disadvantaged communities that come through investments in GHG-reducing projects (e.g., % reduction in energy burden and utility shutoffs, health co-benefits, employment outcomes, projects with clear ties to community ownership; etc.). One potential resource for EPA to consult is the University of Michigan’s newly released Energy Equity Project report, which
provides a framework to measure and further energy equity outcomes. Ultimately, for the GHGRF to successfully meet Justice40 goals, impacts will need to be focused on people-centered benefits.

We recommend that EPA consider a short list of clear, overarching, quantifiable program outputs and outcomes that all recipients will be responsible for reporting in a database system (e.g., size of loan, term, project cost, technology financed (via drop-down menu), LI/DAC qualification and a more tailored set of metrics specific to each project vertical (e.g., building electrification, EVs). EPA should identify when national, standardized approaches to measuring outcomes could best be applied; when a regional approach makes sense; and when local, recipient-level reporting is needed.

Currently, many green lending entities communicate impact differently. The GHGRF presents an opportunity for EPA to establish clear standards on impact reporting and measurement for all recipients to follow. While all recipients should be expected to report a number of project outputs and outcomes, EPA should rely heavily on Eligible Recipients to do more detailed tracking and measurement, particularly on GHG emissions. In addition to consistency, EPA should promote learnings among eligible and Indirect Recipients to improve the use of metrics year over year. EPA should collate and publish core metrics, tailored sector-specific metrics, and qualitative reporting among practitioners to advance learning as well as share validated indicators recipients can use for the coming reporting cycle. The complexity and nascency of this undertaking warrants EPA’s use of dedicated agency staff for metrics development, application in project implementation, and ongoing learnings.

In addition, EPA should ensure that GHGRF awardees can rely on independent, third-party professionals to provide assessments, validate project scopes, validate GHG savings estimates, and provide reliable cost estimates. To the greatest extent possible, EPA should seek to streamline these services to maximize efficiency and reliability, although local/state policy or code may require more tailored approaches in some instances.

**Reductions in Greenhouse Gas Emissions or Air Pollution**

EPA should design a program that provides clear guidance to recipients on what projects/technologies are deemed high-priority, safe harbor for funding under GHGRF and the emissions-reduction factors of those technologies (see Section 3.1 for a discussion of Qualified Projects and technologies). For example, EPA’s Waste Reduction Model, which estimates potential GHG emissions reductions, energy savings, and economic impacts from baseline and alternative waste-management practices, could be expanded or incorporated into a tool that helps Eligible Recipients uniformly document impacts. By providing clear guidance, EPA can ensure that funds go toward projects that reduce GHG emissions and other air pollution while lessening administrative burdens on recipients. This would also reduce confusion among Eligible Recipients on how to account for the emissions reductions of a Qualified Project. Many lenders may lack the expertise to measure and track GHG emission reductions, nor should they be the ones deciding what is/isn’t eligible to receive GHGRF financing. Once lenders report back on what technologies were financed, EPA can work with Eligible Recipients and third-party organizations to estimate total GHG and other air pollution reductions, as well as associated health benefits.

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42 Energy Equity Project, *Energy Equity Framework: Combining Data and Qualitative Approaches to Ensure Equity in the Energy Transition*,” University of Michigan School for Environment and Sustainability (SEAS), 2022. 
EPA guidance on emissions factors will help ensure that emissions reductions are being calculated in a comparable manner by all Eligible Recipients. Further, this guidance will help avoid the unwarranted exclusion of certain projects, whether building retrofits or transportation electrification, from consideration as a way to reduce emissions. Further, EPA could coordinate with DOE to provide emissions factors for different technologies so that Eligible Recipients can aggregate emissions factors for their portfolios. To account for Scope 2 electricity grid emissions, DOE could develop a protocol using long-range marginal emission rates to accurately estimate grid emissions over time.

**Allocation of Benefits to Low-Income and Disadvantaged Communities**

Benefits to low-income and disadvantaged communities should be disaggregated by Qualified Project type (for instance, different outcomes may be prioritized for community solar versus EV/transportation projects), as well as by the demographics of the population served. For example, metrics could include lending to minority-owned businesses, project deployment by income level served, direct job-years created, and indirect and induced job-years supported.

**Leverage and Project Add tionality**

These metrics need to be measured consistently across recipients and should include portfolio-level leverage, project-level leverage, and balance sheet leverage if applicable. For a more detailed discussion and recommendations on leverage, please see Section 2.1. Metrics used by existing green banks are included in the NRDC report *How Green Banks Assess and Report Impacts*.

**Number of GHG and Air Pollution Reduction Projects Funded and Distribution of Projects at the National, Regional, State, and Local Levels**

EPA should require Eligible Recipients to track the disbursement of GHGRF money to subrecipients (both Indirect Recipients and borrowers), even when blended with other funds. Eligible Recipients should maintain information on its awards to subrecipients that allows evaluation of the effectiveness of the program by third parties, after appropriately anonymizing the subrecipient data. The data on subrecipients that grantees should maintain and make available include:

- Subrecipient zip code
- Total dollars for each subrecipient zip code
- Type of subrecipient, e.g., private business, housing authority, etc.
- Total dollars by subrecipient type
- GHG reduction solution funded, e.g., home retrofit, electric transportation
- Total dollars by type of solution funded
- Industry identifier, such as North American Industry Classification System (NAICS) code, for the key lines of business to be supported by GGRF money (e.g., NAICS 2362 for nonresidential construction or retrofits)

Using this information, EPA should provide estimates of jobs created or sustained by industry, as well as apprenticeship and other quality job opportunities supported by the GHGRF.
Section 5.4 What should EPA consider in the design of the program to ensure community accountability for projects funded directly or indirectly by the Greenhouse Gas Reduction Fund? What if any existing governance structures, assessment criteria (e.g., the Community Development Financial Institutions Fund’s Target Market Accountability criteria), rules, etc., should EPA consider?

EPA should award applicants that can credibly demonstrate (1) inclusive governance practices with responsiveness and accountability to low-income and disadvantaged communities, and (2) best practices of nonprofit and financial governance for mission-based entities. Other federal programs, such as those run by the U.S. Department of Treasury’s CDFI Fund or the U.S. Department of Health and Human Services’ Federally Qualified Health Centers, may serve as good examples for EPA to consider when deciding on GHGRF governance parameters. At minimum, consideration should be given to board and leadership representation; board charters; investment/credit policies; and organizational policies such as conflict-of-interest standards, procurement policies, and document retention. In addition, consideration should be given to proven track record and commitment to working alongside low-income and disadvantaged communities as well as environmental and energy justice organizations. We concur with the Greenlining Institute that awardees with a track record of grant-making and financing relationships with BIPOC-led organizations, and applicants with a demonstrated track record of effectively stewarding federal and/or state funds for the benefit of low-income and disadvantaged communities and households through other programs (e.g., Paycheck Protection Program, CDFI Fund, utility ratepayer funds), should be scored highly.

Any GHGRF awardee should demonstrate a history of co-governance and of maximizing investment to low-income and disadvantaged communities. This may include community representation at the board and leadership levels; explicit partnerships with environmental or energy justice organizations to inform business models; and committed and funded community engagement planning designed to identify community priorities. Green banks like the Montgomery County Green Bank, for example, have demonstrated inclusive design practices to co-create products, programs, and services in conjunction with community leaders and organizations in the communities served. EPA could also require a certain percentage of projects funded to include a community ownership mechanism. Ultimately EPA should look across any awardee’s governance, operations, and investment process to ensure accountability to disadvantaged communities.

Finally, we echo the response from the University of New Hampshire’s Center for Impact Finance that EPA should define what it means for a project to be “in” a low-income and disadvantaged community. Eligible and Indirect Recipients should be required to document some meaningful level of community benefit from and involvement in investments that are counted as serving these communities. For instance, a utility-scale solar development that happens to be sited in a low-income census tract should not count. Meaningful community benefits could include job creation or workforce development benefits for low-income residents, project ownership by community residents or a community-based organization, meaningful energy cost savings or other wealth-building benefits for community residents, or climate resilience benefits for community residents.
Section 6: General Comments

Section 6.1 Do you have any other comments on the implementation of the Greenhouse Gas Reduction Fund?

Early Awards
If EPA determines it must begin making awards by February 2023, it should consider making only a small pot of funds available for February awards. These awards could be focused on collaborative planning and organizing efforts between eligible and Indirect Recipients of both the $7B and $20B allocations of funds. Such collaborative planning awards should be paired with additional guidance from EPA that addresses outstanding ambiguities around Eligible Recipients, Qualified Projects, and zero-emission technologies. Collaborative planning awards could help fund partnerships between community-based and environmental justice organizations, technical assistance providers, Nonprofit Lenders, and governmental agencies. This investment would help these collaborations develop key approaches and ideas for Fund deployment that would inform future applications. We view this as a critical technical assistance investment that could build both an investible pipeline and a set of creative approaches for future GHGRF capital.

It is important to emphasize that such an approach should be paired with additional guidance from EPA. One example is the recent DOE Energy Efficiency Revolving Loan Fund FAQ, which clarified many outstanding questions in that program, allowing potential recipients to develop more informed approaches and proposals for the program (https://www.energy.gov/eere/wipo/articles/frequently-asked-questions-revolving-loan-fund-capitalization-grant-program).

Avoiding State Cuts in Complementary Programs
In its application guidance for the $7 billion dedicated for states, municipalities, and Tribal governments, EPA should state explicitly that any divestment from committed funding sources for GHGRF-complementary programs would score negatively in the application process. We have heard that some states are looking to reduce budget commitments because of reductions in projected budgets for next year and an anticipated influx of GHGRF funding. States should not be incentivized to swap state dollars for federal ones; delivering an equitable clean energy economy needs more resources, not fewer.

We thank the EPA for its consideration of our comments. If we can be of any further assistance, please do not hesitate to contact Adam Kent (akent@nrdc.org), Doug Sims (dsims@nrdc.org), or Sarah Dougherty (sdougherty@nrdc.org).

Sincerely,

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