

Environmental Protection Agency
Docket ID No. EPA-HQ-OA-2022-0859

December 5, 2022

The Honorable Michael S. Regan, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Dear Administrator Regan,

We are writing in response to the Environmental Protection Agency's (EPA) Request for Information on the Greenhouse Gas Reduction Fund (GHGRF). Our response is informed by our deep experience in developing and advising on the green bank model, designing and implementing national and local financing programs, and building and operating financial institutions, programs, and initiatives that invest in GHG-reducing projects that drive benefits to low-income communities and households. Collectively, we have over eight decades of experience in this work, and we believe that there are excellent models and lessons learned to look toward (and others to avoid) as EPA structures this important program.

Our letter seeks to address two questions of paramount importance to EPA. First, how should EPA design a program that balances and maximizes: (1) GHG emissions and other air pollution reduction; (2) creates tangible benefits to low-income and disadvantaged communities and households; and (3) appropriately structures key financial considerations of additionality, leverage of additional capital, recycling, and accelerating market development? Second, what considerations should EPA take in its award process and ongoing oversight to ensure GHGRF capital flows to entities that will be good stewards of taxpayer dollars?

We appreciate your consideration of our comments and welcome any additional questions should they arise. We look forward to working with the EPA to design and implement a program that expands access to clean energy while producing measurable benefits for low-income and disadvantaged communities.

Sincerely,

Beth Bafford
Vice President of Strategy, Calvert Impact Capital

Adam Kent
Senior Advisor, Green Finance Center, Natural Resources Defense Council

Amber Kuchar-Bell
Chief Strategy and Operations Officer, Opportunity Finance Network

Susan Leeds
Founder and CEO Emeritus, New York City Energy Efficiency Corporation (NYCEEC)

Doug Sims
Senior Director, Resilient Communities, Natural Resources Defense Council

SECTION 1: MAXIMIZING THE IMPACT OF THE GHGRF

Introduction

Our letter focuses on the \$19.97 billion of general assistance and assistance to LI/DAC provided via competitive grants to Eligible Recipients.

The question standing before EPA is: how can GHGRF be allocated through *direct investment* and *indirect investment* to provide both *financial assistance* and *technical assistance* (TA) and ensure the goals of the legislation are met? An allocation approach should be designed with the end goals in mind. Key goals identified in the GHGRF legislation are: (1) GHG emissions and air pollution reduction; (2) delivering tangible benefits to LI/DACs; and (3) additionality, leverage of additional capital, recycling, and accelerating market development.

We believe these goals are best met by *distributed GHG reduction technologies* (e.g. *building decarbonization, distributed solar including community solar plus storage, electric vehicles and personal mobility and related infrastructure for low-income and disadvantaged communities, and other small-scale distributed technologies addressing agriculture, small industry, etc.*). This is based on the fact that these projects combine the “public good” benefit of GHG reductions with long-term household cost savings, asset appreciation (at the family and community level), increased resilience, and improved mobility, health, safety and comfort. These are proven GHG-reducing technologies, but have low or constrained market penetration, with limited demand signal for financing. 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.

One significant implication of this recommendation is deployment – the extent to which financing products need to reach qualified projects, likely numbering in the tens of thousands, or even higher. Some examples will help to illustrate:

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 TA, 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, community development financial institutions (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 solve this deployment challenge, hundreds of retail lending institutions across several established industries¹ must participate in the GHGRF. Below, we outline a diversified, networked hub-and-spoke strategy that 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 that do not rely as much on public subsidy.

Finally, to ensure the effective flow of funds that we envision and recommend in this letter, EPA should clarify the roles and responsibilities of various participants in the GHGRF ecosystem, in relation to both federal grant rules and the language of the statute.

By issuing such guidance to potential applicants, EPA can clarify different entities’ potential roles in this multi-layered, sophisticated grantmaking program and, in turn, enhance the quality of applications that the agency receives.

For instance, we envision a large number of “downstream” retail lending entities as essential players in this ecosystem. These retail lenders will be funded by Eligible Recipients and will use GHGRF funds to make large numbers of relatively small-sized individual loans to qualifying projects and technologies. This retail lending role can be labor-intensive; as such, it is critical that retail lenders be able to deploy GHGRF funding efficiently and pragmatically, within clear rules, and without excessive administrative and regulatory requirements.

The flexible nature of the GHGRF presents a unique opportunity for EPA to address these practical considerations in program design and through clear guidance to applicants. For example, EPA may wish to consider the process of funding each retail lender as an “activity” that constitutes a Qualified Project. This interpretation of the statute may alleviate the administrative burden on retail lenders, allowing them to focus on the all-important tasks of building pipelines of projects, engaging their customers, collaborating with project and community-level technical assistance providers, and originating and closing loans that fund GHG reducing technologies and projects for households, businesses, and communities. Although this model is not explored in this letter, we believe it warrants further consideration by EPA.

Allocation and Structure of Funds

We recommend that EPA anticipate funding multiple Eligible Recipients. An illustrative range of 3 to 10 awards would reduce concentration risk for EPA, increase innovation, and ensure that the right products and solutions are being developed for a variety of the highest emitting sectors with broad geographic coverage and locally proficient translation. This approach would also

¹ Established industries could include consumer finance, auto finance, small business finance, housing finance, commercial real estate finance, agricultural finance, among others.

ensure that Eligible Recipients are funded adequately to benefit from economies of scale, and that EPA can conduct appropriate oversight on a manageable number of direct grantees.

We think the risks outweigh the potential rewards of awarding all GHGRF capital to one single entity for a number of reasons – it is too risky²; like monopolies, a single entity also risks creating long-term market inefficiencies in low-income and disadvantaged communities³. A sole awardee would be much less accountable to the many diverse communities across the country that GHGRF should serve⁴; it would be highly unlikely to have the expertise, capacity, relationships, products, and strategies to effectively deploy general assistance capital and serve LI/DAC, and it will be the LI/DAC segments that would likely suffer⁵. Also, it is unlikely to have a complete national presence and so risks wasting time and resources developing untested and duplicative franchisees or subsidiaries.

Unless GHGRF deployment is diversified via a hub-and-spoke model that invests through multiple lending industries with multiple product and deployment strategies, there is real risk of under-deployment. The relevant industries/lending channels include green banks, CDFI⁶ loan funds, credit unions, community banks (MDI and CDFI), speciality non-bank community and green lenders, affordable housing mortgage lenders (including moderate income and low-income borrowers), and housing finance agencies (HFAs). There may be other emerging strategies like use of state revolving loan funds, but that is unknown at present.

Once awarded grant funds, Eligible Recipients should have flexibility to allocate and reallocate funds as needed based on actual deployment success in GHG- and other air pollution-reducing projects. For example, if an Eligible Recipient has \$1 billion in funds to allocate across 50 small business lenders for the purpose of financing the decarbonization of small business real estate and operations in their markets, instead of allocating \$20 million to each lender on day one, the Eligible Recipient can allocate \$5 million to each lender and then track progress on deployment to ensure the remaining funds get allocated to the lenders with clear success deploying funds quickly against the program's objectives. This will create a

² If that one entity fails in its mandate or struggles to build the administrative capacity to oversee the fund, the entire GHGRF runs the risk of failure. In the hub and spoke model, if one hub should encounter difficulty, the integrity of the broader program remains intact.

³ Like water, capital continues to flow through familiar channels. While relying on one entity might feel expedient, it ultimately carries the risk of limiting innovation in the field over time and can potentially serve as a dam to the capital flow to low-income and disadvantaged communities.

⁴ For GHGRF funding to effectively benefit low-income and disadvantaged communities, this funding must also be accountable to these communities through familiar and trusted governance structures and must have the flexibility to make programmatic adaptations to serve these communities.

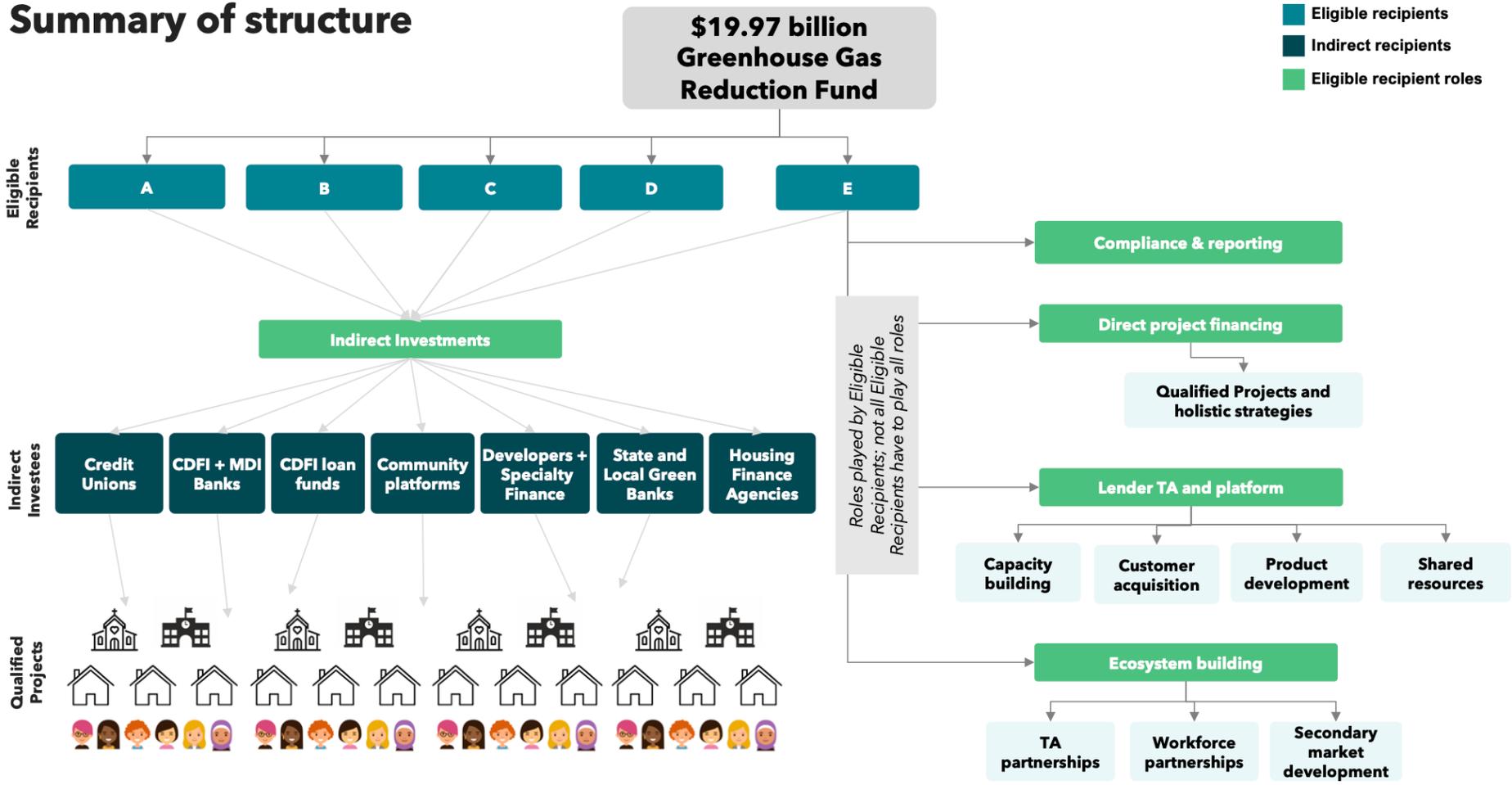
⁵ GHGRF must serve LI/DAC and can also provide "general" assistance that is not restricted to LI/DAC. One single entity is highly unlikely to have the expertise and relationships necessary to both deploy general assistance capital and simultaneously address the specific needs of LI/DAC market segments. Serving LI/DAC requires expertise, experience, and established relationships of trust. It also requires different strategies, financial products, prioritization of technical assistance, and strategic use of subsidy. Relying on one entity to effectively execute two fundamentally different strategies for two very different market segments creates significant risk of ineffective deployment and under-deployment to LI/DAC.

⁶ To be certified as a CDFI by the Treasury Department, an entity must: have a primary mission of promoting community development; provide both financial and technical assistance to borrowers; target at least 60% of its financing activities in 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; maintain accountability to the communities it serves, generally through representation on their board and/or special advisory boards; and be a non-governmental entity, except for Tribal government entities. (Source: [CDFI Fund, U.S. Department of Treasury](#))

beneficial, race-to-the-top dynamic among participating lenders. At the end of the period, some lenders may have received and deployed \$50 million and some may have only received and deployed the initial \$5 million. This can happen over time, including after the September 2024 deadline for EPA to disburse the GHGRF in grants. These downstream retail-facing lenders can have flexibility to use funds for various activities – loans, concessionary loans, soft debt, grants, technical assistance, and capacity building. Through this process, Eligible Recipients will learn which approaches are the most effective and share that information with its network, increasing program effectiveness.

The diagram on the following page illustrates our recommended structure for the GHGRF, including key actors, their responsibilities, and the proposed flow of funds.

Summary of structure



The Role of Eligible Recipients

Eligible Recipients, under grant awards from EPA, will have significant power over the impact, reach and success of the GHGRF. This is because Eligible Recipients have the responsibility of setting the terms, conditions, and costs under which funds will flow to other entities within the ecosystem of lenders and TA providers. Eligible Recipients will be responsible for attracting other entities to participate in the GHGRF. These downstream lenders and TA providers have the most labor-intensive roles in the ecosystem, since getting projects and technologies “over the finish line” – providing the financial and technical assistance needed at the borrower and community level – is the hard work of this program.

The more that Eligible Recipients acting as intermediaries seek to earn revenue by flowing funding to downstream program participants in the form of interest-bearing debt products and financing arrangements, the more financial burden will be placed on those participants. **We recommend that EPA incentivize Eligible Recipients – through both scoring and sizing of awards – to flow funds to other program participants in the form of grants and very low-cost financing arrangements akin to philanthropic Program Related Investments.**

In the proposed deployment strategy, Eligible Recipients play multiple, important roles including: (1) investing in indirect recipients; (2) providing lender technical assistance and shared platforms; (3) providing compliance and accountability services for EPA; (4) helping to create the GHGRF ecosystem; and (5) investing directly into qualified projects.

Indirect Financial Investment Role

Eligible Recipients should be able to clearly demonstrate their ability and strategy to “downstream” funds. Eligible Recipients should develop a model for “downstreaming” funds and resources to retail lenders (Indirect Recipients). This may include providing sub-grants, technical resources and financing products to Indirect Recipients. 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.

Eligible recipients should be able to demonstrate that they can:

- Solicit and engage retail lenders as Indirect Recipients.
- Allocate funds to Indirect Recipients; make sub-allocation decisions based on transparent, fair, and effective criteria.
- Disburse funds to Indirect Recipients on a controlled basis, preferably against objective milestones (loans originated and closed in LMI/DAC and other communities) or project financings (e.g., a monthly draw asset-based facility, or staggered drawdowns on recourse debt).
- Hold the technical expertise and accountability to determine appropriate terms and/or products for Indirect Recipients that will facilitate GHGRF projects that benefit LI/DAC communities and households
- Make reallocation determinations and shift funding as needed based on activity of the Indirect Recipients.

There must be transparency and fairness regarding all costs associated with funds provided to Indirect Recipients. Excessive rates, fees, management fees, overhead allocations, or other revenues and cost recovery earned by Eligible Recipients on the provision of funding to Indirect Recipients can create substantive barriers to lenders participating in GHGRF 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. Indirect Recipients need both adequate operating funds and revenue opportunities to be motivated to participate in GHGRF, to do the hard work of developing project pipelines and to originate large numbers of relatively small loans. Excessive application and reporting requirements for Indirect Recipients can create burden as well, and Eligible Recipients should be prepared to provide Indirect Recipients with tools, systems and support to ease these burdens. It is essential to make this program attractive to downstream lenders, and this responsibility will rest with Eligible Recipients serving as intermediaries.

Given that each Eligible Recipient must be a nonprofit organization, best practices with respect to nonprofit financial management should apply:

- Earned revenues in excess of (1) allowable operating costs related to GHGRF direct investment or indirect investment activities, up to an administrative cost cap established by EPA; (2) the cost of servicing any debt directly supporting GHGRF direct investment 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 any disbursements or projections regarding beneficial LI/DAC investment are achieved or on track.
- 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 retained earnings should be avoided and EPA should establish strong guardrails against private enrichment.

Lender Technical Assistance and Platform Role

Eligible Recipients should also be expected to provide lender technical assistance to their network of Indirect Recipients, including via the creation or strengthening of shared platforms that Indirect Recipients can use to drive GHG reduction and community co-benefits. These include:

- Technical assistance designed to assist lenders to acquire customers; 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.
- Provide product templates, lending process tools, and data on performance for lenders to modify existing products and/or adopt new products that effectively finance GHG-reduction technologies.
 - Assist lenders to identify familiar, market-accepted financing products that can be modified or enhanced to finance GHG reduction technologies.

- Seek to develop new products and solutions where established products don't work.
- Establish matchmaking platforms to connect lenders with project- and community-level TA providers.
- Promote recognition and learning opportunities related to successful case studies, products, processes and lending strategies amongst Indirect Recipients.
- Develop other forms of TA responsive to lender needs.

Compliance Role

Eligible Recipients should be expected to monitor Indirect Recipient performance and ensure that those entities comply with GHGRF requirements. EPA cannot be expected to monitor the performance and compliance of hundreds, if not thousands of lenders. Instead, EPA should focus its oversight on Eligible Recipients, who in turn will be relied on to ensure Indirect Recipient performance and compliance. The details of grant agreements between Eligible Recipients and Indirect Recipients will be critical in ensuring Indirect Recipient performance and compliance.

Eligible Recipients' responsibilities in this role include:

- Execute and oversee grant agreements with Indirect Recipients that codify the Eligible Recipient's role in ensuring GHGRF-related performance and compliance, with appropriate remedies.
- Ensure that grant milestones are achieved, and pursue reallocation remedies as needed.
- Roll up financial and impact reporting for Indirect Recipients reporting; focusing on loan level outputs should be required by Indirect Recipients, and Eligible Recipients should have systems in place to report on retail lending of Indirect Recipients in the aggregate, including key metrics such as GHG emissions reduction, LI/DAC benefits delivered, project- and portfolio-level leverage, and loan-level performance.
- Ensure consistency in reporting data amongst Indirect Recipients.
- Report out on capital deployment volume in terms of investments in Qualified Projects, not capital commitments. Note that some green banks present many metrics in terms of capital commitments whether such commitments are utilized or not. This practice tends to inflate capital deployment impact metrics and obscure the economic value of actual GHG-reducing project investments.

Role in Helping to Create the GHGRF Ecosystem

Beyond providing financial assistance to Indirect Recipients and ensuring performance and compliance, Eligible Recipients should also make investments in the broader ecosystem of project delivery, helping to build the pipeline of investible projects and addressing barriers at a larger scale than any one Indirect Recipient could accomplish. This goes beyond the lender

technical assistance role discussed above, and will ultimately help GHGRF investment capital flow through Eligible Recipients and Indirect Recipients to qualified projects on the ground. In this role, Eligible Recipients should:

- Include existing or prospective partnerships with TA providers and/or the development of TA platforms as part of their grant applications.
- Develop effective partnering arrangements with project-level, community-scale and workforce development technical assistance providers.
- Engage with GHGRF-funded TA providers and report on joint activities.
- Develop and facilitate the creation of secondary markets to increase efficiency and lower costs of private capital through direct asset purchases, warehousing, asset-backed issuances, aggregation of data, and education of key market actors (ratings agencies, investment banks, etc.).

Direct Investment Role

Finally, Eligible Recipients can also make direct investments in projects, activities, and technologies that reduce or avoid GHG emissions and other forms of air pollution. As such, Eligible Recipients should modify existing or develop new products that clearly address financing gaps in GHGRF qualified projects, particularly those benefitting LI/DAC communities and households. It is possible that some Eligible Recipients will have the capacity to invest in much larger projects than Indirect Recipients. Those investments should still follow the prioritization GHGRF legislation has placed on delivering benefits to LI/DAC communities and households.

Qualified projects by definition also include investments that “assist communities in the efforts” of reducing GHG emissions and other forms of air pollution. We read that language as a specific nod to the weight GHGRF places on technical assistance and capacity building. For a deeper discussion on that, please see the Technical Assistance Section below.

Structuring the Flow of GHGRF Funding

At \$30 million for a 10-year grant administration period, EPA has limited administrative resources to manage a complex and multifaceted program. EPA should target a relatively small number (e.g., 3 to 10, but will depend on the quality of applications) Eligible Recipients and empower these recipients to downstream GHGRF resources to other lending institutions.

- **Use of intermediaries as Eligible Recipients:** By awarding program funds to intermediaries (defined by those entities that can perform the five roles covered in the section above), EPA can both successfully obligate the funds within the required timeframe and execute a strategy that allows funding to flow through a large number of lenders. An intermediary strategy can also maximize flexibility of federal funds. Intermediaries should be allowed to reallocate funds amongst retail-facing Indirect Recipients and downstream participating lenders beyond September 2024. This will provide time to engage a wider range of Indirect Recipients. Because as grantees, intermediaries have more flexibility over a longer timeframe to allocate and reallocate

funds than does EPA as Program Administrator, this provides some protection against slow or ineffective deployment by individual lenders who are Indirect Recipients.

- **Large-scale direct lenders:** We recommend emphasizing an intermediary strategy, but not to the exclusion of applicants who are large-scale direct lenders. There may be institutions with adequate loan volumes and geographic reach, who also have track records lending to GHG-reducing technologies and LI/DAC communities, who are strong candidates for deploying funding directly to Qualified Projects through their current and prospective customers. As all Eligible Recipients must be non-profits, such large-scale direct lenders will most likely be large CDFIs or credit unions with a national or multi-regional footprint. Joint applications from a collaborative of direct lenders such as regional green banks could also be entertained.

We recommend a minimum award size of \$500 million for two reasons: to encourage applications with scaled impact, and to assist EPA in accomplishing the goals of the statute within the confines of its administrative budget.

Technical Assistance

The statutory language recognizes the critical role of TA in unlocking the potential of green finance. The need for technical assistance is acute at the project level, especially for building decarbonization projects focused on multifamily housing, affordable housing, and solar deployment in low-income and disadvantaged households and communities. EPA must accordingly ensure that TA is built into every layer of the GHGRF ecosystem. In particular, we recommend that EPA awards create a structure for providing TA at two levels, as described below.

First, as previously discussed, **Eligible Recipients should be expected to provide lender TA and shared platforms to their respective networks of Indirect Recipients.**

In addition, **Eligible Recipients should be required to present and execute a detailed demand generation and TA strategy that will support community-, portfolio-, and project-level TA and capacity building to build a pipeline of initiatives or products that will ultimately be financed by either the Eligible or Indirect Recipients.** Community- and project-level TA, capacity building, and awareness building are key to creating markets for GHGRF financing across asset types (households, buildings, community solar, etc.). Capacity-building assistance should be tailored to individual communities' needs, supporting activities such as workforce development, small business development, culturally competent marketing and outreach strategies, and community-ownership of projects. In addition, by forming partnerships with TA providers, Indirect Recipients should look across their portfolio of investments for opportunities to decarbonize the work they have already financed.

The relationships between lenders and TA providers should go both ways. Lenders can train TA providers on the information required for a financing application, ensuring that the TA process will facilitate the ability for a customer to seamlessly apply for financing, and possibly helping them do that. And, a reciprocal referral system could be established so TA providers can refer projects to lenders, and lenders can refer potential projects for TA.

Eligible and Indirect Recipients should be encouraged to forge partnerships with experienced, successful TA partners, and not re-create the wheel. EPA should use proposal scoring criteria

that incentivizes applicants to advance meaningful partnerships prior to submitting an application, not just include language saying what they plan to do on TA.

SECTION 2: DEVELOPING THE GHGRF ECOSYSTEM

The allocation strategy discussed above places a significant amount of responsibility on the Eligible Recipients to deploy capital in a networked fashion to achieve GHGRF goals. Below we discuss (1) key criteria EPA should require from Eligible Recipients; (2) how to structure an application and award process that will facilitate a networked, diversified implementation; and (3) how EPA can build in compliance and accountability to ensure fidelity to the program goals.

In this section, we refer to the GHGRF's \$8 billion in funding for projects exclusively in LI/DAC as the "LI/DAC Fund" and the remaining \$11.97 billion for general assistance as the "GA Fund."

All Eligible Recipients

Eligible Recipients will assume primary responsibility for maximizing the GHGRF's reach and will have contractual relationships with EPA. Criteria for grantee eligibility, evaluation and selection, contractual commitments, disbursement procedures, grant monitoring, and supervision are thus all critically important to the success of the GHGRF.

Given the critical role of Eligible Recipients in developing the GHGRF ecosystem, EPA must ensure that **all** prospective Eligible Recipients meet certain key criteria:

Purpose – Any Eligible Recipient must be able to demonstrate how its use of funds will:

- Accelerate deployment of distributed GHG reduction technologies and anti-pollution projects 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 Eligible Recipient must have a proven track record of:

- Successfully raising, deploying, and managing public and private capital, including large sums of capital, either directly or through their networks.
- Successfully deploying capital, either directly or through their networks, into GHG reducing and anti-pollution projects, companies, or activities; and
- Administering government grants. In the absence of such experience, an applicant must demonstrate partnering, sub-contracting or staffing strategies that will address this need to EPA's satisfaction.

Financial Expertise – Any Eligible 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 proven accounting systems, robust policies and procedures, sound information technology and data storage capabilities, and reporting frameworks that can be used to track grant, loan, and impact 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 the clean energy lending and technology markets which 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 Eligible Recipient must have:

- Trusted client/borrower networks and relationships in the states, regions, and/or communities in which they intend to operate;
- 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 (including experience with institutional operational and financial diligence); and
- Institutions in the industry, ideally including technical assistance providers, as supporters to an applicant’s application who are committed to participate as indirect recipients via that applicant.

It will ultimately be incumbent upon Eligible Recipients to select and monitor their network of Indirect Recipients. However, EPA should require that all Eligible Recipient applicants include as part of their application an initial network of committed Indirect Recipients with which they intend to work. EPA should stress that, to the greatest extent possible and as applicable, these Indirect Recipients should meet most of the criteria laid out above.

Over time, Eligible Recipients are likely – and should be encouraged – to provide financial and technical assistance to additional Indirect Recipients not included in their original application, including new lending institutions that may not exist yet. EPA should thus require that in their applications, potential Eligible Recipient specify (1) the criteria they will use to evaluate, select, and monitor future Indirect Recipients, whether existing or newly established; (2) in the case of newly established Indirect Recipients, how the Eligible Recipient will ensure that these new lenders receive funding from other public and/or private sources and can demonstrate strong governance standards; and (3) the maximum amount that the Eligible Recipient plans to spend capitalizing new Indirect Recipients.

Eligible Recipients Serving LI/DAC

In addition to meeting the criteria described in the previous section, **an Eligible Recipient that intends to work in LI/DACs should be required to meet certain additional standards.** EPA can maximize policy outcomes by granting funds to multiple Eligible Recipients in the LI/DAC pool (within the confines of 3 to 10 total awardees overall, as discussed above). Capitalizing multiple entities in the LI/DAC pool will allow lenders to develop customized solutions that truly meet individual community needs. These entities and their identified Indirect Recipients must be able to demonstrate that they have the following:

- A demonstrated track record of successfully investing in low-income and disadvantaged communities;
- 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 reflects:
 - 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.

One of the lessons learned from other programs intended to be directed toward low-income and disadvantaged communities, such as the Paycheck Protection Program (PPP) included in COVID relief legislation, is that serving low-income and disadvantaged communities requires specialized market expertise. This need for specialized market expertise has also been a lesson learned by green banks who seek to serve low-income and disadvantaged communities. For this reason, the LI/DAC Fund (and, at minimum, 40% of the GA Fund) should be targeted towards recipients who can demonstrate this knowledge. The established lending infrastructure in LI/DACs is expansive, with existing institutions – including CDFI loan funds, community development credit unions, community development banks, state Housing Finance Agencies and Public Housing Agencies, Minority Depository Institutions, and Low-Income Credit Unions –

collectively holding over \$1.5 trillion in assets.⁷ CDFIs and other community-based lenders have the unique ability to leverage their extensive network and ensure rapid, equitable investment in rural and urban communities across the country.

There are some existing institutions that EPA should consider eligible for the LI/DAC Fund, given the criteria described above. Certain types of CDFIs, for instance, should qualify based on these criteria. These entities have already been through an intensive U.S. Treasury Department certification process that ensures they are good stewards of taxpayer dollars, are accountable to their community (in terms of both the financing they provide and their board representation), and have a history of successfully deploying capital in target communities. In addition, there is an existing network of nonprofit investment funds, green banks, and similar mission-oriented entities that meet the statutory requirements of an Eligible Recipient. Any of these entities that can demonstrate a successful track record of working in LI/DAC communities, with at least 50% of their lending and/or investment activities dedicated to serving such communities, should be considered eligible applicants for the LI/DAC Fund.

Requirements for GHGRF Applications and Awards

As noted above, statute creates two funding streams for Eligible Recipients: the GA Fund and the LI/DAC Fund. All Eligible Recipients – regardless of which funding stream they apply to – should be funded in relation to their scale, customer reach, and experience with GHG emissions reduction technologies, or that of the industries they represent. These entities should also be evaluated based on the strength of their industry relationships and down-streaming strategies. All applicants should demonstrate experience with government grant management; strength of governance, oversight and transparency; operational infrastructure to raise and manage private capital; plans to fund both financial assistance and technical assistance; overhead allocation; and systems available to track and report.

Beyond these cross-cutting requirements, EPA should take certain factors into consideration when structuring the application and awards process for both the GA Fund and the LI/DAC Fund.

First, EPA should establish a separate application process for each funding stream. The anticipated flow of funds would be largely similar with some key distinctions:

- Additional eligibility criteria for applicants to the LI/DAC Fund (see above section), or for those receiving the portion of the GA Fund that has been devoted to LI/DAC households, businesses, and communities.
- Monitoring and reporting protocols for LI/DAC Fund to ensure that funds actually benefit LI/DAC households and communities.
- Funding applications for both resources should provide for applicants who apply as intermediaries, applicants who apply as direct lenders, applicants who apply as both intermediaries and direct lenders.

⁷ Based on research conducted by the Center for Impact Finance at the University of New Hampshire's Carsey School of Public Policy.

- Applicants should apply separately for GA Fund and LI/DAC Fund but can apply for both.
- If awards are granted to a single applicant under both GA Fund and LI/DAC Fund, reporting should be segregated.

Second, the GA Fund should be subject to Justice40 principles and EPA should ensure that 40% of the benefits of the GA Fund resources benefit LI/DAC households and communities. This requirement supports the overall ability for GHGRF to achieve and demonstrate additionality. Additionality is tenuous in some key technology sectors for borrowers who are not LI/DAC community members (e.g., solar PV or electric vehicles).

Finally, **EPA should recognize that there is a greater need for technical assistance and financial assistance in the form of grants in the LI/DAC segment.** This reality means that lending business models that can successfully serve LI/DAC market segments likely need to allocate more GHGRF resources to project-level technical assistance and grants. This may result in lower leverage and slower recycling in the lending business model, although both leverage and recycling are achievable in LI/DAC market segments.

- For applicants that apply under the GA Fund, GHGRF revenues that are not required to support ongoing GHGRF operations and fund necessary reserves against losses should be utilized to 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 retained earnings should be avoided. To the greatest extent feasible, earnings should be reinvested in eligible GHGRF activities.
- For LI/DAC Fund and the deployment of Justice40 funds, it is essential to ensure that CDFIs, credit unions with low-income designations, minority-owned institutions, and community banks serving these communities are represented and engaged. These lenders have expertise and deep experience necessary to serve LI/DAC customers. Another excellent strategy for reaching these communities is through housing finance agencies (HFAs) with whom CDFIs and other LI/DAC-serving lenders often partner.

Applicant Evaluation Criteria

Below we outline key considerations for EPA as it designs the GHGRF funding application. It is critical that EPA's application assessment and program accountability goals focus on clearly defined and intentional outcomes (e.g. LI/DAC benefits targeted, additionality, leverage, etc.) and provide flexibility to allow for the market and recipient to figure out the best way to achieve the outcomes and leverage.

As a threshold matter, EPA should evaluate for each applicant applying as an Eligible Recipient based on the key considerations described below:

- Applicant's proposed business model for serving as intermediary, especially the revenue model.

- If intermediaries lend money to downstream lenders – charging interest and fees earned on debt products – rather than sub-granting funds, this may slow and depress the development of the primary markets, particularly LI/DAC markets.
- It is essential that downstream lenders who are expected to develop project and transaction pipelines and make large numbers of small-scale loans have ample cost recovery and revenue opportunities to support this labor-intensive activity.
- Applicant’s strategy for attracting and engaging Indirect Recipients: How does the applicant propose to engage downstream lenders as Indirect Recipients? How many lenders are projected to participate and how many of these lenders are already firmly committed to participate in GHGRF? What are the key terms of engagement with downstream lenders? What are the planned application requirements for indirect investments?
- Applicant’s plan, capacity and experience to provide Indirect Recipients with access to lender-focused technical assistance and the additional supports and systems necessary for them to succeed.
- Applicant’s approach to ensuring availability of robust and effective project-level and community-level technical assistance: Does the applicant have engaged and committed technical assistance partners? Does the applicant have adequate staff with background and experience to work with both technical assistance partners and Indirect Recipients to provide a fully integrated suite of technical and financial assistance to potential borrowers, project developers, and community-based organizations?

In addition, EPA should evaluate proposals based on the applicant’s proposed cost efficiency of providing services to lender networks – in other words, how would an applicant applying as an intermediary pay for its various activities, as described below:

- Projected use of capital funds: portion of grant funds to be used for market-rate financing, concessionary financing, grants (to Indirect Recipients and Qualified Projects), technical assistance.
- Illustrative terms and requirements of both sub-grants and loan products; level of mark-up of sub-grants.
- Recognition of the interest earned on grant awards (prior to deployment).
- Amount of management or administrative fees.
- Proposed percentage of operating budget allocation in grant award.
- Securitization revenues anticipated and how these revenues will be reinvested to advance GHGRF objectives.
- Level of pricing, monies recycled versus spent outright, operating expenses, timeframe for recycling.
- Leverage projections: Applications may have a wide range of projections about the leverage an Eligible Recipient proposes to achieve. Leverage projections can be difficult to evaluate *a priori* especially for entities without a track record. As stated earlier, leverage is easier to achieve in some sectors than 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.). Finally, leverage calculation methods can vary, so any historical leverage metrics provided need to be scrutinized to ensure an apples-to-apples comparison based on EPA's leverage reporting requirements for GHGRF.

- Intent for long-term sustainability of the enterprise.

Finally, EPA should also evaluate:

- Pro-forma financial model for proposed GHGRF award (for a minimum of five years of operations).
 - Demonstrate illustrative mix of grants, technical assistance, loan products and any other anticipated activities.
 - Project revenues from various activities; project expenses disaggregating personnel expenses and other program-related expenses.
 - Demonstrate recycling and reinvestment expectations.
 - Demonstrate "continued operability".
- Competent and skilled management team; proposals should also address the staffing needs to accomplish the activities and whether staffing is presently in place or needs to be hired.
- Risk management – in other words, proposals should:
 - Articulate key risks in successfully executing the proposed direct and indirect investment activities, and identify mitigating factors.
 - Explain key organizational policies and procedures that will promote the success of the Eligible Recipient in carrying out the proposed activities, and that will serve to mitigate key risks.
 - Describe the applicant's investment management policies: Who makes key investment decisions? What is the depth and experience of credit risk management staff? Describe composition of investment committees and approval levels.
- Explanation of governance structure.
 - Legal status of organization; non-profit status of organization; summary of key elements of by-laws and articles of incorporation.
 - Board structure and design; Board committee structure; current Board members and background information.

Grant Management and Disbursement Recommendations

Awards should be sized to winning applicants taking into consideration their individual or industry scale (evidenced by annual loan origination volumes, total assets under management and, as applicable, numbers of network institutions), breadth of customer access, ability to serve and deliver benefits to LI/DAC (for both LI/DAC Fund and GA Fund given Justice40 principles), and lending experience with eligible GHG emissions reduction technologies.

In addition, EPA should use a matrix/formula approach based on track record and scale to take into account the breadth, geographic reach, volume, asset base and capacity of existing industries. EPA should make the comparison based on green lending (not generic lending), and/or applicants should be required to show how their existing products will be adapted to green lending and what resulting volume of capital would be expected. Special consideration may be given to a green bank or similar organization due to its sophistication and experience with the underlying technologies.

Finally, 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. 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).

Measuring Outcomes

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. Overall, the agency should seek to understand the outputs generated by GHGRF funds and the outcomes the funds had on people and the planet. To balance reporting burden with speed of deployment, all reporting at the Qualified Project level should be quantifiable outputs (and when applicable, outcomes) reported by the Indirect Recipient to their Eligible Recipient.

Metrics

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. Key metrics should include size of loan, term, project cost, technology financed, and LI/DAC benefits, as well as a more tailored set of metrics specific to each project vertical (e.g., building electrification, EVs, and so on). 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 and transaction level data. Eligible Recipients should be expected to aggregate, study, and sample Qualified Projects across their network to gain a deeper understanding of outcomes. This includes the translation of loans, grants, or activities into GHG reduction estimates as well as understanding the role that access to Qualified Projects had on the beneficiaries (e.g., homeowner who electrified their home, small business who electrified their fleet, etc.). This can be done through various impact evaluation approaches and helps build evidence useful for the entire network of activities without placing this cost burden on every Indirect Recipient. They should also organize and aggregate transaction level data, which could enable the creation of active secondary markets.

In addition to consistency, EPA should promote learning 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.

Finally, 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.

Infrastructure for Reporting Reductions in Greenhouse Gas Emissions and Air Pollution

EPA should design a program that provides clear guidance to recipients on what projects/technologies are deemed high-priority for funding under GHGRF and the emissions-reduction factors of those technologies. 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.

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.

Ensuring Compliance and Accountability

EPA should ensure ongoing compliance and accountability for the fund by using existing reporting structures where possible.

Because of the size of this fund and its deviation from EPA's historical role, we recommend that EPA does not attempt to make individual loan level determinations of eligibility for this fund. Rather, a robust reporting and accountability structure could ensure that the funds are: a) spent in low-income and disadvantaged communities in ways that improve people's lives, and b) reduce or avoid greenhouse gas emissions and other forms of air pollution. CDFIs have experience with this type of reporting already and currently gathering and report significant financial and place-based data. For example, the CDFI fund already tracks the geocodes of each of the investments made by CDFIs and reports in a Transaction Level Report (TLR) and Use of Award Report (UAR). A similar reporting structure, with carbon reduction information layered on, would be a simple way to ensure these funds are spent in accordance with the law, maximize flexibility within the program, and ensure accountability. In addition, to ensure the financing is as flexible as possible and balanced with accountability the EPA should consider other federal financing programs like the CDFI Fund's Rapid Response Program (RRP), which defined allowable grant funding across a range of flexible categories.

Appendix: About the Authors

Beth Bafford is Vice President of Strategy at Calvert Impact Capital, a nonprofit financial institution that has raised more than \$4 billion from 20,000+ investors in pursuit of measurable social and/or environmental impact. Beth leads Calvert Impact Capital's strategy and new business development efforts to build financial products and services that accelerate private capital for the benefit of communities in the US and around the world, with a focus on how to unlock the traditional capital markets for good. She also leads the organization's loan syndications and structuring practice and oversees corporate strategy, communications and impact management and measurement.

Prior to Calvert, Beth was a consultant in McKinsey & Company's D.C. office where she focused on U.S. Health Reform strategy. She has also worked as a Special Assistant at the White House Office of Management and Budget during the drafting and passage of the Affordable Care Act, as a Regional Field Director and Community Organizer on the 2008 Obama for America campaign, and as a Senior Associate at UBS Financial Services. Beth received both her BA in Public Policy and MBA in Social Entrepreneurship at Duke University.

Beth serves on the Advisory Board for the CASE Initiative on Impact Investing (CASEi3) at Duke's Fuqua School of Business, the Investment Committee for the Aaron and Lillie Straus Foundation, the Impact Investment Committee for the Baltimore Community Foundation, the Advisory Board of Higher Ground Labs, and the Board of Directors of Founders First Capital Partners, a revenue-based financing firm focused on funding diverse founders. She lives in Washington, DC with her husband and four young children.

Adam Kent is the Senior Advisor in NRDC's Green Finance Center, working at the intersection of finance and climate, with a particular focus on the role housing and community development finance play in creating a more equitable and environmentally sustainable economy. Prior to NRDC, Kent was the deputy director in the Washington, D.C. office of the Local Initiatives Support Corporation (LISC). During his time there, he financed over 1,500 affordable homes for lower-income families and helped to grow LISC's solar financing. In addition, he developed and led LISC's Elevating Equity Initiative, a \$100 million effort devoted to fostering equitable and inclusive development in the neighborhoods surrounding the 11th Street Bridge Park. Prior to LISC, Kent worked as a high school math teacher in the D.C. Public Schools system and as a researcher at the Urban Institute. He serves on the board of Project Create, a D.C.-based arts nonprofit that delivers accessible multidisciplinary arts education and programming to youth and families. Kent holds a bachelor's degree in economics from Macalester College, a master's degree in teaching from American University, and a master's degree in public affairs from Princeton University.

Amber Kuchar-Bell is the Opportunity Finance Network's (OFN) Chief Strategy and Operations Officer and is responsible for strategic initiatives, corporate budgeting, and facilitating partnerships with major financial institutions, philanthropy, and new corporate partners. Prior to joining OFN, Amber was the CDFI Program/NACA Program Manager at the CDFI Fund. She was responsible for the design and implementation of the \$1.25B CDFI Rapid Response

Program and managed over \$200MM annually in grants and loans to over 300 organizations. Amber was also an investment officer for Calvert Impact, where she managed a \$68MM investment portfolio of CDFIs. Amber also worked at Momentum Capital as a commercial loan underwriter and Bay Federal Credit Union as a Sr. Consumer Loan Officer. Amber has a Master of Public Policy from Duke University located in Durham, North Carolina, and a Bachelor of Science in International Development from the University of California Los Angeles.

Susan Leeds is the founder of the New York City Energy Efficiency Corporation (NYCEEC), the country's first local green bank. Susan served as President and CEO of NYCEEC from 2011 to 2019 and currently serves as Director and Secretary of the corporation. NYCEEC is a non-profit that finances energy efficiency, electrification, and clean energy projects primarily in buildings. Leveraging an initial federal grant of \$37.5 million, NYCEEC has mobilized over \$400 million of public, private, and philanthropic capital to date for building-scale decarbonization investments.

Susan is a recognized leader in clean energy finance – as an entrepreneur, lender, advocate and consultant to the public and private sectors. Susan's recent consulting assignments include Association for Energy Affordability, Boston Green Ribbon Commission, Citibank, Energy Foundation, Kansas City, Massachusetts Clean Energy Center, New York Green Bank, NRDC, NYSEERDA, St. Louis, The Clean Fight, and various early- and growth-stage clean tech companies. Prior to founding NYCEEC, Susan worked as an advocate for NRDC and led fundraising for Equilibrium Capital. Susan spent over seventeen years working in capital markets in various positions in the U.S. and abroad. Susan holds an MBA in finance from the Wharton School and a BA from the University of Pennsylvania.

Doug Sims is Senior Director of the Resilient Communities Division at Natural Resources Defense Council (NRDC), where he manages a team of over 40 advocates working on climate finance and place-based, and people-centered strategies to improve lives while combatting and preparing for climate change. Doug founded and led NRDC's Green Finance Center, was instrumental in the design and launch of the New York Green Bank is a co-founder of global Green Bank Network, a membership organization whose members include the Clean Energy Finance Corporation (Australia), Connecticut Green Bank, GreenTech Malaysia, NY Green Bank, New Zealand Green Investment Finance, Development Bank of Minas Gerais (Brazil), Rhode Island Infrastructure Bank, DC Green Bank and Tata CleanTech (India). He authors papers, presents at conferences and advises jurisdictions around the world on green finance and sustainable infrastructure. He is a member of the Standards Board of the Climate Bonds Initiative, the board of directors of the Center for Sustainable Energy and a founding board member of Inclusive Prosperity Capital, a spin out of Connecticut Green Bank. An infrastructure finance lawyer by training, Douglass worked for a decade at Allen & Overy LLP, focusing on energy and infrastructure projects. Douglass holds a law degree from Harvard Law School and bachelor's degree from Stanford University.