

# EPA Environmental Financial Advisory Board GHGRF Charge

Public Meeting  
December 15, 2022

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- All meetings are open to the public.
- All materials are available online via EPA's website.

For more information on EFAB, visit:  
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## Environmental Financial Advisory Board (EFAB)

The Environmental Financial Advisory Board (EFAB) provides ideas and advice to EPA's Administrator and program offices on ways to lower the costs of and increase investments in environmental and public health protection.

EFAB's work focuses on:

- Lowering the cost of environmental protection;
- Removing financial and programmatic barriers that raise costs;
- Increasing public and private contribution in environmental facilities and services; and
- Building state and local financial ability to meet environmental laws.

EFAB's membership consists of:

- officials from state and local governments;
- leaders from the finance community and other business industries;
- selected federal employees; and
- members of environmental, tribal and non-governmental organizations.

[Current list of EFAB members \(pdf\)](#) (153.08 KB)

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# Charge Background and Summary

## **Section 60103 of the Inflation Reduction Act of 2022 – Amended the Clean Air Act to create a new program: the Greenhouse Gas Reduction Fund (GHGRF)**

- This first-of-its-kind program will provide competitive grants to mobilize financing and leverage private capital for clean energy and climate projects that reduce greenhouse gas emissions – with an emphasis on projects that benefit low-income and disadvantaged communities.

## **The GHGRF provides \$27 billion to EPA for expenditure until September 30, 2024. This includes:**

- \$7 billion for competitive grants to enable low-income and disadvantaged communities to deploy or benefit from zero-emission technologies, including distributed technologies on residential rooftops;
- Nearly \$12 billion for competitive grants to eligible entities to provide financial and technical assistance to projects that reduce or avoid greenhouse gas emissions; and
- \$8 billion for competitive grants to eligible entities to provide financial and technical assistance to projects that reduce or avoid greenhouse gas emissions in low-income and disadvantaged communities.

## **EPA launched a coordinated stakeholder engagement strategy to help shape the implementation of the GHGRF and ensure economic and environmental benefits are realized by all Americans.**

- Public Listening Sessions – November 1 and November 9, 2022; recordings available online
- Request for Information – Public comment period open until December 5, 2022
- **Solicitation of Expert Input from EFAB**
  - **October 19, 2022 – Formal charge questions presented by EPA and approved by EFAB**
  - **December 15, 2022 – Final charge deliverable presented by EFAB**

For more information on the GHGRF at EPA, visit:

<https://www.epa.gov/inflation-reduction-act/greenhouse-gas-reduction-fund>

# Charge Status

EFAB created three (3) workgroups for three (3) categories of charge questions:

1. Objectives;
2. Program Structure; and
3. Execution, Reporting, and Accountability.

## Workgroup Progress

- Given the extremely compressed timeline of this charge (2 months vs. 1-2 years), workgroups have drawn on their own expertise and that of their constituent networks, reviewing public comments and other readily available literature.
- Materials are in no way meant to be exhaustive; they represent a summary of workgroup deliberations.
- Workgroups have largely been working independently, with some coordination on overarching themes.

**Today: Present and review the final EFAB GHGRF charge deliverable (full slide deck) and hold two (2) EFAB votes:**

- 1. To approve the deliverable.**
  - The deliverable contains EFAB “options for EPA consideration” for the GHGRF, not recommendations.
- 2. To authorize the creation of a transmittal letter to EPA.**
  - The transmittal letter will note key themes and summarize the deliverable.
  - It will be shared with EFAB for a vote to approve (via email) before officially submitting, with the deliverable and public comments, to EPA.

# Objectives Workgroup

# Workgroup Overview

This workgroup was asked to provide considerations around the GHGRF's objectives, including:

- How to fund and/or finance projects intended to reduce GHG emissions that are not being resourced today, particularly in low-income and historically disadvantaged communities;
- Program Efficiency; and
  - Design Elements (e.g., leverage, additionality).
  - Complementary Programs and Structures.
- Environmental Justice / Definition of “Low-Income and Disadvantaged Communities.”
  - Definition and Support Considerations.
  - Technical and Financial Assistance, including application support assistance.

# Key Challenges to Achieving GHGRF Objectives

- There is a lack of requisite capital at reasonable costs and flexibility.
- Priority areas for reducing GHGs (e.g., agriculture, buildings, industry, transportation) may not readily lend themselves to existing funding structures in priority communities.
- There is a lack of technical and human capacity to plan and prepare for grant applications, financing, and project development.
- There is a lack of start-up “capital” (e.g., technical assistance, planning / pre-development grants).

# Overarching Approach to GHGRF Objectives

### **1. Balance equity and access objectives with leverage objectives.**

- Seek higher levels of financing leverage (hard and soft match) for projects in communities with greater capacity and access to resources.
- Have lower leverage (hard and soft match) requirements for projects requiring some subsidization, associated with less resourced communities.
- No leverage requirements for grant funded projects primarily intended to provide various benefits / technical assistance to disadvantaged communities.

### **2. Balance need for “shovel-ready” projects with capacity building goals.**

- Goal is rapid deployment, so project-specific criteria should focus on that.
- Conventional meaning of “shovel-ready” projects (e.g., designed, engineered, permitted) is only one path to achieving rapid deployment, and could exclude projects that could/should be supported by one or more of the GHGRF streams.
- Consider development of other indicia of rapid deployment; to the extent there is still an interest in elevating “shovel-ready” projects, this could include a one to two (1-2) year design period.



# Overarching Approach to GHGRF Objectives

### 3. Acknowledge a variety of mandates and objectives in the short-term.

- Leveraging financing and ensuring GHGRF funds flow to disadvantaged communities **will not always lead to prioritizing the same types, sizes, or timeframes of projects or community supports.**
- **In the long-term**, investing in community capacity, technical assistance, and the ability to develop a wider array of projects and sizes will sustainably increase GHG reduction ability on a national level; however, this approach may not always optimize for leverage and “shovel-readiness” **in the short-term.**
- Another framing for this principle is balancing the interest in “building balance sheets” vs “building markets” – interventions can build the capacity of key players in a marketplace and/or support the scale and impact of a marketplace; both are important for long-term impacts.
- EPA has flexibility to design the GHGRF to empower states, municipalities, tribes, and eligible entities to select solutions that accomplish only one of these objectives well, while ensuring performance of both **in the aggregate.**

For example, EPA could enable project selection that:

- Prioritizes GHG reduction projects that provide direct benefits to disadvantaged communities, but that will not necessarily leverage private capital in the short-term (e.g., capacity building, workforce development, reduction of localized pollution).
- Enhances funding additionality and recycling that may not provide immediate benefits to disadvantaged communities but are likely to provide funding sustainability for GHG reduction programs for the long-term (beyond 2024).
- Establishes performance metrics demonstrating that selected projects in the aggregate accomplish objectives.

# Overarching Approach to GHGRF Objectives

### **4. Ensure eligible recipient(s) are positioned to serve priority communities effectively.**

- To meet the Congressional directives to not only reduce GHGs but also to serve and benefit low-income and disadvantaged communities, it will be important that the direct recipient(s), as well as indirect project applicant(s), have the capacity and experience to ensure that those communities and their interests are well represented.
- Additionally, in alignment with Justice40, intentional support of Black, Indigenous, and People of Color (BIPOC)-led organizations and communities will help EPA achieve GHG reduction goals in under-resourced communities that are also the most burdened and most vulnerable to GHG-related impacts.
- To these ends, it is important for EPA to incorporate consideration of diversity, equity, and inclusion within the leadership, structure, and decision-making of eligible recipient(s), as well as demonstrated record of success in working with and addressing the needs of low-income and disadvantaged communities.
- Centering representative, proximate, and diverse perspectives among the value chain of recipient(s) will increase equitable opportunities for communities to access GHGRF funding. Ideally, this will also provide accountability and feedback loops from communities back to EPA.
- Resourcing a diversity of decision makers with deep experience in low-income and disadvantaged communities may also help mitigate potential harms arising from GHGRF, such as:
  - Many low-income households are already indebted, and any new consumer financial products should not aim to increase household debt.
  - Similarly, city-funded rebate programs may count against taxable income thresholds for low-income families and risk compromising other critical supports for housing, childcare, or food (known as the “benefit cliff” issue).

# Designing for Flexibility to Meet Varying Mandates

- Near-term trade-offs between program **efficiency** and program **objectives** might be:
  - GHGRF timeline vs. measurable GHG reductions;
  - Leveraging and recycling funds vs. capacity building in communities;
  - Community reach vs. timeline / administrative burden;
  - Benefits reaching low-income and disadvantaged communities vs. long-term financial sustainability requirements;
  - Prioritizing GHG reduction performance in the first year of the program could disadvantage efforts to build low-income and disadvantaged communities' capacity to develop GHG reduction initiatives and projects; and
  - "Shovel-ready" vs. community-supported projects.
- In response, the GHGRF funding streams could be subject to varying weights and objectives in order to achieve multiple goals. For example:
  - \$7B to States / Municipalities / Tribes could be more heavily weighted towards capacity building, low-income community impacts and programs, and additionality (projects that wouldn't otherwise get done).
  - \$8B could be more heavily weighted towards capacity building, additionality, long-term sustainability, and technical assistance.
  - \$12B could be more heavily weighted towards leverage and capital recycling, long-term sustainability of financial assistance, and scale of GHG impacts.
- Additionally, emphasis could vary based on the nature of both direct and indirect recipient(s).

# Program Efficiency – Design Elements

### ***Charge Question I.b.i:***

- ***How can the GHGRF grant competition be designed so that funding is highly leveraged (i.e., each dollar of federal funding mobilizes multiple dollars of private funding)?***
- ***How can the funding be used to maximize “additionality” (i.e., the extent to which funding catalyzes new projects that would not otherwise occur)?***
- ***How can EPA balance the need for grants for capacity building and short-term results with financial structures that will allow capital to be recycled over time?***
- ***Where (if at all) is it appropriate to impose sustainability requirements on direct or indirect beneficiaries of GHGRF funding?***

### **This workgroup provided guidance in terms of:**

- Strengths and weaknesses of each of the above elements by recipient / project type;
- Strong fits and weak fits of each element by recipient / project types; and
- Careful perusal of the public comments, which provide a wealth of specific examples from other programs for EPA’s consideration.

## GHGRF Charge – Objectives

# GHGRF Design Elements by Direct Recipient Type and Suggested Relevance (“weight”)

Aligned Recipient	Leverage	Additionality	Capital Recycling	Capacity Building	Long-Term Operability
States / Municipalities / Tribes	Low weight	High weight	Medium weight	High weight	Medium weight
National Green Bank / Fund	High weight	Medium weight	Medium weight	Low weight	High weight
Collective Action – Regional	Medium weight	High weight	Medium weight	High weight	Low weight
Collective Action – Sectoral	High weight	Low weight	Medium weight	Medium weight	Medium weight
Lender Intermediaries	High weight	Low weight	High weight	Low weight	High weight

# Program Efficiency – Design Elements

Design Element	Strengths / Weaknesses	Strong / Weak Fits	Aligned Recipients
<p><b>Leverage:</b> The ability of a recipient or project to evidence additional private sector funding sources</p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Crowds in additional dollars from other sources</li> <li>• Enables larger projects</li> <li>• Stretches taxpayer resources further</li> <li>• Can provide risk mitigation for private capital</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Burdensome from a structuring and transaction cost standpoint</li> <li>• May increase cost of capital</li> <li>• Less workable in smaller projects</li> </ul>	<p><b>Strong Fits</b></p> <ul style="list-style-type: none"> <li>• Large asset-backed projects</li> <li>• Subordinate tranches in structured funds</li> <li>• Nonprofit and commercial projects</li> <li>• Residential solar leases</li> </ul> <p><b>Weak Fits</b></p> <ul style="list-style-type: none"> <li>• Smaller community-based organizations</li> <li>• Smaller municipalities</li> <li>• Matching technical assistance dollars</li> <li>• Non-commercial project costs (e.g., pre-development)</li> </ul>	<p><b>Higher Leverage</b></p> <ul style="list-style-type: none"> <li>• States / Municipalities / Tribes</li> <li>• National Green Bank / Fund</li> <li>• Lender Intermediaries</li> </ul> <p><b>Lower Leverage</b></p> <ul style="list-style-type: none"> <li>• Collective Action – Regional</li> <li>• Collective Action – Sectoral</li> </ul>
<p><b>Short-Term Capacity Building:</b> Use of funds is predominantly to hire expertise / staff to improve communities' ability to plan and execute GHG reduction projects</p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Enables attribution to leaders, organizations on successful projects</li> <li>• May enable projects in disinvested / overlooked communities</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Challenging to measure and easy to critique</li> <li>• May complicate decision-making around eligible projects</li> <li>• Doesn't always collaborate well with other funding sources</li> </ul>	<p><b>Strong Fits</b></p> <ul style="list-style-type: none"> <li>• Where capital has historically not been invested</li> <li>• Where funding is clearly taking "de-risking" role for private capital</li> <li>• Planning and pre-development funding</li> </ul> <p><b>Weak Fits</b></p> <ul style="list-style-type: none"> <li>• Industrial / large-scale projects</li> <li>• Loss-sharing guarantees</li> <li>• Pari passu funding structures</li> <li>• Senior debt</li> </ul>	<p><b>More Additionality</b></p> <ul style="list-style-type: none"> <li>• States / Municipalities / Tribes</li> <li>• National Green Bank / Fund</li> <li>• Collective Action – Regional</li> <li>• Combination of Structures</li> </ul> <p><b>Less Additionality</b></p> <ul style="list-style-type: none"> <li>• Collective Action – Sectoral</li> <li>• Lender Intermediaries</li> </ul>

# Program Efficiency – Design Elements

Design Element	Strengths / Weaknesses	Strong / Weak Fits	Aligned Recipients
<p><b>Capital Recycling:</b> The ability of recipient(s) to recycle / re-deploy the funding provided over time</p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Bolsters financial sustainability of recipient(s) for the long-term</li> <li>• Ensures long-term impacts after program funding window is closed</li> <li>• Builds intermediary capacity</li> <li>• Enables strong leverage opportunities</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Desire to recoup capital reduces risk tolerance of funds</li> <li>• Incentives for recipient(s) may be at odds with purpose (e.g., funds may be used for reserves or liquidity vs. deployment)</li> <li>• Ability to recycle capital within reporting period may be limited by long-term project finance cycles, which are common in energy (20 years)</li> </ul>	<p><b>Strong Fits</b></p> <ul style="list-style-type: none"> <li>• Financial intermediaries who are lenders</li> </ul> <p><b>Weak Fits</b></p> <ul style="list-style-type: none"> <li>• Equity investments (because of both illiquidity and risk)</li> <li>• Start-up capital</li> <li>• Technical assistance</li> <li>• Projects without material cash payout over 10+ years</li> </ul>	<p><b>Higher Recycling Ability</b></p> <ul style="list-style-type: none"> <li>• National Green Bank / Fund</li> <li>• Collective Action – Regional</li> <li>• Collective Action – Sectoral</li> <li>• Lender Intermediaries</li> </ul> <p><b>Lower Recycling Ability</b></p> <ul style="list-style-type: none"> <li>• States / Municipalities / Tribes</li> </ul>
<p><b>Additionality:</b> Demonstrating the essential contribution of the GHGRF to getting the project done; "but for this funding..."</p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Evident and persistent demand for capacity building support, especially in low-income / disadvantaged communities</li> <li>• High demand for in-community, long-term human capacity</li> <li>• Can increase uptake / demand for financial assistance / pipeline projects</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Once money is allocated, limited future funding sources</li> <li>• Short funding period incentivizes use of consultants vs. full-time hires</li> <li>• No leveraging / recycling ability</li> <li>• Overlooked communities may be unaware of funding opportunities and lack grant application bandwidth</li> </ul>	<p><b>Strong Fits</b></p> <ul style="list-style-type: none"> <li>• Middle and low-income communities with the most to gain from technical assistance and funding navigator support</li> <li>• In communities with coordinated access to long-term technical assistance funding</li> <li>• When paired with green workforce development to increase local skilled workforce</li> <li>• For short-term trainings around grant applications, reporting, and compliance</li> <li>• Planning uses for GHG projects</li> </ul> <p><b>Weak Fits</b></p> <ul style="list-style-type: none"> <li>• Not as well suited to project-specific funding</li> </ul>	<p><b>Stronger Capacity Building</b></p> <ul style="list-style-type: none"> <li>• States / Municipalities / Tribes</li> <li>• Collective Action – Regional</li> <li>• Combination of Structures</li> </ul> <p><b>Weaker Capacity Building</b></p> <ul style="list-style-type: none"> <li>• National Green Bank / Fund</li> <li>• Collective Action – Sectoral</li> <li>• Lender intermediaries</li> </ul>

# Program Efficiency – Design Elements

Design Element	Strengths / Weaknesses	Strong / Weak Fits	Aligned Recipients
<p><b>Long-Term Sustainability Reporting:</b></p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Reassures EPA of recipient(s)' abilities to manage, invest, and report upon funds in compliant and efficient ways</li> </ul> <p>Recipient(s) with stronger long-term financial sustainability have:</p> <ul style="list-style-type: none"> <li>• Proven track record of completing GHGR projects</li> <li>• Proven ability to reach low-income and disadvantaged communities</li> <li>• Greater likelihood of project completion</li> <li>• Greater ability to recycle and leverage capital</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Burdensome for small entities</li> <li>• Challenging to apply to many governmental entities</li> <li>• Challenging to track across indirect recipient(s) in a standardized manner</li> <li>• Difficult to apply to newly created or yet to be created entities</li> </ul>	<p><b>Strong Fits</b></p> <ul style="list-style-type: none"> <li>• Established financial intermediaries</li> <li>• The lead partners (or primes) of a regional or sectoral collaboration</li> <li>• Quasi-governmental development entities and other public sector agencies (e.g., EDCs, HFAs, Port Authorities)</li> </ul> <p><b>Weak Fits</b></p> <ul style="list-style-type: none"> <li>• Intermediaries with limited track record or historical financials</li> <li>• Community-based organizations reliant upon grant funding</li> <li>• Municipalities and agencies with lower credit ratings</li> </ul>	<p><b>Stronger Sustainability Reporting</b></p> <ul style="list-style-type: none"> <li>• States</li> <li>• Collective Action – Regional</li> <li>• Collective Action – Sectoral</li> <li>• Lender Intermediaries</li> </ul> <p><b>Weaker Sustainability Reporting</b></p> <ul style="list-style-type: none"> <li>• Municipalities / Tribes</li> <li>• National Green Bank / Fund</li> <li>• Combination of Structures</li> </ul>



## **GHGRF Charge – Objectives**

# Program Efficiency – Complementary Programs and Structures

### *Charge Question I.b.ii:*

- *Are there programs / structures at the federal or state level that could effectively complement the GHGRF?*
  - *How can EPA best leverage the GHGRF to support lasting, long-term (beyond 2024) transformation of the clean energy and climate finance ecosystem, especially for disadvantaged communities, and greenhouse gas and other air pollution reductions?*
- 
- The opportunity to design the GHGRF so that it amplifies and advances other programs with similar and/or overlapping goals is very large, encompassing dozens, if not hundreds, of potentially aligned initiatives.
  - Identifying a full set of such programs is thus beyond the capacity of the current EFAB assignment, which has focused instead on developing a set of guiding principles to support EPA in prioritizing identification of such programs.
  - Coordination with other agencies and connecting program recipients can enable alignment with the GHGRF over time.

## **GHGRF Charge – Objectives**

# Program Efficiency – Complementary Programs and Structures

### **Guiding principles / "good fits:"**

- Use Justice40 not as a "maximum" target to be achieved, but as minimum starting point for the entire program;
- Share emphasis on low-income / disadvantaged communities (definitions may vary), specifically programs focusing on and/or filling gaps. For example:
  - Energy efficiency measures for low-income housing and technical assistance for same.
  - DOE's Energy Infrastructure Reinvestment Program.
- Water efficiency programs (water / energy nexus), including SRF Green Reserve;
- Where the GHGRF could provide matching funds required by other infrastructure programs;
- Tax credits intended to incentivize energy efficiency and reduced GHG emissions;
- Seek defined co-benefits in communities;
- Clean energy programs that share GHG reduction objectives, preferably with the ability to measure GHG impacts;
- Reach communities across the U.S. and/or state-level at a minimum with emphasis on low-income / disadvantaged communities;
- Established relationships with direct recipient(s), especially states / municipalities / tribes; and
- Funding programs that focus on de-risking projects for later private investment.

### **"Nice to haves:"**

- Workforce development components in the "green economy;" and
- Focus on orphan projects / additionality.

## **GHGRF Charge – Objectives**

# Environmental Justice / Definition of “Low-Income and Disadvantaged Communities” – Definition and Support Considerations

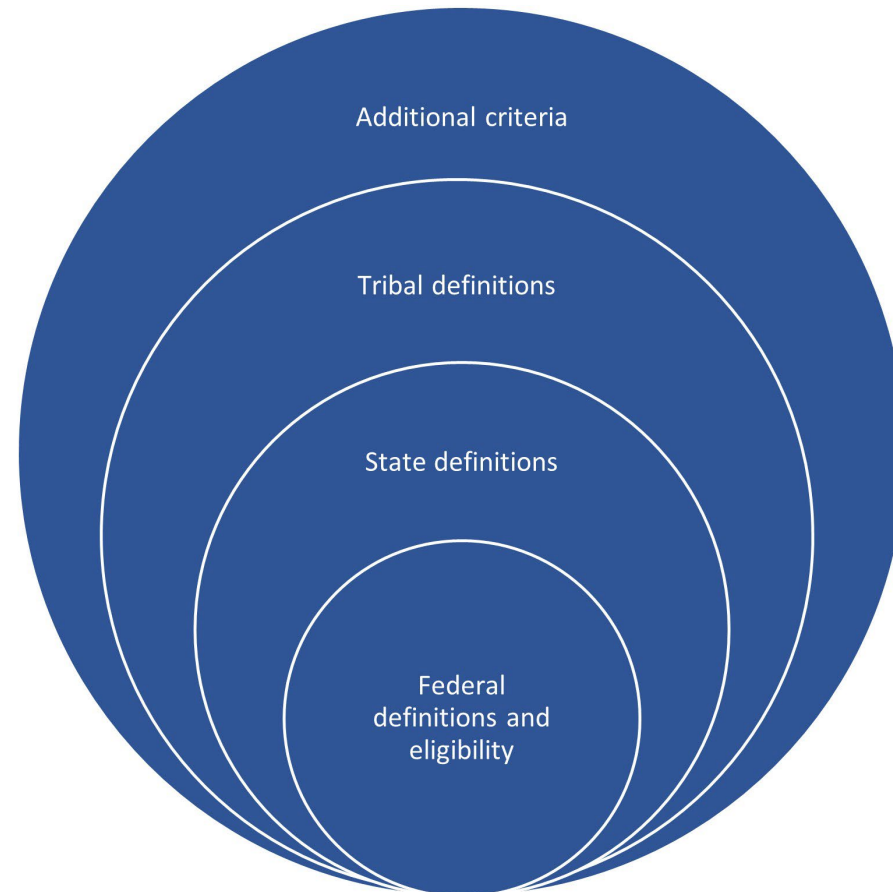
### **Guiding principles and considerations:**

- Provide clarity to direct and indirect recipient(s) and participants about EPA’s expectations;
- Acknowledge that no one definition will meet the needs of every region, state, tribe, and/or community;
- Any definitions used should increase inclusion of communities and organizations for consideration;
- Acknowledge the importance of defining disadvantaged communities more broadly than by median income or other existing federal and/or state metrics. For example:
  - Recognize that communities are not always bounded by political boundaries (e.g., cities, townships, counties).
  - A community may be as small as a census tract.
  - Tribal communities and nations may use different definitions from states and municipalities.
- Encourage the use of EJSCREEN and other federal mapping tools;
- Acknowledge that existing federal and tribal criteria used today may not be sufficient to capture sub-populations in large cities, as well as unique challenges in rural communities; and
- As part of the grant management process, work with direct and indirect recipient(s) to develop aggregate measures that can capture the impact of GHGRF on priority communities.

## **GHGRF Charge – Objectives**

# Environmental Justice / Definition of “Low-Income and Disadvantaged Communities” – Inclusive Model for Defining

***In addition to existing definitions, accept and allow for the use of additional criteria in guiding principles to ensure inclusive and equitable access to GHG and localized pollution reduction benefits.***



## GHGRF Charge – Objectives

### Project-Level Fund Eligibility: Defining “Low-Income / Disadvantaged Communities”

Guiding Principle	Strengths / Weaknesses
<p>Acknowledge the importance of defining disadvantaged communities more broadly than by median income or other existing federal and/or state metrics</p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Ability to optimize project benefits and expand range of solutions</li> <li>• Enables a more inclusive and equitable access to GHG reduction funds and benefits</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• May create measurement and tracking challenges</li> <li>• Guardrails needed to ensure the definition does not become all-encompassing</li> </ul>
<p>Accept existing federal definitions and eligibility criteria (e.g., HUD Area Median Income, DHS TANF eligibility criteria, SBA size standards)</p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Easier for EPA to deploy quickly</li> <li>• Supports standardized reporting nationwide</li> <li>• Allows for eligibility on the household / entity level</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• May not be optimized for pollution reductions</li> <li>• May make it harder to include pockets of low-income and disadvantaged communities that have been historically excluded from federal support</li> </ul>
<p>Accept state and tribal definitions (by statute) as applicable and when they prove to increase inclusion</p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Aligns with existing state priorities and funding programs</li> <li>• Prioritized projects on Intended Use Plans could be screened for GHG reduction potential</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• May not be optimized for pollution reductions</li> <li>• May make it harder to include pockets of low-income and disadvantaged communities that have been historically excluded from state support</li> </ul>

## GHGRF Charge – Objectives

### Project-Level Fund Eligibility: Defining “Low-Income / Disadvantaged Communities”

Guiding Principle	Strengths / Weaknesses
<p>Encourage the use of EJSCREEN and other federal mapping tools</p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Standardized eligibility nationwide</li> <li>• Easy to access</li> <li>• Easy for EPA to deploy</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Excludes a significant number of communities</li> <li>• May miss sub-areas and sub-populations within large boundaries</li> <li>• Some tools may not be optimized</li> </ul>
<p>Acknowledge that existing federal and tribal criteria used today may not be sufficient to capture sub-populations in large cities, as well as unique challenges in rural communities</p>	<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Ability to optimize for GHG reduction and community co-benefits</li> <li>• Inclusive of sub-populations within larger cities and rural locales lacking critical infrastructure</li> <li>• Inclusive of other important criteria (e.g., health burdens caused by pollution levels, cost of energy, cost of housing / living, climate fragility)</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Depending on whether the criteria is flexible or formulaic, could be overly complex without ensuring equitable inclusivity</li> <li>• May create tracking challenges</li> </ul>

## **GHGRF Charge – Objectives**

# Environmental Justice / Definition of “Low-Income and Disadvantaged Communities” – Technical Assistance\*

***Charge Question 1.a.iii: What kinds of technical ... assistance should GHGRF funding recipients provide to ensure that low-income and disadvantaged communities are able to be direct or indirect beneficiaries of GHGRF funding? Please identify supports that could help communities with project implementation.***

The GHGRF could support a wide variety of TA, for both institutions disbursing funds and for communities to help develop projects that can eventually seek resources from the GHGRF.

Type of TA will vary across phases of implementation and based on:

- Project Applicants;
- Project Types;
- Local Benefit Pathways; and
  - Workforce benefits.
  - Economic development benefits.
  - Public health benefits.
- Issues faced by community.

Third parties to coordinate across communities and departments and create capacity to develop, apply, fund, and implement projects. These could be national or regional organizations or include very localized community groups. Examples include but are not limited to:

- NGO Navigators to provide funding TA for application support;
- NGOs to provide project development, design, and implementation support;
- AmeriCorps;
- State extension programs;
- USACE Silver Jackets;
- Engineers Without Borders; and
- Senior design projects at accredited university engineering programs.

## **GHGRF Charge – Objectives**

# Environmental Justice / Definition of “Low-Income and Disadvantaged Communities” – Technical Assistance

TA needs will vary across all aspects of implementation and depend on several factors, including:

- Who needs assistance (e.g., project developers, communities, local government entities, households)?
- Project type (e.g., agriculture, buildings, industry, transportation)?
  - Identifying funding opportunities and synergies;
  - Applying for funds;
  - Broader project financing analysis;
  - Project design and implementation planning;
  - Identifying relevant case studies and other project-related research;
  - Economic analysis;
  - Data development and analytics;
  - Developing and deploying performance metrics;
  - Legal and policy analysis;
  - Community outreach and education; and
  - Long-term capacity building.
- Benefits being achieved?
  - Funding benefits: TA for funding application assistance and other “navigator” support.
  - Local workforce development: TA for project development, design, implementation planning workforce training, and small business development.
  - Public health: TA for mapping to identify high leverage pollution reduction opportunities / needs, project design and development, large-scale and more localized projects, and performance metrics to demonstrate connections.



## **GHGRF Charge – Objectives**

# Environmental Justice / Definition of “Low-Income and Disadvantaged Communities” – Financial Assistance\*

***Charge Question 1.a.iii: What kinds of ... financial assistance should GHGRF funding recipients provide to ensure that low-income and disadvantaged communities are able to be direct or indirect beneficiaries of GHGRF funding? Please identify supports that could help communities with project implementation.***

- Given the capital constraints evidenced across the country, providing direct financial assistance to communities and project proponents in the form of grants will most immediately advance projects in low-income and disadvantaged communities. As a secondary tool, low-cost and patient debt is also an accelerant for these projects, when paired with adequate pre-development resources.
- EPA might also consider that the effectiveness of financial assistance goes beyond the tools and resources themselves, to the pathways through which such support is provided. To this end, developing principles around financial assistance would be additive, such as:
  - Prioritize pathways for the funding streams dedicated to and/or led by low income / disadvantaged communities, through entities and institutions set up to fund projects at the neighborhood or community level, with accountability to those communities.
  - Prioritize funders and lenders with strong representation within and ties to the communities they serve, thereby providing community-centered TA delivered by trusted experts.
  - Take advantage of lessons and best practices developed by other federal and state initiatives around lending to small businesses, including the U.S. Treasury’s Office of Small and Disadvantaged Business Utilization, State Small Business Credit Initiative (SSBCI), and Department of Commerce’s assistance programs focused on underserved entrepreneurs.

## GHGRF Charge – Objectives

### Environmental Justice / Definition of “Low-Income and Disadvantaged Communities” – Financial Assistance

- Additionally, GHGRF recipient(s) among all funding streams, including state and tribal recipient(s), could adopt financing tools and policies aimed at addressing structural issues that limit access to capital in such communities, such as:
  - Developing flexible or forgivable lending structures designed with low-cash flow households in mind;
  - Establishing non-traditional methods of loan repayment (e.g., Pay as You Save, Property Assessed Clean Energy financing); and
  - Adopting policies that facilitate flows of funds towards low-income households within larger programs. For example:
    - Per public comment, Maryland’s community solar pilot program required 30% of its solar capacity to be reserved for projects serving LMI households.
    - To further drive adoption of community solar, the state incentivized developers and investors by guaranteeing to recover any losses from non-payment of bills.
    - In exchange, developers had to agree to a 20% discount on low-income subscribers’ electricity bills with no credit limits / requirements.

## GHGRF Charge – Objectives

# Environmental Justice / Definition of “Low-Income and Disadvantaged Communities” – Financial Assistance

- Given the funding window for the GHGRF, partners selected for financial assistance should have already intentionally designed their services and products to overcome barriers to capital among low-income and disadvantaged communities. For example:
  - Mission-driven lenders whose product suites are designed for low-income borrowers and undercapitalized projects, such as CDFIs.
  - Capital providers who use alternative underwriting criteria that expand the communities / households that can be served compared to conventional FIOC-based models.
    - Florida’s Solar and Energy Loan Fund doesn’t use conventional underwriting criteria to serve LMI clients, and still achieves a default rate of < 2%.
- Consider the value of indirect financial assistance (e.g., support for initiatives that may not provide immediate GHG reductions, but build the local ecosystem required to support GHG reduction projects in ways that generate local economic development over the long-term). Examples include:
  - Accelerators or gap financing to support low emission business establishment; and
  - Workforce development support for the requisite local zero-emission businesses, including weatherization, electrification, etc.
- Given the vulnerability of lower-income households to predatory lending practices, which can cause over-indebtedness, EPA may benefit from consulting with the Consumer Financial Protection Bureau and/or nonprofit organizations like the Center for Responsible Lending on "do no harm" standards for loan products that aim to serve low-income households.

This workgroup acknowledges that this is a much larger topic than could be adequately addressed in the time available, and notes there is a rich set of examples of financial assistance approaches in the public comments to EPA.

## GHGRF Charge – Objectives

# Potential Indicators of Success

- GHG reduction impacts.\*
- Low-income and disadvantaged community impacts. For example:
  - Capacity building and technical assistance deployed;
  - Energy burdens / costs reduced for households;
  - Increased access to GHG-reducing products, and increase in affordable financing or grant capital;
  - Workforce initiatives (training, hiring, and retention);
  - Other community benefits (e.g., "greened" areas, health and pollution impacts, walkability indices); and
  - Dollars deployed by BIPOC-led organizations.
- Program efficiency and performance.\*
  - Time-bound performance (e.g., deployment and reach);
  - Leverage;
  - Additionality;
  - Recycling; and
  - Sustainability Reporting.

*\*See GHGRF Charge Workgroup 3 (Execution, Reporting, and Accountability) for metric examples*

## GHGRF Charge – Objectives

# Thank You!

EFAB GHGRF Charge – Objectives Workgroup			
Name	Affiliation	Location	Sector
Margot Kane (co-chair)	Chief Investment Officer, Spring Point Partners LLC	Philadelphia, PA (EPA Region 3)	Business – Financial Services
Cynthia Koehler (co-chair)	Executive Director, WaterNow Alliance	San Francisco, CA (EPA Region 9)	Environmental / Non-Governmental Organization
Ashley Allen Jones	Founder and Chief Executive Officer, i2 Capital	Washington, DC (EPA Region 3)	Business – Financial Services
Angela Montoya Bricmont	Chief Finance Officer, Denver Water	Denver, CO (EPA Region 8)	State / Local Government
Stacy Brown	President and Chief Executive Officer, Freberg Environmental, Inc.	Denver, CO (EPA Region 8)	Business – Financial Services
Ted Chapman	Investment Banking Analyst, Hilltop Securities, Inc.	Dallas, TX (EPA Region 6)	Business – Financial Services
Janet Clements	President and Founder, One Water Econ	Loveland, CO (EPA Region 8)	Business – Industry
Jeff Diehl	Chief Executive Officer, Rhode Island Infrastructure Bank	Providence, RI (EPA Region 1)	State / Local Government
George Kelly	Global Client Strategy Officer, Earth Recovery Partners	Denver, CO (EPA Region 8)	Business – Financial Services
Lawrence Lujan	Executive Director, Taos Pueblo Utility Service	Taos, NM (EPA Region 6)	Tribal Government
Dennis Randolph	City Traffic Engineer, City of Kalamazoo Public Services Department	Kalamazoo, MI (EPA Region 5)	State / Local Government
Sanjiv Sinha	Chief Sustainability Officer, Environmental Consulting and Technology, Inc.	Ann Arbor, MI (EPA Region 5)	Business – Industry
David Wegner	Senior Consultant on Water, Climate Change, and Asset Risk Assessment, Water Science and Technology Board, National Academy of Sciences	Tucson, AZ (EPA Region 9)	Business – Industry
Gwen Yamamoto Lau	Executive Director, Hawaii Green Infrastructure Authority	Honolulu, HI (EPA Region 9)	State / Local Government

# Program Structure Workgroup

# Workgroup Overview

This workgroup was asked to provide considerations around the GHGRF's program structure, including:

- Eligible Recipient(s);
- Eligible Projects; and
  - Types of Projects / Sectors / Market Segments.
  - Barriers, Gaps to Fill, and Strategies.
  - Beneficiaries / Low-Income Communities.
- Structure of Funding.
  - Design Requirements.
  - Compliance and Streamlining.

# Approach to Evaluations

- This workgroup includes finance professionals from public, private, and philanthropic sectors with expertise in energy, water, agriculture, and more. Since EFAB accepted this charge on October 19, 2022, this workgroup:
  - Conducted interviews within EFAB;
  - Interviewed third-party experts in relevant sectors and types of capital (e.g., community development, technical assistance, project finance, equity); and
  - Reviewed both written and oral public comments.
- Objectives of approach
  - Highlight list of potential eligible project, recipient, and program structure options;
  - Assess pros / cons (strengths / weaknesses) of options relative to overall program design elements and requirements; and
  - Inform EPA staff versus recommend specific options.



## GHGRF Charge – Program Structure

# Eligible Recipient(s)

*Charge Question II.a.i: Who could be eligible entities and/or indirect recipients under the GHGRF?*

- Range of state, federally licensed, and non-profit capital deployment vehicles with reach into disadvantaged communities; specific vehicles map to priority projects and unique needs of communities (non-exhaustive list)



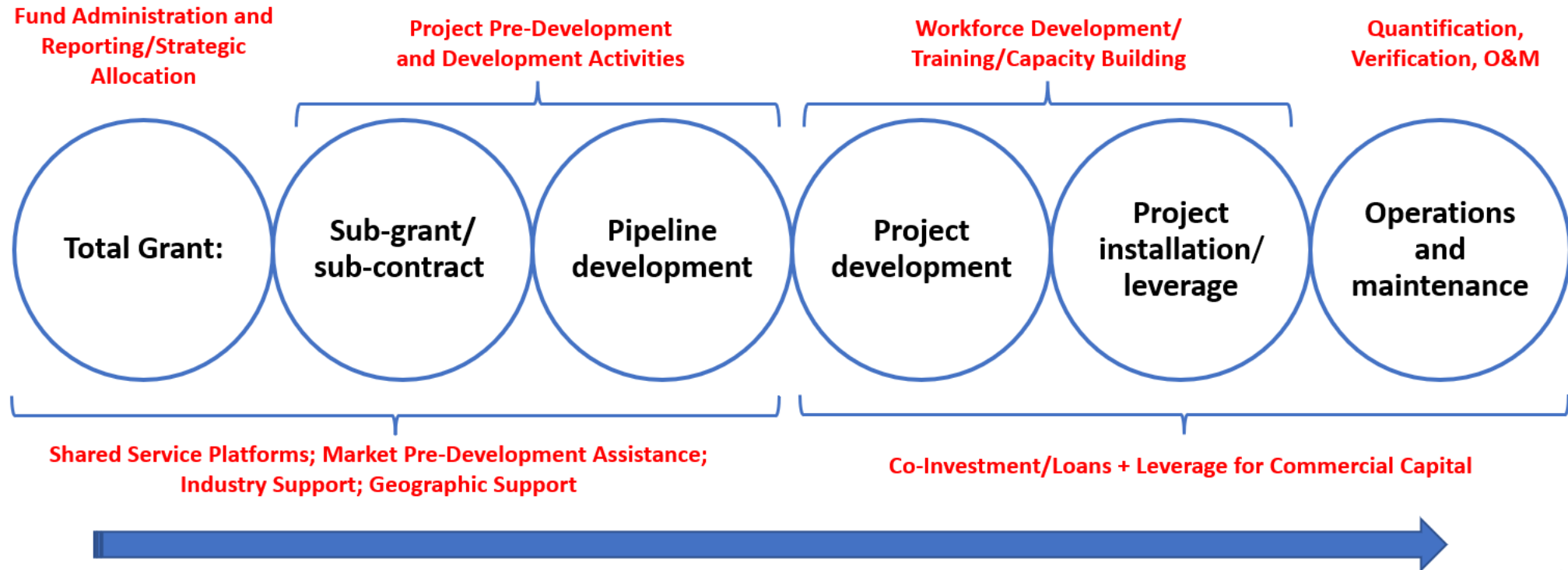
Potential to ask organizations from discrete financial sub-sectors to collaborate to create flexible capital stacks that meet the unique needs of disadvantaged communities.

# GHGRF Charge – Program Structure

## Eligible Recipient(s)

*Charge Question II.a.i: Who could be eligible entities and/or indirect recipients under the GHGRF?*

### Strategic Allocation of Capital Along Value-Chain of Activities



Capacity to leverage private sector capital to expand the reach of the program will be an important consideration.

## GHGRF Charge – Program Structure

# Eligible Recipient(s): JEDI\* Lens

*Charge Question II.a.ii: What eligible entities and/or indirect recipients would best enable funds to reach disadvantaged communities? What are their challenges and opportunities and how can EPA maximize the use of these channels?*

- To meet the conditions for what the GHGRF calls “low-income and disadvantaged communities,” EPA could give special attention and consideration to **diverse representation in the leadership and structure** of the GHGRF direct and indirect recipients. This means that Black, Indigenous, and other People of Color (BIPOC) leadership could be centered in the objectives and structures of the GHGRF.
  - Two potential mechanisms: Special Purpose Credit Programs (“SPCPs”) available for credit unions, including Low-Income Designated Credit Unions (LICUs) and Minority Depository Institutions (MDIs).
    - LICUs: To qualify as a LICU, a majority of the credit union’s membership (50.01 percent) must meet certain low-income thresholds, based on data from the Census Bureau and requirements outlined in the NCUA’s Rules and Regulations (opens new window).
    - MDIs: An MDI may be a federally insured depository institution for which: (1) 51% or more of the voting stock is owned by minority individuals; or (2) a majority of the board of directors is minority and the community that the institution serves is predominantly minority.

## GHGRF Charge – Program Structure

# Eligible Recipient(s): JEDI Lens

*Charge Question II.a.ii: What eligible entities and/or indirect recipients would best enable funds to reach disadvantaged communities? What are their challenges and opportunities and how can EPA maximize the use of these channels?*

- Special Purpose Credit Programs (“[SPCPs](#)”) allow credit unions to offer product enhancements for the benefit of economically disadvantaged classes of persons. SPCPs are explicitly authorized under the Equal Credit Opportunity Act (ECOA) and [Regulation B](#), ECOA’s implementing regulation.
  - Regulators recently have encouraged broader adoption of SPCPs to increase access to credit in underserved communities, and HUD recently issued [official guidance](#) affirming that properly designed SPCPs, including SPCPs by nonprofits for the benefit of economically disadvantaged classes, also are legal under the Fair Housing Act.
  - Significant data and studies show that individuals and families of color have lower levels of [homeownership](#), [wealth](#), and [income](#) than white individuals and families and that borrowers of color have diminished access to affordable credit as compared to white borrowers (including for [home-improvement loans](#) and [auto loans](#)).
  - Redlining – historical and current – has created and entrenched racial bias and systemic inequality into financial systems, leading to economic disadvantage. Disparities extend beyond simply financial; disparities in [health](#), [environmental quality](#), and [access to energy-efficient technology](#) also exist and reflect historical redlining status. Neighborhoods of color also have [less access to solar power](#) than white neighborhoods.

Public data and reporting support that Americans and borrowers of color are economically disadvantaged as a class, and that there are significant additional challenges that could in part be aided through access to clean energy financing and investment.

# Eligible Recipient(s): JEDI Lens

*Charge Question II.a.ii: What eligible entities and/or indirect recipients would best enable funds to reach disadvantaged communities? What are their challenges and opportunities and how can EPA maximize the use of these channels?*

### Low-Income Credit Unions (LICUs)

- Some credit unions are federally chartered (not-for-profit, financial services cooperative) that provide loans for clean energy and energy saving projects, such as electric vehicles, electric bicycles, residential solar electric systems, residential geothermal systems, and other green home improvements.
- Among these credit unions, some have also been designated by the National Credit Union Administration (NCUA) as a [low-income credit union](#).
- Some LICUs offer an SPCP that centers borrowers of color and low-income borrowers.
- The capacity of U.S. credit unions is over \$1.8 trillion, so there is ample space for scaling clean energy loans; for example, one credit union has originated over 7,000 clean energy loans totaling \$110M+ without a single default as of December 2022.

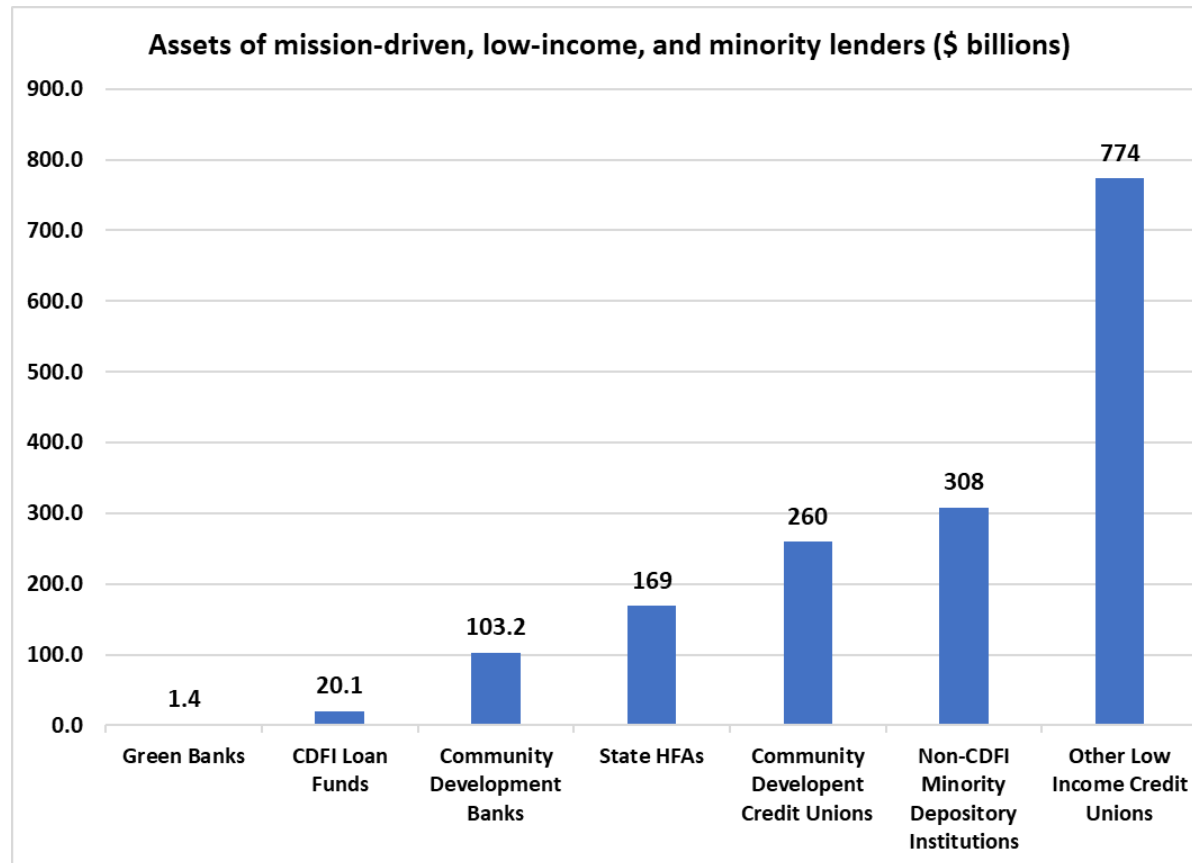
### Minority Depository Institutions (MDIs)

- MDIs serve communities that are disproportionately impacted, physically and economically, by climate change.
- MDIs are often the bank of last resort for consumers and businesses underserved by traditional banks and financial service providers.
- In the United States, access to capital for individuals and business owners is uneven based on race. The racial wealth gap remains significant. In 2019, the median net worth of a typical white household, \$188,200, was 7.8 times greater than that of a typical Black household, \$24,100. (Brookings-Broadly, McComas and Ouazad).
- Some MDIs have already provided climate-friendly loans, including:
  - Developing and launching solar energy loans;
  - Partnering with solar finance experts ;
  - Increasing capital flow to climate finance: purchasing climate focused loans from other mission driven lenders; and
  - Increasing the interest and capacity of other MDIs in climate friendly financing solutions.

## GHGRF Charge – Program Structure

# Eligible Recipient(s): JEDI Lens

**Charge Question II.a.ii: What eligible entities and/or indirect recipients would best enable funds to reach disadvantaged communities? What are their challenges and opportunities and how can EPA maximize the use of these channels?**



1. 2021 American Green Bank Consortium Annual Report
2. CDFI Fund analysis 2020 Annual compliance report data
3. National Community Development Bankers' Association
4. Fitch Ratings; 2021 NCSHA State HFA Fact Book
5. Inclusiv.org
6. National Community Development Bankers' Association
7. Analysis of NCUA data on federally insured credit unions

These institutions are already embedded in LMI and DAC communities; opportunity to transform financial entities to prioritize decarbonization activities and projects in their core strategies.

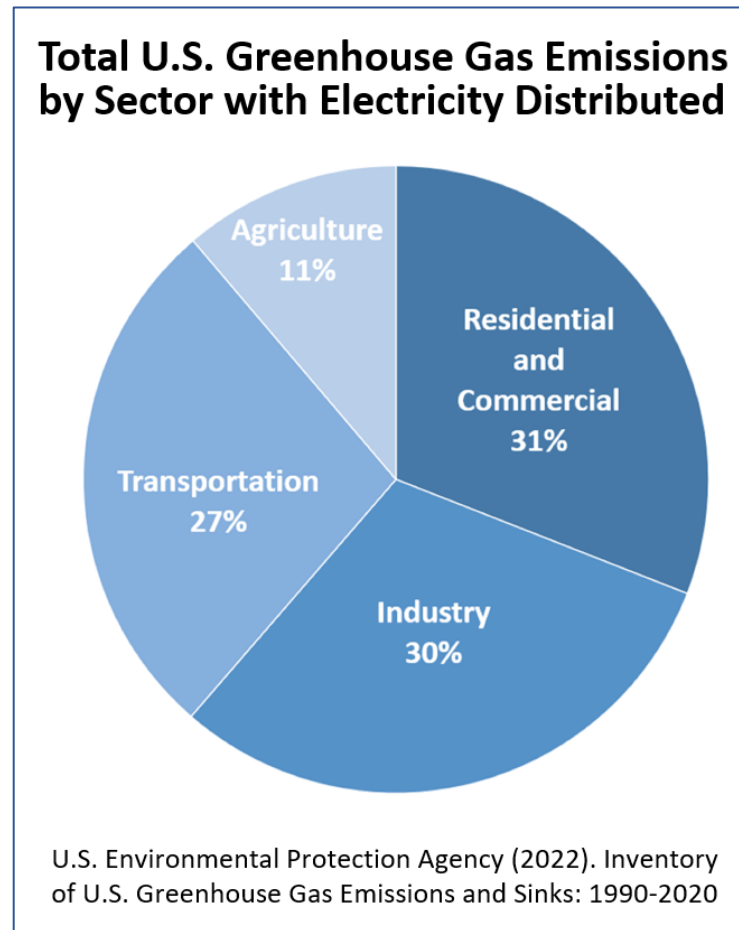
## GHGRF Charge – Program Structure

# Eligible Projects – Types of Projects / Sectors / Market Segments

*Charge Question II.b.i: What types of projects / sectors / market segments could EPA prioritize for funding through the eligible recipients?*

- To frame what types of projects could be considered, need to understand where the problem is. How can it be solved? Who will benefit? For example, assess the largest sources, sectors, locations of GHG emissions to inform consideration.

Where is the problem?



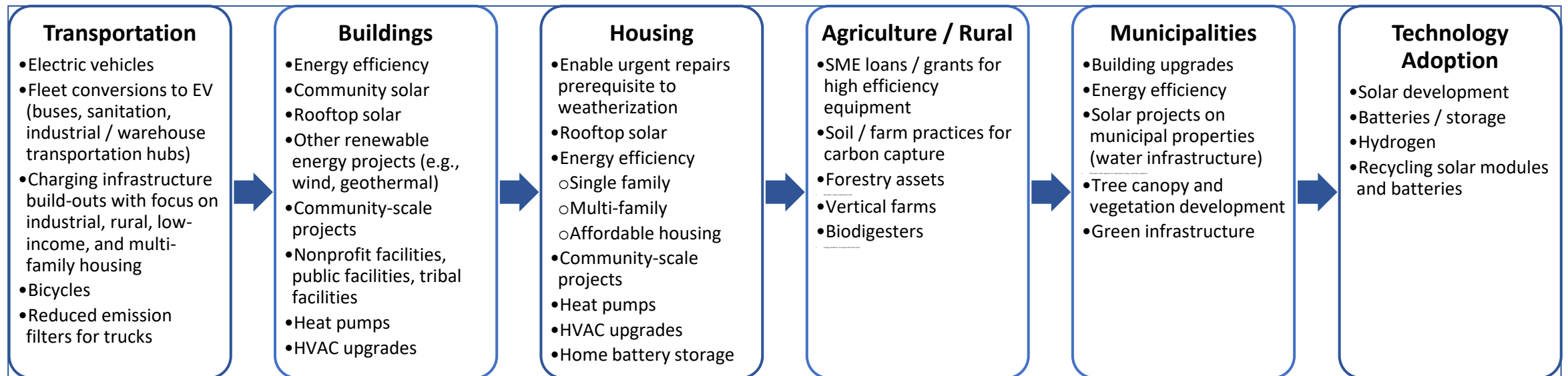
## GHGRF Charge – Program Structure

# Eligible Projects – Types of Projects / Sectors / Market Segments\*

*Charge Question II.b.i: What types of projects / sectors / market segments could EPA prioritize for funding through the eligible recipients?*

- How can the problem be solved? Considerations may include project size, market gaps, GHG reduction capacity, scalability, community reach and access, etc. List below includes representative examples (not comprehensive).

### How can the problem be solved?





## GHGRF Charge – Program Structure

# Eligible Projects – Types of Projects / Sectors / Market Segments

**Charge Question II.b.i: What types of projects / sectors / market segments could EPA prioritize for funding through the eligible recipients?**

- Who will benefit from solving the problem? List below includes representative examples (list not comprehensive).

Sector	Use Case (Examples)	Beneficiary (Examples)
Buildings – Residential	Energy efficiency Community solar / wind Rooftop solar Electrification – cooking/heat	LMI LMI LMI Tribes
Buildings – Commercial / Public	Energy efficiency upgrades HVAC upgrades Renewables	Nursing homes / churches / small business Health centers, small business All the above
Water Infrastructure	Water processing equipment upgrades Alternative energy for utility infrastructure (net-metering)	Water consumers Urban communities / LMIs
Agriculture	Climate-smart forestry Biochar	Rural communities
Industry	Equipment upgrades Tribal oil and gas assets – methane reduction Tribal leasing for solar and wind	LMI communities exposed Tribes
Transportation	Charging infrastructure; fleet conversions – municipal, tribal (e.g., school buses, sanitation trucks, public fleets)	Communities in and around industrial / warehouse areas Users of public transport

# GHGRF Charge – Program Structure

## Eligible Projects – Types of Projects / Sectors / Market Segments

*Charge Question II.b.i: What types of projects / sectors / market segments could EPA prioritize for funding through the eligible recipients?*

- Targeted technical assistance, along the "value chain" of GHG activities to build the clean energy market segment (e.g., for buildings / solar / energy efficiency to LMI communities).

Contractor / Installer / Solar Developer Capacity Building	Workforce Development Programs	Community Outreach and Customer Acquisition	Regulatory Reform Supports	Financial Assistance to Achieve "Pre-requisites" to Building Efficiency and Clean Energy Retrofits	Analysis, Planning, and Contracting Assistance for Building Owners	Lender Operating Platforms
<ul style="list-style-type: none"> <li>• Loans and equity for business growth</li> <li>• Purchasing cooperatives for equipment and services</li> <li>• Knowledge sharing – training, shared documents, tools, templates, networking</li> </ul>	<ul style="list-style-type: none"> <li>• Training certificate programs, on-the-job training supports</li> <li>• For the installer / contractor space</li> <li>• For project developers (e.g., community solar developers, real estate asset managers, and developers)</li> <li>• For lenders</li> </ul>	<ul style="list-style-type: none"> <li>• Solarize and weatherize campaigns</li> <li>• Social marketing and education efforts</li> <li>• Support for community-based planning efforts and for community-based organizations seeking financial assistance</li> </ul>	<ul style="list-style-type: none"> <li>• Incentives and support for building energy codes, community solar enabling laws, and other efforts to lower regulatory barriers to GHG abatement projects</li> <li>• (Knowledge-sharing component to complement "race to the top" strategies)</li> </ul>	<ul style="list-style-type: none"> <li>• New roofs, new electrical services, removal of outdated wiring, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Information infrastructure for building owners to access energy usage data and benchmark building performance</li> <li>• Energy audits / other help to identify and scope GHG abatement opportunities</li> <li>• Contractor vetting / quality control</li> <li>• Assistance in lining up rebates and incentives</li> <li>• Different programs covering single-family and multi-family / commercial real estate / community facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Standardized loan product designs and documentation</li> <li>• Technical analysis and review of proposed energy improvements; contractor vetting and quality control</li> <li>• CRM / tech solutions to speed underwriting, contractor / borrower / lender interaction</li> <li>• Credit enhancement and secondary market vehicles</li> </ul>

Potential to ask organizations from sub-sectors to collaborate and form "clean energy hubs" – work with existing players at national and regional levels + new or expanded players as needed.

# GHGRF Charge – Program Structure

## Eligible Projects – Barriers, Gaps to Fill, and Strategies

**Charge Question II.b.ii.1: What are the barriers to private sector capital?**

**Charge Question II.b.ii.3: What project-level gaps could the GHGRF fill for each type of project? What form could capital take to fill these gaps?**

Barriers to Private Capital (II.b.ii.1)	Gaps GHGRF Could Fill (II.b.ii.3)	Forms of Capital
<p><u>Project Level:</u></p> <ul style="list-style-type: none"> <li>• Underwriting risk (payback period, return on investment, revenue vs. cost)</li> <li>• Ability to demonstrate energy savings</li> <li>• Technical expertise</li> <li>• Fragmentation</li> <li>• Lack of track record</li> <li>• Quality control</li> <li>• Tenor (long-term)</li> <li>• Operations and maintenance</li> <li>• Pre-requisites (e.g., repairs)</li> <li>• Project development / supply chain</li> <li>• Scale (e.g., C-PACE)</li> <li>• On-bill financing resistance (utility)</li> <li>• Administrative resistance (PACE)</li> </ul>	<ul style="list-style-type: none"> <li>• Technical assistance including [cost savings analysis, education, adoption requirements, etc.]</li> <li>• Pre-condition assistance including [grants for home repairs enabling weatherization]</li> </ul>	<ul style="list-style-type: none"> <li>• Clean energy loans – single family, multi-family, commercial</li> <li>• Energy efficiency loans</li> <li>• Revolving loan funds</li> <li>• EV auto loans</li> <li>• Unsecured loans</li> <li>• Blended finance</li> <li>• Equipment and appliance loans (e.g., HVAC, energy efficient appliances)</li> <li>• C-PACE loans (Commercial Property Assessed Clean Energy loans)</li> <li>• Tariff on-bill repayment loans</li> <li>• Pay-for-performance contracting mechanisms</li> </ul>
<p><u>Borrower Level:</u></p> <ul style="list-style-type: none"> <li>• Credit risk</li> <li>• Ability to repay</li> <li>• Uptake</li> <li>• Adoption</li> <li>• Split incentives (tenant / owner)</li> </ul>	<ul style="list-style-type: none"> <li>• Market development assistance including [information campaigns, available incentives, community programs]</li> <li>• Funding collaboration development including [local funding campaigns, community wide pools, etc.]</li> <li>• Provides access to financial products across all borrower types and levels the playing field</li> </ul>	<ul style="list-style-type: none"> <li>• Green mortgages</li> <li>• Small business loans</li> </ul>
<p><u>Capital provider:</u></p> <ul style="list-style-type: none"> <li>• Balance sheet equity</li> <li>• Lack of loan servicing platform</li> <li>• Lack of shared services (e.g., IT, insurance)</li> <li>• Lack of credit enhancements</li> <li>• Lack of climate impact reporting infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Balance sheet equity</li> <li>• Credit enhancements: Loan loss reserves, interest rate buy-downs, guarantees</li> <li>• Technical assistance</li> </ul>	

## GHGRF Charge – Program Structure

# Eligible Projects – Barriers, Gaps to Fill, and Strategies

*Charge Question II.b.ii.4: Beyond assembling the capital stack for a deal, what other barriers and constraints exist that could constrict the pipeline of successful projects? What program strategies are needed to respond to these barriers and constraints?*

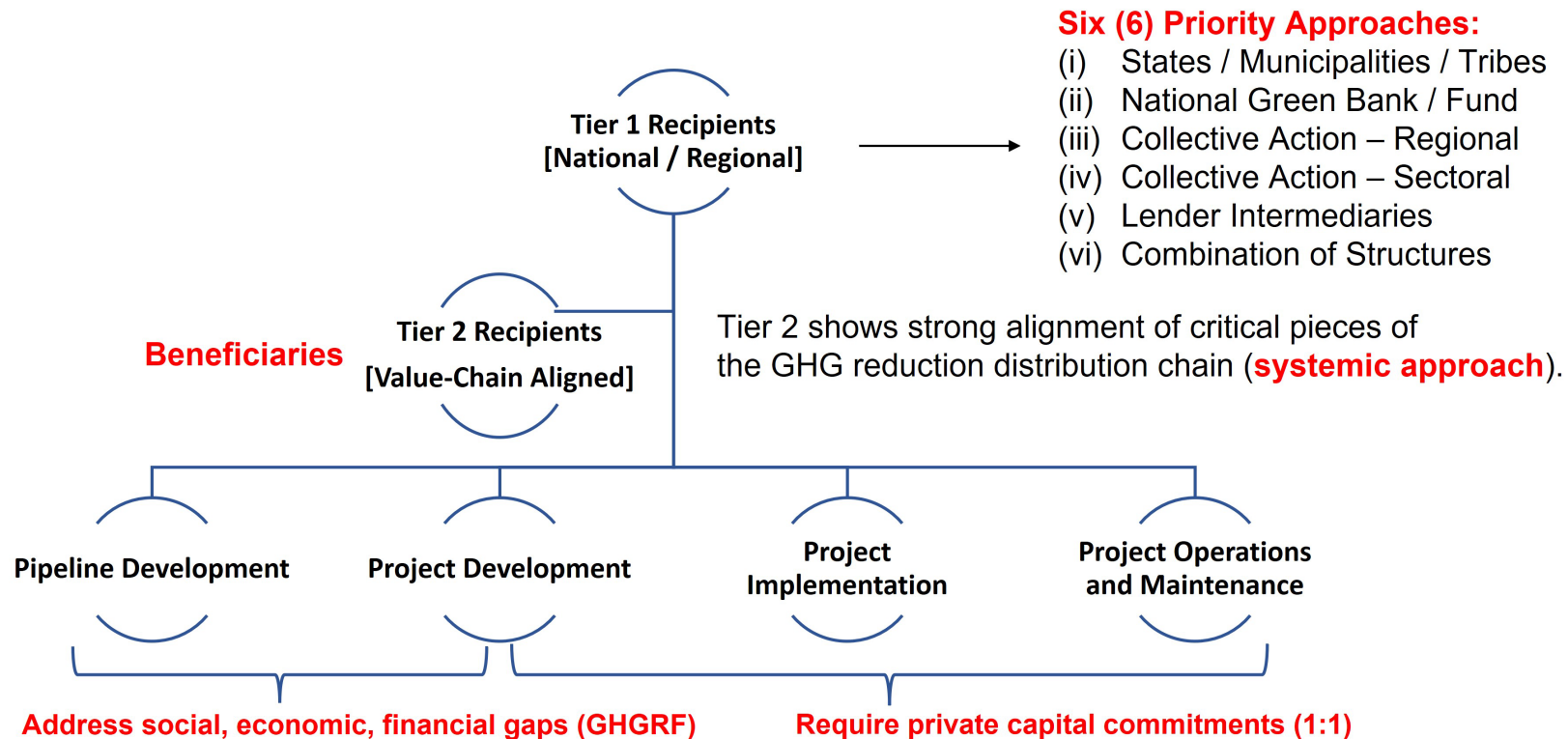
- Barriers, examples, and strategies listed below are representative examples (not comprehensive).

Barrier	Project Examples	Strategies
Uptake – See LBNL study on driving demand for home improvements	Home improvements	Community-level programs
Interest – Commercial building owner	Energy efficiency, renewable energy, HVAC upgrades, C-PACE	Demonstrated interest, commitment, or pipeline before funding program established
Prerequisites	<ul style="list-style-type: none"> <li>• Home needs basic repairs (e.g., new roof) before energy efficiency upgrades would be viable</li> <li>• Commercial building needs basic energy efficiency upgrades before solar would be viable</li> </ul>	Coordination with State Energy Offices / SEP, pre-development support
Scale – Aggregate impact	Fleet conversions	Systemic programs, collaboration with government agencies

## GHGRF Charge – Program Structure

# Structure of Funding – Design Requirements

*Charge Question II.c.i: How could EPA address these issues through program design?*



EPA has an opportunity to create program structures that address barriers and directly support scaled deployment across defined value chains, with emphasis on filling gaps that prohibit expansion and benefits to low-income communities.

# Structure of Funding – Compliance and Streamlining

### ***Charge Question II.c.i: How could recipients comply with relevant federal requirements?***

- This workgroup reviewed and discussed this question at a high level and in coordination with the other GHGRF charge workgroups.

### ***Charge Question II.c.i: How can EPA streamline the distribution of funds so that applicable federal and state review can be accomplished in a coordinated and efficient manner?***

- Evaluating pros / cons (strengths / weaknesses) of a range of potential options.
- Options include potentially one, few, or many direct recipients:
  - States / Municipalities / Tribes;
    1. State Green Banks / Infrastructure Funds / Bond Funds.
    2. State Clean Water Revolving / Clean Energy Funds.
    3. Tribal Entities / Indian Energy Service Centers / Branch of Tribal Climate Resilience.
  - [Single Entity] National Green Bank / Fund;
  - Multiple potential recipients; and
    1. Green Funds.
    2. Collective Action – Regional.
    3. Collective Action – Sectoral.
    4. Lender Intermediaries.
  - Mixed approach (combination of above).

# Evaluation of Structure Options

- Focus on six (6) major potential structure options:
  - 1) States / Municipalities / Tribes;
  - 2) [Single Entity] National Green Bank / Fund;
  - 3) Collective Action – Regional;
  - 4) Collective Action – Sectoral;
  - 5) Lender Intermediaries; and
  - 6) Combination of Structures.
- Strengths and weaknesses of each option based on proposed design requirements.

## GHGRF Charge – Program Structure

# 1) States / Municipalities / Tribes

**Strategy:** Solicit competitive proposals from states, municipalities, and tribes and/or allocate funding based on an EPA-established distribution methodology to qualified applicants.

- States / municipalities / tribes would then redeploy funds to other eligible recipient(s), indirect recipient(s), and for technical assistance, and perhaps directly to projects.

### **Ask applicant(s) to:**

- Describe how they will allocate GHGRF funds across their state / municipality / tribe.
- Leverage existing state / municipal / tribal organizations and capacities.
- Underscore how funds will be directly invested in, address barriers to, and/or benefit specific disadvantaged communities in the state / municipality / tribe.
- Demonstrate success with deploying capital and innovation that drives additionality in GHG funding and reductions.

### **EPA Methodology:**

- EPA could manage award from the federal level, potentially with internal teams providing first-level review in relation to requirements and rankings, and expert panels providing second-level review.
- EPA could use a hybrid award model (like WIFIA) that would create an allocation methodology, with funding contingent upon meeting qualifications and conditions under the competitive award process.



## GHGRF Charge – Program Structure

# 1) States / Municipalities / Tribes

### Strengths / Rationale

- Equitable access to funds for qualified applicants.
- Public and transparent process to capital distribution.
- State-level expertise addresses unique needs of each state related to LMI, GHG reductions, leverage, etc.
- Many states have well established infrastructure to address GHG solutions (e.g., State Green Banks).
- Some tribal fund mechanisms exist that are better equipped to deal with tribal dynamics.
- Some states have preexisting state-wide GHG reduction laws and funds that can be leveraged.
- Preexisting state infrastructure does not have to be created and could be utilized in the first 180 days to ensure expeditious distribution of funds.

### Weaknesses / Challenges

- The competitive application process may disadvantage states / municipalities / tribes where political priorities don't align with statute.
- Limits coordination across regions and sectors that could strengthen outcomes.
- Some states have much less existing infrastructure to receive and distribute funds to disadvantaged communities.
- There may be differences in definitions between federal and state laws.

# 2) National Green Bank / Fund

**Strategy:** Solicit competitive proposals from entities to create and manage a single National Green Bank / Fund.

- The National Green Bank / Fund would then redeploy funds to other eligible recipient(s), indirect recipient(s), and for technical assistance, and perhaps directly to projects as well.

**Ask applicant(s) to:**

- Describe how they will allocate GHGRF funds across the country along a value chain that leads to robust project implementation.
- Detail how funds would address GHG reduction objectives at scale through leveraging existing relationships, organizations and capacities on a national scale.
- Underscore how funds will be directly invested in, address barriers to, and/or benefit disadvantaged communities on a national scale.
- Demonstrate success and efficiency with deploying capital and innovation that drives additionality in GHG funding and reductions.
- Describe how they will retain, manage, recycle, and monetize repayments to ensure continued operability at a national scale.

**EPA Methodology:**

- EPA could manage award from the federal level, potentially with internal teams providing first-level review in relation to requirements and rankings, and expert panels providing second-level review.
- EPA may impose sub-awardee criteria consistent with applicable guidelines.

# 2) National Green Bank / Fund

## **Strengths / Rationale**

- Reduced administrative burden to EPA through centralized management.
- Agreements with the funded entity could be structured to provide flexibility over time, allowing shifts in strategy.
- Provides broadest level of ability for the intermediary to claw back funds and redistribute them, including across regions and sectors, to the best opportunities.
- Probably the strongest structure to administer a “race to the top” strategy (inter-state competition based on regulatory reforms) over time.
- Broad network of other eligible recipient(s) currently exist for downstream allocation.

## **Weaknesses / Challenges**

- Elevated management challenge and longer ramp-up time to operationalize.
- Potential multiple layers of intermediation before funds flow to end users.
- Concentration of funds in one entity elevates financial management and political risks.
- Broad scope could create challenges in planning across the whole value chain for all sectors, engaging stakeholders broadly, responding to individual communities.
- Requires new capacity / entity to address the broad remit and requirements, which could delay timely distribution of funds.

### 3) Collective Action – Regional

**Strategy:** EPA could set forth a pot of funding for regional approaches by either designating a set of regions (could be EPA regions or other) or by seeking regional partnerships as determined by the applicant(s).

- Ask to see applications from partners within the regions (e.g., lead eligible recipient together with indirect recipient(s), technical assistance providers, other key players).
- Amounts to a series of “regional coordinators ” to support GHGRF deployment.

**Ask applicant(s) to:**

- Identify regional opportunities, barriers, and priorities for GHG reduction.
- Describe how the regional partnership would work together to implement a comprehensive strategy responding to regional needs and interests, including on-the-ground delivery of projects and O&M.
- Describe how the initiative would be quarterbacked.
- Address how funds would address specific GHG reduction objectives and barriers within its regional footprint.
- Underscore how funds will be directly invested in, address barriers to, and/or benefit disadvantaged communities.
- Demonstrate success with deploying capital and innovation that drives additionality in GHG funding and reductions.
- Describe how they will retain, manage, recycle, and monetize repayments to ensure continued operability.

**EPA Methodology:**

- EPA could fund at least one application per region.
- EPA could specifically request applications from regions that are underserved or lack capacity.

### 3) Collective Action – Regional

#### Strengths / Rationale

- Encourage applicant(s) to think about all the partnerships needed to leverage resources, build a robust project pipeline, and ensure that strong implementation capacity is in place.
- Narrowed geographic focus allows for deeper thinking and a more tailored approach to regional needs.
- Still allows EPA to manage a more limited number of regions.
- Potential identification of community-level collaborations within regions.
- If aligned with EPA regions, potentially some ease of administration for EPA using regional offices.
- Regional intermediary could exercise clawback at regional level to re-allocate among regional entities.

#### Weaknesses / Challenges

- Requires potential new capacity or entity to address the “collective action” requirements.
- Some structures might be better supported at a national scale (e.g., secondary market infrastructure, operating platforms for lenders).
- Management of strategies across different sectors within a region would still be complex and lack consistency and standardization.
- Some EPA regions are not ideally drawn for easy regional collaboration (e.g., Region 2 – NY, NJ + PR / USVI).

# 4) Collective Action – Sectoral

**Strategy:** EPA would ask applicant(s) to propose a strategy to address a particular sector (e.g., multifamily housing, single-family home retrofits, EVs, community solar).

- Examine barriers and opportunities related to the value chain of activities to generate GHG reductions including funding and financing, consumer demand generation, training / technical assistance / capacity-building needs, workforce development and supply chain issues; *Variant: EPA could invite sectoral collective applications within specific regions (such that the total # of applications funded = # of funded sectors x # of funded regions).*

### Ask applicant(s) to:

- Pull together partnerships with all the stakeholders needed to address the value chain within a sector (“build the ecosystem”).
- Define sector(s), focus on financing needs and non-financing barriers.
- Describe how funds would address GHG reduction objectives within its sector and timelines.
- Underscore how funds will be directly invested in, address barriers to, and/or benefit disadvantaged communities.
- Demonstrate success with deploying capital and innovation that drives additionality in GHG funding and reductions.
- Describe how they will retain, manage, recycle, and monetize repayments to ensure continued operability.

### EPA Methodology:

- EPA could define sectors and fund at least one application per sector (e.g., low-income housing, commercial buildings, water infrastructure, agriculture, industry, transportation).
- Independent sector experts could serve on selection committees.

# 4) Collective Action – Sectoral

## Strengths / Rationale

- Promotes innovative thinking and collaboration across the whole value chain – demand generation, pipeline creation, implementation, O&M.
- EPA could make determinations about certain sectors where it wants to make larger investments / perceives greater opportunities.
- Greater possibility to build platforms that facilitate investment in a specific sector (e.g., Smart-E for single family housing energy retrofits).
- Several entities are well positioned to run a sector-based approach.

## Weaknesses / Challenges

- National sectoral strategies would still need to account for differences from region to region (e.g., different regulatory regimes, electricity pricing and markets, climate factors in building design).
- Not that many truly national players with a focus on one specific sector, although there are some.
- Going to a sectors-by-regions approach increases the number of funded applications and EPA management challenges.
- Focus on sectors may limit types of solutions.

# 5) Lender Intermediaries

**Strategy:** Channel money to green lending programs through existing and established intermediaries.

**Ask applicant(s) to:**

- Describe the existing network of lending organizations they are supporting and the strategies these organizations are using to finance GHG reduction.
- Demonstrate the strength and nature of that intermediary's relationship with the organizations in the network.
- Detail sectors and geographies served.
- Show track record of engagement in low-income communities and green lending.
- Provide network-wide leverage, financing deployment, and GHG reduction goals and supports that would be provided (e.g., TA, training, capacity building) to both lenders and other key players in the value chain.
- Demonstrate success with deploying capital and innovation that drives additionality in GHG funding and reductions.
- Describe how they will retain, manage, recycle, and monetize repayments to ensure continued operability.

**EPA Methodology:**

- EPA could issue awards to select intermediaries targeting a specific financial sector.
- Eligibility for secondary recipient(s) could be tied to sector specialization.



# 5) Lender Intermediaries

## Strengths / Rationale

- Easily the fastest time to market of any of the options discussed here – the intermediaries and their network relationships already exist.
- Relatively low administrative burden to EPA – fund four (4) or five (5) intermediaries.
- Provides ability for the intermediaries to claw back unused funds and redistribute them, within network, to the best performers.
- Diversifies risks compared to funding a single applicant.
- Individual lenders could have flexibility to make plans tailored to the specific sectors and communities they serve and stakeholders they partner with.

## Weaknesses / Challenges

- Has the potential for fragmentation in terms of inability to encourage lenders of different stripes to work together.
- Challenge to ensure that lenders invest adequately in other value chain supports (e.g., TA or capacity building for communities, clean energy project developers).
- The broad scope of activities in any given lender network could create challenges in planning and coordination at the network intermediary level.
- Current intermediaries have not operated at the scale required for the GHGRF; therefore, there's some management and execution risk with ramping up capacity and capabilities.

# 6) Combination of Structures

**Strategy:** EPA could allocate portions of the GHGRF for national, state, regional, sectoral, and direct solutions. Competition would occur within each.

- Structure would examine barriers and opportunities along the GHG value chain, including financing, consumer demand generation, training / technical assistance / capacity-building, workforce development, and supply chain issues.

### **Ask applicant(s) to:**

- Pull together partnerships with all the stakeholders needed to address the value chain in each specific structure.
- Focus on financing needs and non-financing barriers.
- Define focus in state / region / sector.
- Detail how funds would address GHG reduction objectives within its targeted footprint (national, regional, state, sector).
- Underscore how funds will be directly invested in, address barriers to, and/or benefit disadvantaged communities.
- Demonstrate success with deploying capital and innovation that drives additionality in GHG funding and reductions.
- Describe how they will retain, manage, recycle, and monetize repayments to ensure continued operability.

### **EPA Methodology:**

- EPA could fund a cohort of applicant(s) with each major structure represented.
- Independent experts could serve on selection committees for each type of program.

# 6) Combination of Structures

## **Strengths / Rationale**

- Reduces risk by distributing funds across a broader universe of participants (portfolio effect).
- Promotes innovative thinking and collaboration across the whole value chain – demand generation, pipeline creation, implementation, O&M.
- Allows EPA determinations about certain sectors and regions with opportunities for larger or more critical capacity investments.
- Creates balance of scale while ensuring underserved communities are represented in the process.
- Greater possibility to build platforms that facilitate investment in a specific region or sector without sacrificing national-level capacity.
- Several entities are well positioned to compete in one or more priority structure pools.

## **Weaknesses / Challenges**

- Increases total number of funded applications and EPA management challenges.
- Trade-off between EPA challenge in program oversight and fund allocation versus risks to concentration of funds in a single entity.

## GHGRF Charge – Program Structure

# Potential Design Requirements – EPA Matrix

*Charge Question II.c.i: Are there any potential program design requirements that would impact the ability of recipients to use the GHGRF program funds?*

Potential Program Design Requirements*	Strengths / Rationale	Weaknesses / Challenges
Federal funding requirements	<ul style="list-style-type: none"> <li>Reasons these work</li> </ul>	<ul style="list-style-type: none"> <li>Reasons these are burdens</li> </ul>
Financial capacity to manage funds		
Governance		
Metrics / reporting systems		
Due diligence expertise		
Capacity to provide grants / debt / equity / credit enhancements		
Collective action systemic change		
Sector expertise		
Technology expertise		
Community access / LMI reach		
GHG reduction capacity		
Leverage private capital		

\*Assessed in alignment with GHGRF Charge Workgroups 1 (Objectives) and 3 (Execution, Reporting, and Accountability)

## GHGRF Charge – Program Structure

# Thank You!

EFAB GHGRF Charge – Program Structure Workgroup			
Name	Affiliation	Location	Sector
Lori Collins (co-chair)	Owner and Principal, Collins Climate Consulting	Charlotte, NC (EPA Region 4)	Business – Industry
Ashley Allen Jones (co-chair)	Founder and Chief Executive Officer, i2 Capital	Washington, DC (EPA Region 3)	Business – Financial Services
Stacy Brown	President and Chief Executive Officer, Freberg Environmental, Inc.	Denver, CO (EPA Region 8)	Business – Financial Services
Jeff Diehl	Chief Executive Officer, Rhode Island Infrastructure Bank	Providence, RI (EPA Region 1)	State / Local Government
Eric Hangen	Senior Research Fellow, Center for Impact Finance, Carsey School of Public Policy, University of New Hampshire	Danby, VT (EPA Region 1)	Academic
Craig Holland	Senior Director of Urban Investments, The Nature Conservancy	Arlington, VA (EPA Region 3)	Environmental / Non-Governmental Organization
Craig Hrinkevich	Public Finance Team – New Jersey Managing Director, Robert W. Baird & Company, Inc.	Red Bank, NJ (EPA Region 2)	Business – Financial Services
Margot Kane	Chief Investment Officer, Spring Point Partners LLC	Philadelphia, PA (EPA Region 3)	Business – Financial Services
George Kelly	Global Client Strategy Officer, Earth Recovery Partners	Denver, CO (EPA Region 8)	Business – Financial Services
Lawrence Lujan	Executive Director, Taos Pueblo Utility Service	Taos, NM (EPA Region 6)	Tribal Government
Marilyn Waite	Managing Director, Climate Finance Fund	Washington, DC (EPA Region 3)	Business – Financial Services
Gwen Yamamoto Lau	Executive Director, Hawaii Green Infrastructure Authority	Honolulu, HI (EPA Region 9)	State / Local Government

# Execution, Reporting, and Accountability Workgroup

## Workgroup Overview

This workgroup was asked to provide considerations around the GHGRF's execution, reporting, and accountability, including how to meet key deadlines.

### Short-Term – Now through February 12, 2023 (180-day requirement)

- Hold stakeholder engagement strategy, including EFAB input and public request for information
- Identify award priorities and weights
- Develop application review structure
- Develop appropriate recipient(s) terms and conditions
- Identify metrics for success – from application to post-implementation
- Create guardrails for responsible implementation and oversight of funding

### Medium-Term – February 13, 2023 to September 30, 2024 when funds expire

- Make funding selection(s); award, obligate, and initiate funding
- Establish milestones and mechanisms for timely deployment of funds
- Ensure timely reporting and compliance requirements are being met
- Establish a program audit schedule
- Ensure all appropriated funds are awarded by September 30, 2024

### Long-Term – October 1, 2024 and Beyond

- Ensure timely deployment of funds
- Ensure idle funds are redirected to high-performing recipient(s) and/or impactful projects
- Ensure implementation milestones, performance metrics, and compliance requirements are being met
- Conduct ongoing program audits to ensure funds are being used as intended by direct recipient(s) to indirect recipient(s) and eligible projects

## **GHGRF Charge – Execution, Reporting, and Accountability**

# Identify Award Priorities and Weights – \$7B (States / Municipalities / Tribes\*)

1. State, municipal, or tribal finance authorities in existence or enabling legislation to create a finance authority.
  - Extra points for agencies with a track record of financing GHG reduction technologies.
2. Existing clean energy and other GHG reduction financing programs.
  - Extra points for existing financing programs that benefit low-income / disadvantaged communities.
  - Extra points for existing residential rooftop solar financing programs.
3. Existing technical assistance and outreach being conducted.
  - Extra points if technical assistance and outreach are being conducted in low-income / disadvantaged communities.
4. Feasible plan for timely deployment of funds.
  - Extra points for collaboration with relevant public and private partners (e.g., cities, counties, community-based organizations, technical assistance providers).

*\*EPA may consider creating a separate funding bucket for Tribes.*



## GHGRF Charge – Execution, Reporting, and Accountability

# Identify Award Priorities and Weights – \$12B

1. Ability to provide financial assistance to qualified projects at national, regional, state, and local levels.
  - Extra points for an existing entity with a historical track record of deploying funds nationwide.
  - Extra points for having a network of sub-recipient(s) nationwide.
  - Extra points for having a network of sub-recipient(s) with a track record of financing GHG reduction technologies.
  - Extra points for having a network of sub-recipient(s) with existing financing programs that benefit low-income / disadvantaged communities.
  - Extra points for having a network of sub-recipient(s) that have a track record of making investments in qualified projects that would otherwise lack access to financing.
  - Extra points for having a network of sub-recipient(s) that have a track record of leveraging public funds.
2. Ability (or feasible plan) to retain, manage, recycle, and monetize repayments and revenue to ensure continued operability.
  - Extra points for an existing entity that manages, recycles, and monetizes repayments.
3. Provide funding and technical assistance to establish new or support existing public, quasi-public, not-for-profit, or nonprofit entities.
  - Extra points for having a track record of establishing or supporting new/existing public, quasi-public, not-for-profit, or nonprofit low-income focused lenders and capital providers.
4. Feasible plan for timely deployment of funds.
  - Extra points for collaboration with relevant public and private partners (e.g., states, green banks, CDFIs, technical assistance providers).

## GHGRF Charge – Execution, Reporting, and Accountability

# Identify Award Priorities and Weights – \$8B

1. Ability to provide financial assistance to qualified projects at national, regional, state, and local levels in low-income / disadvantaged communities.
  - Extra points for an existing entity with a historical track record of deploying funds nationwide in low-income / disadvantaged communities.
  - Extra points for having a network of sub-recipient(s) nationwide focused in low-income / disadvantaged communities.
  - Extra points for having a network of sub-recipient(s) with existing financing programs that benefit low-income / disadvantaged communities.
  - Extra points for having a network of sub-recipient(s) with a track record of financing GHG reduction technologies in low-income / disadvantaged communities.
  - Extra points for having a network of sub-recipient(s) that have a track record of making investments in qualified projects that would otherwise lack access to financing in low-income / disadvantaged communities.
  - Extra points for having a network of sub-recipient(s) that have a track record of leveraging public funds.
2. Ability (or feasible plan) to retain, manage, recycle, and monetize repayments and revenue to ensure continued operability.
  - Extra points for an existing entity that manages, recycles, and monetizes repayments.
3. Provide funding and technical assistance to establish new or support existing public, quasi-public, not-for-profit, or nonprofit entities.
  - Extra points for having a track record of establishing or supporting new/existing public, quasi-public, not-for-profit, or nonprofit low-income focused lenders and capital providers.
4. Feasible plan for timely deployment of funds.
  - Extra points for collaboration with relevant public and private partners (e.g., states, green banks, CDFIs, technical assistance providers).

## **GHGRF Charge – Execution, Reporting, and Accountability**

### Develop Application Review Structure – \$7B (States / Municipalities / Tribes)

1. EPA to review and score applications based on priorities and weights previously identified (for the \$7B bucket).
2. Funding awarded based on total points scored (including feasibility of implementation and deployment plan).
3. Unawarded funds could remain available for additional applications until September 1, 2024, or be available for reallocation.
4. On September 30, 2024, any remaining unawarded funds could be awarded to an eligible recipient(s) capable of awarding unused funds to states, municipalities, and tribes on an ongoing, competitive basis.
  - The money stays in its intended bucket.

# Develop Application Review Structure – \$20B

1. EPA to review and score applications based on priorities and weights previously identified (for the \$12B and \$8B buckets).
2. Funding awarded based on total points scored (including feasibility of implementation and deployment plan).
3. Unawarded funds (if any) could remain available for additional applications until September 1, 2024.
4. On September 30, 2024, any remaining unawarded funds could be awarded to the eligible recipient(s) with the highest reporting metrics for success as of August 31, 2024.
  - The money stays in its intended bucket.

## Develop Appropriate Recipient Terms and Conditions

- Incorporate positive and negative covenants to ensure compliance in award documents.
- Incorporate a mechanism in award documents that triggers underperforming eligible recipient(s) with idle, undeployed funds to transfer unused funds to high performing eligible recipient(s) in need of additional funding.
- Explore existing federal templates and best practices used to evaluate program effectiveness.
- Reference lessons learned from other existing federal programs to reduce obstacles in assisting and deploying funds into low-income and disadvantaged communities.

## **GHGRF Charge – Execution, Reporting, and Accountability**

# Lessons Learned from EPA Clean Water State Revolving Funds – Section 319 Exemptions

- Section 319 of the Clean Water Act was established in 1987 to address nonpoint source pollution. EPA awards funding to states with a Nonpoint Source Management Program. NY and PA established energy efficiency and renewable energy loans as eligible for CWSRF support under Section 319.
- Most of the projects funded by CWSRFs are large – in the tens of millions of dollars – and are appropriately subject to a variety of federal requirements.
- For residential energy efficiency and non-utility scale clean energy projects, such requirements are impractical and cost prohibitive. Over the past 30 years, EPA has issued guidance that exempts Section 319 projects from many such requirements, enabling the CWSRF program to fund a variety of nonpoint source projects that would have been impossible without such exemptions.
- Section 319 exemptions include:
  - American Iron and Steel provision;
  - National Environmental Policy Act (NEPA); and
  - Davis-Bacon Act.

## GHGRF Charge – Execution, Reporting, and Accountability

# Identify Metrics for Success – From Application to Post-Implementation

Metrics for success, published in an Annual GHGRF Summary Report of eligible recipient(s), may include:

- Total GHG emissions avoided (estimated metric tons CO<sub>2</sub>).\*
  - GHG emissions avoided in low-income / disadvantaged communities (# and % of total).
  - GHG emissions avoided in non-low-income / disadvantaged communities (# and % of total).
- Total funding awarded to eligible recipient(s).
  - Total funding (\$ and %) deployed and invested in low-income / disadvantaged communities.
  - Total funding (\$ and %) deployed and invested in non-low-income / disadvantaged communities.
  - Total funding (\$ and %) deployed to indirect recipient(s).
- Total funding expended by indirect recipient(s).
  - \$ and % of funds deployed and invested in low-income / disadvantaged communities.
    - Number of LMI households served.
    - Estimated energy savings for LMI households.
  - \$ and % of funds deployed and invested in non-low-income / disadvantaged communities.
- Total leverage achieved.
  - \$ and % of leverage (total \$ value of projects completed / total \$ of GHGRF deployed) in low-income / disadvantaged communities.
  - \$ and % of leverage (total \$ value of projects completed / total \$ of GHGRF deployed) in non-low-income / disadvantaged communities.
- Continued operability – Self-sufficiency ratio (earned income / total expenses) for eligible recipients.
- Number of jobs created or retained (EPA may choose to adopt SBA’s jobs created / retained metric).
- Energy savings metrics.

*\*GHG avoided may be reported for Year 1 as well as for life of the system. Recognizing that some investments will unfold over a longer time period, tracking metrics and trends over a longer timeframe may be required.*

## GHGRF Charge – Execution, Reporting, and Accountability

# Responsible Implementation and Oversight of Funds – \$7B

- Timely deployment of funds to eligible recipient(s) (states, municipalities, tribes, and eligible recipient(s)).
  - Direct recipient investments into qualified GHG reduction projects benefitting low-income / disadvantaged communities in the form of loans.
  - Direct recipient investments into low-income / disadvantaged communities in the form of grants, other forms of financial assistance, and technical assistance.
  - Direct recipient deployment to indirect recipient(s).
    - Indirect recipient investments in qualified GHG reduction projects benefitting low-income / disadvantaged communities in the form of grants, loans, or other forms of financial and technical assistance.
- Compliance to ensure investments into low-income / disadvantaged communities benefit them and are not merely located there (e.g., utility scale solar farm located in a low-income / disadvantaged community).
- Community accountability.
  - Diverse board composition.\*
  - Historical track record and clean energy expertise to deploy funds to reduce GHG emissions in low-income / disadvantaged communities.
- Transformative application of funds.
  - Inclusive and non-traditional underwriting and structuring to reach deeper to benefit low-income / disadvantaged communities previously locked out of GHG reduction financing / investments.

*\*Where practicable as it may be difficult for government agencies to achieve as directors may be statutorily appointed.*



## **GHGRF Charge – Execution, Reporting, and Accountability**

# Responsible Implementation and Oversight of Funds – \$12B

- Timely deployment of funds to eligible recipient(s) (non-depository nonprofit organization(s)).
  - Direct recipient investments into qualified GHG reduction projects at the national, regional, state, tribal, and/or local levels.
  - Eligible recipient(s) to prioritize investments in qualified projects that would otherwise lack access to financing.
  - Eligible recipient deployment to indirect recipient(s).
    - Indirect recipient investments in qualified GHG reduction projects.
  - Indirect recipient investments in the form of 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.
- Historical track record and clean energy expertise to deploy funds to reduce GHG emissions.
- Transformative application of funds.
  - Financing mechanisms or structures to attract private capital to leverage funds.
  - Number of new green lending organizations established / supported.
    - Long-term sustainability of green lending organizations receiving GHGRF support.
  - Fiscally responsible fund deployment to ensure continued operability [of GHGRF funds].

## GHGRF Charge – Execution, Reporting, and Accountability

# Responsible Implementation and Oversight of Funds – \$8B

- Timely deployment of funds to eligible recipient(s) (non-depository nonprofit organization(s)).
  - Direct recipient investments into qualified GHG reduction projects benefitting low-income / disadvantaged communities at the national, regional, state, tribal, and/or local levels.
  - Eligible recipient(s) to prioritize investments in qualified projects that would otherwise lack access to financing.
  - Eligible recipient deployment to indirect recipient(s).
    - Indirect recipient investments in qualified GHG reduction projects benefitting low-income / disadvantaged communities.
  - Indirect recipient investments in the form of funding and technical assistance to establish new or support existing public, quasi-public, not-for-project, or nonprofit entities that provide financial assistance to qualified projects.
- Compliance to ensure investments into low-income / disadvantaged communities benefit them and are not merely located there (e.g., utility scale solar farm located in a low-income / disadvantaged community).
- Community accountability.
  - Diverse board composition.\*
  - Historical track record and clean energy expertise to deploy funds to reduce GHG emissions in low-income / disadvantaged communities.
- Transformative application of funds.
  - Inclusive and non-traditional underwriting and structuring to reach deeper to benefit low-income / disadvantaged communities previously locked out of GHG reduction financing / investments.
  - Financing mechanisms or structures to attract private capital to leverage funds.
  - Number of new green lending organizations established / supported.
    - Long-term sustainability of green lending organizations receiving GHGRF support.
  - Fiscally responsible fund deployment to ensure continued operability [of GHGRF funds].

*\*Where practicable as it may be difficult for government agencies to achieve as directors may be statutorily appointed.*

## GHGRF Charge – Execution, Reporting, and Accountability

# How to ensure GHG emission reductions?

Accountability Strategy	Considerations for EPA
Application Guardrails	<ul style="list-style-type: none"> <li>• Technical knowledge of applicant team @ GHG abatement tech</li> <li>• “Systems change” approach of applicant to achieve scaled impacts</li> <li>• Finance expertise of applicant team</li> <li>• Scale of customer relationships / line of sight to GHG projects of applicant team</li> </ul>
Federal Requirements	<ul style="list-style-type: none"> <li>• How requirements may impact contractor availability for smaller jobs than nonetheless could scale in the aggregate to significant abatement</li> </ul>
Governance	<ul style="list-style-type: none"> <li>• Institute minimum GHG reduction metrics per \$X.XX on the “award level” (not project level) to ensure funds are being deployed as intended – keep in mind time lag to impact for some investments</li> </ul>
Reporting / Metrics	<ul style="list-style-type: none"> <li>• Provide a consistent and understandable methodology to help recipient(s) and subgrantee(s) accurately estimate GHG impacts</li> <li>• Consider when to use “deemed” estimates vs. modeled, measured</li> <li>• Consider award-level instead of project-level performance measurement (across a grantee's portfolio of investments)</li> </ul>
Clawback / Redistribution	<ul style="list-style-type: none"> <li>• How application structure / role of intermediaries enhances or limits the ability to redistribute funding from underperforming to higher-performing sector(s) or organization(s)</li> </ul>

## GHGRF Charge – Execution, Reporting, and Accountability

# How to ensure accountability to low-income and disadvantaged communities?

Accountability Strategy	Considerations for EPA
Application Guardrails	<ul style="list-style-type: none"> <li>Track record / expertise of applicant(s) in serving LMI and DAC communities</li> <li>Depth of private-public partnerships, including community-based organizations</li> </ul>
Federal Requirements	<ul style="list-style-type: none"> <li>EPA needs to comply with Federal law; however, these requirements may negatively impact the ability of LMI and DAC-serving projects to be implemented</li> <li>To facilitate projects benefiting low-income / disadvantaged communities, EPA could adopt waivers and exemptions currently used by EPA and other federal agencies (e.g., EPA Section 319: American Iron &amp; Steel provision and NEPA &amp; Davis-Bacon exemptions; USDA RESP: “Buy-American” Requirement (7 CFR Part 1787); NEPA Categorical Exclusions (7 CFR Part 1970 Subpart B); and waiver of Davis-Bacon requirement)</li> </ul>
Governance	<ul style="list-style-type: none"> <li>As practicable, Board representation from LMI and DAC communities on recipient and indirect recipient / subgrantee organization(s)</li> <li>Subsequent award funding dependent on investments benefitting low-income / disadvantaged communities</li> </ul>
Reporting / Metrics	<ul style="list-style-type: none"> <li>Metrics to capture meaningful co-benefits to communities such as job creation, energy savings, wealth building</li> <li>Metrics to track number and \$ value of projects serving / benefiting (not just “in”) LMI communities</li> </ul>
Clawback / Redistribution	<ul style="list-style-type: none"> <li>How application structure / roles of intermediaries enhances or limits the ability to redistribute funding from underperforming to higher-performing sector(s) or organization(s)</li> </ul>

## GHGRF Charge – Execution, Reporting, and Accountability

# How to ensure leveraging and recycling of the grants?

Accountability Strategy	Considerations for EPA
Application Guardrails	<ul style="list-style-type: none"> <li>• Financial capacity / track record of recipient organization(s)</li> <li>• Finance expertise of recipient(s) / indirect recipient(s) and subgrantee(s)</li> </ul>
Federal Requirements	<ul style="list-style-type: none"> <li>• Establish minimum and target program leverage requirements (recycled funds can be leveraged multiple times) on the award level:               <ul style="list-style-type: none"> <li>○ Minimum: With initial funding</li> <li>○ Target: By September 30, 2031</li> </ul> </li> </ul>
Governance	<ul style="list-style-type: none"> <li>• Subsequent award funding dependent on achievement of leverage metric milestones</li> </ul>
Reporting / Metrics	<ul style="list-style-type: none"> <li>• Define a consistent measure for leverage (e.g., GHGRF \$ / total project costs funded)</li> <li>• Consider how leverage may also happen at multiple levels</li> <li>• Take the long view: Consider how capacity-building investments in a defined value chain may ultimately unlock larger volumes of investment than focusing on levering capital for “shovel-ready” projects</li> </ul>
Clawback / Redistribution	<ul style="list-style-type: none"> <li>• How application structure / roles of intermediaries enhances or limits the ability to redistribute funding from underperforming to higher-performing sector(s) or organization(s)</li> </ul>

## GHGRF Charge – Execution, Reporting, and Accountability

# How to ensure additionality of projects?

Accountability Strategy	Considerations for EPA
Application Guardrails	<ul style="list-style-type: none"><li>• Types of projects that applicant(s) propose to invest in (EPA could encourage / prioritize applications focusing on project types it thinks are most additional)</li><li>• Finance expertise of applicant team (ability to ID project not needing subsidy)</li></ul>
Federal Requirements	<ul style="list-style-type: none"><li>• How requirements might help to avoid funding projects with negative environmental impacts</li><li>• How requirements might create costs</li></ul>
Governance	
Reporting / Metrics	<ul style="list-style-type: none"><li>• Additionality is difficult to report / confirm directly; consider proxies (such as project types or community types that historically are challenged to access capital)</li></ul>
Clawback / Redistribution	<ul style="list-style-type: none"><li>• How application structure / roles of intermediaries enhances or limits the ability to redistribute funding from underperforming to higher-performing sector(s) or organization(s)</li></ul>

## GHGRF Charge – Execution, Reporting, and Accountability

# How to promote continued operability?

Accountability Strategy	Considerations for EPA
Application Guardrails	<ul style="list-style-type: none"> <li>• Financial capacity / track record of recipient organizations</li> <li>• Finance expertise of recipient(s) / indirect recipient(s) and subgrantee(s)</li> <li>• Treasury function expertise of applicant team</li> </ul>
Federal Requirements	<ul style="list-style-type: none"> <li>• Consider whether permanent (vs. temporary) restriction of funds may promote recycling but negatively impact ability for leverage, ability to make non-recycled but highly additional investments</li> </ul>
Governance	<ul style="list-style-type: none"> <li>• Fiduciary expertise of board members</li> </ul>
Reporting / Metrics	<ul style="list-style-type: none"> <li>• Financial sustainability metrics for applicant(s), direct recipient(s), indirect recipient(s) (e.g., net income, self-sufficiency)</li> <li>• Take the long view – Consider how market-building activities that don't recycle funds may set the table for greater business opportunities and hence longer-term operability of recipient(s)</li> </ul>
Clawback / Redistribution	<ul style="list-style-type: none"> <li>• Consider how intermediation structures may help to mitigate risk of funding riskier indirect recipient(s) / subgrantee(s) by phasing investment over time</li> </ul>

## GHGRF Charge – Execution, Reporting, and Accountability

# Thank You!

EFAB GHGRF Charge – Execution, Reporting, and Accountability Workgroup			
Name	Affiliation	Location	Sector
Ted Chapman (co-chair)	Investment Banking Analyst, Hilltop Securities, Inc.	Dallas, TX (EPA Region 6)	Business – Financial Services
MaryAnna Peavey (co-chair)	Grants and Loans Bureau Supervisor, Idaho Department of Environmental Quality	Boise, ID (EPA Region 10)	State / Local Government
Ashley Allen Jones	Founder and Chief Executive Officer, i2 Capital	Washington, DC (EPA Region 3)	Business – Financial Services
Stacy Brown	President and Chief Executive Officer, Freberg Environmental, Inc.	Denver, CO (EPA Region 8)	Business – Financial Services
Jeff Diehl	Chief Executive Officer, Rhode Island Infrastructure Bank	Providence, RI (EPA Region 1)	State / Local Government
Phyllis Garcia	Treasurer, San Antonio Water System	San Antonio, TX (EPA Region 6)	State / Local Government
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George Kelly	Global Client Strategy Officer, Earth Recovery Partners	Denver, CO (EPA Region 8)	Business – Financial Services
Cynthia Koehler	Executive Director, WaterNow Alliance	San Francisco, CA (EPA Region 9)	Environmental / Non-Governmental Organization
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Gwen Yamamoto Lau	Executive Director, Hawaii Green Infrastructure Authority	Honolulu, HI (EPA Region 9)	State / Local Government