EPA Environmental Financial Advisory BoardGHGRF Charge

Public Meeting

December 1, 2022

What is EFAB?

EFAB is a Federal Advisory Committee, an independent advisory body chartered under the Federal Advisory Committee Act (FACA) with members representing various constituencies

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

For more information on EFAB, visit: https://www.epa.gov/waterfinancecenter/efab



EFAB's work focuses on:

Environmental Financial

Advisory Board

Public Meetings

EFAB Workgroups

Charter and Guidance

Activity Summaries,

Publications, and Reports

- · 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)

View EPA's news release

On this page:

- New Membership for EFAB
- · EFAB Letter to EPA Administrator Regan
- Upcoming EFAB Public Meetings and Webinars
- Recent EFAB Public Meetings and Webinars
- EFAB Workgroups
- EFAB Charter and Guidance
- · EFAB Activity Summaries, Publications, and Reports

Charge Background & 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 zeroemission 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
 - EPA presented and EFAB approved a set of formal charge questions on October 19, 2022
 - Final charge deliverable(s) to EPA on December 15, 2022

Charge Status

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

- 1. Objectives
- 2. Program Structure
- 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 shared today are in no way meant to be exhaustive; they represent deliberations up to this point
- Workgroups have largely been working independently, with some coordination
 - Workgroup integration and coordination will be focus of next two (2) weeks
 - Overlapping themes will be addressed leading up to December 15, 2022

Today – Check in with full EFAB, review workgroup progress to date, and solicit feedback

 Critical to raise any concerns as workgroups head into final two (2) weeks

Upcoming charge schedule

 December 15, 2022 – EFAB Public Meeting to present the final charge deliverable(s) and vote on approval Execution, Reporting, and Accountability Workgroup

Recap of Tasks / Scope

How to meet key deadlines in the:

- Short-term The 180-day requirement
 - Metrics for success From application to post-implementation
 - Responsible implementation and oversight of funding
- Medium-term Next two years before funds expire in 2024
- Long-term Beyond 2024

Charge Question III.a: Given the tight timeline for implementation of the funds, what are key steps that EPA could take in the short- (next 180 days), medium- (next two years before funds expire in 2024), and long-term (beyond 2024)?

Considerations to meet key statutory deadlines:

- Now through February 12, 2023
 - Public comment period Now through December 5, 2022
 - EFAB GHGRF charge deliverable December 15, 2022
 - Identify fund award priorities, including workable metrics for success
 - Develop application review structure and weighting
 - Develop appropriate recipient terms and conditions
 - Reference other federal programs in place to reduce obstacles to assisting and deploying funds into low-income and disadvantaged communities
 - Explore existing federal templates and best practices that are used to evaluate program effectiveness
- February 13, 2023 → September 30, 2024
 - Make funding selection(s); commit and obligate all funding
 - Monitor implementation milestones, including fund expenditure by recipients, to ensure funds are appropriately and sustainably expended
 - Evaluate deployment metrics and impact reporting
- October 1, 2024 → Beyond
 - Monitor implementation milestones, including fund expenditure by recipients, to ensure funds are appropriately and sustainably expended
 - Evaluate program metrics

Metrics for Success – From Application to Post-Implementation

The metrics for success may be published in an Annual GHGRF Summary of Reports from direct recipients. Metrics could include:

- Total GHG emissions avoided (estimated metric tons CO₂)*
 - o GHG emissions avoided in disadvantaged communities (# and % of Total)
 - o GHG emissions avoided in non-disadvantaged communities (# and % of Total)
- Total funding awarded to direct recipients
 - o Total funding (\$ and %) deployed and invested in disadvantaged communities
 - o Total funding (\$ and %) deployed and invested in non-disadvantaged communities
 - Total funding (\$ and %) deployed to indirect recipients
- Total funding expended by indirect recipients
 - o \$ and % of funds deployed and invested into disadvantaged communities
 - Number of LMI households served
 - Estimated energy savings for LMI households
 - o \$ and % of funds deployed and invested into non-disadvantaged communities
- Total leverage achieved
 - \$ and % of leverage (total \$ value of projects completed / total \$ of GHGRF deployed) in disadvantaged communities
 - o \$ and % of leverage (total \$ value of projects completed / total \$ of GHGRF deployed) in non-disadvantaged communities
- Continued operability Self-sufficiency ratio (earned income / total expenses) for direct recipients
- # of jobs created or retained (EPA may choose to adopt SBA's jobs created / retained metric)

Charge Question III.b: What types of requirements could EPA establish to ensure the responsible implementation and oversight of the funding?

Existing Federal program examples (not exhaustive)

Program	Strengths*	Weaknesses*
EPA Clean Water State Revolving Fund	 Decades-long track record of success as a federal program Spurs good governance and financial profile among eligible recipients to score high enough to get funded Maximizes use of limited funds 	 Reliant on continuing appropriations GHGRF is perhaps not a "revolving" fund
EPA Nonpoint Source Program (CWA Section 319)	 Includes streamlining policies that could be replicated for the GHGRF A September 2022 update includes EJ and equity considerations language 	 Might require additional state participation to develop eligibility requirements Best fit only for the States / Municipalities / Tribes structure
EPA WIFIA	 EPA's OIG has an existing loan award monitoring process that could be replicated for the GHGRF 	 Size / scale bias that might be many times larger than a typical eligible recipient Does it place extra burden on EPA for post-closing activities and monitoring? Timeline from LOI to loan closure is prolonged vs. timing requirements in the GHGRF timeline mandates
HUD CBDG	 Formulaic. Apolitical. Easily replicable Includes TA set-asides and targets low- and moderate-income persons 	 Grantees must solicit local citizen input. While this ins never a bad thing, would it conflict with GHGRF timing mandates? Eligible recipients do not directly include non-profits, NGOs, or businesses
ARRA	 Somewhat comparable example of a targeted federal stimulus Included renewable energy allocations 	 Mixed results; net impact reduced over time by sequestration Monitoring and auditing were challenging
ARPA	 Good comparable for getting federal money allocated on a short timeline as well as setting "spend by" dates for eligible recipients to use the funds Probably the best fit comparable because it provided funding to both state and local governments as well as those who would also be GHGRF eligible recipients 	 "Need" was mainly defined by previous personal income tax filings (individuals) and not well defined for businesses Too early to know if ongoing monitoring and reporting has been effective

^{*}To be integrated with Workgroup 1 (Objectives) and Workgroup 2 (Program Structure)

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

- Timely deployment of funds to direct recipients (states, municipalities, tribal governments, and eligible recipients)
 - Direct recipient investments into qualified GHG reduction projects benefitting disadvantaged communities (DC) in the form of loans
 - Direct recipient investments into DC in the form of grants, other forms of financial assistance, and technical assistance
 - Direct recipient deployment to indirect recipients
 - Indirect recipient investments in qualified GHG reduction projects benefitting DC in the form of grants, loans, or other forms of financial and technical assistance
- Compliance to ensure investments in DC <u>benefit</u> the DC and are not merely located in a DC (e.g., Utility Scale Solar Farm located in a DC)
- Community accountability
 - Diverse board composition*
 - Historical track record and clean energy expertise to deploy funds to reduce GHG emissions in DC
- Transformative application of funds
 - Inclusive and non-traditional underwriting and structuring to reach deeper to benefit DC 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

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

- Timely deployment of funds to direct recipients (non-depository non-profit organization(s))
 - Direct recipient investments into qualified GHG reduction projects benefitting disadvantaged communities
 (DC) at the national, regional, state, tribal, and/or local levels
 - o Direct recipients to prioritize investments in qualified projects that would otherwise lack access to financing
 - Direct recipient deployment to indirect recipients
 - Indirect Recipients investments in qualified GHG reduction projects benefitting DC
 - Indirect investments in the form of funding and technical assistance to establish new or support existing public, quasi-public, not-for-project, or non-profit entities that provide financial assistance to qualified projects
- Compliance to ensure investments in DC <u>benefit</u> the DC and are not merely located in a DC (e.g., Utility Scale Solar Farm located in a DC)
- Community accountability
 - Diverse board composition*
 - Historical track-record and clean energy expertise to deploy funds to reduce GHG emissions in DC

^{*}Where practicable as it may be difficult for government agencies to achieve as directors may be statutorily appointed

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

- Transformative application of funds
 - Inclusive and non-traditional underwriting and structuring to reach deeper to benefit DC previously locked out of GHG reduction financing / investments
 - # of new green lending organizations established / supported
 - Long-term sustainability of green lending organizations receiving GHGRF support
 - Financing mechanisms or structures to attract private and other capital to leverage funds
 - Fiscally responsible fund deployment to ensure continued operability [of GHGRF funds]

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

- Timely deployment of funds to direct recipients (non-depository non-profit organization(s))
 - Direct recipient investments into qualified GHG reduction projects at the national, regional, state, tribal, and/or local levels
 - Direct recipients to prioritize investments in qualified projects that would otherwise lack access to financing
 - Direct recipient deployment to indirect recipients
 - Indirect recipient investments in qualified GHG reduction projects
 - Indirect investments in the form of funding and technical assistance to establish new or support existing public, quasi-public, not-for-project, or non-profit 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
 - # 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 GHGR funds]

Charge Question III.c: What mechanisms could eligible recipients adopt, including governance as well as other mechanisms, to ensure that their applications and subsequent implementation efforts ensure: (1) accountability to low-income and disadvantaged communities; (2) greenhouse gas emission reductions; and (3) the leveraging and recycling of the grants?

Mechanisms to ensure:

(1) Accountability to low-income and disadvantaged communities

Accountability Strategy	Considerations for EPA	
Application Guardrails	 Track record / expertise of applicants in serving LMI and DAC communities Depth of partnerships with community-based organizations 	
Federal Requirements	 How requirements may impact ability of LMI and DAC-serving projects to pencil 	
Governance	 Board representation from LMI and DAC communities on recipient and indirect recipient / subgrantee organizations 	
Reporting / Metrics	 Metrics to capture meaningful co-benefits to communities such as job creation, energy savings, wealth building Metrics to track # and \$ value of projects serving / benefiting (not just "in") LMI communities 	
Clawback / Redistribution	 How application structure / roles of intermediaries enhances or limits the ability to redistribute funding from underperforming to higher-performing sectors or organizations 	

Charge Question III.c: What mechanisms could eligible recipients adopt, including governance as well as other mechanisms, to ensure that their applications and subsequent implementation efforts ensure: (1) accountability to low-income and disadvantaged communities; (2) greenhouse gas emission reductions; and (3) the leveraging and recycling of the grants?

Mechanisms to ensure:

(2) Greenhouse gas emission reductions

Accountability Strategy	Considerations for EPA	
Application Guardrails	 Technical knowledge of applicant team @ GHG abatement tech "Systems change" approach of applicant to achieve scaled impacts Finance expertise of applicant team Scale of customer relationships / line of sight to GHG projects of applicant team 	
Federal Requirements	 How requirements may impact contractor availability for smaller jobs than nonetheless could scale in the aggregate to significant abatement 	
Governance		
Reporting / Metrics	 Provide a consistent and understandable methodology to help recipients and subgrantees accurately estimate GHG impacts Consider when to use "deemed" estimates vs. modeled, measured 	
Clawback / Redistribution	 How application structure / roles of intermediaries enhances or limits the ability to redistribute funding from underperforming to higher-performing sectors or organizations 	

Charge Question III.c: What mechanisms could eligible recipients adopt, including governance as well as other mechanisms, to ensure that their applications and subsequent implementation efforts ensure: (1) accountability to low-income and disadvantaged communities; (2) greenhouse gas emission reductions; and (3) the leveraging and recycling of the grants?

Mechanisms to ensure:

(3) The leveraging and recycling of the grants

Accountability Strategy	Considerations for EPA	
Application Guardrails	 Financial capacity / track record of recipient organizations Finance expertise of recipient / indirect recipients and subgrantees 	
Federal Requirements		
Governance		
Reporting / Metrics	 Define a consistent measure for leverage (e.g., GHGRF \$ / total project costs funded) Consider how leverage may also happen at multiple levels 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 	
Clawback / Redistribution		

How to ensure additionality of projects?

Accountability Strategy	Considerations for EPA
Application Guardrails	 Types of projects that applicants propose to invest in (EPA could encourage / prioritize applications focusing on project types it thinks are most additional) Finance expertise of applicant team (ability to ID project not needing subsidy)
Federal Requirements	 How requirements might help to avoid funding projects with negative environmental impacts How requirements might create costs
Governance	
Reporting / Metrics	 Additionality is difficult to report / confirm directly; consider proxies (such as project types or community types that historically are challenged to access capital)
Clawback / Redistribution	

How to promote continued operability?

Accountability Strategy	Considerations for EPA	
Application Guardrails	 Financial capacity / track record of recipient organizations Finance expertise of recipient / indirect recipients and subgrantees Treasury function expertise of applicant team 	
Federal Requirements	 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 	
Governance	Fiduciary expertise of board members	
Reporting / Metrics	 Financial sustainability metrics for applicants, recipients, indirect recipients (e.g., net income, self-sufficiency) 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 recipients 	
Clawback / Redistribution	 Consider how intermediation structures may help to mitigate risk of funding riskier indirect recipients / subgrantees by phasing investment over time 	

Program Structure Workgroup

Evaluation of Structure Options

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

1) States / Municipalities / Tribes

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

• States / municipalities / tribes would then redeploy funds to other eligible recipients, indirect recipients, and for technical assistance, and perhaps directly to projects

Ask applicants to:

- Describe how they will allocate GHGRF funds across their state / municipality / tribe
- 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

EPA Methodology:

- EPA would manage award from 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

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 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 recipients, indirect recipients, and for technical assistance, and perhaps directly to projects as well

Ask applicants to:

- Describe how they will allocate GHGRF funds across the country along a value chain
- Address how funds would address GHG reduction objectives at scale
- 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 would manage award from 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
- Network of state-level Green Banks and other indirect recipients currently exist for downstream allocation

Weaknesses / Challenges

- Elevated management challenge and longer ramp-up time to operationalize
- Higher costs of intermediation / 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 applicants

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

Ask applicants 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 GHG reduction objectives 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

3) Collective Action – Regional

Strengths / Rationale

- Encourage applicants 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 applicants to propose a strategy to address a particular sector (e.g., multifamily housing, single-family home retrofits, EVs, or 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 applicants to:

- Pull together partnerships with all the stakeholders needed to address the value chain ("build the ecosystem")
- Define sector(s), focus on financing needs and non-financing barriers
- Address 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 and define the sectors
- 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 # 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 applicants to:

- Describe the 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 in low-income communities and in 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 recipients 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 4 or 5 intermediaries
- Provides ability for the intermediary 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 GHG Fund for national, state, regional, sectoral, and direct solutions. A larger portion could be dedicated to a national strategy and then smaller distributions could be made in each other category. Competition would occur within each category

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

Ask applicants to:

- Pull together partnerships with all the stakeholders needed to address the value chain in each specific strategy Define focus in state, region, sector
- Focus on financing needs and non-financing barriers
- Address how funds would address GHG reduction objectives 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 a cohort of applicants with each major strategy 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

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	Reasons these work	Reasons these are burdens
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		

^{*}To be integrated with Workgroups 1 (Objectives) and 3 (Execution, Reporting, and Accountability)

Next Steps

- Continuing to coordinate with other EFAB GHGRF charge workgroups on design requirements
- Next EFAB public meeting December 15, 2022

Objectives Workgroup

GHGRF Charge – Objectives

Workgroup Overview

Provide considerations around the GHGRF's primary purpose:

- To fund and/or finance projects intended to reduce GHG emissions that are not being resourced today, particularly those in low-income and historically disadvantaged communities, because:
 - There is a lack of requisite capital at reasonable costs;
 - Priority areas for reducing GHGs (e.g., buildings, industry, agriculture, transportation) may not readily lend themselves to existing funding structures in priority communities;
 - o There is a lack of technical and human capacity to prepare grant applications; and
 - There is a lack of start-up "capital" (e.g., technical assistance and planning grants)

Focused on two areas:

- Program Efficiency
 - Design Elements
 - Complementary Programs and Structures
- Environmental Justice / Definition of "Low-Income and Disadvantaged Communities"
 - Definition and Support Considerations
 - o Technical and Financial Assistance, including application support assistance

Overarching Concepts

Balance equity and access with leverage goals

- Seek higher levels of financing leverage for projects in communities with greater capacity and access to resources
- Lower leverage 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

Balance need for "shovel-ready" projects with capacity building goals

- Goal is rapid deployment
- Conventional meaning of "shovel-ready" projects (e.g., designed, engineered, permitted) is only one path to achieving this goal and could exclude projects that could/should be supported by one or more of the GHGRF streams

Overarching Concepts

There may be competing 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 of projects or community support
- In the longer-term, investing in community capacity, technical assistance, and the ability to develop a wider array of projects and sizes will increase GHG reduction ability on a national level
- EPA has flexibility to design the GHGRF to empower states, municipalities, tribes, and eligible entities to select solutions that accomplish one or multiple 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 longer-term (beyond 2024)
 - Establish performance metrics demonstrating that selected projects in the aggregate to accomplish overarching objectives

Designing for Flexibility to Meet Varying Mandates

- Near-term trade-offs between program efficiency and program objectives are:
 - Timeline vs. measurable GHG reductions
 - Leveraging and recycling vs. capacity building
 - Community reach vs. timeline / administrative burden
 - Benefits reaching low-income / disadvantaged communities vs. long-term financial sustainability requirements (grants vs. loans)
 - Prioritizing GHG reduction performance in the 1st year of the program could disadvantage efforts to build low-income community capacity to conduct GHG reduction initiatives
- 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 heavily weighted towards capacity building, low-income community impacts and programs
 - o \$8B
 - o \$12B
- Additionally, emphasis should vary based on the nature of both direct and indirect recipients

Design Elements by Direct Recipient Type

Aligned Recipient	Leverage	Additionality	Capital Recycling	Capacity Building	Long-Term Operability
States / Municipalities / Tribes	Low weight	High weight	Medium weight	High weight	Low 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	Medium weight	Medium weight	Medium weight	Medium weight
Lender Intermediaries	High weight	Medium weight	High weight	Low weight	High weight

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?

Providing 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
- Examples / case studies of each element by recipient / project types

Program Efficiency – Design Elements

Design Element	Strengths / Weaknesses	Strong / Weak Fits	Aligned Recipients
Leverage: The ability of a recipient or project to evidence additional private sector funding sources	 Strengths Crowds in additional dollars from other sources Enables larger projects Stretches taxpayer resources further Can provide risk mitigation for private capital 	 Strong Fits Large asset-backed projects Subordinate tranches in structured funds Nonprofit and commercial projects Residential solar leases 	 Higher Leverage States / Municipalities / Tribes National Green Bank / Fund Lender Intermediaries
	 Weaknesses Burdensome from a structuring and transaction cost standpoint May increase cost of capital Less workable in smaller projects 	 Weak Fits Smaller community-based organizations Smaller municipalities Matching technical assistance dollars Non-commercial project costs (e.g., predevelopment) 	 Lower Leverage Collective Action – Regional Collective Action – Sectoral
Additionality: Demonstrating the essential contribution of the	 Strengths Enables attribution to leaders, organizations on successful projects May enable projects in disinvested / overlooked communities 	 Strong Fits Where capital has historically not been invested Where funding is clearly taking "de-risking" role for private capital Planning and pre-development funding 	 More Additionality States / Municipalities / Tribes National Green Bank / Fund Collective Action – Regional Combination of Structures
GHGRF to getting the project done; "but for this funding"	 Weaknesses Challenging to measure and easy to critique May complicate decision-making around eligible projects Doesn't always collaborate well with other funding sources 	 Weak Fits Industrial / large-scale projects Loss-sharing guarantees Pari passu funding structures Senior debt 	 Less Additionality Collective Action – Sectoral

Program Efficiency – Design Elements

Design Element	Strengths / Weaknesses	Strong / Weak Fits	Aligned Recipients
Capital Recycling: The ability of recipients to recycle / re-deploy the funding provided over time	 Strengths Bolsters financial sustainability of recipients for the long-term Ensures long-term impacts after program funding window is closed Builds intermediary capacity Enables strong leverage opportunities 	• Financial intermediaries who are lenders	 Higher Recycling Ability National Green Bank / Fund Collective Action – Regional Collective Action – Sectoral Lender Intermediaries
	 Weaknesses Desire to recoup capital reduces risk tolerance of funds Incentives for recipients may be at odds with purpose (e.g., funds may be used for reserves or liquidity vs. deployment) Ability to recycle capital within reporting period may be limited by long-term project finance cycles, which are common in energy (20 years) 	 Weak Fits Equity investments (because of both illiquidity and risk) Start-up capital Technical assistance Projects without material cash payout over 10+ years 	• States / Municipalities / Tribes
Short-Term Capacity Building: Use of funds is predominantly to hire expertise / staff to improve communities' ability to plan and execute GHG reduction projects	 Strengths Evident and persistent demand for capacity building support, especially in low-income / disadvantaged communities High demand for in-community, long-term human capacity Can increase uptake / demand for financial assistance / pipeline projects 	 Strong Fits In communities with coordinated access to long-term technical assistance funding When paired with green workforce development to increase local skilled workforce For short-term trainings around grant applications, reporting, and compliance Planning uses for GHG projects 	 Stronger Capacity Building States / Municipalities / Tribes Collective Action – Regional Combination of Structures
	 Weaknesses Once money is allocated, limited future funding sources Short funding period incentivizes use of consultants vs. full-time hires No leveraging / recycling ability Overlooked communities may be unaware of funding opportunities and lack grant application bandwidth 	 Weak Fits Not as well suited to project-specific funding 	 Weaker Capacity Building National Green Bank / Fund Collective Action – Sectoral Lender intermediaries

Program Efficiency – Design Elements

Design Element	Strengths / Weaknesses	Strong / Weak Fits	Aligned Recipients	
	Strengths Reassures EPA of recipient's abilities to manage, invest, and report upon funds in compliant and efficient ways	Strong Fits	 Stronger Sustainability Reporting States Collective Action – Regional Lender Intermediaries 	
Long-Term Sustainability Reporting:	 Recipients with stronger long-term financial sustainability have: Proven track record of completing GHGR projects Proven ability to reach low-income and disadvantaged communities Greater likelihood of project completion Greater ability to recycle and leverage capital 			
	 Weaknesses Burdensome for small entities Challenging to apply to many governmental entities Challenging to track across indirect recipients in a standardized manner Difficult to apply to newly created or yet to be created entities 	 Weak Fits Intermediaries with limited track record or historical financials Community-based organizations reliant upon grant funding Municipalities and agencies with lower credit ratings 	 Weaker Sustainability Reporting Municipalities / Tribes National Green Bank / Fund Combination of Structures 	

Additional Considerations / Parking Lot

Considerations related to efficiency elements in program design, including:

- Goals around deployment timing / thresholds
 - Workgroup 2
- Clawback / recapture capability Both at EPA and direct recipient level
 - Workgroup 3

Additional considerations related to overall objectives:

- Risk of compromising other supports at the low-income / disadvantaged household level (e.g., benefits cliffs with consumer rebate or cash assistance programs)
- Accountability to communities Community voice / feedback loops at EPA, direct, indirect recipients?
 - Workgroup 2

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?

Considerations include:

- Where can EPA "piggyback" on existing capacity and pull examples from existing / established federal programs and initiatives (e.g., Justice 40)?
 - Highlight existing programs that tie into GHG objectives and reductions and deliver synergistic solutions (e.g., National Community Solar Partnership, DOE Energy Efficiency Revolving Loan Fund)
- Critical to use federal collaboration to coordinate financial assistance

Program Efficiency – Complementary Programs and Structures

Guiding principles / "good fits":

- Share emphasis on low-income / disadvantaged communities (definitions may vary)
- Seek defined co-benefits in communities
- Share GHG reduction objectives and have 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 recipients, especially states / municipalities / tribes

Nice to haves:

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

Environmental Justice / Definition of "Low-Income and Disadvantaged Communities" – Definition and Support Considerations

Guiding principles for EPA to consider in defining low-income / disadvantaged communities:

- Provide clarity to all recipients (direct and indirect) and participants;
- Acknowledge that no one definition will meet the needs of every region, state, and/or community;
- Acknowledge the importance of defining disadvantaged communities more broadly than by median income or other existing federal and/or state metrics to ensure inclusive and equitable access to GHG and localized pollution reduction benefits;
- Accept existing Federal program definitions and eligibility criteria;
- Accept state definitions (by statute), as applicable;
- Encourage the use of EJSCREEN and other Federal mapping tools; and
- Acknowledge that existing Federal criteria used today may not be sufficient to capture subpopulations in large cities as well as unique challenges in rural communities

Project-Level Fund Eligibility: Defining "Low-Income / Disadvantaged Communities" No one definition will meet the needs of every region, state, and community

Guiding Principle	Strengths / Weaknesses			
Acknowledge the importance of defining disadvantaged communities more broadly	 Strengths Ability to optimize project benefits and expand range of solutions Enables a more inclusive and equitable access to GHG reduction funds and benefits Weaknesses May create tracking challenges Guardrails needed to ensure the definition does not become all-encompassing 			
Accept existing Federal program definitions and eligibility criteria (e.g., HUD's Area Median Income, DHS's Tanf eligibility criteria, SBA's size standards)	 Strengths Easy for EPA to deploy quickly Supports standardized reporting nationwide Allows for eligibility on the household / entity level Weaknesses May not be optimized for pollution reductions May make it harder to include pockets of low-income and disadvantaged communitie that have been historically excluded from Federal support 			
Accept state definitions (by statute), as applicable	 Strengths Aligns with existing state priorities and funding programs Prioritized projects on Intended Use Plans could be screened for GHG reduction potential Weaknesses May not be optimized for pollution reductions May make it harder to include pockets of low-income and disadvantaged communities that have been historically excluded from state support 			

Project-Level Fund Eligibility: Defining "Low-Income / Disadvantaged Communities" No one definition will meet the needs of every region, state, and community

Guiding Principle	Strengths / Weaknesses		
	Strengths		
	Standardized eligibility nationwide		
	Easy to access		
Encourage the use of EJSCREEN and other Federal	Easy for EPA to deploy		
mapping tools	Weaknesses		
	Excludes a significant number of communities		
	 May miss sub-areas and sub-populations within large boundaries 		
	May not be optimized for pollution reductions		
	Strengths		
	 Ability to optimize for GHG reduction and community co-benefits 		
	 Inclusive of sub-populations within larger cities and rural locales lacking critical 		
Acknowledge that existing Federal criteria used today may	infrastructure		
, ,	 Inclusive of other important criteria (e.g., health burdens caused by pollution 		
not be sufficient to capture sub-populations in large cities	levels; cost of energy; cost of housing/living; climate fragility, etc.)		
as well as unique challenges in rural communities	Weaknesses		
	 Depending on whether the criteria is flexible or formulaic, could be overly 		
	complex without ensuring equitable inclusivity		
	May create tracking challenges		

Environmental Justice / Definition of "Low-Income and Disadvantaged Communities" — Technical and Financial Assistance*

Charge Question I.a.iii: What kinds of technical and/or 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.

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

- Project Applicants
- Project Types
- Local Benefit Pathways
 - 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
- Silver Jackets (USACE)
- Engineers Without Borders
- Senior design projects at accredited university engineering programs

 $^{^*}$ To be integrated with GHGRF Charge Workgroup 2 (Program Structure) and 3 (Execution, Reporting, and Accountability)

Environmental Justice / Definition of "Low-Income and Disadvantaged Communities" — Technical and Financial Assistance

Technical assistance will vary depending on several factors, including:

- Who needs assistance (e.g., project developers, communities, local government entities, households)?
- Project type (e.g., buildings, industry, power sector, transportation)
- What are the benefits being achieved?
 - o Funding benefits: TA for application assistance and other "navigator" support
 - Local workforce development: TA for project development, design, implementation planning workforce training, 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; performance metrics to demonstrate connections

Third-Party Service Providers for Various Project Sponsors

TA Partner Examples	Project Developers	State Government and Regional Entities	Local Government Entities	Communities / NGOs	Households
Consultants	X	X			
State extension programs		X	X		
AmeriCorps		X	X	X	
Engineers Without Borders				X	X
Senior design projects at accredited university engineering programs				X	

Third-Party Service Providers and Project Expertise — and Cost to Project Sponsor

TA Partner Examples	Project Developers	State Government and Regional Entities	Local Government Entities	Communities / NGOs	Households
Consultants	All infrastructure – High cost	All infrastructure – High cost	All infrastructure – High cost		
State extension programs			Local roads and sewers – Moderate cost		
AmeriCorps		Not needing stamped plans – Moderate cost	Not needing stamped plans – Moderate cost	Not needing stamped plans – Moderate cost	
Engineers Without Borders				Small infrastructure – Low cost	Small infrastructure – Low cost
Senior design projects at accredited university engineering programs				Small infrastructure – Very low cost	

Financial Assistance – Tools to increase the accessibility of capital to low-income and disadvantaged communities

Establish tools to facilitate flow of funds through CDFIs, credit unions, and other established vehicles for low-income communities

- 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

Financial Assistance – Tools to increase the accessibility of capital to low-income and disadvantaged communities

Per public comment, establish alternative underwriting criteria

- Conventional criteria (e.g., credit score, income, debt-to-income ratio) can perpetuate racial disparities
- Alternative underwriting criteria can provide investor assurances in other ways (e.g., whether homeowner has consistently paid their utility bills)
- Florida's Solar and Energy Loan Fund does not use conventional underwriting criteria to serve LMI clients, and still achieves a default rate of less than 2%

Indicators of Success

- Design element reporting
 - Time-bound? (Deployment)
 - Leverage
 - Additionality
 - Recycling
 - Sustainability Reporting
- Low-income and disadvantaged community reach reporting
- Capacity Building and TA progress reporting
- GHG reduction reporting
- Community benefits reporting