December 5, 2022

Michael S. Regan
Administrator
U.S. Environmental Protection Agency
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Washington, DC 20004
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SUBJECT: Public Comments from the Connecticut Green Bank – Request for Information: Greenhouse Gas Reduction Fund – Docket ID No. EPA-HQ-OA-2022-0859

Dear Administrator Regan:

The Connecticut Green Bank ("Green Bank") values the U.S. Environmental Protection Agency's ("EPA") Request for Information regarding the Greenhouse Gas Reduction Fund ("RFI GHGRF"). The RFI GHGRF invites public comment on the design and implementation of the Greenhouse Gas Reduction Fund ("GHGRF"). The fund was created to deploy competitive grants that mobilize financing and leverage private capital for clean energy and climate projects that reduce or avoid greenhouse gas emissions, especially in low-income and disadvantaged communities. These are the public comments of the Green Bank, a quasi-public entity[1] of the State of Connecticut.

As the nation's first state-level green bank, the Green Bank leverages the limited public resources it receives to attract multiples of private investment to scale up clean energy deployment. Since its inception, the Green Bank has mobilized $2.26 billion of investment into Connecticut's clean energy economy at a 7 to 1 leverage ratio of private to public funds. The Green Bank has supported the creation of 27,720 direct, indirect and induced jobs, reduced the energy burden on over 66,500 families and businesses, deployed nearly 510 MW of clean renewable energy, helped avoid 10.4 million tons of CO2 emissions over the life of the projects, and generated $113.6 million in individual income, corporate, and sales tax revenues to the State of Connecticut.

For a more complete overview of the Green Bank, and its solutions – see Attachment A.

[1] The Connecticut Green Bank is hereby established and created as a body politic and corporate, constituting a public instrumentality and political subdivision of the state of Connecticut established and created for the performance of an essential public and governmental function. The Connecticut Green Bank shall not be construed to be a department, institution or agency of the state.

The Green Bank applauds Democratic Congressional leadership and staff, specifically Senator Sanders,[2] and Congresswoman Dingell, Senator Markey, and Senator Van Hollen,[3] for working with the White House[4] team to advance the $27 billion GHGRF as part of the Inflation Reduction Act ("IRA"). The Green Bank is gratified that Connecticut's Congressional delegation, and specifically Senators Murphy and Blumenthal,[5] and Representatives Himes and DeLauro,[6] who have been instrumental in advancing, for nearly a decade, the national debate at the federal level on a climate bank. And lastly, the Green Bank salutes Reed Hundt and the Coalition for Green Capital for their work with the Connecticut General Assembly ("CGA") in 2011 to pass a nearly unanimous bipartisan bill creating the nation's first state-level green bank;[7] for assisting other state and local governments in the creation of their green banks; and for their nearly 15 years of leadership advocating for a national climate bank.

Background

There are numerous public policies in Connecticut that support the Biden Administration's public policies, including:

- **GHG Reduction Targets** – Public Act 08-98 "An Act Concerning Connecticut Global Warming Solutions," established GHG emission reduction targets for 2010, 2020, 2030,[8] [2040][9] and 2050. Connecticut's GHG emission reduction target for 2030 is consistent with President Biden's 50-52% reduction from 2005 levels by 2030.

- **Resilience and Vulnerable Communities** – Public Act 20-05 "An Act Concerning Emergency Response by Electric Distribution Companies, the Regulation of Other Public Utilities and Nexus Provisions for Certain Disaster-Related or Emergency-Related Work Performed in the State," established definitions for resilience[10] and vulnerable communities,[11, 12] that are consistent with President Biden's Justice 40 efforts to increase resilience of those populations disproportionately impacted by the effects of climate change.

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[2] Sec. 134(a)(1)

[3] Sec. 134(a)(2-3)

[4] https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/23/fact-sheet-biden-administration-outlines-key-resources-to-invest-in-coal-and-power-plant-community-economic-revitalization/

[5] Sponsor and/or Co-Sponsor under Green Bank Act of 2014 (S.2271), Green Bank Act of 2016 (S.3382), Green Bank Act of 2017 (S.1406), National Green Bank Act of 2019, National Climate Bank Act of 2021 (S.283), and National Green Bank Act of 2021 (S.1208)

[6] Sponsor and/or Co-Sponsor under Green Bank Act of 2014 (H.R.4522), Green Bank Act of 2016 (H.R.5802), Green Bank Act of 2017 (H.R.2995), National Green Bank Act of 2019 (H.R.3423), and National Green Bank Act of 2021 (H.R.2656)

[7] https://www.cga.ct.gov/current/pub/chap_283.htm#sec_16-245n

[8] Through Public Act 18-82, "An Act Concerning Climate Change Planning and Resiliency," a 45% reduction of GHG emissions from 2001 levels by 2030 was established – click here.

[9] Through Public Act 22-5, "An Act Concerning Climate Change Mitigation," a 100% zero carbon electric sector by 2040 was established – click here.

[10] "Resilience" means the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from deliberate attacks, accidents or naturally occurring threats or incidents, including, but not limited to, threats or incidents associated with the impacts of climate change.

[11] "Vulnerable communities" means populations that may be disproportionately impacted by the effects of climate change, including, but not limited to, low and moderate income communities, environmental justice communities pursuant to section 22a-20a, communities eligible for community reinvestment pursuant to section 36a-30 and the Community Reinvestment Act of 1977, 12 USC 2901 et seq., as amended from time to time, populations with increased risk and limited means to adapt to the effects of climate change, or as further defined by the Department of Energy and Environmental Protection in consultation with community representatives.

[12] Connecticut's analog to the U.S. Department of Energy's "disadvantaged communities" definition

- **Just Transition Requirements** – Public Act 21-43 "An Act Concerning a Just-Transition to Climate-Protective Energy Production and Community Investment," established requirements for Community Benefit Agreements ("CBAs") for certain renewable energy projects that are consistent with President Biden's Just Transition efforts, including workforce development and prevailing wages.

- **Renewable Portfolio Standards** – Public Act 18-50 "An Act Concerning Connecticut's Energy Future," builds on the Renewable Portfolio Standard ("RPS") and established a 40% by 2030 target.

- **Weatherization** – Public Act 11-80 "An Act Concerning the Establishment of the Department of Energy and Environmental Protection ("DEEP") and Planning for Connecticut's Energy Future," included a weatherization target of eighty percent of the state's residential units by 2030.

- **Zero Emission Buses** – Public Act 22-25 "An Act Concerning the Connecticut Clean Air Act," established a 100% zero-emission target for school buses in environmental justice communities by 2030, all school districts by 2040, and at least 30% of transit buses purchased or leased by the state must be zero-emission by 2030.

- **Green Bank** – Public Act 11-80 established the nation's first state-level green bank – Connecticut Green Bank. The Green Bank over the last decade has pioneered the green bank model[13] with its mission to "confront climate change by increasing and accelerating investment into Connecticut's green economy to create more resilient, equitable, and healthy communities" and vision of "a planet protected by the love of humanity".

  For an overview of the green bank model – see Attachment B.

The Green Bank shares EPA's goals to reduce or avoid GHG emissions and air pollution, especially in low-income and disadvantaged communities by investing public funds to mobilize and leverage private investment in clean energy and climate projects.

[13] In 2017, the Connecticut Green Bank received the Innovations in American Government Award from the Harvard Kennedy School Ash Center for Democratic Governance and Innovation for their "Sparking the Green Bank Movement" nomination.

A Vision for a National Climate Bank

The GHGRF presents a generational opportunity to establish a durable and expansive clean energy and climate financial platform – via a national climate bank ("NCB") – that is built to be financially strong and sustainable through the 2030s and 2040s. Having capital available through a NCB to support work through upcoming decades will be essential to fully transition our country to a carbon-neutral economy by 2050. To be maximally effective, and to achieve both environmental as well as energy justice goals for low-income and disadvantaged communities, the NCB must *ab initio* demonstrate a strong, transparent, representative, and accessible governance structure with board and organizational leadership which represents the diversity of the populations it will serve.

To succeed, the NCB must have a strong, transparent, representative, and accessible governance structure to assure States, minority-owned institutions, and disadvantaged communities that essential balance is maintained to protect, preserve, and enhance over time equitable funding disbursement among regions, states, and communities with an emphasis on frontline, low-income and environmental justice communities that have borne the brunt of our carbon intensive economy.

States, minority-owned institutions, and disadvantaged communities need to have direct input into funding prioritization policies to ensure equitable funding disbursement among regions, states, and communities. Such a structure will engender the trust and confidence of a wide cross-section of market participants and social actors that will be needed to reach deeply into low-income, low-wealth communities where so much environmental and energy injustice exists and persists. Resting upon a durable capital base and a strong and representative governance and diverse organizational leadership structure, the NCB will be an unparalleled hub for leveraging, deploying, and recycling capital; a sustainable source of grant funding; and a center for technical resources and assistance.

Current actors are undercapitalized.

The overwhelming proportion of State, community, and local capital actors in the clean energy finance space (green banks, Community Development Financial Institutions ("CDFI") and Community Development Credit Unions ("CDCU")) are undercapitalized entities that operate independently of each other throughout the United States, although many collaborate via trade bodies and networks such as the American Green Bank Consortium[14], Opportunity Finance Network[15], and Inclusiv[16]. With the exception of green banks, clean energy and climate finance is not the key focus of their investment activities, although some CDFIs (such as Reinvestment Fund) and credit unions (such as Clean Energy Federal Credit Union) have a substantial focus on investments directed at clean energy, climate, and sustainability as well as social equity. In short – capital, liquidity, and access to capital markets (a key barrier to scale at present) are urgently needed.

The NCB would facilitate the participation of private-sector participants.

The NCB would solve the perennial issues faced by an ecosystem of state and local community actors that have been deprived of access to needed investment capital, liquidity for originated transactions, secondary markets access and funding for education, market-building, community engagement and technical assistance. The NCB would immediately work as the principal intermediary among these state, local and community entities, organizations and enterprises and vast pools of private-sector investment capital. Included would be Wall Street and global banks, private equity, institutional investors such as pension funds, endowments, insurance companies and family offices, and public and private capital

[14] https://greenbankconsortium.org/
[15] https://www.ofn.org/
[16] https://inclusiv.org/

markets. All would be attracted to the NCB's clean energy, climate, and sustainability purposes, substantial capital base, market reach, collaboration with an array of green finance entities (i.e., green banks, CDFIs, CDCUs, Minority Depository Institutions ("MDI"), etc.) and anticipated AA/AAA credit rating. This substantial capital base and anticipated credit rating would allay concerns from the traditional financial community, investors and capital markets participants around issuer risk, liquidity risk and operational risk. At the same time, in furtherance of the goals of the GHGRF to promote direct investment in projects that maximize emissions reduction and spur substantial economic development, a substantially capitalized NCB will be capable of co-investment with institutional private capital for larger projects of importance regionally or nationally.

Leveraging private markets through a NCB would expand the scope of impact.
The climate challenge isn't going to be solved with $27 billion – and it will take many years to achieve the transition to a carbon-neutral economy. A key benefit of the NCB will be the ability to scale its balance sheet which will increase the amount of capital to be deployed beyond its initial grant from EPA. A study by the Coalition for Green Capital suggests balance sheet leverage of between 3 and 4 to one is a reasonable expectation for what the NCB could achieve.[17] A review of credit ratings of certain development banks with AA (or better) credit ratings suggests a similar balance sheet leverage is attainable. Even at the low end of this scale, for every $1 billion of grant capital $3 billion could be made available to an array of green financing institutions such as green banks, CDFIs, CDCUs, MDIs, etc. These entities, in turn, have their own capacity to leverage their balance sheets – on the scale of 3-10x (with the higher end attributable to capital used by depository institutions like credit unions or green banks using such funds for loan loss reserves).

This translates into $1 billion of grant capital being transformed into $30 billion (or more) of capital deployed at the community level ($1 billion **X** 3x NCB leverage **X** 10x entity leverage). Depending upon how quickly this capital "recycles" (i.e., loans repaid and reinvested) – the ability to fund transactions over a 10-year period could be doubled (or more), which could result in more than $50 billion of funded activity over the next decade for every $1 billion of original EPA grant (assuming cash flows from a typical 10-year loan is reinvested in new loans).

More financing available for more projects would unlock considerable social benefits. The recently released study by the Regional Greenhouse Gas Initiative ("RGGI") concludes that the benefits of programs funded in 2020 by $196 million in RGGI investments are projected to avoid the release of 6.6 million short tons of carbon emissions while returning an estimated $1.9 billion in lifetime energy bill savings – a 10:1 benefit.[18] Using the RGGI experience as a benchmark together with NCB and entity leverage – a $1 billion investment in the NCB could very well translate into more than half a trillion dollars of lifetime energy savings for residential and business energy users providing for significant inflation reduction. The scale effects of the NCB together with leverage from green banks, CDFIs, CDCUs and MDIs, etc., are indisputable and must be realized.

The NCB would provide the flexibility and reliability needed for long-term impact.
With the ability to scale its balance sheet and achieve a high credit rating, the NCB will be able to issue commitments over a series of years to an array of state, local and community institutions and organizations. This will provide much needed surety for lending institutions that they will be able to rely on the funding commitments being made available as and when needed. In the existing, poorly capitalized system of existing clean energy, climate and sustainability financing institutions, entities

[17] http://coalitionforgreencapital.com/wp-content/uploads/2019/09/1T-investment-white-paper.pdf
[18] https://www.rggi.org/sites/default/files/Uploads/Proceeds/RGGI_Proceeds_Report_2020.pdf

often must secure more capital than they can reasonably deploy over a given period of time to avoid the risk of not being able to reliably source incremental funding as needed. This will especially be true of entities that will be established to participate in the GHGRF in the years to come. While these new entities may offer valuable, creative ways to deliver benefits, it will take time to get staffing in place, establish solid governance, processes and procedures, develop a pipeline of deal flow, that ultimately will result in investments in communities. The NCB would solve this dilemma and grossly inefficient practice of capital sourcing by providing "capital as a service." The NCB will deliver capital on demand – as and when needed by these local market building and capital deployment organizations.

Providing capital as a service would unlock several benefits:

(1) The entities needing the capital can devote maximum attention to solving the climate challenge – not solving the capital challenge. The Green Bank has first-hand experience of several market actors being strung along for months on end, spending tens of thousands of dollars chasing sorely needed capital, only to end up with high-priced capital, burdened with a bevy of fees that include charges for sourcing the capital, more fees for not using the capital, and even fees for prepaying capital borrowed. The NCB would put an end to this grossly inefficient and punitive practice of capital procurement.

(2) Owing to the capital strength of the NCB – these entities will no longer need to "hoard cash" fearing capital won't be available when needed. These entities will apply for capital on a rolling basis and will have their capital allocations paid out on a schedule that lines up with their ability to invest and deploy. Should the entity have greater success – the NCB would step up to allocate more capital. Should the entity fail to need its capital allocation or deploy more slowly, the NCB could easily adjust the deployment schedule and reallocate the capital released to other entities that are ahead of schedule or that have identified incremental needs. It will be an efficient and dynamic process of capital investment which is not dissimilar to the way traditional banks all over the country operate for their borrowing customers.

The NCB would ensure that funding is available for the critical decades to come.
The climate challenge will take many years to resolve and future federal support for funding our country's transition to a carbon neutral economy is uncertain. Any initial grant sought from EPA for an NCB must demonstrate that through its leverage, direct investment, and indirect investment activities – earning a wide range of returns on its investments – that it is capable of being financially sustainable – throughout the 2020s, the 2030s and into the 2040s. The successful NCB candidate must present a credible program for such sustainable operations. It must demonstrate that it has the experienced staff to manage operational and credit risks, and a robust system of financial controls and risk management. The NCB's ability to withstand existential exposure to borrower defaults must be incontestable.

The NCB must also be capable of managing capital grants and loans over a multi-year period and to provide funding and technical assistance to establish new public, quasi-public, not-for-profit, or nonprofit entities that provide financial assistance to qualified projects, the NCB must have a program design that allows funding for innovation and new business models. The NCB's capacity to fund capital and grant requests on a continuous and uninterrupted basis must be clear and substantiated.

The Green Bank provides the following public comments in response to the RFI GHGRF for Sec. 134.

Section 1: Low-Income and Disadvantaged Communities

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

   Response

   The Green Bank's response applies to Sec. 134(a)(1) and Sec. 134(a)(3) of the GHGRF that specifically address low income and disadvantaged communities.

   The Green Bank has several recommendations for EPA's consideration in defining "low income" and "disadvantaged" communities, including aligning to appropriate federal and state definitions and non-locational community definitions.

   Federal and State Definitions

   Consistency in the definition of "distressed", "low income", "disadvantaged", and "structurally marginalized communities" across federal agencies and state agencies (e.g., state energy offices, departments of health and departments of housing) would support the successful deployment of capital to these high interest communities. In Connecticut there are two (2) definitions of relevance – environmental justice community and vulnerable communities.

   - **Environmental Justice Community** – the definition of an *environmental justice community* (Connecticut General Statutes "CGS" 22a-20a)[19] consists of (A) a United States census block group, as determined in accordance with the most recent United States census, for which thirty percent or more of the population consists of low-income persons, not including institutionalized individuals, that are 200% below the Federal poverty level, or (B) a "distressed municipality"[20] (CGS 32-9p).

[19] https://portal.ct.gov/-/media/DOT/CGSSec22a20aEnvironmentalJusticeCommunitypdf.pdf

[20] "Distressed municipality" means, as of the date of the issuance of an eligibility certificate, any municipality in the state which, according to the United States Department of Housing and Urban Development meets the necessary number of quantitative physical and economic distress thresholds which are then applicable for eligibility for the urban development action grant program under the Housing and Community Development Act of 1977, as amended, or any town within which is located an unconsolidated city or borough which meets such distress thresholds. Any municipality which, at any time subsequent to July 1, 1978, has met such thresholds but which at any time thereafter fails to meet such thresholds, according to said department, shall be deemed to be a distressed municipality for a period of five years subsequent to the date of the determination that such municipality fails to meet such thresholds, unless such municipality elects to terminate its designation as a distressed municipality, by vote of its legislative body, not later than September 1, 1985, or not later than three months after receiving notification from the commissioner that it no longer meets such thresholds, whichever is later. In the event a distressed municipality elects to terminate its designation, the municipality shall notify the commissioner and the Secretary of the Office of Policy and Management in writing within thirty days. In the event that the commissioner determines that amendatory federal legislation or administrative regulation has materially changed the distress thresholds thereby established, "distressed municipality" means any municipality in the state which meets comparable thresholds of distress which are then applicable in the areas of high unemployment and poverty, aging housing stock and low or declining rates of growth in job creation, population and per capita income as established by the commissioner, consistent with the purposes of subdivisions (59) and (60) of section 12-81 and sections 12-217e, 32-9p to 32-9s, inclusive, and 32-23p, in regulations adopted in accordance with chapter 54. For purposes of sections 32-9p to 32-9s, inclusive, "distressed municipality" also means any municipality adversely

- **Vulnerable Communities** – the definition of *vulnerable communities* (Public Act 20-05)[21, 22] builds on the environmental justice community definition to also incorporate the disproportionate impacts of climate change for low- and moderate-income communities, environmental justice communities, communities eligible for the Community Reinvestment Act ("CRA") of 1977 and allows for further changes in the definition by DEEP in consultation with community representatives.

The Department of Energy ("DOE") has led a Justice 40 Initiative which identifies and prioritizes serving disadvantaged communities ("DACs"). The DOE defines DACs as people groups with cumulative burden over a broad list of indicators, including types of socio-economic vulnerability, environmental and climate hazards, etc. The DOE definition of DACs also references the Office of Management and Budget's Interim Guidance definition of a community: a community is a geographic location (i.e., census tract) and can be a people group not physically in the same area with a shared-common experience.

Connecticut's public policy definitions of environmental justice communities and vulnerable communities as described above are consistent with the DOE's Justice 40 Initiative, as well as the intent of the GHGRF's low-income and disadvantaged communities.

If EPA were to align the GHGRF definitions to appropriate, existing state (e.g., environmental justice communities, vulnerable communities) and federal definitions (e.g., DOE's Justice 40 Initiative's DACs), it would have an amplifying impact on where and how these funds reach this critical audience. EPA should consider such state and federal definitions for low income and disadvantaged communities for the GHGRF where appropriate.

In reference to possible criteria or tools, another consideration for EPA in prioritizing greenhouse gas emissions and other air pollution reduction efforts is the tie between low-income and disadvantaged communities and the geographic location of historic industrial land use. Connecting with research support can help to identify specific locations and quantify the impact of potential or historic air polluting facilities. Dr. Robert Bullard, Dr. Beverly Wright, and scholars within topics of environmental justice and distributive justice have researched the connections between marginality and transportation access and emitting facilities. In Connecticut, those cities identified as DACs using DOE's definitions align with historic industrial cities with aging infrastructure (e.g. Bridgeport, Harford, Waterbury) and compounding environmental impact on natural resources (e.g. air quality,

impacted by a major plant closing, relocation or layoff, provided the eligibility of a municipality shall not exceed two years from the date of such closing, relocation or layoff. The Commissioner of Economic and Community Development shall adopt regulations, in accordance with the provisions of chapter 54, which define what constitutes a "major plant closing, relocation or layoff" for purposes of sections 32-9p to 32-9s, inclusive. "Distressed municipality" also means the portion of any municipality which is eligible for designation as an enterprise zone pursuant to subdivision (2) of subsection (b) of section 32-70.

[21] "An Act Concerning Emergency Response by Electric Distribution Companies, the Regulation of Other Public Utilities and Nexus Provisions for Certain Disaster-Related or Emergency-Related Work Performed in the State" – click here.

[22] "Vulnerable communities" means populations that may be disproportionately impacted by the effects of climate change, including, but not limited to, low and moderate income communities, environmental justice communities pursuant to section 22a-20a, communities eligible for community reinvestment pursuant to section 36a-30 and the Community Reinvestment Act of 1977, 12 USC 2901 et seq., as amended from time to time, populations with increased risk and limited means to adapt to the effects of climate change, or as further defined by the Department of Energy and Environmental Protection in consultation with community representatives.

emissions, water quality). This will likely look different across the nation, but in the northeast, GHGRF can support these types of low-income distressed areas, including those with brownfields.

EPA should consider state-determined brownfields within its definition of low income and disadvantaged communities.

Non-Locational Community Definitions

Incorporating a non-location community definition would allow EPA to develop programing that is adaptable to changing community dynamics, such as indigenous populations that may or may not be co-located. Although low income and disadvantaged community designations are noted in the GHGRF, the alignment to support distressed and marginalized communities is shared across the federal and some state governments.

Key Takeaway:

- EPA should look to existing state definitions, like Connecticut's definitions of *Environmental Justice Community* and *Vulnerable Community*, but also look to other federal agencies, such as the DOE's definition of *Disadvantaged Communities*.

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

See the Green Bank's response to Section 4 (i.e., Eligible Recipients) and Question 5 (i.e., technical and financial assistance grants).

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

Although not an area of expertise, the Green Bank proposes several things for EPA's consideration in providing technical and/or financial assistance to support and/or prioritize businesses owned or led by members of low-income or disadvantaged communities, including prioritizing supplier diversity, expanding the scope of existing workforce training initiatives, and providing small business financing and working capital for such businesses.

Prioritizing Supplier Diversity

Connecticut has a Supplier Diversity Program that was established to ensure that women and minority-owned small businesses have an opportunity to bid on a portion of the State's purchases. The program requires agencies and political subdivisions (e.g., quasi-public agencies) to set aside 25% of their annual budgets for construction, housing rehabilitation, and purchasing of goods and

services,[23] to be awarded to certified small businesses, with 25% of this amount to be awarded to certified minority business enterprises. The Green Bank has followed such practices that were once compliance and now voluntary – see Table 1.[24]

Table 1. Small and Minority Owner Business Enterprise Procurement

	Goal ($MM's)	Actual ($MM's)	Percentage
Small Business Procurement	$3.6	$4.4	120%
Minority Business Enterprise Procurement	$0.9	$1.0	105%

Alongside government procurement standards, CBAs can also be a supplier diversity mechanism to prioritize businesses owned or led by members of low-income or disadvantaged communities. As a major component of President Biden's Justice 40 Initiative and Just Transition, CBAs could be instituted to ensure such prioritization.

Expanding Scope of Existing Workforce Development Programs

Connecticut's Office of Workforce Strategy ("OWS") was awarded $23.9 MM from the American Rescue Plan ("ARP") Good Jobs Challenge grants from the U.S. Department of Commerce to support the creation of the Strengthening Sectoral Partnerships Initiative. The initiative provides resources to support ten (10) Regional Sector Partnerships ("RSPs") across Connecticut to train and place more than 2,000 people – particularly from historically-underserved communities – in high-demand jobs in four priority sector areas, including manufacturing, healthcare, information technology, bioscience. OWS subsequently launched a $70.0 MM job training program to fill more than 6,000 skilled jobs in businesses around the state that faced ongoing challenges hiring new workers by creating CareerConneCT through ARP. Several of the awardees were within the clean energy sector.[25]

The Green Bank acknowledges the importance of workforce development (e.g., apprenticeship programs) and prevailing wages as not only consistent with climate change policy in Connecticut (e.g., Public Act 21-43), but also future requirements under Section 48 of the Investment Tax Credit in order for projects to receive the full 30%.

Small Business Financing and Working Capital

Through a partnership with Eversource Energy[26] and Amalgamated Bank,[27] the Green Bank supports the Small Business Energy Advantage ("SBEA") program – an on-bill, zero-percent interest, revolving fund program for small businesses (i.e., commercial and industrial, non-profits, municipalities and state agency customers that use less than 1,000,000 kWh a year across all their properties) pursuing energy efficiency. SBEA provides financing for up to 7 years for up to $1.0 MM per business customer. The Connecticut Energy Efficiency Fund[28] provides funds for credit enhancements (i.e., interest rate buydown and loan guarantee). Over the past four (4) years, SBEA, through utility managed installation contractors, has provided over 6,000 projects with on-bill financings totaling

[23] Following approved exemptions from the Department of Administrative Services

[24] Annual Comprehensive Financial Report for FY22 of the Connecticut Green Bank (pp. 124)

[25] Northwest Regional Workforce Investment Board, CT Building Trades Training Institute, and Efficiency for All to expand existing and develop new programs in energy efficiency, solar, offshore wind, energy management, and seeking unionized building trades and registered apprenticeships.

[26] www.eversource.com

[27] www.amalgamatedbank.com

[28] Statutorily established fund replenished by a small recurring charge on electric and gas utility ratepayer bills.

$79.3 MM (of which 80-90% is financed by Amalgamated Bank and 10-20% is from the Green Bank) with an estimated 2,035.6 GWh of energy savings over the life of the measures.

In addition to SBEA, through the Green Bank's Capital Solutions program (i.e., an open RFP for project developers), a construction loan is being provided to a small business contractor performing the energy efficiency work for a large government project being supported by the SBEA program. By aligning public policy objectives with local incentives, the Green Bank is able to apply the tools of the green bank model, to provide small business contractors with the capital they need to develop and deploy clean energy projects for small business end-use customers.

Recommendations

Increasing technical and financial assistance for such supplier diversity initiatives (e.g., CBA), workforce development programs, and access to low-cost capital, would further prioritize businesses owned or led by members of low-income or disadvantaged communities.

If a National Climate Bank was established, it could facilitate sharing of best practices across the diverse participating institutions.

Key Takeaways:

- Requiring supplier diversity through mechanisms such as Community Benefit Agreements can ensure that projects created through the GHGRF prioritize businesses owned or led by members of low-income or disadvantaged communities.
- Expanding existing workforce development programs will not only support members of low-income or disadvantaged communities, but also will allow eligible projects to maximize their Investment Tax Credit value.
- The Green Bank model can enable financing for projects that directly benefit minority-owned businesses, including capital for small businesses seeking to benefit from and/or install projects.

Section 2: Program Design

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

The capital required to address federal and state goals for carbon reduction, together with the particular emphasis for environmental justice for low-income and disadvantaged communities, far outstrips the $27 billion of funding available under the GHGRF. As such, it is indisputable that higher private-sector leverage, as well as the ongoing sustainability of grant funds once issued by EPA, is a particularly desirable criteria for GHGRF grant awards. At the same time, EPA's program should appreciate that:

(1) Leverage can be a challenging metric to define and measure – particularly across different activities (lending vs. market building for instance)
(2) Certain financial institutions may have an inherent advantage over other financial institutions in leveraging grants with the private-sector
(3) Some institutions that will be potential GHGRF program applicants will be "non-financial" entities (such as States, municipalities, and Tribal governments pursuant to Sec. 134(a)(1)) – and may find strict requirements for private-sector leverage a challenging barrier – but should still qualify for grants
(4) Still other worthy institutional applicants or indirect recipients may yet exist (as suggested in Sec. 134(b)(2)) and their ability to achieve private-sector leverage upon commencement of operations could be limited for a prolonged period.

These considerations are explored in depth below.

Defining and Measuring Leverage

EPA should use leverage as a criteria for GHGRF awards. A variety of green financing organizations, such as green banks, identify the financing activities supported through their capital investments, establish outcomes and metrics to measure progress and leverage additional capital for clean energy, climate, and sustainability investing. (For an example, see the Connecticut Green Bank's Annual Comprehensive Financial Report for FY2022 – "Measures of Success" P.127[29].) How leverage for investing is calculated and the range of outcomes will differ depending upon the types of institutions and activities financed.

For some institutions, leverage will be relatively straightforward to assess. For those that opt to use GHGRF grants to leverage private capital by crowding in these funds to the overall capital stack in a large project financing or establish sizeable financing facilities to fund hundreds or even thousands of individual projects (such as for households or small businesses), the leverage ratio should be easily identifiable, such as by comparing the amount of public funds in a project or a group of projects to non-public funds attracted.[30] In Connecticut, the Green Bank has also leveraged our funding through green bond issuances in the public markets by securitizing future revenue streams

[29] https://www.ctgreenbank.com/wp-content/uploads/2022/10/Connecticut-Green-Bank-FY22-ACFR-FINAL-2022.10.21.pdf
[30] https://www.prnewswire.com/news-releases/posigen-and-forbright-bank-partner-to-expand-clean-energy-options-in-underserved-communities-301395331.html?tc=eml_cleartime

associated with clean energy projects, where leverage can also be clearly defined as the ratio of the issuance value of the bonds to the amount of the excess of the issuance value over the value of the collateral offered by the public entity as security.[31]

Other institutions (particularly intermediaries serving depository institutions) calculate leverage by the amount of capital that can be leveraged by the direct lender on the ground through deposits. In these cases, measuring leverage (dollars mobilized per dollar of federal funding) is more straightforward. Metrics that measure the value of projects deployed vs. the dollars used by the grantee in that activity can be determined and tracked.

However, to create the generational change envisioned by the GHGRF, it is likely that some organizations will be involved in capacity building, market building, education, or technical assistance. In these cases, how each dollar of federal funding mobilizes additional private funding could be far less clear, yet the activities undertaken as important as the financing activity associated with ultimate deployment of GHG reduction measures.

EPA should carefully weigh these differences and provide room for a variety of activities, a range of private-sector leverage outcomes, and suitable methods to measure and track private-sector leverage against outcome goals for the reduction of GHGs and other forms of air pollution.

Variations in Leverage

Across a wide swath of financial institutions that participate in the green financing space, there are considerable disparities in observed levels of leverage. These disparities can be due to a variety of factors including:

- The mix of financial products underwritten by these organizations.
- The type of institution including green banks, CDFI loan funds, CDCUs, MDIs, etc.
- The size of institutions. Smaller CDFI loan funds generally leverage 2-3x or less while larger institutions generally leverage ratios of 3-4x or more. Institutions with a depository base (e.g., CDCUs) generally have the highest leverage ratios (~$10 in deposits for $1 of capital).[32] Green banks that have a growing portfolio of transactions or a steady revenue stream (e.g., system benefit charges, RGGI funds, etc.) will have a higher leverage (2-3x their capital base and 4-7x contributed public capital) than entities like some green banks where the capital can be more static or contributed to the institution on an inconsistent basis (i.e., closer to 1x the capital base has been typical).

Leverage and "Non-Financial" Actors

Entities such as States, municipalities, and Tribal governments (identified in the GHGRF under Sec. 134(a)(1)), don't usually consider private-sector leverage as a metric of success, although it is increasingly common for state and local governments to address the benefits of "public private partnerships". More recently, several states and municipalities have established or designated green banks as mechanisms used to leverage the impact of scarce public dollars with private-sector investment. Connecticut's green bank tracks private-sector to public dollars leverage and notes this ratio approximates 7:1 across all activities spanning its organizational lifetime (i.e., 11 years). Michigan Saves, the designated green bank for Michigan, attains leverage of 20:1 for its residential

[31] https://www.ctgreenbank.com/cgb-sells-38m-in-shrecs/

[32] https://www.cdfifund.gov/sites/cdfi/files/documents/carsey-report-pr-042512.pdf

loan program. Other green banks range generally from 2:1 to 3:1 or so depending upon their portfolio's mix of business, maturity of the organization and capital structure and funding sources.

As with the range of leverage ratios cited above for CDFIs and credit unions, EPA will find considerable disparity in attained leverage ratios, and most States, municipalities and Tribal governments have yet to establish green banks. Even where green banks exist, States, municipalities and Tribal governments may ultimately target most or all funds applied for towards incentives, education, capacity and market building activities (though many may emphasize the need to leverage these funds with the private-sector). Used in this way – some outcomes, such as with incentives, can often be clearly tracked, but outcomes due to education, capacity and market building activities can be inherently difficult to quantify.

In considering the concept of private-sector leverage, EPA should afford states broad latitude to support established state and federal equity goals as well as existing climate strategies, adapt to market differences among states, regions, and communities, and further unlock financing and private capital for project types and communities experiencing barriers not addressable by financing alone.

De novo indirect recipients

EPA faces the challenge of a limited time frame for disbursement of GHGRF grants while being directed in statute to (emphasis added):

> "…*provide 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*…"

As new institutions form in response to the availability of the GHGRF, it will be challenging for EPA to navigate how to assess these new institutions against existing ones on the basis of leverage. Innovative models which could be more effective in deploying capital to and achieving climate justice goals in low-income and disadvantaged communities are likely to appear over the next few years as the benefits of potential funding for these activities are increasingly appreciated by the marketplace.

Recommendations

While the Green Bank feels that leverage should be an essential criteria for GHGRF awards, awards should consider a series of factors – such as the demonstrated ability of an organization to reach and serve their designated market area, deploy capital into GHG reducing activities, attain carbon reductions, reduce energy burdens (with additional credit for serving low-income customers and disadvantaged or underserved / underbanked communities). EPA would be better served by appreciating the diverse capabilities of different market actors and using criteria which enables EPA to allocate grants and establish deliverables or outcomes based on: a demonstrated track record of GHG reducing activities; pathways to local communities, either directly or via active partnership activities; clear coordination with state energy, housing and transportation policies for climate action; and robust systems to track capital deployment and environmental outcomes.

To accommodate new participants without a track record of success but that may still be essential in the transition to a green economy, EPA should invite applicants to provide a process that embraces and provides access to funding for innovative models on the horizon while respecting the need for

these new players to demonstrate outcomes that satisfy GHG, climate justice and economic development goals.

As discussed, a National Climate Bank would address many of the concerns of quantifying and evaluating the leverage of disparate institutions. It would also have an amplifying effect of crowding in additional capital at the national level, thus increasing leverage ratios, potentially up to 30x.

Key Takeaways:

- Leverage is an essential criteria for awards, however:
  - It is not straightforward to assess: recipient organizations may rightly pursue activities, such as capacity building or technical assistance, that do not directly attract private capital.
  - Different types of institutions may have disparate leverage profiles and prioritizing leverage as a criteria could inherently skew towards certain types of recipients.
  - Non-financial actors such as States, municipalities, and Tribal Governments, as identified in GHGRF under Sec. 134(a)(1), do not typically consider leverage and have diverse experience with green banking.
  - New entrants spurred by the creation of the GHGRF may offer valuable methods to achieve decarbonization goals but will not have a clear leverage history to evaluate.
- Leverage should be considered as one of many criteria including: demonstrated ability of an organization to reach and serve their designated market area; and deploy capital into GHG and air pollution reducing activities.

2. What should EPA consider in the design of the program to ensure Greenhouse Gas Reduction Fund grants facilitate additionality (i.e., federal funding invests in projects that would have otherwise lacked access to financing)?

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

The Green Bank supports the GHGRF policy to facilitate additionality but emphasizes that demonstrating additionality can be challenging. The program should prioritize grants for GHG reduction purposes which, in the absence of the grants, would not have occurred. However, in practice it can be difficult to attribute causation to a particular intervention.

Today, access to capital for GHG reduction projects can be constrained by several barriers such as a lack of willingness of capital providers to fund certain technologies, types of end users (e.g., LMI customers or multifamily affordable housing situations), or certain geographies. Increased costs for capital can also be a barrier to financing such as a disparity between perceived vs. actual risk, market failures, or constrained supply of a particular source of capital (e.g. tax equity). The time required to source capital for projects or the scale of the activity may be yet another barrier.

While the funding available through the GHGRF may allow projects to address these barriers and develop projects that otherwise would not be realized, demonstrating this may be a barrier. In considering additionality, we recommend EPA take a holistic approach such that GHGRF scale, impact, efficiency, and equity are not sacrificed for a strict ability to evidence additionality.

Key Takeaway:

- While the Green Bank supports an additionality policy, it can be challenging to demonstrate and should be part of a holistic approach to distributing funding.

3. What should EPA consider in the design of the program to ensure that revenue from financial assistance provided using Greenhouse Gas Reduction Fund grants is recycled to ensure continued operability?

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

The Green Bank has first-hand experience in the burdens of ongoing reporting responsibility for American Recovery and Reinvestment Act ("ARRA") funds. The Green Bank has accounted for these funds for more than 12 years (and will continue accounting for several hundred thousand dollars of ARRA funds that remain). As we are well capitalized with a robust staff devoted to accounting and data management, this burden is manageable. But grantees with far less robust systems may face an undue burden in evidencing recyclability of GHGRF grants. A National Climate Bank could provide some of the accounting infrastructure that these smaller, less capable organizations can't independently manage, facilitating proper reporting to EPA's requirements. EPA might consider that grant awards (or sub-grant awards) below a particular break point be required to provide suitable evidence of initial use or investment of federal funds toward qualified projects while exempting such grant recipients (or subrecipients) below such breakpoint from ongoing reporting of recycling. As for large awardees, ongoing evidence of the recycling of grant funds should be required for the duration of the grant agreement.

If a National Climate Bank was established, it could ensure the continued operability of funds throughout the decades to come as explained above under: "A Vision for a National Climate Bank."

Key Takeaway:

- While the Green Bank supports a policy of recycling grants to ensure continued operability, smaller grantees may find the associated accounting and reporting requirements overly burdensome. Larger awardees should be required to provide ongoing evidence of recycling grant funds.

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

For a portion of the response, see the Green Bank's response below to Section 2 (i.e., Program Design) and Question 6 (i.e., federal government program design features) focusing on credit enhancements have pertinent points here.

A key part of the green bank model is working with community and private sector financial institutions to address gaps in the market as well as to demonstrate profitable models and structures to the private sector. The Green Bank would suggest that the program be structured in a way that also encourages recipients to partner with private sector financial institutions to leverage the public funds. It is through these partnerships, as the Green Bank has demonstrated, that private sector organizations will gain comfort with clean energy and climate finance. In Connecticut, the Green Bank has addressed several market gaps in the residential solar market with a variety of tools that have sparked private sector investment. In the early days of the residential solar market, the Green Bank identified a lack of options for residential consumers in terms of financing these systems. Our predecessor organization, the Connecticut Clean Energy Fund, pioneered the solar lease with the launch of Solar Lease I. As the market matured and demand increased, the Green Bank noticed persistent gaps in financing options and launched the CT Solar Loan product and the CT Solar Lease II product. Both products relied on the private market not only for contractors to install the solar but also on private sector capital to finance the installations. Both served as ways to educate private financiers on how these structures could work and demonstrated profitability for the financiers and a reduction in energy burden for the homeowners. After the initial run of both offerings, there existed in the market enough competing offers that the Green Bank felt that we did not need to continue to offer a solar loan or lease product.

Similarly, as the market matured, the Green Bank observed a market gap regarding where the solar adoption was taking place. To address slower rates of adoption in disadvantaged communities, the Green Bank issued an RFP looking for an installer with experience reaching similar communities and worked to create an added income-based incentive. The Green Bank selected Posigen as a partner and provided financing to support their activities in the disadvantaged communities in the state. As a result, the gap that existed between affluent and disadvantaged communities in terms of solar adoption has now been closed and Connecticut is now installing solar at higher rates in disadvantaged communities than in affluent ones thereby achieving the status of a solar with justice state. The financing provided by the Green Bank has not just helped the initially targeted communities (participating homeowners have seen a reduction in their energy burdens) but has also proven that investment in these communities is profitable.

For details on the Green Bank's efforts to advance distributed technologies on residential rooftops through administering a pay for performance incentive program and green bond issuance – see Attachment C.

Key Takeaway:

- A variety of financial interventions are needed when looking to address financing gaps in clean energy. Partnering with and including private sector players in transactions that are targeted to address specific gaps is an effective tool in terms of educating the private sector and demonstrating bankability.

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

Response

The Green Bank's response applies to Sec. 134(a)(1) of the GHGRF only.

The Green Bank proposes several things for EPA's consideration in best practice program design to reduce burdens on not only applicants, grantees, and/or subrecipients, but also EPA's administration of the GHGRF, including states climate change application and equitable, competitive distribution of funds.

States Climate Change Application

EPA should allow a State to apply on behalf of a number of States, to reduce the administrative burden on EPA and State applicants, grantees, and subrecipients. For example, the Green Bank could be an applicant on behalf of a number of other States (and Territories). Such partnering states would each have demonstrated climate change and public policy alignment with the GHGRF (see "Background" section above), along with programmatic and allocation structures in support of such policies, which would ease the collective administrative burden on all parties.

Equitable Competitive Distribution of Funds

As EPA begins to layout a process for determining how the GHGRF will be distributed, it need not look beyond the best practices it has already established through the State Revolving Funds ("SRF") and Water Infrastructure Finance and Innovation Act ("WIFIA") funds. The SRF has provided nearly $190 billion of low-cost financing for a wide range of water quality and drinking water infrastructure projects since inception – 43,000 water quality and 16,300 drinking water projects.[33] Within the Bipartisan Infrastructure Law ("BIL") (or Infrastructure Investment and Jobs Act ("IIJA")), EPA will allocate $44 billion in dedicated SRF to States, Tribes, and Territories with nearly half of this funding available as grants or principal forgiveness loans that remove barriers to investing in essential water infrastructure in underserved communities. And WIFIA, has provided more than $13 billion in 72 loans to accelerate investment in the nation's water infrastructure by providing long-term, low-cost supplemental credit assistance for regionally and nationally significant projects.[34] By combining the allocation approach of SRF, with the competitive approach of WIFIA, EPA has a proven and transparent process for implementing Sec. 134(a)(1) of the GHGRF that would result in an **equitable, competitive distribution of funds**.

For example, the BIL provided an SRF allocation to States, Tribes, and Territories for both clean water ("CWSRF") and drinking water ("DWSRF"). EPA should apply this allocation formula (e.g., CWSRF and/or DWSRF). And then, per the competitive approach of WIFIA, States, Tribes, and Territories would submit a letter of interest in such allocation, and then submit an application (including a plan for reaching low-income and disadvantaged communities) to compete for such funds. A State, Tribe, or Territory could request funds greater than their CWSRF and/or DWSRF allocation, or the EPA could establish a floor allocation (e.g., $100 MM) for smaller states (e.g., Connecticut, Hawaii, Puerto Rico, Rhode Island), however, they will only receive such additional funds beyond their allocation if there aren't enough strong applications for such funds or if allocation fails to be used in a timely manner in accordance with the terms of the grants (i.e., such funds could be redeployed to other allocatees).

In addition, states working together within an EPA region, could request additional funds for regionally significant projects.

The GHGRF should not be looked at as a one-time investment. Instead, if invested properly, then perhaps there could be an annual recuring source of funding approved by Congress. EPA should

[33] EPA Press Release of February 16, 2022 (click here)
[34] EPA Press Release of March 24, 2022 (click here)

prepare for success in investing funds, just as it has done with the SRF and WIFIA funds and follow its own best practices towards the **equitable, competitive distribution of funds**.

Key Takeaway:

- EPA should follow best practices established in the allocation of both the SRF and WIFIA to create an equitable, competitive distribution of funds.

6. What, if any, common federal grant program design features should EPA consider or avoid in order to maximize the ability of eligible recipients and/or indirect recipients to leverage and recycle Greenhouse Gas Reduction Fund grants?

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

The Green Bank proposes several common federal grant program features for EPA's consideration to maximize the ability to leverage and recycle grants, including the "best practices" and "lessons learned" from the American Recovery and Reinvestment Act ("ARRA").

Best Practices

EPA should consider "best practice" program design features from ARRA, which taught many state and local governments how financial assistance can increase and accelerate the investment in and deployment of clean energy, including, but not limited to:[35]

- **Loan Loss Reserves** – by providing community development financial institutions, credit unions, and community banks with loan loss reserves, the Green Bank was able to stretch public resources further; and

- **Interest Rate Buydowns** – by initiating special offers to lower interest rates to encourage new technology adoption (e.g., solar PV, air source heat pumps, ground source heat pumps), the Green Bank was able to increase and accelerate the investment in and deployment of clean energy.

The Green Bank invested $8.3 million of financial assistance from ARRA, in combination with $16.5 million of its own resources, to mobilize $158.1 million of private capital investment in clean energy.

For details on the financing products and the social impact resulting from resources provided through ARRA – see Attachment D.

This investment resulted in supporting over 9,000 families reducing energy burden from clean energy deployment, while creating over 2,000 jobs, reducing nearly 600,000 tons of CO_2 emissions, and reaching over 50% of the projects with nearly 40% of investment in vulnerable communities. Several of the residential financing programs supported by ARRA, including new programs created as a result of ARRA from "lessons learned" (e.g., Solar for All), led to significant investment and projects directed at vulnerable communities – see Table 2.

[35] It should be noted that the use of ARRA funds for "third party insurance" was not pursued by the Green Bank, however, given the increasing impacts of climate change, such an approach could be useful in the future.

Table 2. Green Bank Residential Clean Energy Financing Programs by Investment and Projects for Vulnerable Communities

Program	Investment ($MM's)			# of Projects		
	Not Vulnerable Communities	Vulnerable Communities	% Vulnerable Communities	Not Vulnerable Communities	Vulnerable Communities	% Vulnerable Communities
Smart-E Loan[36]	$75.1	$41.3	34%	3,689	2,627	42%
CT Solar Loan	$6.7	$2.4	26%	197	82	29%
CT Solar Lease[37]	$30.2	$16.1	35%	746	443	37%
Solar for All[38]	$27.9	$90.5	76%	929	3,363	78%

Lessons Learned

One of the many benefits supporting ARRA implementation, specifically as it applied to residential clean energy financing and deployment, was categorical exemptions for Davis Bacon, National Environmental Policy Act ("NEPA"), and historical preservation. Recognizing the importance of a just transition and the need for CBAs, the Green Bank would suggest that EPA consider similar treatment as ARRA for eligible projects (e.g., not applying to projects with construction costs less than $5 MM) for residential customers supported by the GHGRF, including those residing in single family homes and multifamily affordable housing.

Key Takeaways:

- Loan loss reserves and interest rate buydowns (such as those enabled by the American Recovery and Reinvestment Act or "ARRA") have led to significant investment and projects directed at vulnerable communities.
- Creating categorical exemptions for projects with construction costs less than $5 MM from existing federal standards that may be overly prescriptive (as done through ARRA) can accelerate financing activity and provide easier and more affordable access to low-income customers and DACs.

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

EPA should incorporate and prioritize the creation of quality jobs within grantees and subrecipients projects. There is a need across the nation, and specifically within Connecticut, for quality jobs that support a thriving and growing middle-class. This must include jobs that build professional skills, trades, and access to wealth building in a field that will shape the Nation's climate future. One way

[36] Annual Comprehensive Financial Report for FY22 (270) – click here
[37] Ibid (354)
[38] Annual Comprehensive Financial Report for FY21 (266) – click here

that EPA can support this through the GHGRF is to link certification, trades, and higher education to the project opportunities to invest in building the workforce we, as a nation, will need.

There are several ways to shape the future workforce from partnerships with State community colleges and universities to supporting labor transition and re-training programs. Connecticut has taken steps to ensure that our transition to a clean-energy economy will benefit our workforce as well. For instance, the Connecticut State Building Trades Training Institute ("BTTI") is a state-wide apprentice readiness program that prepares individuals that are interested in careers in state-certified apprentice programs within the unionized construction industry. The BTTI was launched in September of 2022 and provides workforce development in eight communities across Connecticut. Two communities have already successfully graduated cohorts, while the remaining six are preparing for their first trainees. The graduates from this program have either enrolled in Building Trades Apprentice Programs or are in the process of applying to the unions Joint Apprentice Training Committees. Once enrolled into one of these programs, the apprentice will be trained in all of the facets of the trade which includes many hours of training in the renewable energy field.

Key Takeaway:

- EPA should work with State community colleges, universities, and training/apprenticeship programs to support the creation of quality jobs within grantees and subrecipients projects.

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

EPA should seek to capture as much data as possible with regards to the ultimate borrowers and their use of funds. EPA should require recipients to collect this information and house it securely to protect Personal Identifiable Information ("PII"). Regularly auditing this data and looking for areas that are being underserved should be a fundamental part of any program.

However, EPA should go beyond just auditing data and identifying problems. They should look to recipients to specifically target communities of color. Lack of minority-owned businesses and contractors of color are recognized issues in many areas when it comes to clean energy installation and having additional owners and contractors in general, especially those who look like the communities that we are trying to reach, will be essential in combatting climate change. EPA should value recipients who are actively engaged with workforce development especially in communities of color.

Key Takeaway:

- EPA should track information, including demographic and socioeconomic profiles of the ultimate borrowers, and their use of funds, as well as data about the workforce providing the construction and operational support of GHG reducing projects.

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

Response

The Green Bank has no constructive response to this question except to note the following:

- **Tax Credit Adders** – within the IRA are "domestic content" provisions that provide for additional tax credits that should help enable market forces; and

- **Community-Based Campaigns** – the Green Bank has experience supporting community-based campaigns (e.g., Solarize Connecticut), including through the DOE's SunShot Initiative, that provided participating households with the option to pay more for hardware "Made in America".

These are two examples of existing processes within the GHG reduction industry that could be considered when developing program policies and guidance around American-made hardware.

Key Takeaway:

- EPA should investigate other processes in the GHG reduction industry that prioritize American-made products such as the IRA Tax Credit Adders and Community-Based Campaigns such as Solarize.

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

For Sec. 134(a)(1), EPA should consider the alignment of an applicant's projects with or advancement of state and federal equity goals such as location-specific pollution reductions, the projects' alignment with or advancement of state decarbonization and/or resilience plans, and a portfolio's likelihood and scale of financial standing improvement for disadvantaged communities. EPA should allow grants to act as flexible, gap-filling monies to complement other sources of funding (i.e. BIL or state incentive programs) and to unlock private-sector investment not only for projects that need credit enhancement but also for projects and communities, particularly environmental justice and vulnerable communities, that currently have limited access to financial markets due to systemic inequities.

The same can be said for application of GHGRF grants pursuant to Sec. 134(a)(1), (2) and (3), toward projects benefitting from rebates, tax credits and other support from the IRA, the BIL, or ARP. The BIL offers a myriad of opportunities to advance GHG reduction priorities. Various Connecticut state agencies have already participated in dozens of RFIs, FOAs, and RFPs issued in support of the BIL. The Green Bank has participated in these activities as they align to our mission of supporting Connecticut to achieve our policy goals of a 45% reduction from 2001 levels by 2030 (equivalent to

50-52% reduction from 2005 levels by 2030). We provide support to these requests by: sharing lessons learned from our decade of work in the clean energy space and ensuring that environmental justice community leaders are aware and have the resources to participate in these activities.

To achieve federal, state, and local GHG reduction targets, GHGRF grants need to be as flexible as possible – particularly when used to advance investment in low-income and disadvantaged communities – to be gap-filling and catalytic funds to complement increased investment in qualified projects.

Key Takeaway:

- GHGRF grants need to be as flexible as possible – particularly when used to advance investment in low-income and disadvantaged communities – to be gap-filling and catalytic funds to complement increased federal, state, and/or local investment in qualified projects.

11. Is guidance specific to Tribal and/or Territorial governments necessary to implement the program? If so, what specific issues should such guidance address?

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

Guidance specific to Tribal and/or Territorial governments (e.g., Puerto Rico) is necessary to implement the program. The following are some specific issues the guidance should address:

- **Clarify Treatment Under IRA** – as clarity is being sought in Question #10 above, with respect to GHGRF alignment to the IRA, EPA should consult with Treasury to be clear about all of the credits, direct payment, transferability and other benefits available under the IRA (e.g., 25C, 25D, 45, 45L, 45Y, 48, 48C, 48E, and others), and communicate which ones (if not all) of them are appropriate for Tribal and/or Territorial governments to rely on to finance such projects within their jurisdiction.

- **Increase Awareness of GHGRF** – EPA should increase its efforts to raise awareness about the GHGRF to Tribal and/or Territorial governments. For example, the Green Bank recently participated in the Solar and Energy Storage Association of Puerto Rico's annual summit[39] and met with the Board of Directors of the Puerto Rico Green Energy Trust (a.k.a. Puerto Rico Green Bank). In order to raise awareness about the opportunities presented by the GHGRF, the Green Bank spoke about its importance to Puerto Rico's efforts, especially rooftop solar and battery storage for low-income and disadvantaged communities.

These are a few suggestions for EPA's consideration to provide additional support to Tribes and/or Territorial governments in order to mobilize more public and private investment in and deployment of "qualified projects" to benefit these communities.

If the Green Bank can be of assistance, please let us know.

[39] https://www.sesapr.org/summit from November 1-3, 2022

If a National Climate Bank was established, it could assume the responsibilities of ensuring that Tribal and Territorial governments were aware of the GHGRF and provide assistance as needed to develop financing programs for these entities.

Key Takeaways:

- EPA should clarify treatment of Tribal and Territorial governments under the Inflation Reduction Act.
- EPA should dedicate resources to increase awareness of and encourage participation in the GHGRF in Tribal and Territorial governments.

Section 3: Eligible Projects

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

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

In addition to "distributed technologies on residential rooftops," in terms of "qualified projects"[40] and "zero emissions technology,"[41] the Green Bank would suggest that EPA look to the Clean Energy and Sustainability Accelerator ("Accelerator") passed out of the House of Representatives,[42] National Climate Bank Act introduced in the Senate,[43] and state level projects (e.g., environmental infrastructure) consistent with the intent of the GHGRF for additional guidance.

Accelerator and National Climate Bank

The Green Bank, supporting work being led by the Coalition for Green Capital, assisted Congresswoman Dingell with the drafting of the Accelerator, including the definition of "qualified projects" with a focus on "confronting climate change" by avoiding or reducing GHG emissions, and increasing resilience against its impacts.

Within the Accelerator, the following "qualified projects" were included:

- Renewable energy generation (e.g., solar, wind, geothermal, hydropower, ocean and hydrokinetic, and fuel cells[44])
- Building energy efficiency, fuel switching and electrification
- Industrial decarbonization
- Grid technology such as transmission, distribution and storage to support clean energy distribution, including smart grid applications[45]
- Agriculture and forestry projects that reduce net greenhouse gas emissions

[40] Includes any project, activity, or technology that (A) reduces or avoids greenhouse gas emissions and other forms of air pollution in partnership with, and by leveraging investment from, the private sector; or (B) assists communities in the efforts of those communities to reduce or avoid greenhouse gas emissions and other forms of air pollution.

[41] Means any technology that produces zero emissions of (A) air pollutant that is listed pursuant to section 108(a) (or any precursor to such an air pollutant); and (B) any greenhouse gas.

[42] https://www.congress.gov/bill/117th-congress/house-bill/806/text

[43] Included within the Senate proposed National Climate Bank Act of 2021 (i.e., not the Accelerator)

[44] In Connecticut, given its leading global hub for manufacturing, stationary fuel cells are within the Class I RPS

[45] In Connecticut, there are efforts by the electric distribution companies to install advanced metering infrastructure as the backbone to its clean energy future, including, but not limited to distributed energy resources (e.g., behind-the-meter renewable energy, demand response, battery storage, electric vehicles), improved measurement and verification, on bill financing, etc.

- Clean transportation (e.g., battery electric vehicles, plug-in hybrid electric vehicles, hydrogen vehicles, other zero emissions fueled vehicles)
- Related vehicle charging and fueling infrastructure[46]
- Climate resilient infrastructure

In addition to the Accelerator, the following "qualified projects" could be considered within the context of the National Climate Bank Act:

- Water efficiency, including residential, commercial, and industrial

The Green Bank would recommend that EPA consider all "qualified projects" outlined within the Accelerator, and consideration of measures within the Climate Bank Act, to apply to the GHGRF for direct and indirect investments.

In addition to these "qualified projects," the Green Bank suspects that there will be preexisting health and safety issues (e.g., lead, mold, asbestos) on properties, especially within low-income and disadvantaged communities, that prevent the deployment of projects. Because such preexisting issues are a barrier to deployment, the Green Bank would recommend that a portion of the GHGRF be allocated to support preexisting health and safety issues on properties as they too, should be considered "qualified projects" as long as there is a nexus with other projects supporting the GHGRF.

Environmental Infrastructure

Following the passage of the Accelerator by the House of Representatives, in June 2021 Connecticut Governor Lamont led a bipartisan effort to expand the scope of the Green Bank beyond "clean energy"[47] to include "environmental infrastructure"[48] through the passage of Public Act 21-115.[49] The Act seeks to apply the green bank model to environmental infrastructure, while advancing the capabilities of the Green Bank, including, but not limited to:

- **Environmental Infrastructure Fund** – establishing a fund within the Green Bank that can receive funding from federal sources (e.g., Accelerator, GHGRF) to be invested in environmental infrastructure.

[46] It should be noted that the Green Bank led an effort of multiple stakeholders to develop the voluntary carbon offset standard for electric vehicle charging stations – https://verra.org/methodology/vm0038-methodology-for-electric-vehicle-charging-systems-v1-0/

[47] "Clean energy" means solar photovoltaic energy, solar thermal, geothermal energy, wind, ocean thermal energy, wave or tidal energy, fuel cells, landfill gas, hydropower that meets the low-impact standards of the Low-Impact Hydropower Institute, hydrogen production and hydrogen conversion technologies, low emission advanced biomass conversion technologies, alternative fuels, used for electricity generation including ethanol, biodiesel or other fuel produced in Connecticut and derived from agricultural produce, food waste or waste vegetable oil, provided the Commissioner of Energy and Environmental Protection determines that such fuels provide net reductions in greenhouse gas emissions and fossil fuel consumption, usable electricity from combined heat and power systems with waste heat recovery systems, thermal storage systems, other energy resources and emerging technologies which have significant potential for commercialization and which do not involve the combustion of coal, petroleum or petroleum products, municipal solid waste or nuclear fission, financing of energy efficiency projects, projects that seek to deploy electric, electric hybrid, natural gas or alternative fuel vehicles and associated infrastructure, any related storage, distribution, manufacturing technologies or facilities and any Class I renewable energy source, as defined in section 16-1.

[48] "Environmental Infrastructure" means structures, facilities, systems, services, and improvement projects related to water, waste and recycling, climate adaptation and resiliency, agriculture, land conservation, parks and recreation, and environmental markets (e.g., carbon offsets, ecosystem services).

[49] "An Act Concerning Climate Change Adaptation" – click here

- **Bonding** – enables the Green Bank to issue revenue bonds for up to 50 years for environmental infrastructure.

- **Expanding Reporting Requirements** – expands the Green Banks reporting requirements beyond the Energy and Technology Committee and Commerce Committee, to also include the Environment Committee and Banking Committee of the CGA to increase accountability.

The Green Bank has been anticipating the passage of the GHGRF (i.e., Accelerator) in its efforts to support the passage of Public Act 21-115 in Connecticut.

In 2022, the Green Bank conducted stakeholder outreach to understand the various components of environmental infrastructure. With its mission to "confront climate change" through the cross-cutting issues of reducing greenhouse gas emissions, increasing climate adaptation and resilience, and enabling investment in vulnerable communities, there were several primers produced on land conservation,[50] parks and recreation,[51] and agriculture[52] reflecting the observations, findings, and initial recommendations from stakeholders.

In addition to the "qualified projects" included within the Accelerator and Climate Bank, and in support of "environmental infrastructure" to "confront climate change" within Connecticut, the Green Bank would recommend the following additional "qualified projects" be considered:

- Water
- Waste and Recycling
- Climate Adaptation and Resiliency
- Agriculture
- Land Conservation
- Parks and Recreation
- Environmental Markets (including, ecosystem services and carbon offsets)

EPA should consider "qualified projects" that can be supported through the GHGRF from the perspectives of state and local government if those governments have climate change policies consistent with the intentions of the GHGRF.

Key Takeaways:

- EPA should consider all qualified projects outlined within the Clean Energy and Sustainability Accelerator passed out of the House of Representatives, as well as measures within the National Climate Bank Act introduced by the Senate.
- EPA should allow GHGRF to be used to support preexisting health and safety concerns that may otherwise be a barrier to deployment of clean energy, especially in low-income and disadvantaged communities.
- EPA should consider environmental infrastructure projects as qualified projects so long as they are reducing GHG emissions or air pollution.

[50] Land Conservation Primer – click here
[51] Parks and Recreation Primer – click here
[52] Agriculture Primer – click here

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

In the experience of the Connecticut Green Bank, we have found that having a creative, flexible, and innovative approach to creating financing products allows us to have the greatest impact. Different market failures (e.g. underserved customer segments, high capital costs, etc.) require customized forms of intervention. The local government (State, municipal, Tribal/Territorial government) will likely be the party best suited to match the financing tool to the need identified within their geography. The following are the primary forms of financial assistance the Green Bank has used to create impact:

- Direct Lending/Investment – Lending to sub-recipients or to organizations in support of further development of clean energy assets. This activity includes but is not limited to equity investments, working capital loans, secured warehouse facilities, and other forms of debt. This approach works best when there is a substantial number of standardized contracts with downstream borrowers, such as homeowners and small businesses, with a sufficient history of loan performance of at least 5 years.

  In Connecticut, we have created loan facilities that increase low-income adoption of solar by lending to PosiGen and we have increased residential access to loans for energy efficiency by directly lending to a CDFI partner in support of their lending to homeowners. Further, through our Commercial Property Assessed Clean Energy offering, we have issued loans to hundreds of commercial property owners for energy efficiency and distributed generation projects.

- Credit Enhancements/Credit Support/Guarantees – Financial vehicles that de-risk the activities performed by others.

  The Green Bank has used a loan loss reserve for our Smart-E program (which lends to homeowners for energy efficiency or distributed generation) that effectively insures the lenders in the program against certain losses, thereby mitigating much of their risk and allowing them to lend money at lower rates. Rather than use cash for these loan loss reserves, a more efficient way to offer credit enhancements is to use a green bank (or national climate bank) guarantee backed by the entity's balance sheet, which the Green Bank has done successfully for the Smart-E program.

- Project Finance – Participating as part of the capital stack for a project, typically in the form of debt. The Green Bank has provided project financing for specific projects where our participation can lower the risk and overall cost of capital to the project by joining others in the financing.

  For example, the Green Bank worked with a community bank to repower a 1 megawatt hydroelectric facility. A Green Bank subordinate loan of $1.2 million plus a $500,000 limited guarantee enabled a $4.4 million senior loan from the bank in addition to $1 million in equity and Small Business Administration support.

- Grants – Providing financial assistance to help nascent or expanding organizations build their capacity and to expand to reach their targets. However, grants should be performance based, limited in size, and designed in a way that does not create organizational dependence on them in the long term.

  The Green Bank has provided grants to Sustainable Connecticut, a community-based organization that partners with towns to improve the sustainability in their communities. The Green Bank has provided grants that have allowed the organization's match fund to facilitate sustainability projects. This has effectively acted as a lead generation for the Green Banks's Solar Marketplace Assistance Program which targets municipal buildings for PPA projects.

- Secondary Markets/Securitization - Through securitizations and the selling of loans in the secondary market, recipients will be able to recapitalize themselves so that they may continue their other activities. Accessing the secondary market is a key part of the Green Bank model and should be a crucial activity for the long-term success of any organization receiving funds from the GHGRF.

  The Green Bank has participated in secondary markets by securitizing income streams from our Renewable Energy Credits through the issuance of 3 bonds, allowing for a more timely cost-recovery of the Residential Solar Incentive Program and effective management of the organization's balance sheet. Additionally, the Green Bank has had sold Commercial Property Assessed Clean Energy loans in the secondary market for similar purposes. Further, the Green Bank has worked in a secondary markets capacity with Eversource, one of the Investor Owned Utilities in the state, by buying small business energy efficiency loans originated by Eversource as the Green Bank and our financing partner can do so at a lower cost of capital than can Eversource.

- Creation of Leverage – As discussed in Section 2, Question 1, leveraging public funding to crowd in private sector lenders will stretch the funds received from the GHGRF as far as possible. Recipients will need to balance the need to build their balance sheet with assets that help them achieve fiscal sustainability and the need to maximize impact as possible by leveraging the GHGRF funds.

  The Green Bank operates a variety of products and programs designed to support the transition to the green economy, each with a different leverage ratio. At a portfolio level, the Green Bank is currently investing at around a 1:7 public to private ratio.

If a National Climate Bank was established, it could provide both technical assistance to local entities interested in establishing one or all of these tools, as required by the need in their specific geography.

Key Takeaways:

- There are a diverse set of financing tools that can support the transition to a green economy and selecting the appropriate tool is specific to the need of each geography/market.

3. Beyond financial assistance for project financing what other supports – such as technical assistance -- are necessary to accelerate deployment of such projects?

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

In the experience of the Green Bank, there are forms of assistance beyond project financing that are needed to accelerate deployment of clean energy projects. This assistance generally centers around project opportunity assessment, project acquisition and market development. First, there will be the need to design and implement community focused campaigns that increase the awareness of energy efficiency and distributed generation. These campaigns will need staff and marketing assets that will potentially need some financial support to develop, although the cost of this should be recovered through financing activities in the long term. In some areas, with some technologies, there will be a need to support workforce development to meet the demand for qualified contractors to do the required installations. When evaluating initial investments in customer acquisition and administration, the Green Bank has typically looked at the interest generated by assets and determine if those will cover the initial expenses over the life of the financing activity. For example, if we are looking to launch a new program that will necessitate an initial expense of $200,000 for marketing and setup, then approximately $4 million must be lent over a 10-year term at 1% interest rate, to achieve a present value of interest income equivalent to the marketing and setup expenses.

Technical assistance will like be required for particular project types (e.g. more complex building energy efficiency in the multifamily, commercial, industrial and institutional sectors). Building owners will need technical assistance to identify and plan for projects before they come to the traditional first stage of development. Where possible, the costs for technical assistance provided in identifying projects should be recouped through subsequent financing for resulting projects.

Key Takeaway:

- To establish successful programs will likely require funding for project opportunity assessment, project acquisition, market development, and technical assistance. The cost of this support should be recovered through financing activities (i.e., interest income) in the long term.

Section 4: Eligible Recipients

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

   Response
   The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

   EPA has been allocated a limited amount of funds to administer and oversee the GHGRF program. Therefore, as a practical matter, EPA will need to constrain grants to a limited number of ultimate recipients and should therefore solicit applications whereby the ongoing access to financial and technical assistance can be assured over many years. The suggestion earlier in this RFI response that EPA solicit proposals for a substantially capitalized national clean energy financing platform – a national climate bank (NCB) funded via grants sourced under Sec. 134(a)(2), and Sec. 134(a)(3) – could fulfill this need for ongoing access to financial and technical assistance for a wide range of applicants over many years to come.

   For Sec. 134(a)(1), the statute is clear, but the Green Bank suggests that States be given preference over a substantial amount of the funds, with the balance allocated to Tribal governments and municipalities (particularly those municipalities with acute environmental and energy justice issues to address and where the impact from such grants would be substantial). Given that States, municipalities, and Tribal governments are *not* permitted to apply for grants available under Sec. 134(a)(2), and Sec. 134(a)(3), we would recommend "eligible recipients" be ascribed a lower priority here as these entities have exclusive access to grants pursuant to Sec. 134(a)(2) and Sec. 134(a)(3) without competition from States, municipalities, and Tribal governments.

Key Takeaways:
- EPA should consider proposals for a national climate bank funded via grants provided under Sec. 134(a)(2), and Sec. 134(a)(3) to provide ongoing access to financial and technical assistance for a wide range of applicants over many years to come.
- For grants provided under Sec.134(a)(1), EPA should prioritize States, Tribal governments, and municipalities with acute environmental and energy justice issues and policies consistent with the GHGRF.

2. **What types of entities (as eligible recipients and/or indirect recipients) could enable Greenhouse Gas Reduction Fund grants to support investment and deployment of greenhouse gas and air pollution reducing projects in low-income and disadvantaged communities?**

   Response
   The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

Public Policy Created Green Banks

An "eligible recipient"[53] and/or "indirect recipient,"[54] such as a statutorily created state or local green bank, working in concert with community development financial institutions and other local lenders, could enable GHGRF grants to support investment in and deployment of GHG and air pollution reducing projects in low-income and disadvantaged communities. For example, the Green Bank is a quasi-public agency created through an act of legislation by the CGA with the mission to "confront climate change by increasing and accelerating investment into Connecticut's green economy to create more resilient, healthier, and equitable communities". As a quasi-public agency, the Green Bank is a nonprofit organization that supports the State of Connecticut in confronting climate change by reducing GHG emissions by 45% and no less than 80% from 2001 levels by 2030 and 2050, respectively, through the investment in and deployment of clean energy and environmental infrastructure.

Within its Comprehensive Plan, the Board of Directors of the Green Bank, established a goal that by 2025, no less than 40% of investment and benefits from the Green Bank be directed to vulnerable communities. Since its inception, the Green Bank has made progress towards this goal – see Table 3.[55]

Table 3. Investment in and Deployment of Clean Energy in Environmental Justice Communities in Connecticut with Support from Green Bank (2012-2022)

Investment		Deployment		Projects	
$MM's	%	MW	%	#	%
$787.0	36	162.2	32	23,648	39

The investment in and deployment of clean energy will avoid the emissions of GHGs and air pollution – see Table 4.[56]

Table 4. Emissions Avoided from Investment in and Deployment of Clean Energy in Connecticut

CO_2 Emissions (lifetime tons)	**NO_x Emissions** (lifetime pounds)	**SO_2 Emissions** (lifetime pounds)	**$PM_{2.5}$ Emissions** (lifetime pounds)
10,432,372	11,148,904	9,657,105	857,422

Key Takeaway:

- Statutorily created state and/or local green banks are entities in direct congruence with the GHGRF with a focus to increase and accelerate investment in low-income and disadvantaged communities.

[53] Means a nonprofit organization that (A) is designed to provide capital, leverage private capital, and provide other forms of financial assistance for the rapid deployment of low- and zero-emission products, technologies, and services; (B) does not take deposits other than deposits from repayments and other revenue received from financial assistance provided using grant funds under this section; (C) is funded by public or charitable contributions; and (D) invests in or finances projects alone or in conjunction with other investors.

[54] Undefined under Sec. 134

[55] Annual Comprehensive Financial Report for FY22 of the Green Bank (155)

[56] Ibid (147-149)

3. **What types of entities (as eligible recipients and/or indirect recipients) could be created to enable Greenhouse Gas Reduction Fund grants to support investment in and deployment of greenhouse gas and air pollution reducing projects in communities where capacity to finance and deploy such projects does not currently exist?**

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

EPA should prioritize applicants that can leverage their existing capabilities and experience with green financing to reach communities to deploy funds. While there are a wide variety of existing organizations operating today that have such a track record, there are parts of the country without established green financing or community financial institutions. For some of these uncovered areas, it may appropriate to expand the coverage of existing entities but for others, it is likely that new community lenders and Green Banks will need to be formed. These new green banks can either be the creations and instruments of states and municipalities or other mission-aligned entities and will take a broad view on green financing gaps in the geographies they operate. They will be best poised to identify these geographic-specific gaps and to address them. As the Connecticut Green Bank, and other Green Banks have demonstrated, we are adept at identifying market gaps (i.e. low-income solar adoption) and partnering with organizations who can address those gaps.

The new green banks will also need to recruit community lenders, developers, and contractors among others to address those gaps. There will also potentially be a need for additional community-focused financial institutions such as CDFI's to be created to reach communities where no such organization works or where one does not have the capacity to do the necessary type of lending.

If a National Climate Bank was established, it could provide the technical and financial support to both expand the reach of existing organizations, and to establish new entities to address geographic-specific gaps.

Key Takeaway:

- EPA should prioritize existing entities, such as green banks, and expand their coverage where applicable.
- In areas that are not currently served by a green financing institution, EPA should support the development of new entities to address geographic-specific needs.

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

The Environmental Protection Agency should seek to acquire as much data as possible as frequently as possible without creating an undue burden on recipients so that they can monitor the progress of funds being deployed. In the agreements with recipients and subrecipients, EPA should set targets and milestones regarding volume and impact. There should be strong claw back provisions that allow EPA to take back funds should milestones not be met. EPA should request that the recipients have in place within 180 days a data collection and evaluation plan that addresses the following:

- Which data that is to be collected, its sources, controls, and privacy safeguards
- Frequency of data collection
- An evaluation framework that speaks to how the recipients' activities are creating additionality and impact
- Impact methodologies that will be used to quantify societal impacts resulting from the recipient's activities

EPA should also look for the recipients to budget for and engage with established evaluation, measurement, and verification ("EM&V") consultants with longstanding experience in this space.

When evaluating recipients with no track records, EPA should look for specific skillsets and experience amongst the recipient's staff. Having the following skills will position and organization to deploy funds quickly and efficiently:

- Program Design & Administration – effectively build, implement, and manage a program/product in the clean energy and community lending spaces
- Deal Origination – source transactions and projects to finance
- Underwriting – verify and review of the financials of a project or loan application.
- Structuring – arrange and execute transactions, preferably demonstrate the inclusion of multiple parties
- Portfolio Risk Management – ongoing monitoring and controls of a group of loans to minimize defaults and losses
- Asset Management – ongoing monitoring of the physical and financial performance of assets owned or supported by the organization with the view of minimizing losses and maximizing returns
- Liability Management/Capital Markets – ongoing review of invested assets with the perspective of identifying opportunities to sell investments to recapitalize a balance sheet to do more lending and securitize income streams in the capital markets
- Loan Servicing – collect and monitor of individual loans and handle of resulting workouts and restructurings.
- Other Support functions:
    - Marketing/Outreach – management of the organization's brand, the public's awareness of the brand and its products as well as how potential deals are brought into the organization
    - Community Engagement – working together with target populations in the community to further support marketing and outreach efforts but with a more community driven approach that addresses community specific needs and barriers
    - Policy – advocation at local, state, and federal levels for policy solutions that will enhance the speed of deployment of clean energy
    - Legal – legal advice for loan documentation, closings, and collections as well as support for activities in the secondary markets such as securitization
    - Compliance – the monitoring and fulfillment of contractual obligations as both a lender and as a borrower
    - EM&V/Data – ensuring that the data on each loan is collected and handling any impact reporting and evaluation on programs
    - Finance, Accounting, and Administration – The management of the accounting for these financing activities as well as the cash management for them, both of which are specific to the clean energy space

Key Takeaways:

- All entities (new or existing) should be subject to data and reporting requirements.
- New entities should demonstrate staff expertise in all areas critical to establishing and maintaining financing products and programs and in terms of their ability to partner with the community.

5. What kinds of technical and/or financial assistance could Greenhouse Gas Reduction Fund grants facilitate to maximize investment in and deployment of greenhouse gas and air pollution reducing projects by existing and/or new eligible recipients and/or indirect recipients?

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

As discussed in Section 3, Question 3, it is likely that many forms of assistance will be required to successfully support the deployment of the GHGRF. Existing and/or new "eligible recipients" and/or "indirect recipients" of GHGRF grants could provide a variety of technical and/or financial assistance to maximize investment in and deployment of GHG and air pollution reducing projects, including to ensure that low-income and disadvantaged communities can participate in and benefit from the GHGRF.

Technical Assistance

Several DOE technical assistance programs, present "best practice" models for community engagement, including, but not limited to:

- **National Laboratories** – the DOE has an extraordinary resource in its seventeen (17) national laboratories that can provide various forms of technical assistance. For example, the National Renewable Energy Laboratory ("NREL") provided rigorous, integrated engineering-economic analysis to the Los Angeles Department of Water and Power through the Los Angeles 100% Renewable Energy Study ("LA100").[57] NREL is doing something similar with PR100 in Puerto Rico.[58]

- **Communities LEAP**[59] – a pilot technical assistance program that brings together resources from the nation's premier national laboratories with disadvantaged communities across the country to develop or implement local clean energy plans. Grounded in the eight (8) policy principles of the DOE's Justice 40 Initiative, resources from the GHGRF should be provided for Communities LEAP to be replicated and scaled-up across the country to support more low-income and disadvantaged communities.

- **SunShot Initiative** – a program to reduce "soft costs" from the deployment of solar PV, the SunShot Initiative provided technical assistance resources to communities to reduce permitting and zoning barriers, reduce customer acquisition costs through community-

[57] https://www.nrel.gov/analysis/los-angeles-100-percent-renewable-study.html

[58] https://www.nrel.gov/news/program/2022/doe-launches-study-to-consider-equitable-pathways-to-power-puerto-rico-with-100-renewable-energy.html

[59] It should be noted that the Green Bank, working in collaboration with the Greater Bridgeport Community Enterprises and Operation Fuel, were among the awardees for Communities LEAP technical assistance pilot.

based marketing campaigns (e.g., Solarize,[60] Solar for All[61]), and increase information on financing to enable investment in and deployment of clean energy. The GHGRF should provide technical assistance resources to replicate and scale-up such community-based activities with a focus on low-income and disadvantaged communities.

Such technical assistance in community action planning, implementation, and engagement, with support to remove local barriers and increase customer adoption of technology through marketing and financing, while meeting the needs of the community, will maximize investment in and deployment of GHG and air pollution reducing projects, especially in low-income and disadvantaged communities.

Financial Assistance

In addition to the financial assistance examples learned from ARRA as noted above, there is also a need for continuous and ongoing financial assistance training and certification of workers. For example, there are several "best practice" certificate programs, including, but not limited to:

- **Financing and Deploying Clean Energy Certificate Program**[62]– a year-long online admissions-based certification program offered by Yale for working professionals who seek to accelerate the transition to a clean economy. The key objective of this program is to help professionals understand the interplay of the financial, technological, and socioeconomic drivers in financing and deploying clean energy.

- **Solar Lending Professional Training and Certification** [63]– an online program offered by Inclusiv, designed to increase the capacity of community-based lenders (credit unions, community development financial institutions ("CDFIs"), and community banks) to offer solar financing. The training is offered free of charge to cohorts of lending professionals who have high capacity to implement solar loan programs at their institutions.

Such financial assistance should be encouraged and scaled up through funding from the GHGRF, which will not only maximize investment in and deployment of GHG and air pollution reducing projects, especially in low-income and disadvantaged communities, but also provide useful workforce development and credentials to support the advancement of people of color within financial services.

Key Takeaways:

- Several DOE programs, such as the National Labs, Communities LEAP, and the SunShot Initiative, have created technical assistance programs that have been immensely supportive of clean energy financing initiatives.
- Financial education assistance programs can support the development of a skilled green financing workforce to deliver the impact envisioned in the GHGRF.

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[60] https://cbey.yale.edu/sites/default/files/2019-09/Solarize%20Your%20Community%20Rev1%20Dig.pdf
[61] https://www.ctgreenbank.com/solarforall/
[62] https://cbey.yale.edu/financing-and-deploying-clean-energy-certificate-program/about-the-certificate
[63] https://inclusiv.org/inclusiv-center-for-resiliency-and-clean-energy-free-solar-lending-professional-training-certificate/

Section 5: Oversight and Reporting

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

The GHGRF provides a significant amount of public funds with various uses and recipients to invest in qualified projects. Given the magnitude of the public funds, especially for those direct or indirect recipients (i.e., grantees, subrecipients) that receive a large amount of funds (e.g., $25 MM or more), the highest standards for governance structures, reporting requirements, and audit requirements must be considered by EPA. The Green Bank would like to share information that it believes to be up to this standard of accountability given the use of public funds it invests on behalf of Connecticut ratepayers, except applied in this case to the American taxpayers for the GHGRF.

Governance Structures

In terms of governance structure, pursuant to CGS 16-245n, the powers of the Green Bank are vested in and exercised by a Board of Directors that is comprised of twelve (12) voting and one non-voting members[64] each with the knowledge and expertise in matters related to the purpose of the organization – see Table 5.

Table 5. Governance Structure of the Green Bank

Position	Status	Appointer
Commissioner of DECD (or designee)	Ex Officio	Governor
Commissioner of DEEP (or designee)	Ex Officio	Governor
Secretary of OPM (or designee)	Ex Officio	Governor
State Treasurer (or designee)	Ex Officio	Treasurer
Finance of Renewable Energy	Appointed	Governor
Finance of Renewable Energy	Appointed	Governor
Labor Organization	Appointed	Governor
R&D or Manufacturing	Appointed	Governor
Investment Fund Management	Appointed	Minority Leader of the House
Environmental Organization	Appointed	President Pro Tempore of the Senate
Finance or Deployment of Renewable Energy	Appointed	Minority Leader of the Senate
Residential or Low Income	Appointed	Speaker of the House
President of the Green Bank	Ex Officio	Board of Directors

[64] President and CEO of the Green Bank

The Board of Directors of the Green Bank is governed through statute, as well as an Ethics Statement,[65] Ethical Conduct Policy,[66] Resolution of Purpose,[67] Bylaws,[68] Operating Procedures,[69] and Comprehensive Plan,[70] all of which are provided publicly on the governance section of its website.[71]

The Board of Directors also has four (4) committees, including:

- Audit, Compliance, and Governance Committee
- Budget, Operations, and Compensation Committee
- Deployment (Investment) Committee
- Joint Committee[72]

The Board of Directors and Committee meetings are noticed to the Secretary of State,[73] open to the public, recorded and made available following the meeting, and meeting materials are accessible online.[74] For recipients of large amounts of funds through the GHGRF, either directly or indirectly, such accountability and transparency with governance should be the baseline.

Reporting and Auditing Requirements

The Green Bank also adheres to the highest standard of reporting and auditing, ensuring public transparency,[75] including, but not limited to:

- **Annual Reports** – issued by the Green Bank to the DEEP, committees of cognizance of the CGA,[76] and local elected officials in cities and towns throughout Connecticut.[77]

- **Annual Comprehensive Financial Reports** ("ACFR") – compiled by the accounting staff of the Green Bank and audited by an external certified public accounting firm in accordance with Generally Accepted Accounting Principles ("GAAP"), the report is submitted to the Government Finance Officers Association ("GFOA") to seek awarding of a "Certificate in Achievement for Excellence in Financial Reporting" – the highest award in government financial reporting. Within the ACFR are both the financial report, as well as the non-financial public benefit report demonstrating the results achieved from the investment of public funds.[78]

- **Auditors of Public Account** ("APA") – the office of the APA, is a legislative agency of the State of Connecticut whose primary mission is to conduct audits of all state agencies,

[65] https://www.ctgreenbank.com/wp-content/uploads/2017/02/Green-Bank_Ethics-Statement-CLEAN-REVISED-102214.pdf
[66] https://www.ctgreenbank.com/wp-content/uploads/2022/09/Green-Bank_Ethical-Conduct-Policy_BOD_102221.pdf
[67] https://www.ctgreenbank.com/wp-content/uploads/2021/11/5ai_Green-Bank-Resolution-of-Purpose-CLEAN-REVISED.pdf
[68] https://www.ctgreenbank.com/wp-content/uploads/2021/11/5ai_Green-Bank_Revised-Bylaws_CLEAN.pdf
[69] https://www.ctgreenbank.com/wp-content/uploads/2022/09/5ai_Green-Bank-Operating-Procedures-10-22-2021.pdf
[70] https://www.ctgreenbank.com/wp-content/uploads/2022/08/Comprehensive-Plan_FY-2023_FINAL_080122-1.pdf
[71] https://www.ctgreenbank.com/about-us/governance/
[72] Members of the Green Bank Board of Directors and the Energy Efficiency Board (i.e., utility-administered incentive programs) for the purposes of coordination of programs and activities consistent with respective strategic plans to reduce long-term costs, environmental impacts, and security risks of energy in the state.
[73] https://portal.ct.gov/SOTS/Legislative-Services/Public-Meeting-Notice-Calendar
[74] https://www.ctgreenbank.com/about-us/governance/
[75] https://www.ctgreenbank.com/strategy-impact/reporting-transparency/
[76] Energy and Technology, Commerce, Environment, Banking Committees
[77] For example, FY21 Annual Report – click here
[78] For example, FY22 Annual Comprehensive Financial Report – click here

including quasi-public agencies. The office is under the direction of two state auditors appointed by the state legislature. The APA audits certain operations to ensure that the Connecticut Green Bank is meeting its duties under CGS 1-122 and 2-90.[79]

- **Open Connecticut – Payroll** – centralizes state financial information on payroll to make it easier to follow state dollars expended on operations and compensation.[80]

- **Open Connecticut – Checkbook** – centralizes state financial information on transactions or expenditures to make it easier to follow state dollars for goods or services.[81]

And lastly, the Green Bank, as a quasi-public entity of Connecticut, adheres to the Connecticut Freedom of Information Act.[82]

For those entities that directly or indirectly receive substantial funding through the GHGRF, ensuring accountability and transparency with the administration and investment of such funds should be of paramount importance to EPA.

Key Takeaway:

- Given the magnitude of the public funds, especially for those direct or indirect recipients that receive a large amount of funds (e.g., $25 MM or more), the highest standards for governance structures, reporting requirements, and audit requirements must be considered by EPA. The Connecticut Green Bank has such protocols and can be looked to as a go-by for the level of review and oversight prudent for entities that are allocated funds through the GHGRF.

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

Recipients of funds have a responsibility to ensure that personal identifiable information ("PII") collected as part of these activities is kept confidential and that there are appropriate controls in place. The Green Bank recommends that EPA require all recipients to have in place completed a Systems and Organization type II ("SOC2") audit every 12 to 18 months. Recipients should demonstrate ongoing certification while they are in possession of these funds.

Key Takeaway:

- EPA should require all recipients to complete a Systems and Organization Type II (SOC2) audit every 12 to 18 months with no gaps in certification to ensure that personal identifiable information collected as part of these activities is kept confidential.

[79] For example, State of Connecticut Auditors' Report for FY19 and FY20 – click here
[80] https://openquasi.ct.gov/payroll
[81] https://openquasi.ct.gov/checkbook
[82] https://portal.ct.gov/FOI/Quick-Links/The-FOI-Act

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

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

With the mission to "confront climate change by increasing and accelerating investment in Connecticut's green economy to create more resilient, healthier, and equitable communities," the Green Bank has three (3) goals, including:

1) To leverage limited public resources to scale-up and mobilize private capital investment in the green economy of Connecticut.

2) To strengthen Connecticut's communities, especially vulnerable communities, by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses.

3) To pursue investment strategies that advance market transformation in green investing while supporting the organization's pursuit of financial sustainability.

Progress towards the achievement of these goals, are tracked through an Evaluation Framework[83] to guide the assessment, monitoring, and reporting of program impacts and processes arising from clean energy investment and deployment. This framework provides the foundation for determining the e^4 impact (i.e., economy, equity, energy, and environment) the Green Bank is enabling from its investment. Increasing and accelerating investment in the green economy leads to greater e^4 benefits to society.

For a summary of the Green Bank's social impacts – see Attachment E.

Reductions in Greenhouse Gas Emissions or Air Pollution

Working in consultation with EPA and DEEP, the Green Bank devised a methodology[84] that takes the reduction in consumption of energy and increase in production of renewable energy, to reasonably estimate the air emission (i.e., CO_2, NO_x, SO_2, and $PM_{2.5}$) avoidances resulting from clean energy deployment. The methodology uses EPA's Avoided Emissions and Generation Tool ("AVERT").

Allocation of Benefits to Low-Income and Disadvantaged Communities

With the passage of Public Act 20-05, and its inclusion of "vulnerable communities," along with the goal from the Board of Directors of the Green Bank to ensure that no less than 40 percent of investment and benefits from its programs be directed at vulnerable communities, the Green Bank established a methodology for measuring equity.[85] In addition to equity, the Green Bank developed in consultation with NREL, an energy burden reduction methodology resulting from the projects it has financed through its products and programs using actual production data, contracts, and utility

[83] Evaluation Framework – click here

[84] https://www.ctgreenbank.com/wp-content/uploads/2018/01/CGB-Eval-IMPACT-091917-Bv2.pdf

[85] https://www.ctgreenbank.com/wp-content/uploads/2021/10/Equity_Investment_in_Vulnerable_Communities.pdf

rates.[86] It is worth noting that defining "benefits" to low-income and disadvantaged communities may still be an area for exploration. Today, many clean energy and greenhouse gas reduction projects reduce energy burden to these customers. However, the Green Bank recommends that EPA consider a more holistic view of benefits, including building resiliency, workforce development initiatives, etc.

Private Sector Leverage and Project Additionality

Leveraging limited public funds to mobilize multiples of private sector investment, is a fundamental principle of green banks. As a result of providing families and businesses with the capital that they need to finance clean energy, they are able to realize its benefits. In consultation with the Department of Economic and Community Development ("DECD") and Department of Revenue Services ("DRS"), investment in clean energy deployment creates jobs in our communities[87] and raises tax revenues from sales, individual, and corporate taxes,[88] respectively.

Public Health Benefits Generated

In addition to the methodology to estimate air emissions, in consultation with EPA, DEEP, and Department of Public Health ("DPH"), using EPA's Co-Benefit Risk Assessment ("COBRA") tool, the green bank developed a methodology to estimate the public health benefits resulting from cleaner air from energy efficiency and renewable energy projects.[89]

Distribution of Projects at the National, Regional, State and Local Levels

While the Green Bank's focus is within Connecticut, it does make the information on the distribution of projects, and the associated benefits, available online through its Mapping Analysis of Your Area ("MAYA") tool.[90, 91] MAYA provides project level data and benefits (i.e., all of the above impact metrics) at the local level, including:

- Municipal
- County
- State Legislature
- Congressional
- Census Tract

These are the metrics and indicators the Green Bank has developed over the years in consultation with a number of state (e.g., DEEP, DECD, DPH, DRS) and federal (e.g., DOE, EPA) government partners.

It is critically important that recipients receiving funds from the GHGRF collect and analyze data on the social and environmental impacts resulting from investments to continuously and effectively communicate benefits to politicians, citizens, and key stakeholders. The Green Bank would emphasize that EPA require that such data must be collected at the project level for all recipients of funds through the GHGRF and made publicly available since taxpayer resources are being used.

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[86] https://www.ctgreenbank.com/wp-content/uploads/2021/09/CGB-Eval-Solar-Methodology-combined-6-8-2021-final.pdf
[87] https://www.ctgreenbank.com/wp-content/uploads/2018/03/CGB_DECD_Jobs-Study_Fact-Sheet.pdf
[88] https://www.ctgreenbank.com/wp-content/uploads/2018/09/CGB-Eval-Tax-Methodology-7-24-18.pdf
[89] https://www.ctgreenbank.com/wp-content/uploads/2018/03/CGB-Eval-PUBLICHEALTH-1-25-18-new.pdf
[90] https://www.ctgreenbank.com/maya/
[91] MAYA is named after the poet Maya Angelou, who is an inspiration for the Green Bank's vision statement of "…a planet protected by the love of humanity".

The following are the key pieces of data that are essential to collect to estimate E^4 impact – see Table 6.

Table 6. Data Collection to Compute Success and Impact

	Economy	Energy	Environment	Equity
Installed Cost	x			x
Project Type	x	x	x	x
Installed Capacity		x	x	x
Location	x			x

- **Economy** – per every $1.0 MM invested in funding (i.e., grants) and financing (i.e., loans) from public and private sources of capital in various clean energy projects (e.g., renewable energy, energy efficiency), the direct, indirect and induced jobs years and sales, property, corporate, and individual tax revenues can be estimated.

- **Energy** – based on the installed capacity of a project, including its estimated production (i.e., kWh) and/or savings (i.e., MMBtu), and the type of clean energy project (e.g., energy efficiency, solar PV), the energy burden reduction can be calculated depending upon the rate structure.

- **Environment** – based on the estimated production and/or savings of such systems, and type of project, using tools developed by EPA, an estimate of GHG and criteria pollutant emissions avoided and the associated public health benefits from cleaner air (e.g., reduced sick days, hospitalizations, deaths) can be estimated.

- **Equity** – if data on income and race is not being collected, then the location of a project with respect to census tract can enable an estimate of what families and businesses are benefitting from such investment in and deployment of various clean energy projects.

Data Availability and Accessibility

Given the use of public funds through the GHGRF, all recipients of such funds should provide to the United States Government ("USG") all the information, including loan performance data. For example, the Green Bank has provided to the DOE, loan and incentive performance data for residential single-family energy efficiency loans, solar PV leases for low- to moderate-income families, and rooftop solar incentives for scientific research purposes.[92, 93, 94] Research can emphasize how carefully designed and administered financing programs supported by federal funds can exhibit stronger performance than other similar loans and therefore capital providers and lenders should offer better terms (i.e., lower interest rates, longer tenors, or both), and that such lending can help support public policy goals related to equitable access to capital such as Justice 40 and the CRA[95] compliance requirements.

[92] State and Local Energy Efficiency Action Network (SEE Action). (2021). *Long-Term Performance of Energy Efficiency Loan portfolios.* Prepared by: Jeff Deason, Greg Leventis, and Sean Murphy of Lawrence Berkeley National Laboratory.

[93] (May 2021). *Performance of Solar Leasing for Low- and Middle-Income Customers in Connecticut*. Prepared by Jeff Deason, Greg Leventis, and Sean Murphy of Lawrence Berkeley National Laboratory.

[94] (April 2022). *Rooftop Solar Incentives Remain Effective for Low- and Moderate-Income Adoption.* Prepared by Eric O'Shaughnessy of Lawrence Berkeley National Laboratory.

[95] The Community Reinvestment Act (CRA), enacted in 1977, requires the Federal Reserve and other federal banking regulators to encourage financial institutions to help meet the credit needs of the communities in which they do business, including low- and moderate-income (LMI) neighborhoods (i.e., less than 80% area median income).

Reducing asymmetric information by requiring that all data from federally funded programs such as the GHGRF be collected, made available, and publicly disclosed will reduce the perception of risk by private lenders and encourage more competition in the marketplace. Increased competition is good for borrowers as this should result in increased access to capital, lower interest rates, more term options, better underwriting criteria, greater marketing by financial institutions, and other benefits, including an increase in demand for clean energy projects and measures by consumers.

Key Takeaways:

- At a minimum, EPA should require tracking on the following metrics:
  - Reductions in GHG emissions or air pollution
  - Benefits allocated to low-income and underserved communities (e.g. reduction of energy burden)
  - Private sector leverage and additionality
  - Increased jobs
  - Public health benefits
  - Geographic distribution of projects
- Data should be collected at the project level for all recipients of funds through the GHGRF and made publicly available, which will reduce the perception of risk by private lenders and encourage more competition in the marketplace.

4. What should EPA consider in the design of the program to ensure community accountability for projects funded directly or indirectly by the Greenhouse Gas Reduction Fund? What if any existing governance structures, assessment criteria (e.g., the Community Development Financial Institutions Fund's Target Market Accountability criteria), rules, etc., should EPA consider?

Response

The Green Bank's response applies to Sec. 134(a)(1), Sec. 134(a)(2), and Sec. 134(a)(3) of the GHGRF.

The Green Bank has several perspectives with regards to this response, including guidance provided by the CRA, and existence of jurisdictional public policies or corporate structure, as considerations for program design to ensure community accountability for projects funded directly or indirectly by the GHGRF.

Community Reinvestment Act

From the perspective of financing, in support of the dual goals "to leverage limited public resources to scale-up and mobilize private capital investment in the green economy of Connecticut" and "strengthen Connecticut's communities, especially vulnerable communities, by making the benefits of the green economy inclusive and accessible to all individuals, families, and businesses," the Green Bank tracks CRA eligible investments by location. CRA was enacted by Congress in 1977 to encourage depository institutions to lend in low- (i.e., less than 50% Area Median Income ("AMI") census tracts) to-moderate-income (i.e., 50-80% AMI census tracts) communities. These lending institutions are rated by regulators as to the volume of their lending to projects in these communities. The more a green bank can partner with such financial institutions that must comply with CRA, the more EPA can use public funds from the GHGRF to mobilize private investment in qualified projects in low-income and disadvantaged communities.

In a recent opportunity to comment on the Federal Reserve System, Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation involving revisions to the CRA, the Green

Bank supported the inclusion of "disaster preparedness and climate resiliency" as a new category in community development activities eligible for CRA credit, along with three (3) criteria to qualify for such credit, including that the activities must:

1. benefit or serve residents, including low- or moderate-income residents, in one or more of the targeted census tracts;

2. not displace or exclude low- or moderate-income residents in targeted census tracts; and

3. be conducted in conjunction with a federal, state, local, or tribal government plan, program or initiative focused on disaster preparedness or climate resiliency that includes an explicit focus on benefitting a geographic area that includes the targeted census tracts.

To ensure community accountability, EPA should consider within its design for projects funded directly or indirectly by the GHGRF, as they apply to the financing of such projects within low-income and/or disadvantaged communities, guidance from CRA.

Jurisdictional Public Policy and Corporate Governance

It should be noted that not all jurisdictions (e.g., municipal, county, or state governments), nor financial institutions, have public policies or corporate structures, respectively, that can support ensuring community accountability to the GHGRF.

As noted above, Connecticut has numerous public policies in place that guide such community accountability (e.g., from statewide targets to reduce greenhouse gas emissions and statutory creation of the Green Bank to public disclosure of compensation and expense information from the Green Bank). Where jurisdictional public policies don't exist for government, consideration by EPA should include the following:

- **Sub-State Public Policies** – there may be instances where a lack of state public policy, can be augmented by the existence of local public policy (e.g., city or county established renewable energy targets like LA100, or statutorily created green bank like the Montgomery County Green Bank) consistent with the intentions of the GHGRF.

- **Public Facing Initiatives** – there may be Governors of states or Mayors of cities involved in public facing initiatives (e.g., United States Climate Alliance[96] or United States Conference of Mayors Climate Protection Center[97]) consistent with the intentions of the GHGRF.

With respect to financial institutions who receive funds from the GHGRF either directly or indirectly, the Green Bank has experience partnering with mission-aligned investors that may be insightful to ensuring community accountability.[98] Where corporate structure is not as apparent, consideration by EPA should include the following:

[96] http://www.usclimatealliance.org/

[97] https://www.usmayors.org/programs/mayors-climate-protection-center/

[98] Amalgamated Bank is such an example, as a B Corporation, they are committed to environmental and social responsibility – net-zero and powered by 100% renewable energy, history of providing affordable access to the banking system, supporting immigrants and affordable housing, and being a champion of workers' rights.

- **Corporate Governance** – Board of Directors of the financial institution adopting environmental, social, and governance ("ESG") principles consistent with the intentions of the GHGRF.

- **Transparency** – timely and thorough accounting and reporting consistent with the intentions of the GHGRF.

Ensuring community accountability for projects funded directly or indirectly by the GHGRF can be improved through those parties required to adhere to CRA, as well as jurisdictions with strong public policies or corporate governance with demonstrated principles and transparency consistent with the intentions of the GHGRF.

Key Takeaways:

- To ensure community accountability, EPA should consider guidance from the Community Reinvestment Act within its design for projects funded directly or indirectly by the GHGRF, as they apply to the financing of such projects within low-income and/or disadvantaged communities.
- Where available, GHGRF recipients should follow protocol established by state and local government to ensure community accountability.
- Financial institutions should adopt environmental, social, and governance (ESG) principles consistent with the intentions of the GHGRF.

Section 6: General Comments

1. Do you have any other comments on the implementation of the Greenhouse Gas Reduction Fund?

   Response
   State and local green banks, especially those that have been statutorily created and/or provided public funds, and a mission to confront climate change by increasing and accelerating private investment in and deployment of clean energy and climate change projects, especially within low income and disadvantaged communities, are excellent partners for the EPA in its successful and sustainable efforts to implement the GHGRF.

The Green Bank appreciates EPA's efforts to solicit public comment on the RFI GHGRF. The Green Bank looks forward to working with our partners in Connecticut, and across the country, to submit applications for consideration into the pending solicitations.

Sincerely,

Lonnie Reed
Lonnie Reed
Chair

Bryan Garcia
Bryan Garcia
President and CEO

Sara Harari
Sara Harari
Associate Director of Innovation

Bert Hunter
Bert Hunter
EVP and CIO

Eric Shrago
Eric Shrago
VP of Operations

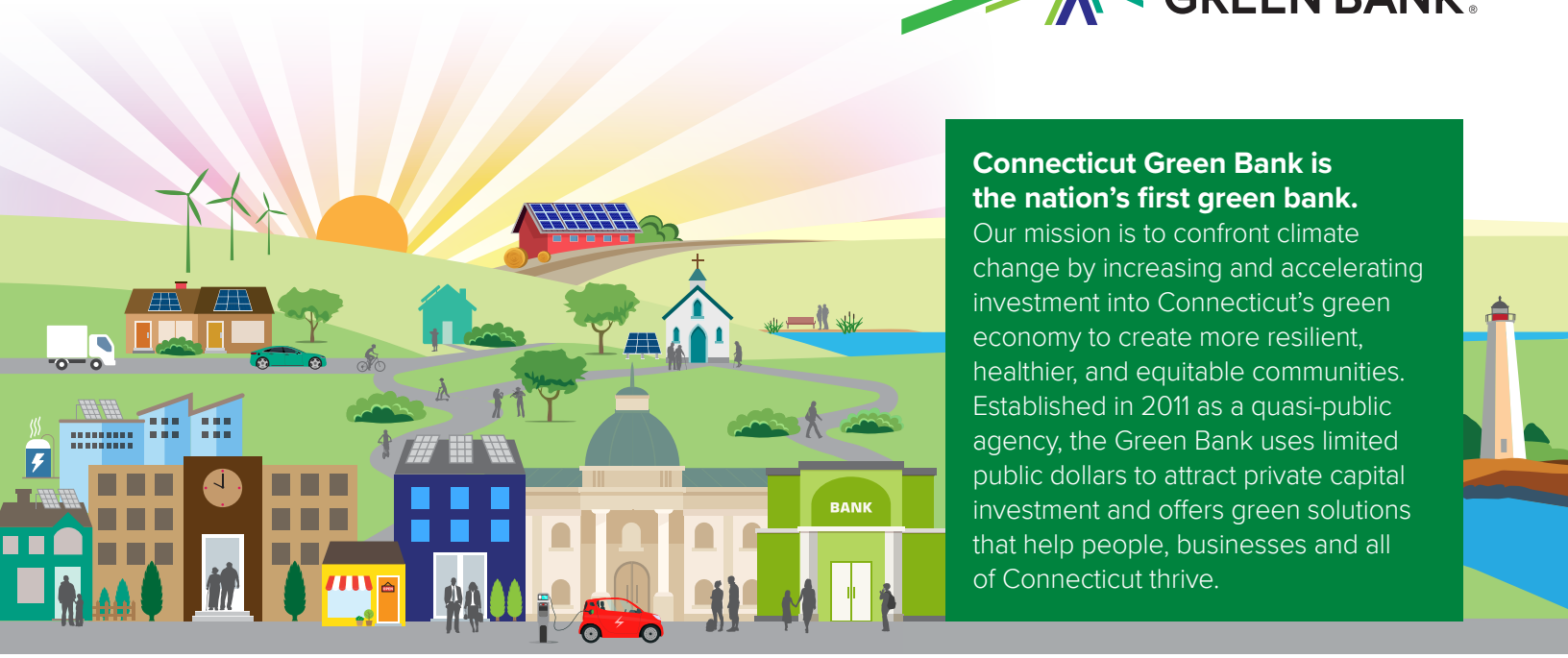
Ashley Stewart
Ashley Stewart
Manager of Community Engagement

Attachments
Attachment A – Our Solutions
Attachment B – Green Bank Model
Attachment C – Residential Solar Investment Program
Attachment D – American Recovery and Reinvestment Act
Attachment E – Social Impact

ATTACHMENT A

Our Solutions

CONNECTICUT GREEN BANK®



Connecticut Green Bank is the nation's first green bank.
Our mission is to confront climate change by increasing and accelerating investment into Connecticut's green economy to create more resilient, healthier, and equitable communities. Established in 2011 as a quasi-public agency, the Green Bank uses limited public dollars to attract private capital investment and offers green solutions that help people, businesses and all of Connecticut thrive.

our solutions

The Green Bank is helping Connecticut flourish by offering green solutions for homes and buildings, and by creating innovative ways to invest in the green economy.

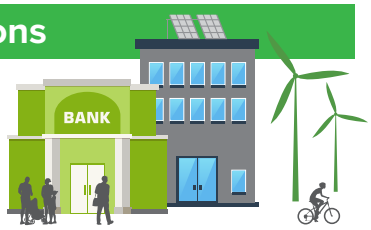
home solutions

Empowering all Connecticut families and households with accessible and affordable green solutions that bring them comfort and security. Find incentives for battery storage or use the Green Bank's flexible financing to reduce costs with health and safety improvements and the newest energy efficient technologies.

building solutions

Creating stronger, more resilient buildings with green solutions for all types of buildings – from businesses and nonprofits to multifamily housing. Leverage Green Bank financing to go solar or retrofit your building with efficiency and resiliency measures, while saving money and realizing the benefits of more modern, sustainable buildings.

investment solutions



Securing a healthier planet with smart ways for individuals and businesses to invest in green solutions – and our future – while also earning a return. Energize the green economy by investing in it today. Buy a Green Liberty Bond, invest through a crowdfunding offering, or join the movement by finding other ways to invest.

community solutions

Helping Connecticut thrive and creating stronger towns and cities by offering green solutions for all. From solutions for local and state government properties, to providing support for community leaders in outreach to local businesses and community members – especially the most vulnerable – helping them to access green energy and achieve a more prosperous future.

Get Started. Call 860.563.0015 or visit ctgreenbank.com

8/22

ATTACHMENT B
Green Bank Model

The Green Bank Model

A Planet Protected by the Love of Humanity

1 Attract Private Investment by Leveraging Public Funding

Public Funding
Ratepayer dollars, taxpayer dollars

CONNECTICUT GREEN BANK

Private Investment
Individuals, credit unions, banks, bond buyers

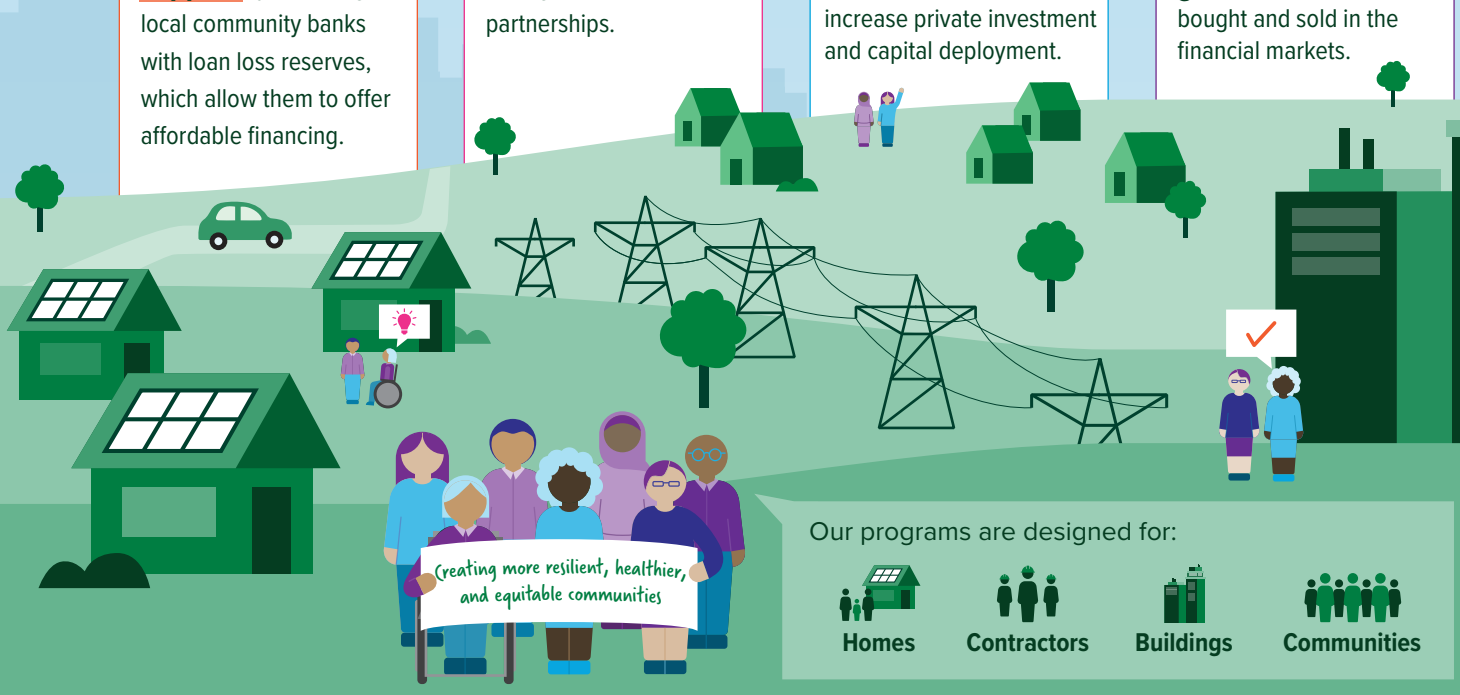
2 Apply Innovative Financial Tools to Deploy Investment Towards Our Programs

Generate **credit support** by providing local community banks with loan loss reserves, which allow them to offer affordable financing.

Initiate **co-investment** through public-private partnerships.

Support **performance-based incentives** to increase private investment and capital deployment.

Convert assets into **green bonds** to be bought and sold in the financial markets.



Our programs are designed for:

- Homes
- Contractors
- Buildings
- Communities

3 Deliver Social and Environmental Benefits to Connecticut's Families and Businesses

Economic Development

- Creating thousands of jobs
- Generating millions in tax revenue

Energy

- Reducing energy burden by deploying clean energy
- Increasing energy security by deploying clean energy

Environmental Protection

- Reducing greenhouse gas emissions
- Improving the health of our residents by reducing air pollution

Equity

- No less than 40% of investment and benefits must reach vulnerable communities

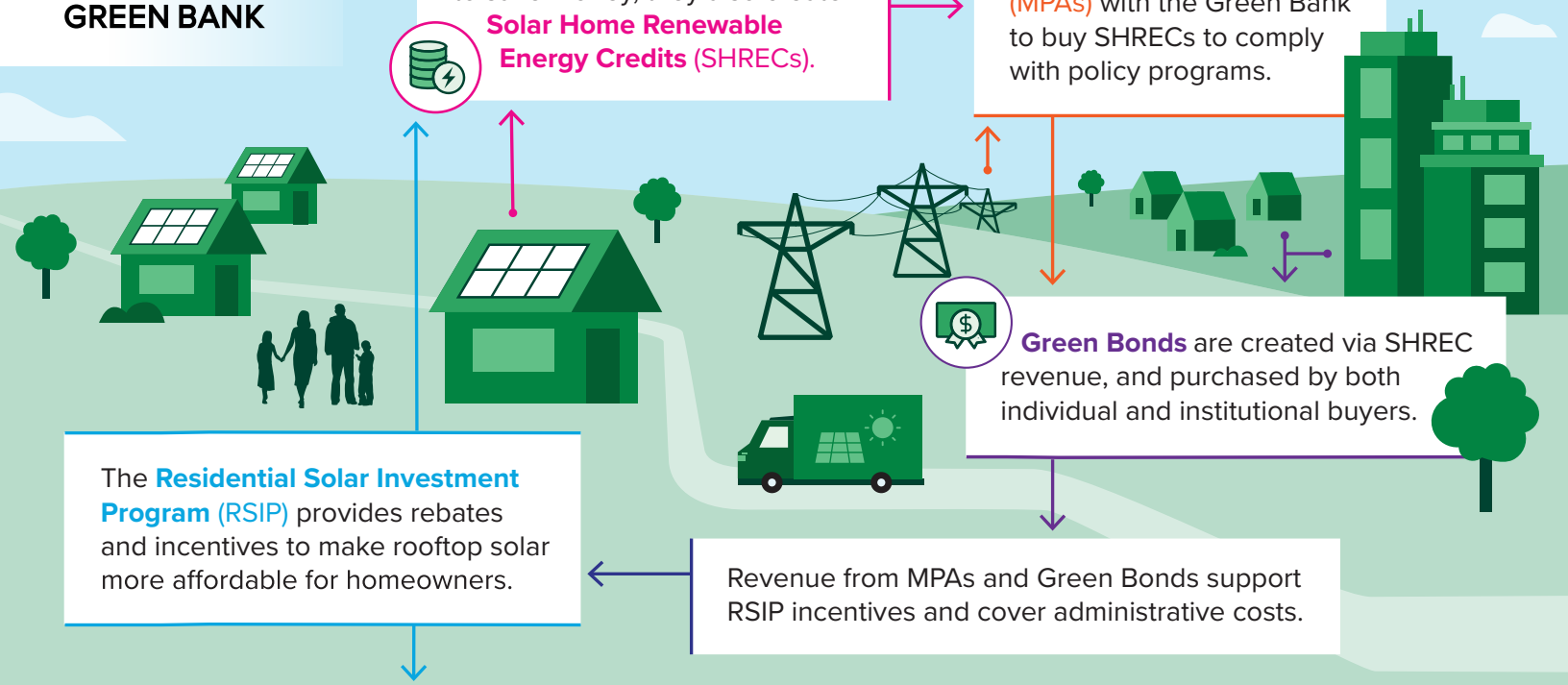
ATTACHMENT C

Residential Solar Investment Program

CONNECTICUT GREEN BANK

When panels produce electricity to save money, they also create **Solar Home Renewable Energy Credits** (SHRECs).

Utilities enter into **Master Purchase Agreements** (MPAs) with the Green Bank to buy SHRECs to comply with policy programs.



Green Bonds are created via SHREC revenue, and purchased by both individual and institutional buyers.

Revenue from MPAs and Green Bonds support RSIP incentives and cover administrative costs.

The **Residential Solar Investment Program** (RSIP) provides rebates and incentives to make rooftop solar more affordable for homeowners.

Residential Solar Investment Program (RSIP)

Through a network of contractors, the Green Bank helped **43,000+ households** access solar energy since 2012, surpassing the statutory target of 350 MW one year ahead of the December 2022 deadline.

$1.33 billion
Total investment

$149.7 million
Total incentive

$0.43/W*
Incentive ($31 per Zero Emission Renewable Energy Credit Equivalent)

$3.80/W
Installed Cost

Solar Power Generation

350 MW
Capacity

9,966,706 MWh
Estimated lifetime generation

Solar and Energy Efficiency for All

- **50%** of RSIP projects have been deployed in **vulnerable communities**
- **98%** of RSIP projects had **energy audits** (i.e., Home Energy Solutions)

SHREC Backed Bonds

Consumer demand is greater than the supply of bonds, showing consumers' high interest in supporting investment to confront climate change in Connecticut.

Green bonds are certified and verified by a third-party for consumer protection.

Connecticut's Solar Industry

15,437
Jobs created

$41.9 million
Tax revenue generated

6,291 Direct | **9,146** Indirect and induced

Environmental Impact

Through the production of zero emission renewable energy, the lifetime reduction of greenhouse gases is equivalent to:

5.5 million
Tons of CO_2

606,686
Homes energy use

6.1 million
Acres of forests

12.6 billion
Miles driven

$397.8 million Public health cost reduction from cleaner air

*Average incentive over life of the program

ATTACHMENT D

American Recovery and Reinvestment Act

The Impact of Federal Funds in Connecticut

Through our partnership with the Department of Energy & Environmental Protection, Connecticut Green Bank deployed $8.25 million of American Recovery and Reinvestment Act of 2009 (ARRA) funds to create more than $176.4 million of investments into residential clean energy projects. (All data as of 12-31-2021)

CONNECTICUT GREEN BANK

Environment

ARRA funds helped to avoid **596,382 tons of CO_2,** which is equal to:

8.9 million tree seedlings grown for 10 years

removing 117,663 passenger cars from the road for one year

Economic Development

The Green Bank turned $8.25 million of federal funds

$8.25 million → $174.6 million

into **$174.6 million in investments**

$16.5M Green Bank investment

$158.1M private investment

$8.25M ARRA Funds

The Green Bank supported the creation of **2,176 job-years of employment** through the use of ARRA funds.

Equity

38% of **investments**

53% of **projects**

were made in **vulnerable communities**

$38.8–87.8M of lifetime public health value created

9,434 families supported

The Green Bank targets 40% of investment and benefits into vulnerable communities

Energy

The use of ARRA funds supported

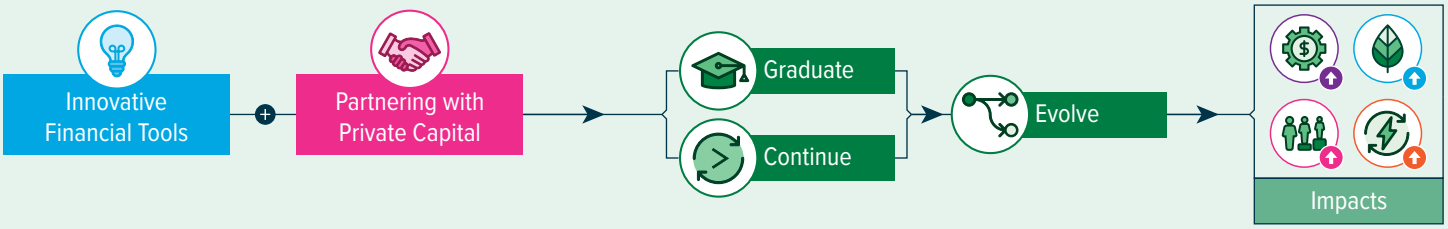
- Deployment of over **24 megawatts** of **clean energy**
- **Lifetime savings of over 3.4 million MMBTUs** through energy efficiency projects, including:
  - Solar panel installation
  - Insulation upgrades
  - Heating and cooling system upgrades

$138M in lifetime energy savings generated

Financing Programs with Federal Funds

CONNECTICUT GREEN BANK

The Green Bank's ARRA funded programs combined innovative financial tools and partnering with private capital to create programs that **promote clean energy, economic growth, a healthier environment, and greater equity** in Connecticut.



Program models, proved successful through the deployment of ARRA funds, evolved to focus on additional markets and larger investment beyond the Green Bank.

CT SOLAR LEASE

Allowed homeowners to access the benefits of solar through a lease option.

- Leveraged $3.5M in ARRA funds as a **lease loss reserve** and $7.1M in Green Bank Subordinated Debt and Sponsor Equity.
- Raised $15.0M of **tax equity investment** and $16.9 million of senior debt through a **syndicate of local lenders**.

The success of this model led to the creation of **"Solar For All"**: a program based on the model that focused on providing residential solar to low-to-moderate income (LMI) families and communities of color — helping Connecticut achieve 41% deployment in LMI communities

CT SOLAR LOAN

Enabled homeowners of varying financial means to own their systems at affordable rates without a lien.

- Used $517,000 in ARRA funds for a **loan loss reserve (LLR)** to allow for the creation of the **first-ever crowd- sourced portfolio of solar loans**.
- Partnered with Sungage Financial and The Reinvestment Fund to generate $8.3M in lifetime savings.

ⓘ A **loan loss reserve** is a pool of money set aside to cover a prespecified amount of loan losses, providing partial risk coverage to lenders.

After this model proved successful, the program expanded to include new partners and a $100 million pool of capital, without any resources from the Green Bank.

SMART-E LOAN

Offers flexible financing for upgrades to home energy performance.

- ARRA funds used as **LLR and interest rate buydowns (IRB)** to offer homeowners low-interest financing to improve their home's energy performance.
- Provided in partnership with 13 local community banks and credit unions, 500+ contractors, and 5,923 families for $108.7 million in total investment.

Originally focused on clean energy, this program is **expanding to support environmental infrastructure.**

The program is transitioning from ARRA supported LLR to LLR on the Green Bank's balance sheet using IRBs from ARRA funds.

ⓘ An **interest rate buydown** is when capital is deployed to pay a portion of the interest on borrowers' loans to decrease their costs.

LOW INCOME MULTI-FAMILY ENERGY (LIME) LOAN

Unsecured low interest loans serving properties where at least 60% of units serve renters at 80% or lower of Area Median Income.

- ARRA funds used as LLR and **projected energy savings are used to cover the debt service of the loan.**
- Offered through a partnership with Capital For Change (C4C), a community development financial institution (CDFI) that provides financial **products and services that support an inclusive and sustainable economy**.

Using $300,000 in ARRA funds as LLR, LIME projects have a combined lifetime energy cost savings of over $117.6M.

ATTACHMENT E
Social Impact

CONNECTICUT GREEN BANK

Societal Impact Report

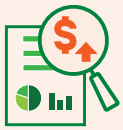
FY12 FY22

Since the Connecticut Green Bank's inception through the bipartisan legislation in July 2011, we have mobilized more than **$2.26 billion of investment** into the State's green economy. To do this, we used **$322.4 million** in Green Bank dollars to attract $1.95 billion in private investment, a leverage ratio of **$7.00 for every $1**. The impact of our deployment of renewable energy and energy efficiency to families, businesses, and our communities is shown in terms of economic development, environmental protection, equity, and energy (data from FY 2012 through FY 2022).

ECONOMIC DEVELOPMENT

JOBS The Green Bank has supported the creation of more than **26,720** direct, indirect, and induced job-years.

TAX REVENUES
The Green Bank's activities have helped generate an estimated **$113.6** million in state tax revenues.



$55.3 million individual income tax

$29.2 million corporate taxes

$29.1 million sales taxes

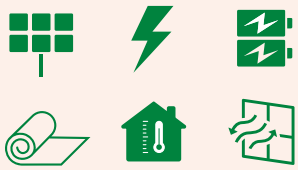
ENERGY

ENERGY BURDEN
The Green Bank has reduced the energy costs on families, businesses, and our communities.

60,000+
families

6,500+
businesses

DEPLOYMENT
The Green Bank has accelerated the growth of renewable energy to more than **509 MW** and lifetime savings of over **65.6 million MMBTUs** through energy efficiency projects.



ENVIRONMENTAL PROTECTION

POLLUTION The Green Bank has helped reduce air emissions that cause climate change and worsen public health, including **9.6** million pounds of SOx and **11.1** million pounds of NOx lifetime.

10.4 MILLION tons of CO_2 : EQUALS

156 MILLION tree seedlings grown for 10 years

OR

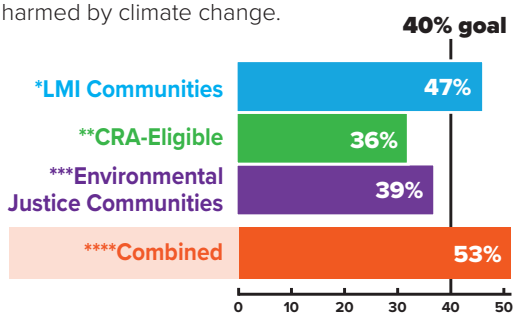
2.1 MILLION passenger vehicles driven for one year

PUBLIC HEALTH The Green Bank has improved the lives of families, helping them avoid sick days, hospital visits, and even death.

$317.1 – $717.2 million of lifetime public health value created

EQUITY

INVESTING in vulnerable communities, The Green Bank has set **goals** to reach **40% investment** in communities that may be disproportionately harmed by climate change.



*LMI Communities – census tracts where households are at or below 100% Area Median Income.

** Community Reinvestment Act (CRA) Eligible – households at or below 80% of Area Median Income and all projects in programs designed to assist LMI customers.

*** Environmental Justice Community means a municipality that has been designated as distressed by Connecticut Department of Economic and Community Development (DECD) or a census block group for which 30% or more of the population have an income below 200% of the federal poverty level.

**** Combined Vulnerable Communities include LMI, CRA and EJC.

Learn more by visiting ctgreenbank.com/strategy-impact/impact

Winner of the 2017 Harvard Kennedy School Ash Center Award for Innovation in American Government, the Connecticut Green Bank is the nation's first green bank.

Sources: Connecticut Green Bank Comprehensive Annual Financial Reports