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CLIMATE SOLUTIONS LAB

The Evolving Landscape of US Green Banks

CSL White Paper

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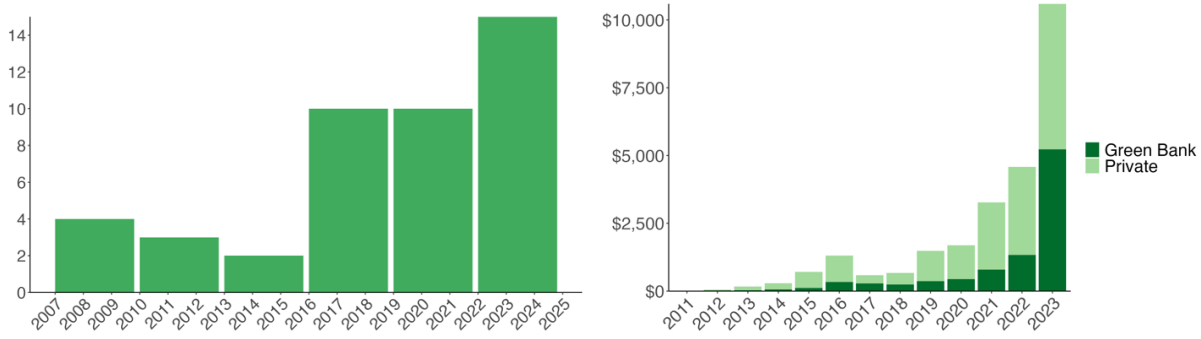
1. Introduction & Background

Renewable and clean energy technologies are becoming more widespread in the U.S., with electric vehicles on the road, solar panels on rooftops, and wind farms now a visible feature of daily life.[1] What is driving this change? In part, demand is shifting whether due to concerns about the health and economic impacts of climate change, the availability of manufacturing jobs as markets shift away from fossil fuels, or international security and economic competitiveness.[2] However, increasingly changes in supply are also critical, due to lowered costs through public incentives and improved access to financing. This paper explains a vital new source of financing that has rapidly grown in the last decade: green banks.

Green banks are an essential tool for this market transformation. Though well-established in countries such as Germany, India, Australia, and the UK,[3] green banks have gone mostly missing in action in the United States until recently. Green banks take the form of public, quasi-public, or non-profit financial institutions designed to accelerate investment in clean energy technologies, in part by leveraging public and mission-driven capital to mobilize private investment. They de-risk early-stage clean energy investments and prioritize deployment over profit. As financial interlocutors, they connect policymakers, developers, community lenders, and private banks.

The U.S. has over 40 state and local green banks of varying sizes and structures that in 2023 alone collectively invested $10.6 billion in public-private capital into clean energy projects. The number of green banks grew markedly since the first several were founded between 2007-2009 (Figure 1a). So too has the total amount of public-private investment made by green banks, growing from $5.7 million in 2011 to $10.6 billion in 2023—a cumulative total of $25.4 billion (Figure 1b).



[1] See this *New York Times* interactive map for a visualization of the growth in solar and wind sites from 2017 to 2024.

[2] See: Colgan, Green, and Hale (2021); Myers et al (2012); Egan and Mullin (2017); Basseches et al. (2022); Gazmarian et al. (2023); Ditmore and Parajon (working paper).

[3] Specifically, this is referencing the 1974 GLS Bank in Germany, 1987 Indian Renewable Energy Development Agency, 2012 Clean Energy Finance Corporation of Australia, and 2014 Green Investment Bank in the UK.

Figure 1: (a) Count of green banks formed over time through February 2025; (b) Public-private investments (in millions) made by green banks over time through December 2023, broken down by the green banks' and private co-investment portions of financing.

A key factor in the growth of this network of green banks is a national non-profit called the Coalition for Green Capital (CGC), founded in 2009 as an advocacy group and green bank incubator. An early advocate for the creation of a national green bank, CGC was founded based on the recognition of the need for a coalition of green banks at the state and local levels as a proof of concept. In the following decade, CGC led the growth of this national network by providing policy and direct operational support leading to the founding of 20 state and local green banks as well as ongoing technical assistance and national coordination (via its "American Green Bank Consortium").

The 2022 Inflation Reduction Act (IRA) has since enabled the possibility of creating a national green bank after multiple stand-alone policy proposals for a national climate bank were introduced and failed between 2009 and 2021.[4] It does so by establishing the Greenhouse Gas Reduction Fund (GGRF), a large competitive grant program administered by the Environmental Protection Agency (EPA) with a legislated purpose of mobilizing public-private investment towards emissions reducing projects. In April 2024, EPA announced the winners, among which CGC was selected specifically to establish a self-sustaining national green bank that funds and coordinates a network of green banks in all 50 states through a seed capital grant award of $5 billion.[5] This mandate expressly situates CGC as the cornerstone of the U.S. green bank ecosystem, while most of the other organizations receiving GGRF grant awards for green lending are not green banks per se.[6] To date, green banks have been founded in 35 states, D.C., and Puerto Rico.[7]

[4] Specifically, this is referencing H.R. 1698 (introduced in 2009 by Rep. Chris Van Hollen), H.R. 5416 (introduced in 2019 by Rep. Debbie Dingell), H.R. 3423 (introduced in 2019 Rep. Jim Himes), H.R. 2 (various sponsors in 2020), H.R. 806 (multiple sponsors in 2021), and H.R. 3684 (multiple sponsors in 2021).

[5] https://www.epa.gov/newsreleases/biden-harris-administration-announces-20-billion-grants-mobilize-private-capital-and

[6] A key exception is Appalachian Community Capital, which was awarded GGRF funds to support the creation of the Green Bank for Rural America.

[7] Green banks included in this figure were identified using the criteria described in Section II. Appendix A includes the complete list of green banks.

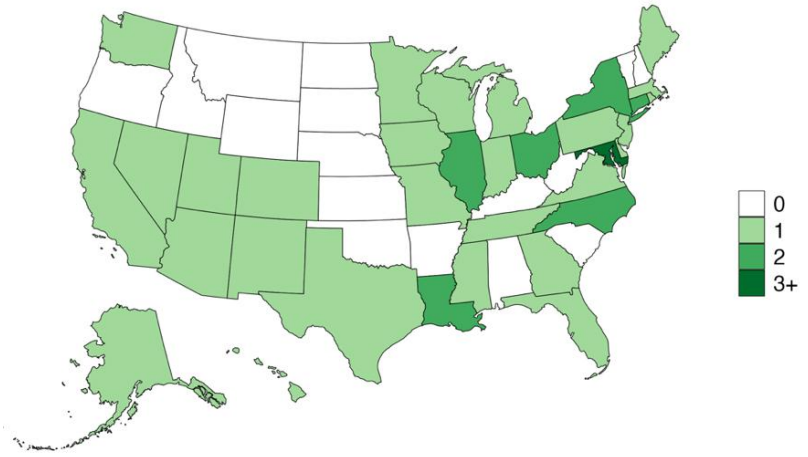


Figure 2: Number of green banks in each state as of February 2025.[8]

The collective impact of these US green banks on creating environmental and economic transformation depends on their ability to effectively address market failures. Doing so enables private capital mobilization and lowers costs for clean energy technology. National and local policy contexts will also further shape their functioning. This paper seeks to explore these dynamics within the US green banking system descriptively, by first elaborating on the definition and market functions of green banks, reviewing the policy contexts influencing their design and operations at the national and state levels, and assessing the actual and projected impact of the US green banking system.

The dynamics of US green bank development described here reflects a growing consensus that meeting international climate goals requires an experientialist, coalition-based approach[9] and a recognition within global climate agreements that public-private financing is a key mechanism for energy market transformation to meet these goals.[10] This point is revisited in the conclusion.

2. Definition and Core Purpose: Market Functions of Green Banks

2.1. Definition & Conceptual Boundaries

Defining green banks with clear criteria matters for accurate analysis, especially regarding their formation patterns, governance, impact, and financial sustainability. Yet to date the term "green banks," lacks a formal or legal regulatory definition, unlike private commercial

[8] The map reflects the state in which green banks are headquartered, rather than their full scope of coverage. Wyoming, South Dakota, and North Dakota are served by the Collective Clean Energy Fund based in Colorado; South Carolina is served by the North Carolina Clean Energy Fund; states throughout the Appalachian region are served by the Green Bank for Rural America based in Virginia; and greater portions of the Southeast are served by the Solar and Energy Loan Fund based in Florida. This map does not include U.S. territories, i.e. the Puerto Rico Green Energy Trust.

[9] See Basseches et al. (2022), Sabel and Victor (2022), and Ostrom (2009).

[10] United Nations Framework Convention on Climate Change. (2015). *Paris Agreement*. United Nations. Retrieved from https://unfccc.int/sites/default/files/english_paris_agreement.pdf

banks or Community Development Financial Institutions (CDFIs). Instead, the concept of "green bank" has largely been shaped by key policy advocates with a broad and evolving definition. This can be useful for coalition building but risks inconsistencies in measuring impact or financial performance.

To provide analytical clarity, this paper advances 2 key characteristics to help standardize the definition of green banks. Ideally, for clearest identification, a green bank would not only meet these criteria but also be formally designated as a 'green bank' by name or through recognition by a governing body. However, formal designation alone does not guarantee that an institution meets both criteria.[11] These 2 criteria map onto the "green" and "bank" components of the term, namely:

1) **Focus on environmental improvement**: They have a stated public-purpose mission to make investments in projects that entail environmental improvements, including primarily clean or renewable energy investments lowering air pollution but also clean water or climate resilience projects. In lieu of a formally stated mission, they may alternatively be identified by a majority of their investments going towards such projects. Importantly, none of their investments go towards projects that increase greenhouse gas emissions or air pollutants.
2) **Financial intermediation:** They are set up as distinct institutions operating as financial intermediaries, though not necessarily "banks" in the sense of having a full banking license. This means they facilitate financial transactions between investors and borrowers within the financial system and structure financial products that enable continuous reinvestment and market engagement (rather than providing one-time grants).

These criteria help distinguish green banks from other forms of clean energy financing programs or entities. For example, the New Jersey Green Bank is a public green bank created and operating under the New Jersey Economic Development Authority (NJEDA), with its CEO appointed by the state governor.[12] While the NJEDA (a state agency) administers a range of economic development initiatives, including grants and tax incentives, the Green Bank specifically focuses on financing clean energy projects by leveraging public and private capital, ensuring funds are recycled and reinvested over time. Similarly, despite the occasional characterization of the EPA's GGRF as 'a national green bank' by some outside commentators,[13] the grant program as a whole does not meet the core definition of a standalone financial institution operating as a financial intermediary.[14]

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[11] For example, the so-called Green Bank of Kentucky was created by the state government to provide low-interest loans to make efficiency improvements to government buildings—an arguably negligible intermediation function. Appendix A provides the list of green banks identified based on the conceptualization provided here.

[12] https://www.nj.gov/governor/news/news/562024/20240415a.shtml

[13] https://www.canarymedia.com/articles/climatetech-finance/epas-new-20b-green-bank-will-benefit-disadvantaged-communities-most

[14] The IRA enables the creation and financing of green banks via the GGRF but does not, nor does the GGRF, formally define green banks or mandate their establishment.

All U.S. green banks to date function as loan funds or promotional banks rather than depository institutions. They typically take three main forms:[15]

- **Public** green banks are created through legislation, regulatory proceedings, or executive action at the national, state, local, or tribal levels, typically with initial public funding and the government retaining ownership or managerial control.
- **Quasi-public** green banks are typically created through state legislation, but function as separate entities (including as nonprofits) with government ties through ownership, management, or continuous oversight.
- **Independent non-profit** green banks operate as 501(c)(3) organizations with little to no public funding or government affiliation.

So then as distinct financial intermediaries with a focus on environmental improvement, what do green banks do? Political and economic conditions can shape how green banks operate over time or across different contexts, making it essential to separate the question of what they are from what they do at a given moment.[16] The next section examines the specific market functions U.S. green banks typically perform, while the following section explores how specific national and local policy contexts further shape their activities.

2.2. Core Purpose: Market Functions

In the U.S. context, green banks play a critical role in overcoming financial challenges that prevent clean energy projects from securing private investment, ultimately reducing the cost of capital and thereby the cost of clean energy for consumers. Based on its extensive experience incubating green banks in the U.S., CGC identifies six main barriers to clean energy financing that green banks help address:[17]

- **Perceived project risk:** Investors hesitate to fund clean energy projects in emerging markets due to uncertainty. Green banks mitigate risk through credit enhancements like loan guarantees and loan loss reserves, improving project credit profiles and attracting private capital.
- **First-in-kind transactions:** New technologies and financing models face high costs and complexity. Green banks streamline processes through technical assistance and standardized financial structures, making innovative projects easier to finance.
- **Inefficiencies of scale:** Small and dispersed projects struggle to secure investment due to high transaction costs. Green banks use aggregation to bundle projects into larger portfolios, lowering costs and making them more appealing to institutional investors. Among the larger green banks, this can include securitization of standardized green loans, which further promotes liquidity in the market and channels more capital to the sector.

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[15] A recent initiative seeks to create the "Green Bank of Colorado" as a Public Benefit Corporation—a for-profit company with a commitment to public benefits—which would be the first green bank of its kind in the US.

[16] See: Case-Ruchala (2023); Moller (2021).

[17] https://coalitionforgreencapital.com/what-is-a-green-bank/green-bank-techniques/

- **Marginal economics:** Some projects lack immediate profitability to attract full private financing. Green banks provide co-investment, offering gap financing that de-risks projects and leverages additional private capital.
- **Customer financial constraints:** Low credit scores and homeownership barriers limit access to clean energy loans. Green banks enable innovative solutions like on-bill financing, making repayment easier through utility payments and expanding access to underserved communities.
- **Gaps in customer knowledge:** Complex financing options and incentives for clean energy technologies can create confusion. Green banks act as a central resource, simplifying information and connecting consumers with available funding.

By addressing these barriers, green banks unlock private capital, expand market access, and accelerate clean energy adoption. Ultimately, these core market functions translate to economic and environmental benefits as discussed in Section IV. However, these functions and associated impacts do not occur in a vacuum—rather the funding sources, scope, and deployment strategies of green banks are further shaped by local, state, and national policy environments.

3. Policy Contexts Shaping the US Green Bank Ecosystem

3.1. State-Level Variation in Green Bank Models

Despite commonality in their core market functions, state and local green banks differ widely in their governance, funding, and operational models, reflecting varying policy and market conditions. The three primary models—public, quasi-public, or independent nonprofit entities—each comes with distinct advantages and constraints that shape how green banks mobilize capital and interact with public and private stakeholders:

- **Public and quasi-public green banks** (e.g., Connecticut Green Bank and New York Green Bank) benefit from legislative backing and long-term funding stability but remain closely tied to state policies.
- **Nonprofit green banks** (e.g., North Carolina Clean Energy Fund) operate independently, avoiding policy constraints or bottlenecks but rely on philanthropic and mission-driven investment. While they offer greater flexibility, they often face challenges in securing sustained capitalization.
- **Hybrid models and partnerships** between green banks, Community Development Financial Institutions (CDFIs), and credit unions can enhance lending capacity and expand access to underinvested markets. For example, the Collective Clean Energy Fund of Colorado partners with local credit unions to finance residential energy efficiency upgrades.[18] Non-profit green banks can also seek CDFI certification, unlocking new capital sources, as seen with the Solar and Energy Loan Fund in Florida.

[18] https://cocleanenergyfund.com/about/annual-impact-report/

The older, more established state and local green banks tend to be public and quasi-public—created in more politically supportive contexts and provided more long-term funding stability through initial public seed capital. Nonprofit green banks have become an increasingly common model, however, given their greater flexibility to policy environments, despite that extensive fundraising efforts and strategic partnerships are required to scale effectively. As CGC seeks to support the establishment of new green banks in states currently lacking them, the nonprofit model is likely to predominate given the ease of creation and its intent to provide seed capital directly.

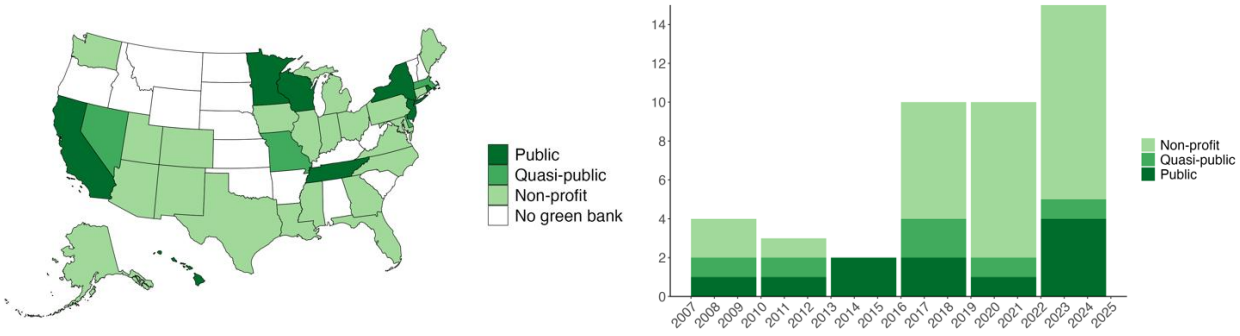

Figure 3: (a) Map of green banks by type[19] and (b) Count of types of green banks formed over time.

The specific projects supported by green banks depend in part on their sources of funding and governance structure. Public and quasi-public green banks, backed by state resources, often have greater capacity to engage in larger projects, including commercial-scale clean energy projects and multi-family efficiency retrofits. Nonprofit green banks, which typically lack direct public funding, focus more heavily on smaller-scale investments, such as residential energy efficiency programs, community solar projects, and targeted financing for low-income and disadvantaged communities.

Across all green bank models, a substantial amount of funding comes from non-federal sources, as captured in CGC's 2023 Annual Report. This includes direct state appropriations such as $50 million to recapitalize the Hawai'i Green Infrastructure Authority, $5.5 million for Michigan Saves to support its loan loss reserve fund, and $1 million for Nevada Clean Energy Fund to support its operations. Philanthropic and private investments included JPMorgan Chase and the JPB Foundation for the Solar and Energy Loan Fund's program development. Meanwhile, Connecticut Green Bank raises capital from individuals through short term bonds called Green Liberty Notes that support its loan purchases of energy efficiency upgrades in small businesses. Additional green bank funding sources included city and county appropriations, grants from various state-level housing and energy agencies, and national non-profits. Meanwhile some did receive

[19] If multiple green banks exist in one state, the "Type" represented defaults to Public if present, Quasi-public if present, and Non-profit if neither Public nor Quasi-public are present. This helps convey the geographic distribution of the different models, while Figure 2 captures the distribution of quantity.

federal support from diverse sources, such as the Illinois Climate Bank's $40 million Department of Energy GRID funding based on its designation as a State Energy Financial Institution (SEFI) and the Collective Clean Energy Fund of Colorado's receipt of a USDA Rural Energy Savings Program grant.

The diversity of green bank models, and the increasing prevalence of the nonprofit model and the tradeoffs therein, reflects both the political realities of different states and the fact that multiple pathways exist for green banks to operate. Meanwhile, the GGRF program represents a significant new national funding source that will further affect the activities of green banks either directly through grants and investments from CGC or other recipients or through broader transformations it produces in the market.

3.2. National Green Bank: Policy & Regulatory Context

Just as state-level green banks must navigate tradeoffs between governance structures, funding models, and policy constraints, the national regulatory environment presents similar challenges and opportunities. Namely, the GGRF program that provides seed capital for CGC to take on the role of national green bank is a significant new source of financing but entails extensive compliance requirements that influence its activities. These regulations define eligible projects, shape investment priorities, extend to any entities or projects financed by CGC, and remain in effect until all funds awarded are recycled and redeployed. Specifically, GGRF recipients must operate as self-sufficient financial institutions, mobilize private capital into qualifying greenhouse gas reducing projects based in the United States,[20] ensure 40% of investments benefit low-income and disadvantaged communities (LIDACs), and comply with laws related to prevailing wage standards and domestic material sourcing. This situates CGC as a quasi-public green bank—an independent nonprofit with the ability to expand its funding sources beyond the GGRF but remaining tied to public policy priorities due to these foundational grant requirements.

While the grant agreements legally bind recipients to the GGRF's original objectives, shifting federal priorities associated with changing administrations adds another source of policy influence and has complicated implementation. The EPA recently stated new priorities under the American Comeback Initiative, which emphasizes clean air and water, energy dominance, permitting reform, AI leadership, and revitalizing the auto industry.[21] Recent federal actions have also intensified disputes over the implementation of the GGRF, sparking legal and political challenges.[22] These developments add another layer of policy contingencies and institutional complexities to an already diverse green bank landscape that continually evolves through a mix of market-driven, state, and federal factors.

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[20] Qualified projects must deliver additional environmental or economic benefits and support only proven, commercial-scale technologies that would not otherwise secure financing.

[21] https://www.epa.gov/newsreleases/epa-administrator-lee-zeldin-announces-epas-powering-great-american-comeback

[22] https://www.washingtonpost.com/climate-environment/2025/03/24/epa-green-bank-grants-biden/

4. Environmental and Economic Impact of Green Banks

4.1. Existing Data Sources & Measurement Challenges

As green banks expand and receive increased public and private funding, transparency in how they measure success becomes increasingly important. Yet impact measurement varies widely and project-level data is not publicly available. Across over two dozen green bank websites, over 30 different impact indicators are mentioned. These metrics range from traditional energy and financial measures—such as annual and lifetime greenhouse gas (GHG) emissions avoided, energy savings (in kilowatt hours), and private capital mobilized—to broader economic and social factors, such as number of affordable housing unit efficiency upgrades or investments in minority-owned businesses.

While these metrics reflect green banks' multidimensional impact, the lack of standardized, specific investment data complicates cross-bank comparisons and limits visibility into collective performance. Still, four indicators consistently emerge as most commonly reported—despite variation in methods and formats: 1) private capital mobilization, 2) investments in low-income and disadvantaged communities, 3) job creation, and 4) GHG or other pollutant reductions.

Two reports summarized in the next sections offer partial insight into performance on these indicators. The *2023 Annual Report of CGC's American Green Bank Consortium* presents the most comprehensive pre-GGRF data, based on survey responses from 51 green banks and community lenders.[23] CGC's first *Semiannual Progress Report* to the EPA captures early post-GGRF activity from April to December 2024, including its network's progress. Table 1 shows which indicators are covered in each report.

Among these, GHG emissions reporting is particularly inconsistent, with differing methodologies, timeframes, and baselines. Other pollutant reductions are reported even less frequently and in inconsistent units. Going forward, the GGRF program sets methodologies that will help drive standardization through EPA requirements for project-type-specific calculators and quality assurance plans that document data sources, calculations, and verification methods.

Metric	**2023 Annual Report (Consortium Data)**	**2024 CGC Semiannual Report for EPA**
Private capital mobilization	Available.	Available.
Investments in low-income and/or disadvantaged communities	Available.	Available.
Job creation	Available.	Available.

[23] Among the 51 organizations included in the survey, 32 are green banks listed in Appendix A. This then captures performance impact of 74% of the 43 green banks listed in Appendix A.

Greenhouse gas emissions or other air pollutants reduced or avoided	Not available (not consistently reported by surveyed green banks).	Not available (pending approval of quality assurance plan).

Table 1. Status of Standardized Impact Reporting Metrics Across Aggregated Sources

4.2. State and Local Green Bank Impact in 2023-2024

The impact of green banks in 2023, as captured in CGC's *Annual Report of the American Green Bank Consortium*, reflects both the growing scale and increasing diversity of the U.S. green banking system. That year, the national network facilitated $10.6 billion in public-private investment, a 130% increase over 2022. The reported private capital mobilization ratio was 1.75:1—meaning $1.75 in private capital was leveraged for every $1 in public green bank investment. These investments supported a broad range of project types: 35% advanced net-zero buildings, 13% funded distributed energy and storage, and 2% supported zero-emissions transportation. The remaining 51% fell into an "other" category encompassing utility-scale renewables, water infrastructure, and climate resilience—underscoring the breadth of activity but also pointing to inconsistencies in project categorization, which future GGRF reporting is expected to help resolve.

Green banks also contributed meaningfully to economic equity and workforce outcomes. In 2023, 26% of total public-private investments and 53% of green bank-led financing (excluding private co-investment) flowed to low-income and disadvantaged communities. Reported job creation totaled 1,268 direct jobs, though this likely undercounts broader employment impacts across supply chains and local economies. Emissions reductions were not included in the report due to a lack of standardized tracking, but future GGRF compliance is expected to support more consistent reporting of greenhouse gas and air pollutant reductions.

Beyond this aggregated reporting, individual green banks' annual reports provide more detailed insights into the range of institutional models and localized impacts across the country. Longstanding public institutions like the Connecticut Green Bank (CTGB) and DC Green Bank reported large-scale investment activity, high mobilization ratios, and significant environmental and economic benefits. CTGB's 2024 investments reached $51 million and mobilized $393 million in private capital, with more than 40% supporting vulnerable communities and ongoing support for solar, fuel cell, and energy efficiency projects.[24] DC Green Bank reported over $300 million in public-private investment in 2024 and over 16 million kWh of solar energy produced.[25] Meanwhile, mature nonprofit lenders such as Michigan Saves reported in 2023 the financing of over 8,500 residential and 85

[24] https://www.ctgreenbank.com/strategy-impact/reporting-and-transparency/connecticut-green-bank-annual-report-2024/
[25] https://dcgreenbank.com/news/fy2024-annual-report/

commercial projects totaling $127.9 million, generating estimated emissions reductions of 188,000 metric tons of CO2e and average household utility savings of $400.[26]

Other green banks focused on expanding access and piloting new programs. The Solar and Energy Loan Fund (SELF) in Florida, founded in 2009 as a non-profit CDFI green bank, deployed $34.2 million in loans in 2023, 95% of which served low- and moderate-income customers, resulting in average household energy reductions of 27%, utility bill savings of 23%, and 3,933 metric tons of CO2 avoided. Through its "Plug and Play" program, SELF is helping emerging nonprofit green banks replicate its inclusive "ability-to-pay" underwriting model.[27] One such emerging nonprofit green bank, Nevada Clean Energy Fund, itself launched a Residential Energy Upgrade Program and secured $7.7 million from the EPA for a Clean School Bus Program that will deploy over 25 electric buses, improving air quality for 1,500 children and reducing fuel and maintenance costs. Though still early in its development, the fund has also secured a $1.7 million subgrant from the Department of Energy and a $100,000 Energizing Rural Communities Prize to expand its reach.[28]

Together, these examples illustrate the wide range of impact emerging across the green bank landscape, while CGC's *Annual Report of the American Green Bank Consortium* provides a snapshot of their collective impact. With more standardized reporting through GGRF, the national green bank network will be better positioned to capture its many environmental and economic benefits.

4.3. Early Results from the National Green Bank in late 2024

Building on the successes of state and local green banks, CGC's first semiannual report (April–December 2024) offers early insight into how its investment activities as a national green bank can scale impact.[29] The launch of CGC's first Request for Proposals ("RFP1") in November 2024 generated 82 proposals totaling $30.9 billion, leading to $2.8 billion in closed investments by early 2025. As of the report, CGC's active pipeline included a further $7.6 billion in qualified projects, with estimated job creation of 81,000 and a 4:1 mobilization ratio. RFP1 emphasizes larger-scale investments (over $50 million), illustrating strong and immediate national market demand.

In parallel, CGC allocated $1.8 billion in subgrants to 18 green financing entities—including established state and local green banks—and issued $135 million in loans to 14 emerging green banks in 14 states. During the reporting period, subgrantees closed six qualifying projects totaling $33.7 million, with projected emissions reductions in the thousands of metric tons annually. These projects reported a 7:1 mobilization ratio, a notable increase from the 1.75:1 average reported in CGC's 2023 annual report. Subgrantees project $888

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[26] https://annualreport.michigansaves.org/?_gl=1*1m5r2m7*_gcl_au*MjAyOTg0MDIxMy4xNzQxNzQwODI2*_ga*MTQ4MTg2MzA3Ni4xNzQxNzQwODI2*_ga_N57D5X2SHS*MTc0MTk1NDAzMi4yLjEuMTc0MTk1NTY5MC4wLjAuMTAyNjAxNzgw

[27] https://solarenergyloanfund.org/site/wp-content/uploads/2024/09/FY23-Annual-Report-v7.pdf

[28] https://nevadacef.org/wp-content/uploads/2024/07/NCEF-2023-Annual-Report.pdf

[29] https://coalitionforgreencapital.com/wp-content/uploads/CGC-2024-Semi-Annual-Report-1.pdf

million in additional investments in the first half of 2025, with total project costs expected to reach $2.4 billion.

While the report does not yet provide specific emissions estimates—which are pending approval of CGC's quality assurance plan—a useful benchmark is the New York Green Bank's $2.5 billion in investments to date ($7.9 billion in total capital), estimated to avoid 47.1 million metric tons of CO2e (equivalent to "removing 485,159 cars from the road for 24 years").[30] These early results underscore the potential of a national green bank to scale environmental and economic impact through financial innovation and capital leverage.

5. Conclusion: Future Outlook & Implications for Climate Governance

In sum, the U.S. green bank network has grown rapidly, with over 40 state and local green banks in operation and the establishment of a national green bank under CGC. Even prior to CGC receiving GGRF funding, green banks had collectively made $25.4 billion in cumulative public-private investments into clean energy projects by 2023, with a 130% increase in annual investments between 2022 and 2023. This accelerating growth suggests green banks are reaching a critical inflection point, where increasing scale and financial sophistication could drive systemic changes in clean energy financing and long-term market adoption. Now with several billions of dollars invested directly by CGC and the billions of dollars' worth of additional projects in its network's collective investment pipeline for 2025, green banks stand poised in the coming years to create hundreds of thousands of American jobs and reduce hundreds of millions of metric tons in emissions all while producing health benefits and lowering energy costs for individuals and businesses.

In the broader context of climate governance, the dynamics of the green bank network in the U.S. demonstrates the relevance of decentralized, subnational approaches to scaling climate finance and ultimately meeting international climate goals as advocated in a growing body of research.[31] While national and international climate commitments set overarching emissions reduction goals, effective implementation requires institutions that can tailor solutions to local market conditions while maintaining alignment with national economic and energy strategies.[32] The U.S. green banking system embodies this approach by utilizing flexible models in a nationally coordinated network that bridges the gap between financial markets and public policy to deploy capital efficiently into clean energy investments.

Looking ahead, green banks must navigate both political and operational challenges to sustain their momentum and maximize their impact. They must demonstrate their long-term value, address policy shifts and frictions associated with the change in administration at the federal level, and continue to pursue diverse funding sources. Operationally,

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[30] https://greenbank.ny.gov/Our-Impact/Impact-Report-2024
[31] See Basseches et al (2022).
[32] See Ostrom (2009).

achieving standardization in financial products and reporting processes across the diversity of green bank models will be critical to achieving scale and demonstrating the associated impacts.

If these challenges are met, green banks as one critical piece of the broader climate finance and policy ecosystem will play a transformative role in decarbonizing the U.S. economy—leading to cleaner air and greater energy security while driving economic growth. They will enable the deployment of clean energy at a pace and scale that would not be possible through traditional financing alone, reducing long-term energy costs and creating sustainable, quality jobs across the country. Ultimately, the success of green banks has the potential to not only shape U.S. climate finance strategies but also serve as a model for other countries seeking to accelerate clean energy investment through a diversity of public-private partnerships.

Citations

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Appendix A

State/Territory	Name	Year formed	Type
Alaska	Spruce Root	2012	Non-profit
Arizona	Groundswell Capital	2022	Non-profit
California	California Infrastructure and Economic Development Bank (IBank)	2020	Public
Colorado	Collective Clean Energy Fund	2018	Non-profit
Connecticut	CT Green Bank	2011	Quasi-public
Connecticut	Inclusive Prosperity Capital	2018	Non-profit
Delaware	Energize Delaware	2007	Quasi-public
D.C.	DC Green Bank	2018	Public
Florida	Florida Solar & Energy Loan Fund	2009	Non-profit
Hawaii	Hawaii Green Infrastructure Authority	2014	Public
Illinois	Illinois Finance Authority (Illinois Climate Bank)	2021	Quasi-public
Illinois	Clean Energy Jobs and Justice Fund	2021	Non-profit
Indiana	Indiana Energy Independence Fund	2024	Non-profit
Iowa	Iowa Energy Fund	2024	Non-profit
Louisiana	Finance New Orleans	2017	Public
Louisiana	Louisiana Clean Energy Fund	2023	Non-profit
Maine	Efficiency Maine Trust	2021	Non-profit
Maryland	Montgomery County Green Bank	2017	Non-profit
Maryland	Climate Access Fund	2017	Non-profit
Maryland	Maryland Clean Energy Center	2022	Non-profit
Massachusetts	Massachusetts Community Climate Bank	2023	Quasi-public
Michigan	Michigan Saves	2009	Non-profit
Minnesota	Minnesota Climate Innovation Finance Authority	2023	Public

Mississippi	Fund for a Green Mississippi	2023	Non-profit
Missouri	Missouri Green Banc	2017	Quasi-public
Nevada	Nevada Clean Energy Fund	2017	Quasi-public
New Jersey	New Jersey Green Bank	2024	Public
New Mexico	New Mexico Climate Investment Center	2024	Non-profit
New York	NYCEEC	2010	Quasi-public
New York	NY Green Bank	2013	Public
North Carolina	Freedmen Green Bank & Trust	2023	Non-profit
North Carolina	North Carolina Clean Energy Fund	2018	Non-profit
Ohio	Growth Opportunity Partners	2022	Non-profit
Ohio	Columbus Region Green Fund	2020	Non-profit
Pennsylvania	Philadelphia Green Capital Corporation	2021	Non-profit
Puerto Rico	Puerto Rico Green Energy Trust	2019	Non-profit
Rhode Island	Rhode Island Infrastructure Bank	2015	Public
Tennessee	Memphis Metropolitan Green Financial Corporation	2024	Public
Texas	Clean Energy Fund of Texas	2022	Non-profit
Utah	SustainEnergyFinance	2024	Non-profit
Virginia	Green Bank For Rural America	2024	Non-profit
Washington	Washington State Green Bank	2024	Non-profit
Wisconsin	Green Innovation Fund (Wisconsin Economic Development Corporation)	2024	Public