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Strategy Considerations for Greenhouse Gas Reduction Funding

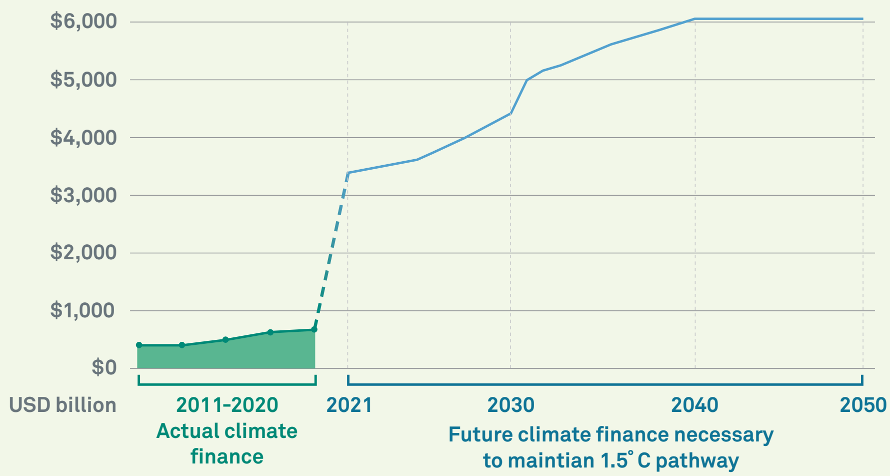
By R.J. McGrail

As the global community looks toward the critical 2030 deadlines of the 2015 Paris Agreement on Climate Change, a need for new strategy and solutions remains—but scientific estimates suggest the agreement's goals may be insufficient to mitigate the climate crisis, and more ambitious policy goals and blended capital solutions are now critical. Recent actions by the United States federal government have brought both funding and attention to the level of investment still needed to achieve climate goals, and multisector stakeholders should begin leveraging these opportunities—and prepare to build upon them.

Authorized by the 2022 Inflation Reduction Act, the Greenhouse Gas Reduction Fund (GGRF) is a first-of-its-kind national grant program designed to mobilize financing and private capital alongside $27 billion in public investment to address the climate crisis, ensure economic competitiveness, promote energy independence, deliver lower energy costs, and economically revitalize historically marginalized and climate-impacted communities.[1] The funding will support projects across the nation, emphasizing targeted public investments to spur additional private investment in activities that reduce pollution and energy costs, enhance energy security, and create well-paying jobs.

The Environmental Protection Agency (EPA) will implement GGRF programs that align with the Justice40 Initiative, which aims to ensure that 40 percent of federal investments flow to disadvantaged communities.[2] The GGRF thus also represents a landmark opportunity for a host of stakeholders in the greenhouse gas– and air pollution–reduction spaces to equitably build state capacity in development, housing, and infrastructure finance to access capital markets and begin to rectify past environmental injustices.

Figure 1: Global tracked climate finance flows and the average estimated annual climate investment need through 2050



Source: Climate Policy Initiative's Global Landscape of Climate Finance

Unfortunately, these funds alone will not be sufficient to meet the country's commitment to reducing emissions to at least half of 2005 levels by 2030, according to consensus estimates.[3] Indeed, relative to the multitrillion-dollar global problem of climate change (see figure 1), the GGRF's investment level is quite modest and favors indirect capital delivery mechanisms rather than direct action against environmental factors in our changing climate.

Looking ahead, leaders, residents of our communities, and other stakeholders concerned about climate change must work to make national and global goals more ambitious, with emphasis on expanding carbon-capturing natural environments and other land policy considerations. Also, adoption of electrification must increase significantly, and more attention must focus on investing in transitioning economic sectors that have high environmental impacts. New avenues for mitigation beyond those emphasized in the Paris Agreement—notably including financing of land-based mitigation solutions, public finance– and capital market–focused interventions, and other community investment strategies—merit further consideration, too.[4]

All that said, the GGRF nonetheless holds enormous potential as a model to begin closing current financing gaps and identifying additional capital sources for greenhouse gas reduction and other climate goals. The public investments at hand with the program's three grant competitions are larger than any prior US government commitment and estimated to make significant progress toward emission reduction goals. As climate actors pursue much larger public and private finance solutions to begin meeting shared goals, then, the GGRF offers an important first step, launching one of the United States' most ambitious public funding proposals to date.

Grant applicants pursuing GGRF funding cannot, however, consider these public funds the only solution to the challenges at hand. Rather, communities, investors, and policymakers can and should build on private capital alongside GGRF's initial public investment. Leveraging both sources will facilitate progress toward climate goals that strike the right balance between necessary ecological preservation and more equitable, resilient economic economic development. It will also better attract additional public and private investment in attaining those goals.

Successful GGRF applicants should have not only the capacity and desire to pursue capital innovation but also a commitment to developing higher-impact, community-sourced outcomes with public, nonprofit, and private actors alike.

With the Biden Administration's goal of ensuring that federal funds are leveraged with other capital and catalyze meaningful change in environmental justice communities, strategically aligning capital and deploying with intention remain important. Taken together, strategies to pursue GGRF grant competition funding can—and should—launch tremendous multisector climate action across the United States.

Greenhouse Gas Reduction Fund Competitions

Solar for All will provide up to 60 grants totaling $7 billion to states, tribal governments, municipalities, and nonprofits to "expand the number of low-income and disadvantaged communities that are primed for residential and community solar investment—enabling millions of families to access affordable, resilient, and clean solar energy." (Applications due September 26, 2023.)

National Clean Investment Fund will award $14 billion to "two to three national nonprofits that will partner with private capital providers to deliver financing at scale to businesses, communities, community lenders, and others, catalyzing tens of thousands of clean technology projects to accelerate energy independence and a net-zero economic future." (Applications due October 12, 2023.)

Clean Communities Investment Accelerator will provide $6 billion in funding and technical assistance to be deployed entirely in disadvantaged communities through "two to seven hub nonprofits with the plans and capabilities to rapidly build the clean financing capacity of specific networks of public, quasi-public, and nonprofit community lenders to ensure . . . access to financing for cost-saving and pollution-reducing clean technology projects." (Applications due October 12, 2023.)

Approaching Implementation Partners

State and local governments, nonprofits, and other GGRF applicants must develop applications with partners that help them leverage the scale needed for success. The state and local development, housing, and finance infrastructure in the United States, with its ready access to the estimated $4 trillion municipal finance market, represents one set of strong implementation partners to consider. GGRF applicants should consider whether and how these partners share their commitments to community-sourced impact and pursuing capital innovation while also expanding capacity.

Such agencies and authorities are great options because they offer vital deal flow for GGRF funds, helping to increase the impact of investment and enabling communities and residents to become more deeply involved in governance and deployment. Selecting and securing the right partners not only supports a strong GGRF proposal but also creates the means to increase capital leverage and scale deployment, thereby deepening the impact of funds on climate goals.

State and Local Solutions to Deployment Challenges

To maximize GGRF funds' ability to meet community needs, state and local governments should consider strategies that deploy additional public grant funds and public finance tools to de-risk, aggregate, and deploy investments. They should develop new tools in the municipal market to support large-scale community decarbonization and the energy infrastructure transition in the United States.

State and local governments can leverage changes to other federal programs, including the Department of Energy's Loan Programs Office. Doing so could enable both a loan guarantee and new tax credits through elective (i.e., direct) payment mechanisms to flow to the municipal market and nonprofit partners, and ultimately to the communities they serve.[5] State and local development, housing, and infrastructure finance agencies can also help make elective payments more effective. These

Accelerating Community Investment (ACI)

Housed at the Lincoln Institute of Land Policy, Accelerating Community Investment (ACI) improves public finance practice by connecting public development, housing, and infrastructure finance agencies with philanthropies, mission-aligned investors, and the broader capital markets. These partnerships help create new, community-led investments in underserved places and people, with the aim to make more capital available and create a more fertile environment for investment in community and economic development, housing, and more.

ACI hosts a professional network that offers a useful jumping-off point for seeking out GGRF implementation partners. Network participants explore field research, join a national community of practice, and receive technical assistance to develop and deploy impactful mission-aligned investment opportunities. ACI also partners with public finance agencies, community capital conduits, and impact-aligned investors to further develop the community investment ecosystem.[6]

agencies and authorities are well positioned both to create new tools that deliver funding and to enhance existing capacity, democratic accountability, adherence to public mission, and other tenets rare in traditional community development.

A Solar for All grant awarded to a state, territory, or tribal government, for example, might dramatically change access to community solar for renters of affordable housing—if funds include all income levels present in much of the nations' existing affordable housing stock. Today, community solar programs typically limit access to low- and moderate-income subscribers with incomes below 60 percent of the total subscriber base. But deploying risk capital—from both the GGRF and other sources—could dramatically spread community solar uptake in low- and moderate-income areas.

Adoption of such a strategy could also allow governments and capital partners to build transformational programs that allow them to more readily de-risk clean energy lending, especially in places where "clean energy redlining"—that is, the heightened exposure to pollution and higher energy costs faced in historically segregated neighborhoods—exists today.[7]

Land-Based Finance to Leverage Capital Deployment

The deployment, extension, or recapturing of funds are among the many strategies that could enhance the effectiveness and reach of capital provided by the GGRF, and land-based climate finance solutions should be considered among better-known tools to contribute to a more just net-zero transition. These utilize an instrument called land value capture, which allows communities to recover and reinvest increased valuation of land assets that result from a range of public investment and government actions—namely, publicly funded infrastructure improvements and regulatory updates that enable redevelopment and growth for land, such as zoning changes.[8]

Land value capture provides specific advantages for leveraging GGRF funding; it can allow capital to flow through proven public deployment channels in existing jurisdictions and through existing proven markets such as the municipal bond market. Because revenue from land-based financing is collected within a particular jurisdiction, it also carries significant advantages as a repayment stream for capital markets to leverage, given the local-level deployment envisioned as the implementation strategy for federal GGRF funding.

This approach also presents additional scaling opportunities for communities with GGRF funds. In addition to pursuing a capital aggregation strategy based on jurisdiction, local governments can employ land value capture as a more immediate repayment mechanism, rather than using typical municipal debt arrangements. Transitioning to green energy amid the much broader mitigation of climate impacts necessitates stacking private and market capital—both impact investments and more traditional funding sources—with GGRF grants and other federal funding, while also advocating for deeper government investment.[9] These strategies could unlock more significant capital pools than the existing but limited pool of public dollars offers, bringing local governments closer to aggregating larger amounts of capital needed to realize a more just transition on the ground.

The Built Environment: a Near-Term, At-Scale Deployment Case

Whether we focus on infrastructure, housing, or economic and community assets, the built environment presents a promising case for significant deployment of GGRF funds and related investments. Fixing aging buildings is inexorably linked to climate goals, and when concerns are raised about an empty pipeline, we need to reassess those concerns and look to existing market opportunities.

The built environment is rife with potential projects: 80 percent of buildings that will be in use in the US in 2050 have already been built and will need retrofitting and other improvements to meet climate goals. Research from the National Trust for Historic Preservation's Research and Policy Lab concludes that "building reuse almost always offers environmental savings over demolition and new construction. It can take between 10 and 80 years for a new, energy-efficient building to overcome, through more efficiency, the negative climate change impacts that were created during the construction process."[10]

To connect these general deployment opportunities in the built environment, GGRF applicants should consider how to include any local analysis of the energy efficiency, retrofitting, and other improvements in their local built environment. By incorporating such needs, applicants' strategy can not only seek capital market leverage needed to make investments at scale but also consider—and plan to make—large-scale investments to improve and preserve the existing built environment and to allow investments to address a range of related climate concerns. For example, the New York City Housing Authority recently identified more than $70 billion in unmet long-term capital needs, many of which are energy-related improvements that could be financed via climate-related funding.[11]

Additional EV charging infrastructure in densely populated areas, such as that to be financed by the National Clean Investment Fund, could encourage more adoption of electric vehicles and contribute to reduced emissions from gas-powered cars. Credit: onurdongel/ iStock/Getty Images Plus

Further Considerations for Scaling Community Investment

The GGRF competitions are a way for historically disinvested communities to organize and build new opportunities for intergovernmental and national collaboration. Many state and local governments, as well as different departments and offices within localities, already work together in new and exciting ways. They figure out how to deploy and leverage capital, finding ways to flow capital to existing financers of the built environments, including municipal bonds. Local and community actors should come together, self-organize, and seek out ways to inform and empower state and local governments to compete for and deploy new GGRF funds most effectively while targeting more equitable results for residents and their communities.

These competitions also present opportunities for participants in local and regional community investment ecosystems to join with public funders and facilitate blended, concessional public finance capital. Participants in these ecosystems across the nation, particularly financial institutions and philanthropic sources of capital, are uniquely positioned to provide less-capitalized public finance partners a variety of products and structures, such as risk-sharing facilities, depository actions, interest-rate buy down, and lending of their rating. That provision could play a significant role in unlocking private finance and access to capital markets.

Promising efforts to address bottlenecks and support project development to mobilize private capital have already begun to emerge in the marketplace. One such effort is the Milken Institute's Center for Financial Markets' 10,000 Communities Initiative, a collaboration between private and public entities aiming to create climate-resilient communities and local economies, and its Community Infrastructure Center, a shared services platform for underserved communities to connect with capital and capacity for sustainable infrastructure projects.[12, 13] This effort seeks to meet those challenges by not only supporting effective project finance, but also connecting communities to the necessary investment in technical assistance and capacity building to ensure more equitable outcomes. (Note: The Lincoln Institute is a partner in this project.)

Summary of Strategies and Recommendations

To effectively address climate challenges, successfully deploy new programs and investment strategies, and achieve global climate goals, GGRF applicants must consider the following, both in their proposals and in further activities to build on and secure additional public funding.

- **Amplify Public and Private Investments**: GGRF applicants and related stakeholders should simultaneously advocate for ramped-up public investment and blend capital and private investments to drive near-term progress on climate goals.
- **Promote Collaboration and Empowerment**: Historically disinvested communities must feel empowered and invited to partner substantively with state and local governments to build investment uses that meet residents' needs. Community investment ecosystems, financial institutions, and philanthropic sources can also be pivotal in giving communities a voice to help shape priorities by unlocking private finance and expanding access to capital markets.
- **Leverage State and Local Development Finance**: To accelerate decarbonization and energy infrastructure transitions, community actors must take advantage of changes made to existing federal programs, as well as deploy new investment vehicles and pair them with the municipal market and the development finance ecosystem. Key to achieving environmental justice, these partners' capital and deployment should align with improved, new, and strategic federal investment.
- **Embrace Land-Based Finance Solutions**: Land-based finance solutions can augment the GGRF's efficacy and reach by allowing reinvestment of increased land asset valuations resulting from public investments. Such strategies have the advantage of linking debt repayment to revenue generated and mobilizing additional resources for climate objectives.
- **Focus on the Built Environment**: To begin to achieve substantial impact, local actors directing early-stage climate investments should prioritize the built environment. Existing and needed improvements to infrastructure, housing, and community assets in the built environment present significant near-term deployment and opportunities to achieve climate goals.

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Cover Photo: A Solar for All award could enable more community-funded solar arrays, which help reduce greenhouse gas emissions and create quality jobs in construction, installation, and maintenance. Credit: schwartstock/iStock/Getty Images Plus.

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