
Catalyzing Investment for Environmental Justice

An Analysis of the National Climate Bank

Summary

The National Climate Bank Act of 2019 was introduced in the U.S. Senate in July 2019 and in the House of Representatives in December 2019. In July 2020, a version of the bill called the Clean Energy and Sustainability Accelerator passed the House with \$20 billion of funding as part of the Moving Forward Act. The bill passed the House again in September 2020 as part of the Clean Economy Jobs and Innovation Act. These pieces of legislation capitalize an independent nonpartisan non-profit institution, a “National Climate Bank,” to finance climate solutions at scale and bring clean energy investment to American communities. This institution will invest its funds in ways that leverage private investment and generate the most impact out of each public dollar.

This analysis seeks to further explore the National Climate Bank’s ability to work as a force for environmental justice. It discusses the importance of environmental justice and the importance of the Green Bank model of public investment to meet environmental justice needs. Further, it will explore how a National Climate Bank can amplify the benefits already demonstrated by the Green Bank model at the state and local level, while also opening up entirely new pathways to provide opportunity and justice for environmental justice communities.

Introduction to the National Climate Bank

The National Climate Bank’s establishing legislation directs it to, among others, do the following:

- Enable communities of color, front-line communities, fence-line communities, low-income communities, historically disinvested communities and rural communities to benefit from and afford projects and investments that reduce emissions;
- Provide support for workers and communities impacted by the transition to a low-carbon economy;
- Form new state and local Green Banks with start-up funding and technical assistance, and provide lending capital to new and existing state and local Green Banks; and
- Use capital to accelerate the retirements of fossil-fueled generation, and otherwise work to purchase greenhouse gas reductions at low cost.

The National Climate Bank’s investment strategy is designed to rapidly and fully transition from fossil fuels to clean energy in order to address climate change. Among the bank’s core principles is that addressing climate change requires a just transition that prioritizes climate impacted communities. This principle is operationalized through various requirements in the National Climate Bank’s enabling legislation including:

About CGC

The Coalition for Green Capital (CGC) is a non-profit organization focused on accelerating the growth of clean energy markets through the creation of Green Banks. CGC offers a unique and proven capacity as the leading creator, advocate, and expert on Green Banks since 2009. CGC works directly to support the formation of Green Banks with governmental and civil society partners, and provides on-going consulting and guidance to operating Green Banks. For more information visit coalitionforgreencapital.com/.

- the National Climate Bank will make a significant portion of its investments (likely 40%) in climate-impacted communities;
- the National Climate Bank will prioritize investment activities that result in the deployment of projects to serve climate impacted communities;
- the National Climate Bank will ensure that the projects it finances create good paying jobs; and
- the National Climate Bank’s board of directors will have expertise in environmental justice and matters related to the energy and environmental needs of climate impacted communities.

If fully capitalized with \$35 billion as contemplated in the National Climate Bank Act of 2019, the National Climate Bank is projected to create over 5.4 million jobs and \$1 trillion of climate investment over five years.

The importance of environmental justice

The U.S. Environmental Protection Agency defines environmental justice as the “fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”¹ Promoting environmental justice within the context of a National Climate Bank will require the National Climate Bank to deliver a clean energy transition that benefits communities that have been disproportionately harmed by the effects of fossil fuel extraction and use, and excluded from the economic benefits of the clean energy transition to date. These communities are disproportionately low-income communities and communities of color and are often referred to as “environmental justice communities.” Environmental Justice communities have been subject to a host of environmental injustices.

- Environmental justice communities bear the disproportionate public health effects from fossil fuels, transportation emissions, and other forms of pollution. Studies have connected harms including asthma, low birth weights, and lead poisoning to the disproportionate exposure to air pollution and toxic chemicals in low-income neighborhoods.²
- Environmental justice communities face increased exposure to the harms of climate change. In urban areas, environmental justice communities are more likely to be impacted by the effects of extreme heat waves, and less likely to have reliable or affordable ways to cool down. When they face extreme weather impacts in the form of fire or flooding, environmental justice communities are less likely to be able to afford to start a new life elsewhere. The Fourth National Climate Assessment found that low-income communities in urban and rural areas face disproportionate harms.³
- The clean energy transition brings economic benefits in the form of lower energy costs and jobs; however, environmental justice communities have too often been excluded from realizing these benefits. Wealthy homeowners that make investments in energy efficiency or home solar receive public subsidies that enable them to enjoy lower energy bills and increased comfort. However,

¹ [“Environmental Justice,”](#) United States Environmental Protection Agency

² [“Trump’s EPA Concludes Environmental Racism is Real,”](#) The Atlantic, February 28, 2018

³ [“Climate change in the US will hurt poor people the most, according to bombshell federal report,”](#) CNBC, November 26, 2018

many members of environmental justice communities are renters. Others that are homeowners are unable to afford the up-front cost of improvements, or to secure traditional financing to achieve the same cost and comfort benefits.

- When large federal investments are made in energy and infrastructure, the needs of environmental justice communities generally aren't taken into account, and the voices of these communities have often been excluded from planning processes. Conventional stakeholder meetings for energy and infrastructure-related decisions are typically technical and arcane, unavailable in languages other than English, and are held at places and times that present obstacles for anyone with inflexible work schedules.
- Programs that mandate emissions reductions or clean energy installations often disregard where those changes occur. Such programs are designed for economic efficiency, to allow emissions reductions to be achieved first where the cost of doing so is lowest. However, this approach can leave polluting facilities in environmental justice communities running for years even as the region as a whole reduces its average annual emissions.
- Environmental justice communities pay a disproportionate share of their income towards energy bills, including electricity and heating.⁴ To the extent that policies to address climate change increase the prices of energy, these households are disproportionately affected.

Any climate policy that aims to enable a just transition will need to take these historic injustices into account. Environmentally just policy should strive to reduce the burden of energy costs on these households. That includes increasing access to money-saving improvements like energy efficiency and clean energy, but also keeping energy prices affordable for households whether or not they invest in such improvements. Investments in new clean energy infrastructure should prioritize reducing pollutants in climate impacted communities, provide good-quality jobs, and bring economic activity to local communities.

How the Green Bank model supports environmental justice

Green Banks already exist at the state and local level across the country, and have built a decade-long track record mobilizing investment into clean energy. They have already driven over \$5.4 billion of investment into clean energy projects that would otherwise not have been built.⁵ They have done so while lowering energy costs for consumers in their states. And, they have undertaken targeted efforts to address environmental justice communities which have historically been excluded from the benefits of clean energy investment.

Reducing energy costs for communities

Green Banks are finance institutions designed to lower energy costs by blending public and private capital. For example, a Green Bank may provide a portion of the total investment that a solar energy project needs, and do so at a lower interest rate than would be offered by a private lender. Private investors may provide the rest of the necessary capital at their normal return requirements. The price of the energy output sold from a given project is based on all the costs that go into the project, including capital costs. For the project to move forward on an economic basis, the end result of all this must be the sale of energy that is competitive or cheaper than the current price of grid power in the region. By blending public and private capital, the

⁴ "Lifting the High Energy Burden in America's Largest Cities: How Energy Efficiency Can Improve Low-Income and Underserved Communities," American Council for an Energy-Efficient Economy, April, 2016.

⁵ "Green Banks in the United States: 2018 Annual Industry Report," American Green Bank Consortium, May 2019.

Green Bank is able to lower the overall cost of the project and deliver clean electricity that is competitive and cheaper for the end user.

Connecticut Green Bank: Solar for All

An example drawn from the Connecticut Green Bank showcases the savings that solar energy, combined with energy efficiency, can provide to individual families. Susan Young, a Black homeowner in Bridgeport, CT, was paying over \$500 per month in utility bills. To lower her utility bills, she signed up for a groundbreaking new solar and efficiency financing program launched by the Connecticut Green Bank. With no down payment or upfront cost, the Green Bank and its developer partner lowered the energy needs of Susan's home with energy efficiency, and then installed solar panels on her roof. Now after the installation, she pays \$120 per month on the financing, and her utility bill is now just \$28. With the combined remaining utility bill and financing charge, Susan comes out well ahead compared to what she was paying before.⁶

This financing solution is made possible through a credit-enhancing junior loan made by the Green Bank, as well as by using alternative underwriting criteria. Rather than evaluate a borrower's eligibility based on traditional banking metrics like credit score or debt-to-income ratio, the only consideration was whether or not the homeowner had consistently paid his/her utility bills for the last 12 months.

The example is part of the Solar for All program, established in 2014 after the Connecticut Green Bank (the first Green Bank in the U.S.) found a racial and income disparity in solar adoption rates in the state. Since the program launched in partnership with PosiGen, solar penetration in Connecticut's low-income communities has increased 188% and over 800 low-income verified households have signed up to go solar.⁷ As a testament to its success, this early demonstration has led to the creation of a larger \$90 million facility with a private investor allowing Posigen to expand the product into new states.⁸

Increasing access to clean energy through targeted programs

State and local Green Banks have pioneered tools to provide low-income communities, renters, and other underserved communities with access to energy efficiency and clean energy improvements.

There are now three Green Banks which focus exclusively on low- and moderate-income customers: the Florida Solar and Energy Loan Fund (SELF), Inclusive Prosperity Capital (IPC) in Connecticut, and the Climate Access Fund (CAF) in Maryland. Many other Green Banks have specific programs dedicated to low-income or otherwise underserved pools of customers.

These programs are a growing part of state and local Green Banks' portfolios of projects. The Green Bank model inherently focuses on markets that are underserved by commercial investors, where the adoption of clean energy is limited by a lack of capital. Low- and moderate-income markets are a clear example where this is the case. Green Bank leaders are also increasingly focused on the historically unequal access to clean energy programs and savings, and on the need to take active steps to remedy the disparity.

⁶ ["Malloy Touts Solar Energy Savings,"](#) CTPost, July 21, 2015

⁷ ["Connecticut Green Bank Receives 2018 State Leadership in Clean Energy Award for Connecticut "Solar for All" Program,"](#) Connecticut Green Bank, May 16, 2018

⁸ ["Financial Partnership Secures Growth of Nation's Leading Low-Income Residential Solar Provider,"](#) Connecticut Green Bank, January 23, 2019.

A National Climate Bank would provide capital and technical assistance which would enable these efforts to expand into communities across the country, including into states and regions which do not currently have existing Green Banks.

Maryland Climate Access Fund: Low-to-Moderate Income Community Solar

Maryland's Community Solar Pilot Program, established by the General Assembly in 2015, allows any Maryland resident to sign up for solar power whether they own their home or not. Program users can sign up for power that is generated elsewhere in the same utility service territory and get credit on their electricity bill for that power.

The program includes a provision that at least 30% of its solar capacity be reserved for projects that serve low- and moderate- income (LMI) customers. However, over time, the state found that this provision alone was not sufficient to drive LMI adoption of community solar. Traditional developers and their investors hesitated to enter the low-income community solar market, in part due to concerns that low-income customers may not pay their bills.⁹

The Baltimore-based Climate Access Fund (CAF), a nonprofit Green Bank, was launched in 2017 to address this gap between the community solar regulation and the way the solar market has traditionally worked. CAF locates urban rooftops for solar developers, and offers attractive financing in the form of below-market debt with flexible terms (using loan capital raised through philanthropic program-related investments) and guarantees to cover potential revenue losses in the event of low-income subscriber non-payment (provided by the State of Maryland).

In exchange for these services, solar developers must agree to an initial 20% discount on low-income subscribers' electricity bills, with no credit limitations or lengthy contract requirements. The developers and the customers both stand to benefit from this arrangement. CAF expects to close on its first project in the coming months, and has a pipeline of additional potential projects in the queue.¹⁰

Enabling communities to adapt to the impacts of climate change

State and local Green Banks have also created lending programs that help frontline communities adapt to the effects of climate change. Generally speaking, mitigation activities, such as deploying clean electricity generating resources, are easier to finance because of the expected future cash flows that arise from these technologies. Adaptation activities, however, do not benefit from the same intrinsic cash flow generating characteristics as mitigation activities such as wind and solar generation. Generally, adaptation projects provide less quantifiable financial benefits than mitigation, meaning that lenders are more hesitant to make loans to these types of projects. This hesitancy can be devastating for front-line communities that are already experiencing the impacts of climate change in the form of increased flooding and stronger storms.

Florida Solar and Energy Loan Fund: Climate Resilience Lending

Green banks have begun to apply themselves to the task of identifying quantifiable cash flows or savings associated with adaptation projects and have already had some success. In Florida, the Florida Solar & Energy Loan Fund (SELF) a certified Community Development Financial Institution (CDFI) and Green Bank, has created a program that takes advantage of the insurance premium savings enjoyed by

⁹ "[Social Equity Through Clean Energy](#)," Lynn Heller, August 12, 2019

¹⁰ "[Social Equity Through Clean Energy](#)," Lynn Heller, August 12, 2019

homeowners that harden their roofs against the threat of hurricanes, and uses those anticipated savings to help secure a loan provided by SELF to finance the upfront cost of the entire project.

SELF also makes financing available specifically for home adaptations, aging-in-place, and assistive technologies.¹¹ These can also be combined with conventional clean energy and energy efficiency options available through Florida SELF. A release from Florida SELF highlights the case of St. Petersburg homeowner Sylvia Thompson, who secured an affordable loan from SELF for a new high-efficiency air conditioner: “Her child with cerebral palsy and epilepsy is prone to seizures during hot summer months. Having a functional air conditioner not only lowered her electric bills, but it greatly improved living conditions. Sylvia described the SELF program as a ‘blessing.’”¹²

Capitalizing environmental justice owned community businesses

The clean energy transition will stimulate a massive transfer of wealth to the businesses, large and small, that manufacture, design and install clean energy technologies. Unfortunately, the same inequities that exist in the broader economy have been replicated in the clean energy transition. Businesses owned or operated by members of environmental justice communities are often unable to access the capital necessary to survive and thrive. State and local Green Banks can serve as crucial source of capital for the locally owned contracting and construction businesses that do the work of the clean energy transition.

Inclusive Prosperity Capital: Providing credit to local businesses

Inclusive Prosperity Capital (IPC) is a national not-for-profit specialty finance organization and Green Bank focusing on the intersection of community development, clean energy finance, and climate impact. IPC spun out of the Connecticut Green Bank in 2018 to increase investment in underserved markets nationally, including low- and moderate-income communities, by accessing new mission-driven capital sources and forging partnerships with mission aligned lenders, community-based organizations and others. IPC’s first investment outside of Connecticut was a \$5 million credit facility for BlocPower, a Black-owned Brooklyn-based energy services company that is transitioning fossil fuel burning buildings in New York State, to clean electric heating and cooling systems.

Facilitating community input in a just transition

One of the obstacles faced by environmental justice communities arise from their exclusion from decision-making processes. Conventional stakeholder meetings for energy and infrastructure-related decisions are typically technical and arcane, unavailable in languages other than English, and are held at places and times that present obstacles for anyone with inflexible work schedules. As state and local institutions, that depend on income from communities they serve, Green Banks are designed to be responsive to community input.

Connecticut Green Bank: Responding to inequity in solar deployment

The Connecticut Green Bank, for example became aware of a disparity in its solar lending programs. In response, the Green Bank set out to correct this disparity by increasing participation from environmental justice communities. As of 2019, CTGB has achieved “parity” in its solar lending operations, meaning that the households and businesses that have received solar loans from the Connecticut Green Bank are representative of the demographics of the state itself. The organization has achieved “beyond parity” with

¹¹ “[New HALO Loans Help Seniors, the Disabled With Crucial Home Renovations](#),” November 2, 2018

¹² “[New HALO Loans Help Seniors, the Disabled With Crucial Home Renovations](#),” November 2, 2018

solar lending to communities of color. This focus on parity has allowed the benefits of going solar to be enjoyed by people and businesses of all walks of life, not just those that may have more access to information about the existence of these programs.

A National Climate Bank increases environmental justice investment

A National Climate Bank will build on the work of state and local Green Banks and be a powerful tool for environmental justice in its own right, by a) supporting the expansion of the environmental justice programs currently underway in state and local Green Banks b) creating local financing entities that enable local control of climate investment and c) undertaking large and complex environmental justice related investment projects.

Supporting expansion of state and local environmental justice programs

The National Climate Bank will expand the environmental justice work currently underway at state and local Green Banks across the country. As is discussed at length above, state and local Green Banks across the country are facilitating the transactions necessary to enable clean energy and climate infrastructure investment in environmental justice communities. The National Climate Bank will further this work by providing additional flexible capital that can be used to broaden the scope and scale of environmental justice focused financing programs. The National Climate Bank will also provide technical assistance that enables state and local Green Banks to develop new financing programs that facilitate investment in environmental justice communities. Like state and local Green Banks, the National Climate Bank would focus its technical assistance and capital on projects involving technologies that are on the edge of widespread deployment in environmental justice communities.

Providing resources necessary for local control of climate investment

The National Climate Bank will also provide the resources necessary to stand up new Green Banks in environmental justice communities. Historically, Green Banks in the U.S. have been formed by state governments, local governments and non-profit and community organizations. There are currently 15 Green Banks operating nationally and across 13 states. State and local Green Banks can be formed and operated by community stakeholders and accordingly, are an ideal vehicle for community control and direction of clean energy and climate infrastructure investments.

A key function of the National Climate Bank will be to provide technical assistance to enable the formation and launch of new Green Banks in environmental justice communities. Technical assistance is a key ingredient for the success of any Green Bank and will be especially important for Green Banks launching in environmental justice communities with a limited history of clean energy and climate infrastructure investment. The National Climate Bank's technical assistance offerings will include market evaluation, product design and implementation, organizational formation, hiring, business plan creation, and launch support.

The National Climate Bank will also provide seed capital to enable new Green Banks to launch their operations and initial financing products. Access to start-up operating capital is key to the success of new Green Banks, as it often takes several years for a new Green Bank to generate revenues sufficient to cover its operating costs. This timeline may be longer in communities where project sizes are smaller or expected returns from financing are low. The National Climate Bank will provide operating capital, sized to the

operating needs of the applicable Green Bank, to enable the Green Bank to immediately begin financing clean energy and infrastructure projects.

Undertaking large and complex environmental justice projects

The National Climate Bank will also invest in large and complex clean energy and climate infrastructure investment projects that are currently outside the scope and scale of most state and local Green Banks. These projects have the potential to bring significant economic activity to the communities and regions in which they are located, and to ameliorate long-standing environmental harms caused by fossil-fuel infrastructure.

A wide array of local stakeholders stand to benefit, including:

- Americans who suffer from the health effects of fossil-fuel based generation;
- Businesses that construct or install clean energy;
- Contractors that perform energy efficiency audits, upgrades, or other construction;
- Communities charting a new path in a post-fossil fuel economy; and
- Energy-intensive businesses constrained by the availability or price of power.

Though the National Climate Bank would invest at an even larger scale, a few examples from existing Green Banks point to the potential benefits, including the jobs that can be created by clean energy investment at scale.

New York Green Bank: Economic Boost to Western NY

Since 2014, NY Green Bank has helped nine New York-based companies expand their operations within the state, and seven non-New York-based companies grow their existing footprint within the state.¹³

Specific projects have generated additional jobs and economic benefits for communities. For example, in 2019 NYGB committed \$68.75 million in financing to support the acquisition of 612.0 MW of installed wind power by Carlyle Power Partners. The transaction will allow that generation to remain operational for longer than previously planned. During these years of extended operation, the projects are expected to generate almost 3 million MWh of clean energy and avoid over 1.5M metric tons of GHG emissions.¹⁴

In addition to the environmental benefits, this transaction will retain more than 40 clean energy jobs in the North Country and Western NY, and enable continued lease payments made to landowners and property taxes contributed to local communities. The NYGB also expects that the transaction will build market confidence and enable further large-scale renewable investment of this type.

Connecticut Green Bank: Creating Jobs

The CT Green Bank's 2018 Impact report found that the Green Bank has supported the creation of more than 16,500 direct, indirect, and induced job-years.¹⁵ A research study from CT Green Bank and Navigant Consulting further estimated the jobs created by each million-dollar investment in clean energy mobilized

¹³ [“Governor Cuomo Announces Major Milestone Reached by NY Green Bank with \\$2.7 Million in Profits,”](#) NY Green Bank, June 22, 2017

¹⁴ [NY Green Bank Annual Review 2018-19 and Annual Business Plan 2019-20](#)

¹⁵ [Green Bank Impact Report FY 12- CY 18](#), Connecticut Green Bank

by the Green Bank. It found that the number of jobs created ranges from 5 job-years for storage tech installers to 18 job-years for residential energy efficiency installers.

The National Climate Bank will also undertake large scale project that enable communities to recover from the effects of fossil fuel infrastructure.¹⁶

Supporting revitalization efforts of fence-line communities

The National Climate Bank will serve as a new source of capital for the revitalization of fence-line communities. Low-income communities and communities of color are more likely to live in fence-line communities that are in close proximity to polluting fossil fuel infrastructure. These communities have long fought for regulatory interventions to mitigate the harms caused by fossil fuel infrastructure, and are increasingly forcing the decommissioning of this infrastructure. However, once the polluting facilities are closed, capital is required to rebuild, repair and renew damaged community infrastructure. Currently, communities depend on scarce philanthropy and governmental grants to undertake these rebuilding efforts. The National Climate Bank will be capable of providing the low/no-cost patient capital that communities need to undertake revitalization projects like community renewable generation facility construction and green retrofits of housing and commercial spaces enable community renewal after fossil fuel infrastructure.

Facilitating a Just Transition for frontline communities

The National Climate Bank will be a tool to support a just transition for communities harmed by the transition away from fossil fuel infrastructure. Many low-income, communities of color, Native and indigenous communities are being devastated by the closure of fossil fuel infrastructure, like coal mines, that were previously the primary source of employment and tax revenue in their communities. Responding to this reality requires a cohesive national response led by the communities experiencing this crisis. However, the National Climate Bank can play a role as a capital provider as these communities develop their post-fossil fuel future. The National Climate Bank will provide financing that supports the creation and capitalization of new businesses in clean energy and climate infrastructure, one of the fastest growing segments of the economy. The National Climate Bank will also be a capital provider for communities looking to reclaim former fossil fuel infrastructure sites, mitigating public health and environmental risks.

Conclusion

A focus on environmental justice must be a part of any comprehensive climate plan. The National Climate Bank has the potential to be a powerful force for environmental justice. Further direct outreach and collaboration with environmental justice communities is needed to understand the investment needs and opportunities that the National Climate Bank should prioritize.

The example set by existing Green Banks has shown that this model can successfully reach and benefit low-income communities, helping residents to access previously unavailable improvements that can immediately save money and reduce pollution. The support of the National Climate Bank will help to capitalize these programs and expand them to new areas. It will maintain or reduce energy costs for consumers, while transitioning to clean energy and improving local air quality. It will provide other economic benefits, including jobs and business activity in disadvantaged communities. With creative policy-making and investment design, it can provide quality-of-life improvements, including in the

¹⁶ [Evaluation Framework Societal Perspective, Connecticut Green Bank](#)

transportation sector. In the larger picture, this mobilization of investment into clean energy will mitigate the harms of climate change, which disproportionately impact environmental justice communities across the country. These features all make the National Climate Bank an important implementation tool for environmental justice.