



STRUCTURE & OPTIONS FOR GREEN BANK LEGISLATION **COALITION FOR GREEN CAPITAL**

A Green Bank is a public or quasi-public clean energy financing institution that uses limited public resources to leverage greater private investment in clean energy. The goal of a Green Bank is to accelerate the growth of renewable energy and energy efficiency markets. Green Banks accomplish this goal by investing in clean energy projects through public-private partnerships that seek to maximize the amount of private investment per public dollar used. And because public dollars are used for loans and not grants, public capital is recycled and preserved, eliminating net long-term costs to taxpayers. Green Banks address the number one barrier to adoption of clean energy technologies – the upfront cost – by helping consumers and businesses access financing while reducing energy costs.

Is Legislation Necessary to Create a Green Bank?

As a government financing entity, legislation, regulation, or administrative action is typically needed to create and empower a Green Bank. Three legal components must be in place to operate a Green Bank:

- 1) **Organization** - A Green Bank must be a defined organization, that is either a new institution or one created within or from an existing entity;
- 2) **Capital** - A Green Bank must have capital to lend and cover operating expenses; and
- 3) **Financing Authority** - A Green Bank must have the legal authority to perform a specific set of financing activities.

Whether or not legislation, or possibly regulation, is needed to create and operate a Green Bank depends on whether these three critical Green Bank operating components can be collected and organized under existing law. For instance, New York State found that its existing state energy office, NYSERDA, could create its own divisions internally, and already had the authority to provide financing in the forms required by a Green Bank. Therefore no legislation was needed to meet the organizational and financing authority components. However, a capital source for the Green Bank was still needed, and it was determined that a regulatory path was the optimal way to obtain funds for the New York Green Bank. Connecticut, though, wanted to repurpose an existing quasi-public authority and give it new legal authority to perform financing that the existing entity did not already have. In addition, the desired capitalization source required legislative, not regulatory action. Therefore, the Connecticut Green Bank could only be created through comprehensive legislation. Any state or municipality seeking to create a Green Bank should assess what existing structures, funds and laws presently allow for, and whether new legislation or regulatory orders are needed to gather the three operating components.

What Should Green Bank Legislation Contain?

If legislation is in fact required to create a Green Bank, then that legislation should address multiple aspects of Green Bank definition and legal authorization. There are certain elements of choice when designing a Green Bank, which will be reflected in the legislation. However, the core operating principles will remain consistent across Green Banks: 1) the organization provides financing, not grants; 2) it provides that financing in partnership with the private sector; and 3) Green Bank capital can be revolved, recycled and/or recovered relatively quickly through the sale of loan assets. With these core elements fixed, legislation can address the myriad of other choices a government can make to define its Green Bank.



- Organization Placement – Legislation should define the Green Bank entity itself. Is a new institution being formed? If so, is it directly part of government, or is it a quasi-public entity, or an instrumentality of the state? Or, if not creating a new entity, is the Green Bank created by repurposing an existing entity? That pre-existing entity can itself be inside or adjacent to government, as well.
- Organization Governance – The Green Bank’s governance structure will likely depend on the legal form of the entity and its organizational placement. For instance, if the Green Bank is a division of the state’s energy office, then it will be under the control of the state itself. Even if under direct state control, a Green Bank can have a board of advisors that provide strategic oversight. If the Green Bank is quasi-public, or independent of government, the entity will likely require a board of directors to provide governance. If legislation is used to create the entity, it must define the size, composition, terms, selection process and responsibilities for that board of directors.
- Capitalization – The capital source identified for the Green Bank may require legislation to transfer the dollars into the Green Bank. Public capital used to fund the Green Bank may come from an annual state budget appropriation; it may come by repurposing funds from an existing fund into the Green Bank; it may come by redirecting ratepayer dollars that are already being collected; it may come from a new ratepayer surcharge; or it may come from any number of other sources. Capital-allocating legislation should both identify that source of funding and describe the structure and frequency of capitalization. For instance, a Green Bank could be funded through a one-time upfront infusion of public funds. Alternatively, a Green Bank could receive its funds over a set number of years, with no more funds sent to the Green Bank after that period. Or a Green Bank may receive a perpetual annual infusion. Legislation should also consider the manner in which this funding structure may be changed in the future. For instance, if the Green Bank relies on annual funds coming through the state budget appropriations process, then those funds are particularly susceptible to changing political environment from year to year. But if funds are provided in lump-sum up-front, with a high threshold required to take back those dollars, then the Green Bank can operate with greater certainty of funding.
- Bonding Authority – Green Bank bonding authority is critical for two reasons. The first is that Green Banks may require bonding authority to raise its pool of lending capital. In the event that no public dollars are directly available to capitalize the bank, it may be necessary to capitalize a Green Bank with bond proceeds. Green Banks may be granted their own bonding authority, with or without full faith and credit and/or moral obligation from the state. Green Banks may be given the authority to issue green bonds, which may carry with them certain financial benefits. Or Green Banks may be able to partner with other existing state entities that already have bonding authority, effectively using that other entity as a conduit issuer for the Green Bank. Each of these potential bonding structures will impact the borrowing cost for the Green Bank, which in turn will affect the interest rates at which the Green Bank can lend to clean energy projects.

The second important element of a Green Bank’s bonding authority relates to its ability to sell the loans it has already issued in order to regenerate the bank’s cash pool. In order for the bank to be able to continue lending even after all of its capital has been used to make loans, the bank must be authorized to sell its loan assets through a number of potential structures. These structures should include either public or private securitization, which is a kind of debt issuance where the bank’s portfolio of loans are converted into tradable bonds. Without the authority to sell loans in this manner, a Green Bank’s ability to lend is capped by its initial pool of capital and the rate at which those loans are repaid over many years. Unlike a traditional revolving loan fund that slowly



recaptures and relends its funds over a long period of time, a Green Bank is meant to continuously lend at the full capacity enabled by its capitalization. And this is only possible if it can readily and repeatedly sell its loan assets and replenish the cash on its balance sheet through securitizations.

- Types of Investments – Green Bank legislation should specify the actual types of lending financing activity it can engage in. This will typically include senior loans, subordinate loans, credit enhancements (such as loan loss reserves, insurance, and guarantees), and equity investments. Legislation should also specify that the Green Bank is allowed to form loan warehouses that gather smaller loans into a pool, which can later be sold to private investors. It should also be specified that Green Banks are allowed to sell their loans through securitization (public or private) or a private placement. In addition to the specific empowerments, it is wise to also include a general clause that allows the Green Bank to provide other kinds of financing that are critical to the deployment of mature clean energy technologies and within the bounds of the Green Bank's expectations of reasonable risk.
- Co-Investment – It is worth specifying in legislation that a Green Bank is allowed to lend to private entities or privately owned projects; that it is allowed to co-invest in projects alongside private entities; and that it may sell its assets (loans) to private entities. This clause is necessary because some states otherwise prohibit public sector co-investment, or public sector lending to non-municipal borrowers.
- Eligible Projects, Technologies and Markets – The legislation needs to define eligible borrowers of Green Bank financing. This encompasses three separate elements of choice – projects, markets and technologies. In the category of project type, the government needs to choose if the Green Bank will lend to an energy generation/energy efficiency project and/or a company that is developing or installing energy technology. Essentially, will the Green Bank provide project finance or business development loans? These two types of lending look very different, with entirely different risk profiles, capital structures, and underwriting projects. Typically, Green Banks only provide project financing, where a loan is used to build an actual energy project, rather than support a business. (Governments often have economic development or related entities better suited to this kind of lending. Therefore this activity is often best left to other entities.)

Presuming the Green Bank will exclusively provide project financing, the next choice is what kinds of technologies are eligible for financing. Energy technology can broadly be categorized as being in either early development stage, commercialization stage, or deployment stage. Nearly all Green Banks exclusively focus on deployment stage energy technologies, which are commercially proven, have very low or no technology risk and are ready for mass market deployment. Technologies in earlier stages of development tend to be riskier, and not well suited for traditional Green Bank-style financing (e.g. term loans) because steady cash flows from these technologies are less certain. If the Green Bank, then, will provide project financing for deployable technologies, the legislation needs to enumerate the specific technologies that are eligible. This may include renewable technologies like solar PV, solar thermal, solar hot water, geothermal, wind, fuel cells, hydro power and various forms bioenergy. Micro-grid applications, like smart meters, energy storage and related grid optimization tools may be eligible. And many different forms of energy efficiency technology are also optimal for Green Bank financing. The kinds of technologies that often draw more focused debate are CHP and natural-gas based technologies.

Finally, it must be determined which market sectors are eligible for Green Bank lending. Green Banks have lent into the residential sector, commercial & industrial sector, non-profit sector, and



the MUSH (municipal, university, schools and hospitals) sector. Barring specific local circumstances, Green Banks should be crafted to be able to lend across all of these potential market sectors.

- Related Mechanisms – Green Banks are well-suited for the task of facilitating, managing, or implementing innovative new clean energy financing mechanisms like Property Assessed Clean Energy (PACE) financing and on-bill recovery (OBR). PACE is a financing structure where loan repayment is made through an incremental property tax on the building that is being upgraded, and OBR is a financing structure where loan repayment is made through the utility bill of the borrower. The value of either structure is that historically the repayment rate of property taxes and utility bills is relatively high, giving increased repayment security to a lender that might otherwise be making an unsecured loan. PACE and OBR both have additional benefits. PACE and OBR loans can be structured to stay with the building, rather than a person, if the original borrower moves out of the upgraded building. The loans also can address the principal-agent problem that prevents landlords and tenants from making energy upgrade investments in rental properties.

These two financing and collection structures typically require significant amount of administrative effort and on-going support to get the program running. In Connecticut, for example, the Green Bank was designated by legislation to be the central, state-wide administrator for all PACE activity. This ensures consistency in programs across taxing entities (individual municipalities) and also removes the burden of PACE program creation and administration from small towns without the resources or know-how to build a program. Similarly, a state-wide open-platform OBR program where any borrower can get a loan from any bank requires tremendous coordination among utilities, policy-makers and lenders. In addition to the administrative and coordination roles, Green Banks can act as a lender for either program. For Connecticut's PACE program, for example, even though the Green Bank had built a robust administrative platform, no private lenders were willing to originate and underwrite loans. But because the Green Bank had its own capital, it chose to kick-start the market and begin making PACE loans itself. One can imagine the Green Bank playing a similar role for OBR if no private capital is available. A Green Bank could also provide other forms of financial support through either structure to enable greater private investment.

These legislative components are intended to highlight the essential elements of a functional Green Bank while still describing the elements of choice that any government has in crafting its own Green Bank. Green Banks are a flexible tool that can be used in any market to address the clean energy financing gaps and needs unique to a particular market, and Green Bank legislation ought to reflect those unique needs.

For more information or to ask further questions, please contact the Coalition for Green Capital's Executive Director, Jeffrey Schub at jeff@coalitionforgreencapital.com.