



County of Fairfax, Virginia

MEMORANDUM

DATE: August 2, 2021

TO: Board of Supervisors

FROM: Bryan J. Hill *B. Hill*
County Executive

SUBJECT: Fairfax Green Bank Update

Introduction

On July 28, 2020, the Board of Supervisors adopted Fairfax Green Initiatives #2, directing staff to report on the feasibility of a 'green bank' for Fairfax County. This memorandum supplements the update provided to the Board of Supervisors Environmental Committee on July 20, 2021. After describing the statutory authority and planned gap analysis, the memo discusses key attributes of green banks, identifies the benefits of such a bank to Fairfax County, and briefly summarizes regional activity. The attachment includes considerations for determining the optimal structure, scope, and focus of a Fairfax green bank.

Background

In the 2021 General Assembly session, Del. Kaye Kory introduced enabling legislation for localities to establish green banks. That bill, which passed and was signed by the Governor on March 30, 2021, is codified at [Va. Code § 15.2-958.3:1](#).

According to the [American Green Bank Consortium](#), green banks "are dedicated finance institutions (often public entities or nonprofits) that use innovative financing to connect clean energy, resilience and climate-related projects with capital." The term "clean energy technologies" as used in the statute encompasses energy efficiency, renewable energy, the electrification of transportation and smart grid technologies.

The law provides that "Any locality may, by ordinance, establish a green bank to promote the investment in clean energy technologies in its locality and provide financing for clean energy technologies." It also describes a variety of functions a green bank may perform, conditions for public engagement and consumer protection, and permits the locality to determine "whether the green bank will be a public entity, quasi-public entity, depository bank, or nonprofit entity." Attachment A to this memo summarizes some typical operational characteristics of green banks.

At its [April 27, 2021 meeting](#), the Board approved \$300,000 to assess the opportunities and constraints for a green bank serving residents and businesses of Fairfax County, and how that green bank might best be structured for local community conditions. This type of study is commonly referred to as a gap analysis. The Office of Environmental and Energy Coordination

(OEEC) and the Departments of Finance and Economic Initiatives are teaming to draft the Scope of Work and identify consultants to perform the gap analysis. To expedite the work, staff is planning to use qualified consultants already contractually available to the county to conduct the gap analysis.

Following established bank industry practice, the gap analysis will include:

- An assessment of the size of the clean energy market in Fairfax County;
- An assessment of the present conditions for financing clean energy projects;
- Constraints experienced by clean energy contractors and service providers;
- Recommendations for the institutional structure of a green bank, noting the financial and risk factors posed by each option;
- An assessment of the potential benefits and challenges of a regional green bank; and
- Recommendations for the size of the bank's capitalization and potential sources of that capital.

The consultant team is expected to begin work on the gap analysis in September 2021 and provide its draft report, with recommendations, by June 2022. Staff will assist the consultants and engage the financial and clean energy contractor communities during this period. In addition, staff anticipates drafting a proposed ordinance during Spring 2022. Staff will remain engaged with potential state and local partners, mindful of opportunities that may emerge for collaboration.

An Overview of Green Banks

Green banks are mission-driven, seeking to reduce carbon emissions rapidly while addressing community needs and local economic development. They pursue those goals by leveraging public funding to attract private capital for clean energy projects.

Green banks seek to improve capital markets for those customers and sectors that lack access to reasonably priced financing or experience other challenges accessing financing. For this reason, green banks often focus on housing projects for low- and moderate-income populations, historically disadvantaged communities, religious communities, and not-for-profit institutions. They can provide credit enhancements and direct incentives to serve targeted or hard-to-reach markets. The green bank financing model also helps address other market imperfections, such as banks avoiding projects they perceive as risky due to proposed use of new technologies, or projects too small for a private bank's desired return on investment after transaction costs are taken into account.

Furthermore, green banks can help create demand for clean energy projects by raising customers' awareness of – and trust in – energy-saving, carbon-reducing opportunities. The most successful green banks today have developed sophisticated marketing of clean energy technologies and programs in their communities. The lesson learned is that the availability of financing alone is

not sufficient to move the market. Customers need to have knowledge and confidence that clean energy projects are sound and the financing mechanism is appropriate for their use.

Green banks are currently operating in a dozen states and the District of Columbia. They typically are funded (i.e., capitalized) by governments through any combination of direct appropriations, bonds, grants, re-allocation of funds, or surcharges (such as carbon taxes or fees on energy use). Green banks also recruit capital from private lenders, community development financial institutions (CDFIs), and mission-focused charitable organizations.

Regionally, the District of Columbia Green Bank, which began operations in 2019, is on track to be capitalized to a total of \$105 million by 2025; its fund balance in September 2020 was \$25.5 million. The Montgomery County Green Bank, which appears to be the only green bank in the nation established by a county, was founded in 2017 and is largely funded by an \$18 million payment to the county as part of the PEPCO-Exelon merger settlement in 2016.

Funds from a green bank are often blended with private financing to capitalize clean energy projects through direct lending. Leveraging of public dollars in this manner lowers the risk to private lenders while enabling work that stimulates the local economy and provides savings to the borrower. According to the American Green Bank Consortium, a membership group of clean energy finance organizations, each dollar invested by a green bank mobilizes about four dollars in private capital into the clean energy economy. Green banks can also reduce the credit risk to private lenders for projects where the borrower has less than ideal credit, or the technologies used are unconventional. This credit enhancement can be provided through loan guarantees, interest rate buy-downs, or other means.

Benefits of a Green Bank for Fairfax County

Fairfax County has expressed a commitment to environmental protection and climate action. This commitment is shown most recently in the Board's adoption of the Carbon Neutral Counties Declaration and updated operational energy strategy on July 13, 2021, and by the ambitious Community Energy and Climate Action Plan (CECAP) that the Board will consider in September.

CECAP implementation will require mobilization of substantial resources throughout the private sector to reduce community energy use and shift to electric vehicles and renewable, resilient energy options. The investments needed to achieve this low-carbon future include:

- Energy-saving renovations in commercial, residential, and institutional buildings;
- Installation of electric vehicle charging infrastructure;
- Deployment of renewable energy systems at homes and commercial buildings; and
- Use of emerging technologies such as energy storage for resilience and to maximize value from renewable energy sources.

The economic development potential for the county through the local businesses serving this growing market is likely large, offering opportunities for many firms large and small. The gap analysis is expected to quantify this potential and market.

To ensure the benefits of a transition to a low-carbon future are allocated equitably in the county, green bank resources can be targeted to historically disadvantaged communities, low- and moderate-income households, and other sectors that have limited financial resources or have experienced or are experiencing challenges in accessing financing.

A green bank would complement the county's existing CPACE financing program. The minimum size of a CPACE project in Fairfax County is \$50,000, and residential properties are not eligible for CPACE financing. However, a green bank could provide assistance to residents and businesses with smaller but meaningful projects. For example, most residential solar photovoltaic systems cost less than \$25,000, and substantial residential energy efficiency upgrades can be made for under \$15,000. Montgomery County and Washington DC – both of which have robust market outreach programs – are presently folding the administration of their CPACE programs into their green banks.

One insight from successful green banks elsewhere is particularly attractive to Fairfax County as it begins CECAP implementation: a green bank can be a powerful educational and marketing vehicle for realizing community clean energy goals. Customers are often unsure of product claims for new technology, skeptical of vendor or contractor credentials, or confused about the value proposition of certain improvements. Therefore, in addition to providing financing options, a Fairfax green bank could assist customers by pre-qualifying eligible contractors for work after verifying their credentials and past work or providing technical advisory services to help customers assess project options. These and other types of services promote the objectives of a clean energy economy in general while also boosting awareness throughout the community.

State and Regional Activity

Thus far, only Fairfax County has made a financial commitment to explore a green bank in Virginia. The Virginia Department of Mines, Minerals and Energy (DMME) is monitoring clean energy finance and may explore statutory authority for a statewide green bank.

Staff in Arlington County and the City of Alexandria have expressed interest, but those localities have not made commitments to pursue the green bank concept. The Northern Virginia Regional Commission (NVRC) has expressed interest in a regional green bank, but the statutory language is silent on the legality of a regional bank. Further, there may not be a model for a regional green bank, as staff is unaware of any multi-jurisdictional green bank operating today below the state level. The complexity of a green bank suggests Fairfax should learn from precedents and best practices before attempting a first-of-its-kind innovation.

The gap analysis to be prepared over the next eight months could serve as a proxy of sorts for the region, as neighboring jurisdictions are served by many of the same lenders

and clean energy contractors that serve Fairfax County. The analysis will focus on Fairfax County but also explore the potential benefits and challenges of a regional bank institution. Future work may expand to include other jurisdictions if evidence emerges that a regional entity is viable, and if other localities show commitment to the concept. Meanwhile, staff will remain engaged with counterparts across Northern Virginia throughout this process.

Staff will periodically update the Board of Supervisors on the topic of green banks. Supervisors who have any questions about this update or green banks should contact Kambiz Agazi at 703-324-1788 or at Kambiz.Agazi@fairfaxcounty.gov.

cc: Joseph M. Mondoro, Chief Financial Officer
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Attachment A: Operational Characteristics of Green Banks

Attachment A: Operational Characteristics of Green Banks

Types of Green Bank Programs

Green Banks provide a variety of finance vehicles or programs to customers looking for assistance. This section highlights the most widely available programs to consider.

Program 1 – Direct Lending

A Direct Lending Program (DLP) is where the Green Bank acts as the lending institution to the customers. This streamlined approach creates a two-party transaction. The Green Bank makes the full monetary contribution, sets the repayment terms, and collects the payments until repaid. Since this program is entirely managed by the Green Bank, it affords a higher level of flexibility compared to other programs, such as:

- Can be marketed and available to all potential customer types (personal, business, organizations, etc.).
- Allows for total independence for approval process and repayment terms.

A DLP may also expose the Green Bank to oversight as a lender. Prior to beginning a DLP, the Green Bank needs to consider if by acting as a lender it is subject to any of the applicable banking Acts and Regulations, including Reg. B (Equal Credit Opportunity Act), Reg. V (Fair Credit Reporting Act), and Reg. Z (Truth in Lending Act), as well as any other that may apply depending on the structure of the loan itself related to security/recourse interests available to the Green Bank. The legal structure of the Green Bank also may determine if rights delegated to the Treasurer by the Commonwealth are applicable and need to be considered as well.

Program 2 – Credit Enhancement – Assistance

A Credit Enhancement – Assistance Program (CEAP) is a partnership with local banks, investors, or other similar groups that can provide loans for projects that fall under the scope of the Green Bank. The key feature of the CEAP is that the Green Bank provides an upfront cash payment to the customer to help lower the overall loan amount with the partner entity, similar to a down payment on a mortgage or car loan. Items to consider with a CEAP include but are not limited to:

- Will the Green Bank be able to collect any fees, interest, or return of principal on the assistance money?
- Would the above result in a change in the credit consideration for the partner entity?
- What requirements will the Green Bank place on partner entities to participate in the CEAP?

A CEAP, similar to the DLP, may expose the Green Bank to oversight as a lender if there are recoupment practices in place. However, if the CEAP operates as strictly a payment to the customer without any recoupment, any number of regulations are not applicable. This is subject to legal opinion. Without recoupment, the Green Bank would need to replace these spent funds

from external sources or other program revenue. CEAP is not an independently self-sustaining model.

Program 3 – Credit Enhancement – Guarantor

A Credit Enhancement – Guarantor Program (CEGP) is a partnership with local banks, investors, or other similar groups that can provide loans for projects that fall under the scope of the Green Bank. The key feature of the CEAP is that the Green Bank provides a principal loan balance guarantee for the partner entity for any loan done as part of the program. The aim of this is to lower the inherent risk associated with issuing a loan by the partner entity in exchange for lowered loan requirements of the customer. It has been the experience that while some partner entities are willing and able to make concessions based on a CEGP, it is not universally the case and needs to be considered heavily when launching a CEGP. As the loan risk is still entirely on the partner entity, the Green Bank has limited negotiating power.

A CEGP has significantly lower direct costs compared to other programs. The Green Bank is only financially responsible for the loans considered in default by the partner entity. While this lowers upfront costs, the Green Bank would need to maintain balances and liquid funds similar to a bank's loan loss reserve in order to cover defaults in the partner entity portfolio. There would need to be negotiated significant transparency for both the Green Bank and partner entity to ensure that the portfolio was only for included program loans.

Program 4 – Investment Model

An Investment Model (IM) is where the Green Bank provides direct financial support through contracts and instruments to contractors and service providers directly, rather than consumers. An IM allows the Green Bank to maintain control over the costs and revenues of the program, as well as the risk criteria associated with pricing the program. Key features of the program are:

- An open solicitation for contractors and service providers to apply for Green Bank investment
- Autonomy in the credit and risk evaluation conducted by the Green Bank when determining investments in the program
- Control of term and returns for the investments made as part of the program.

The IM has considerably higher exposure compared to other programs offered by the Green Bank. The typical cost per program unit is projected to be higher, as the program is not supporting any single project, but more generally the contractor or service provider completing multiple projects over several years. While the contract is written in a way to ensure return of principal, the Green Bank exposure is larger to each individual unit in the program.

Program 5 - Partner Program (Non-Financial)

Network of contractors and service providers vetted and enrolled with the Green Bank for marketing purposes and referrals. This is often combined with lenders operating under the Program 3 loans as Green Bank Partner Loan providers.

Program Requirements

The **Green Bank Programs** described above involve specific requirements to ensure they operate as intended and provide a foundation for supporting the mission of the Green Bank. For discussion purposes, below are the high priority requirements that need to be established for each program.

Program 1 – Direct Lending

- Credit Evaluation – Determine minimum credit scores or alternative credit criteria.
- Loan Limits – Determine upper loan amounts to limit exposure to any single unit.
- Terms – Determine appropriate repayment term given the amount of the loan.
- Rates – Determine methodology to apply a rate for repayment, such as risk-based.
- Payment Collection – Determine how the customer will be invoiced and repay the loan.
- Default – Determine the period and trigger of a default loan and remedies available.

For Example:

- Credit Evaluation – Minimum Credit score of 580 of either applicant or guarantor, or alternative repayment history as provided by utility invoices for 6 months if no credit history.
- Loan Limits – Limited to \$10,000 per project per property.
- Terms – Up to 5-year repayment period, principal and interest payments.
- Rates – 7%, subject to approval. May be higher.
- Payment Collection – Monthly payment through online scheduled payment from bank account, bi-annually through RE tax assessment if not escrowed, or lockbox collection.
- Default – Follow prescribed county collections procedures related to determining default.

Program 2 – Credit Enhancement – Assistance

- Approval Criteria – Determine when an applicant becomes eligible for payment.
- Assistance Limit – Determine upper amount for project.
- Repayment – determine if a repayment period applies and how long it lasts.

For Example:

- Approval Criteria – Applicant must show an approved loan and commitment letter from a partner entity providing the primary loan, either a Green Bank Partner Loan or other loan type; OR an existing Line of Credit with sufficient available credit to support at least 80% of the cost of the project; AND a signed contract with a Green Bank approved vendor to complete the installation of the approved improvement.
- Assistance Limit – 20% of contracted installation, fully inclusive, up to \$10,000

- Repayment – No repayment unless improvement is disconnected, removed permanently, or installation does not occur. 0-35 months from install = 100%, 36-59 months from install = 75%, 60-83 months from install = 25%. No repayment for Transfer of Property or Sale.

Program 3 – Credit Enhancement – Guarantor

- Partner Entity Credit Issuance – Partner entity makes full credit evaluation and approval based on established and/or negotiated terms as agreed to with the Green Bank,
- Partner Entity Reporting – Partner entity reporting regularly on new and current activity related to the Green Bank partnership,
- Prior Notice – Partner Entity must disclose pending action on default action and declaration.

For Example:

- Partner Entity Credit Issuance – The Green Bank agrees to fully protect for principal loss on all program loans. In exchange, the partner entity agrees to provide an unsecured product with longer terms, lower rates, and lower credit criteria. The partner entity further agrees to maintain this product as a part of its portfolio and will not sell the loan for servicing nor securitization purposes.
- Partner Entity Reporting – The Partner Entity will, on a monthly basis, provide a report to the Green Bank of any new products issued, the current balances of all products related to the program held in portfolio, and status of any loans nearing default.
- Prior Notice – Partner Entity is to disclose any product related to the program that is over 60 days late and is approaching default. Documentation must also be provided on remediation steps taken prior to declaring the product in default, including communications with the borrower.

Program 4 – Direct Support to Contractors Model

- Application Process – Determine what is required on an application for acceptance,
- Review Criteria – Determine who makes approval decisions for applications,
- Terms – Determine acceptable length of obligation,
- Rates – Determine acceptable rates based on risk,
- Payment Method – Determine how the investment will be repaid.

For Example:

- Application Process – Applications are accepted electronically, and must include a project scope, business plan, applicable state licensing, applicable industry licensing, the impact for the projects, projected returns related to the additional funding, other debts

held by the company, recourse for default, financial statements, ownership statements, and other documentation.

- Review Criteria – Applications are reviewed by the Chief Investment Officer and Credit/Risk Officer.
- Terms – No more than 5 years based on current Code restrictions.
- Rates – Must be a market rate for the duration and term currently available for similar investment.
- Payment Methods – Either Interest-only with Balloon or Monthly acceptable.

Administrative Requirements

Operating a Green Bank, regardless of legal structure, will have several administrative functions that will need to be in place prior to Day One. The following is an overview of those positions and functions, including potential for outsourcing.

Required Positions

Executive Director: The Executive Director will act as the chief executive and administrative officer for the Green Bank. The position, under the oversight of a board or other body, will be responsible for the overall operation of the Green Bank. This will include management of human resources, financial reporting, and entity leadership. As the visible spokesperson for the Green Bank, will be the primary fundraiser, business development manager, and public affairs officer.

Chief Investment Officer: The Chief Investment Officer will act as the chief financial and reporting officer for the Green Bank. The position reports to the Executive Director and is responsible for program accounting, entity accounting, and managing and investing the funds of the Green Bank, both utilized and unutilized. The position will establish benchmarks for tracking the success of programs, manage the partner entity relationships, and approve all program parameters to ensure risks and returns are within acceptable Green Bank and industry guidelines. This position will also act as the Program Director for the IM program.

Program Director: The Program Director will be responsible for managing the overall execution of a program or programs (DLP, CEAP, CEGP). Reporting to the Executive Director, the position is responsible for the overall execution of the Green Bank programs under the incumbent's management. This includes but is not limited to marketing of the program through partner entities and other channels, overseeing the program process conducted by staff, managing the program portfolio, and program enhancement and development in coordination with the Credit/Risk Officer.

Credit/ Risk Officer: The Credit/Risk Officer is the primary position for program development and parameter setting. Reporting the Chief Investment Officer, the position is responsible for determining risk and credit tolerance parameters associated with the Green Bank programs to ensure that appropriate funds are being allocated. Working collaboratively with the Program Accountants, determine pricing strategies commiserate with risk, forecast returns and losses based on market conditions and risk in the portfolio, and make program parameter recommendation to the Chief Investment Officer.

Program Accountant: The Program Accountant is responsible for financial reporting and accounting for the Green Bank Programs. This position reports to the Credit/Risk Officer. Prepares monthly reconciliation for funds of the Green Bank programs, prepares P+L and Balance Sheets for program and entity funds, and makes presentation to the Credit/Risk Officer and Chief Investment Officer.

Marketing Director/Fundraising Director: The Marketing Director/Fundraising Director is responsible for the overall marketing strategy and business development activities for the Green Bank. Under the supervision of the Executive Director, is responsible for developing new partner entity relationships, and soliciting donations and contributions from investment and philanthropic organizations that support the Green Bank mission. Develops and establishes an overall marketing plan for the Green Bank organization, and working with Program Directors, Program Managers, and Program Assistants, implements both organization and program marketing strategies to improve awareness of the programs.

Program Assistant: The Program Assistant, reporting to the Program Director, is responsible for the execution of individual program units. Through either direct activities or referral sources, work with the customers on collecting required supporting documentation, evaluating the risk associated with the request, and either independently or in collaboration with the Program Director/Manager make approval or decline decisions. Coordinates closing with the partner entities as needed, and through active communication techniques develops referral sources. This position is the most visible to the end users of the Green Bank programs.

Office Manager: The Office Manager, reporting to the Executive Director, is responsible for administrative activities for the Green Bank home office. Provides administrative support to the Executive Director, Chief Investment Officer, and Credit/Risk Officer. Responsible for daily office activities and operations, such as human resource management and payroll.

Optional Positions

Program Manager(s): Under the supervision of the Program Director, manages and supervises the daily activities of a team of Program Assistants. Provides process improvement and workflow strategy, as well as approval and declination assistance as needed. Evaluates overall program effectiveness, and acts as an escalation point for Program Assistants. Works on special assignments as needed at the direction of the Program Director.