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# Thinking Local: Benefits of a Green Bank for Your Community

## Workshop

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## Part I: The Green Bank Model – Accelerating Local Clean Energy Investment

This paper is one of two that capture the proceedings of a day-long workshop hosted by the Montgomery County Green Bank in Annapolis, Maryland on June 7, 2018. The workshop brought together green bank practitioners from across the country with local county and government officials in Maryland, Virginia and Washington, DC. It provided an opportunity to share best practices about the green bank model and a forum for questions about how to stand up and operate a green bank.

We are grateful to the following green bank representatives for presenting at this meeting:

Bonnie Norman, Board Member, Montgomery County Green Bank

Stuart Clarke, Executive Director, Town Creek Foundation

Jeffrey Schub, Executive Director, Coalition for Green Capital

Bert Hunter, EVP & Chief Investment Officer, Connecticut Green Bank

Mary Templeton, President & CEO, Michigan Saves

Lynn Heller, Founder & CEO, Climate Access Fund

Kristine Babick, Program Lead, DC Green Bank<sup>1</sup>

Tom Deyo, CEO, Montgomery County Green Bank

The second paper in this series, *Getting Your Green Bank Off the Ground: Products, Funding and Operational Approaches*, will also be made available on the Montgomery County Green Bank's website: <http://www.mcgreenbank.org>, under the Resources tab.

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<sup>1</sup> Since the workshop, Ms. Babick has left this position. Jay Wilson is now Program Analyst for the DC Green Bank.

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## INTRODUCING THE GREEN BANK MODEL

The objectives of this session were to provide an overview of green bank model; outline benefits and contributions of a green bank; explore how different structures work and ways that these structures align with local goals.

### COALITION FOR GREEN CAPITAL (CGC)<sup>2</sup>

*Jeff Schub, Executive Director*

Why are we having this conversation about green bank model? In order to reach any sort of reasonable climate goal, the investment in clean energy technologies and strategies that is needed is astronomical. The benefits from making these investments are enormous: lower energy costs, more jobs, healthier homes and businesses, resilient communities and economically secure households, companies and cities. Why are we having a local conversation about the green bank model? Because the only way to engage clean energy markets and stimulate clean energy demand is to have action at the local level. Issues of overlap and ownership are important to sort out, but we need to take action now.

Why do we need to talk about financing? For clean energy, financing solutions are not abundant or easily accessible in most local markets. Institutional investors around the country are still hesitant to get into certain kinds of clean energy financing; they can't evaluate the risk, they are not trained in the technologies or familiar with the underwriting processes of loans for this sector. Larger, high-profile projects get financed, but everything else is perceived as being too complicated.

The green bank model is meant to solve this problem. It's worth noting that green banks are not really "banks" in the traditionally understood sense. They are organizations that accelerate clean energy investment. The model is focused on three things: to stimulate demand for clean energy and energy

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<sup>2</sup> The CGC is a 501(c)3 non-profit that has been working with partners across the country to stand up green banks for about the last 10 years.

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efficiency, pull it forward and connect it to pools of capital. The execution can be through an institution, entity, or set of financing activities driven to meet these goals. We will call this collectively, “green banks.” Why pull demand? Many people are not conscious of the benefits of clean energy, that you can save money on your home or business bill by having clean energy.

It is difficult to figure out how to convert demand to action. You can't just make the financing available and expect action. A green bank is designed with tools to do this: outreach, go-to-market channels and marketing plans to activate demand. Green banks are also gathering pools of capital: private capital, public funding, mission-oriented investment. As part of this, local capital formation is an important piece. There are local monies, local banks, community banks and foundations that cannot be accessed by anyone but a local institution. The amounts of money and interest in this space are great, but there need to be channels to help this capital access these markets.

The ultra-focus of green banks on investment volume is important. With a green bank, you set targets to achieve clean energy investment and you go out to meet them. Such a specific focus drives their execution, with an eye to their local surroundings. Green banks work hard to design market-relevant lending products for all property and clean energy sectors, find go-to-market partners, and help build customers.

This is mission-driven work which needs to think in long-term and with a knowledge that risk-taking is a part of the strategy. As non-profit organizations, green banks willingly take risks but their knowledge of their local market helps them mitigate these risks. It's part of their operating model. Private, for-profit investors and lenders generally don't want to be the first movers in a market and potentially learn that they got it wrong. For these reasons, green banks play a critical role in attracting money into clean energy markets where it might not otherwise be inclined to go given the perceived risks.

Fundamentally, green banks are in the business of figuring out how to deliver clean energy to customers that is better/cheaper than what they have now. No one is going to buy clean energy that is more expensive than what they have now.

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Green banks need to be judicious in terms of their own limited capital. They may offer a credit enhancement to a private lender, co-investment in projects with private partners, or warehouse loans for future sale. Where you have small, segmented projects connected to large pools of capital, someone needs to be in the middle to finance them individually until they scale to a place where a private investor gets interested.

Green banks are designed to be very flexible, and to finance whatever is necessary in that clean energy market across commercial and residential properties with different types of projects, such as energy efficiency, renewable energy, electric vehicles. Yet even as they approach this work, they also seek to be self-sustaining organizations financially so they can devote as much capital to their products as possible.

In the end, green banks can be critical to the local clean energy investing market. And, while the level of sophistication necessary to operate a green bank or the method of structure may vary, it is getting money into the local clean energy market that is the important thing. This is where the heart of the value proposition lies.

### **Q:** What can the link between the green bank and the government look like?

**CGC:** There are three options:

1. One option is to have no actual structural link but the government announces support for the organization or a designation of that entity as the government's "green bank" (or both, as is the case with the Montgomery County Green Bank). This connection gives the entity standing to step into the breach of the utilities and to be the convening force for various stakeholders in the market. This bestows convening power and the trust of market actors.
2. You can have a Memorandum of Understanding, which connects the green bank to the government in written terms but it is not a contract. If the organization already exists and is functioning in the market, you can have a reasonable conversation about getting funding.

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3. The government has a formal, statutory relationship, can take seats on the green bank's Board of Directors, etc. However, they do not need to be a majority, so the entity remains independent while being responsive to the government's interests and goals.

### CONNECTICUT GREEN BANK

*Bert Hunter, Executive Vice President & Chief Investment Officer*

Let's set the context: where Connecticut sits and the underpinning of the decision to create a green bank. Connecticut has the nation's fourth highest population density. Buildings are quite old (built before 1970) and not energy efficient. Electricity costs are very expensive compared to other states – above 17 cents per kilowatt hour.

These facts are important because they establish a value proposition for clean energy investment and investment in energy efficiency. The question is, how do you stimulate demand, bring awareness?

In terms of our origin, we're the nation's first green bank. We're a quasi-public organization, set forth in legislation, but we have an independent Board of Directors. We were transformed from a clean energy fund that provided many incentives for solar, new technologies, and fuel cells through the 2000s. Then

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we inherited a pocket of money left over from the clean energy fund – \$72 million. Our focus was to transform from incentives to financing because the need to transform our energy infrastructure to cleaner and more efficient sources of energy is so immense, there is no way to achieve that strictly through incentives.

And we have made good progress. Our balance sheet has grown from \$70 million to approximately \$190 million. We now have reached \$1 billion in activity. Our green bank activities generate jobs and economic development. Our programs serve commercial, residential and infrastructure needs and we support the state's environmental goals.

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We have been funded through a system benefit charge of \$10 per electric customer per year, which adds up to about \$27 million per year. We also get a share of the Regional Greenhouse Gas Initiative (RGGI), a multi-state, regional CO<sup>2</sup> cap and trade program, of approximately \$3 million per year, some foundation funding and US government funds (e.g. the Department of Energy's American Recovery and Reinvestment Act (ARRA) funds) and portfolio income. We have used the system benefit charges to support our operations, get established, invest and credit enhance. Recently, we have redirected our strategy from strictly leveraging our capital to becoming more sustainable. We plan to achieve sustainability over the next five years.

### **MICHIGAN SAVES**

*Mary Templeton, President and Chief Executive Officer*

Michigan Saves was created in 2009 as a non-profit 501(c)3 managed by an independent Board of Directors. We exist to fill the gaps in the marketplace, enabled by comprehensive energy legislation that was passed in 2008. The legislation set out energy efficiency goals and a renewable portfolio standard.

We were originally funded through a grant from the Michigan Public Service Commission of \$8 million, with \$6.5 million of that put in a trust fund to support loans in case of default. To assess the needs in the market, we conducted stakeholder interviews with lenders, contractors, non-profits, state housing authorities. We found that there were lenders who were happy to lend, there were contractors proficient in energy efficiency work, but no one was putting it all together to serve the industry.

We chose to act as a program administrator to pull all the pieces together (lending, contracting, utilities) to drive demand for clean energy investment. We implemented credit enhancements in the form of a loan loss reserve with lender partners to attract them to this market. The loan loss reserve removed a portion of the lenders' credit risk that allowed them to offer more expansive underwriting, and better rates and terms. We established a contractor network and we conduct quality assurance.

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**We exist to fill  
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For every \$1 in public funding, we leverage \$20 of private capital. We were very aggressive with our terms, and found that lenders are receptive to serving this market. They see it as an opportunity to grow their customer base with a low-risk loan offer. Our lenders have issued \$130 million in loans, which has allowed about 10,000 households and 1,000 businesses the opportunity to invest in clean energy improvements. Our balance sheet is \$11-\$12 million.

Default rates have been very low for our products. In the residential sector, only 1.6% of our loans have defaulted over 9 years. On the commercial side, it's 0.5%. This demonstrates that clean energy loans are not that risky.

### **CLIMATE ACCESS FUND (CAF)**

*Lynn Heller, Founder & Chief Executive Officer*

Our origin story is different than that of the traditional green bank. We were started to address a very specific market gap. This market gap was created by the state of Maryland: in 2017, Maryland launched a legislatively-mandated three-year community solar pilot program, which included a 30% carve-out for low-moderate income (LMI) consumption. Of the 200 MW of solar power to be generated statewide through the program, 30% of projects new market provides a tremendous opportunity to address inequity in Baltimore and across the state with respect to access to renewable energy and lowering of energy bill payments. Lower-income households spend a much higher percentage of their incomes on energy than do higher-income households, but they can now save money on their electricity bills through this program.

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We saw this as an opportunity to begin to establish a model of inclusion – to bring solar energy to lower-income households. The challenge with this community solar regulation, however, is that there is no financial incentive built in for developers to serve LMI customers. Developers often perceive lower-income households not to be creditworthy, based on FICO scores. Yet early (and limited) data suggests

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that FICO scores may not be the most accurate measurement of LMI electricity bill payment rate. Without a mechanism in place to overcome this barrier for community solar developers, this program won't work for LMI customers.

We saw an unfunded mandate. We thought about the growing trend in impact investing – could there be a marriage between philanthropic capital and the financing gap for serving lower-income customers, not just in the form of grants, but low-interest loans or guarantees?

The Coalition for Green Capital is incubating the Climate Access Fund. We started with no funding, but have had success with raising philanthropic PRI (program-related investment) funds. We say to philanthropic organizations, give us funds for seven years or provide us with a guarantee to cover potential LMI non-payment of their solar bills. The money sits in a credit enhancement reserve fund and will only be spent if needed to cover LMI defaults, which CAF expects to be minimal (an assumption based on Baltimore Gas and Electric data). So far, we have raised \$700,000 in philanthropic private capital in Maryland for the credit enhancement, and additional funds to cover two years of operations. We have also received a \$1 million guarantee from the Maryland Energy Administration to add to the credit enhancement pool, so we now have \$1.7 million with which to provide an insurance product to solar developers for a fee to cover our operating expenses. The message is, it's possible to do this without being launched by state government, but of course, there are challenges.

### **DC GREEN BANK**

*Kristine Babick, Program Lead*

We are being established as a quasi-independent authority. The government connection is important as it gives us a platform and leadership ability. Being separate from the government, we can act faster, be more agile, and attract private sector directors and staff to speak the language of lenders.

We have been in organizational development since last September, putting workstreams in place for our launch. We are creating the organization itself and figuring out the products we will want to deploy into



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the market, knowing our mission is to catalyze private investment in new technologies and clean energy projects. As a green bank, we can accept a higher risk than private entities can.

We're funded with \$7 million per year for five years (a total of \$35 million) from a renewable energy development fund that is seeded with an alternative compliance payment from utilities that have not met certain percentage of generation sourced from solar and other renewables. Ideally, we want to be in a position where we are not reliant on public funds for future investments.

In our product development efforts, we have been identifying the gaps in the market and looking at how we can best intervene. What projects are not being financed and why? Origination seems to be a missing piece, so the missing piece is not always a financial one. As such we are trying to create an institution that is willing to accept the costs of finding projects. We are finding our channel partners now; we are talking to lenders and contractors. We'll probably arrive at a product like the ones that Michigan Saves and the Connecticut Green Bank have – with that credit enhancement piece, and the loan loss reserve.

We are also focusing our energy on training contractors. In a way, they are our clients. They are selling our products so if we have an easy product, that will help them get more projects done quickly.

### **MONTGOMERY COUNTY GREEN BANK**

*Tom Deyo, Chief Executive Officer*

Let's look at the drivers of the green bank in Montgomery County.

1. The County had a set of aggressive climate goals – to get to 0% greenhouse gas emissions by 2035.
2. The County had \$14 million in settlement money from the Pepco-Exelon merger. That created a source of funds for clean energy, including energy efficiency and renewable energy. They wanted to think of it as a resource with more power than just \$14 million – to use it as a way

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to leverage private funds into the local clean energy markets. They wanted to bring more money into the County.

3. Creating a green bank was also driven by economic development desires to stimulate a clean energy marketplace.

In terms of structure, we are a government-sponsored enterprise, but we are not embedded into the government. We are an independent 501(c)3 non-profit with an 11-member Board of Directors that would not have a majority of members appointed by the County. The settlement funds from the County are a one-time investment. We do not have a long-term funding source like the DC Green Bank. Therefore, it is important for us to preserve and leverage our capital wisely. This is a big reason our product development approach has been very thorough and deliberate.

The County's efforts and success in creating our organization gives the Montgomery County Green Bank stature in the community as a County enterprise as well as a clear focus, which are great advantages. Yet, our independent status helps us with the private sector as they see us as flexible, efficient, and market-driven. Being separate from government, we have our own balance sheet that this private lending community can rely upon.

What are our key performance indicators (KPIs)? From an environmental standpoint, we exist to help the County reach its greenhouse gas emission goals. There is also a community goal: 20% should be used to support projects that benefit low-moderate income residents and multifamily properties. We also exist to create jobs and help drive the local economy. We focus on market transformation – to attract as many lenders into this market as possible. We look at scale – what leverage have we been able to achieve? And finally, we are concentrating on sustainability – generating revenues to support our operations and leave as much capital in the market as possible.

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In terms of product development, we are looking at several models – commercial and residential loomed large. Getting to market quickly was also important to us. We needed the public to know what we really could do – and not just the theoretical. So, we focused on the commercial sector first – with knowledge that this was important to the community and understanding that green bank models existed that might help us.

We stepped into action. We did our market due diligence. Where was the gap? We conducted focus groups that gave us pointers on what would make a product work – for example, participants told us that if we didn't have an unsecured product, then we would not succeed. This exercise also started to enable us to make connections with lenders and contractors. Other learnings in this early stage were finding efficiencies with partnerships that could keep our operating costs down. And, we knew quality control would be important to our roll-out for customers. For that reason, we looked at approaches to partner on this as well.

Our product development approach helped us build credibility with our market players. With repeated conversations throughout the process, these players understood that they were being listened to, and that allowed us to develop lender and contractor partnerships so that we could go to market when we finished the design. We launched our first product for commercial and industrial sector in March 2018: the Commercial Loan for Energy Efficiency and Renewables (CLEER).

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### CONCLUSION

Green banks exist to fill financing gaps in local markets for energy efficiency and clean energy. The model is gaining in adoption across the country, as local states and municipalities try to respond to the need for a shift to clean energy. The local level is especially suited for this kind of response, as green bank practitioners and economic development officials at the state/local levels have a keen understanding of the local stakeholders and their needs.

Green banks may differ in their structures, depending on the economic and political conditions prevailing at the time of their creation. It's also possible to bring aspects of the green bank model to the local market without necessarily setting up a separate entity devoted to clean energy investment. One option is for the government or economic development authority to initiate programs that serve the function of green bank programming: reducing risk for lenders and making the loans more affordable for businesses and residents, thereby accelerating clean energy investment.