

Hosted by:



Thinking Local: Benefits of a Green Bank for Your Community *Workshop*

Supported by a grant from the Town Creek Foundation



Montgomery County
GreenBank
Your partner for clean energy TM

Part II: Getting Your Green Bank off the Ground: Products, Funding and Operational Approaches

This paper is the second 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.

In this workshop session, the group discussed the range of financing products green banks offer in their markets for energy efficiency and clean energy solutions. The products discussed focused on commercial properties, residential energy efficiency and solar. Both papers are available on the Montgomery County Green Bank's website at www.mcgreenbank.org, under the Resources tab.

I. COMMERCIAL AND INDUSTRIAL PROPERTY PRODUCTS

MICHIGAN SAVES

Mary Templeton, President & Chief Executive Officer

We were built to address gaps in the clean energy financing market. Our strategy was to offer a continuum of products that serves different needs. Michigan has a commercial PACE (C-PACE) program.

Michigan Saves' commercial program has a 2018 goal to drive \$17.5 million in clean energy financing. Since we launched the program, our lenders have closed 1,100 loans worth \$38 million. We authorize a network of contractors who offer our financing products to their customers through private lenders. We chose to go with lenders who were committed to approving loan applications quickly, and who had

**We were built to
address gaps in the
clean energy
financing market.**



Thinking Local: Benefits of a Green Bank for Your Community *Workshop*

Supported by a grant from the Town Creek Foundation



Montgomery County
GreenBank
Your partner for clean energy TM

limited paperwork requirements. This approach helped contractors market and sell their offerings, and made it easy for customers to understand and get approved. Our lenders focus on creditworthiness, not energy savings. However, only energy efficiency, renewable energy or water conservation improvements are eligible for financing.

As a green bank, we structured our program to offer a credit enhancement to private lenders in the form of a loan loss reserve, which backs lenders in case of defaults. This allowed our lenders to deploy capital in this sector with better rates and terms, as well as expand underwriting requirements. To attract lenders' interest and mitigate the risks the lenders perceive in the sector, we set aside 5% of the outstanding balance for every lender as a loss reserve – that is 20:1 leverage on our funding. Thus, we get \$5 million of new capital in this market segment with every \$250,000 of credit enhancement. If a customer defaults, we pay the lender after 90 days of non-payment. We cover 75% of the loss. The lender will continue to collect on that loan in same manner as any other loan in their portfolio. If the lender recovers any payments from the borrower, then they return our funds.

MONTGOMERY COUNTY GREEN BANK

Tom Deyo, Chief Executive Officer

Our program was designed to work very closely with the utilities' programs. We felt that was a key partnership...

During our due diligence efforts, we learned the County's C-PACE program was useful but didn't cover the market for loans under \$250,000. The contractors said, if you can deliver something below this target amount, then we can use it and will promote it. Given that information, we felt the Michigan Saves model fit our market needs and the interests of our partners. Also, our program was designed to work very closely with the utilities' programs. We felt that was a key partnership for the program.

In our program, we offer lenders a 5% loan loss reserve, and a payout on losses after 90 days on an 80%-20% split with lenders. The 20% helps align interests and keep all parties engaged in a loan.



Thinking Local: Benefits of a Green Bank for Your Community *Workshop*

Supported by a grant from the Town Creek Foundation



Montgomery County
GreenBank

Your partner for clean energy TM

And we allow any recovery that is paid back to us to flow back into the loss reserve. The underwriting is about the creditworthiness of the borrower. We didn't ask the lender to underwrite the energy savings as we heard this was complicated and not well understood (or believed). Even so, each project financed needs to have a scope of energy efficiency or renewable energy and achieve 15% in energy savings to current conditions. The projects must also tie to the utility's energy savings program, and we use a pre-authorized list of contractors who are also on the utility's list of approved contractors for its program.

We pre-approve each project before it moves forward – the contractor submits the scope of work and budget and we approve it. We make sure it reflects a 15% energy savings. While the scope of work has to be focused on energy efficiency and/or renewable energy, we do allow 30% of the loan to go to other needed non-energy (but project-related) work. Once we approve, the lender can finish financial underwriting, documentation and close.

**Each project
financed has to
be focused on
energy efficiency
or renewable
energy and
achieve 15%
energy savings...**

Q. Did your program start out the way it is today?

Michigan Saves: At first, lenders were reluctant, so we started with a 50% loan loss reserve. Since then, we have moved to 25%, then to 15% and then to 10%. Now it's 5%, and frankly I don't think we need this at all. In fact, we just started working with a new lender that will offer terms up to 10 years and millions in lending – they are not operating with a loss reserve. We believe that this market could be served by the private sector, and then we could take our limited funds elsewhere.

Q: Do you collect fees for the loans?

Michigan Saves: We charge 1.99% to the contractors for the loans. This fee is factored into the total amount financed. It is taken out of the final payment to the contractor and is built into the quote that the contractor gives to the customer. This is consistent with other types of financing fees in other sectors, like manufacturing.



Thinking Local: Benefits of a Green Bank for Your Community *Workshop*

Supported by a grant from the Town Creek Foundation



Montgomery County
GreenBank

Your partner for clean energy TM

Montgomery County Green Bank: Our fees are 2.99% for the contractors and 0.50% to the lenders. In total, that's almost 3.5% all in contributing to our revenue. It helps to sustain our operations and allow more of our capital to work in the marketplace.

Q: Did you get more favorable rates for the program?

Michigan Saves: The benefit of the loss reserve translates to expanded underwriting, longer terms and a small benefit to the customers' rates. The two large investor-owned utilities in Michigan offer interest-rate buydowns in the commercial market.

Montgomery County Green Bank: It's not only about rate. There's another side to what you get for your role – this can be with the terms. In our case, we were able to get 100% financing, unsecured loans and up to 12-year terms. Without green bank support, such a commercial loan program would not exist in the market.

Q: How are contractors key to the green bank model?

Michigan Saves: Contractor relations are so important. They are the ones who are out there having these energy savings conversations. We expect our contractors to do their due diligence and be able to present everything together – scope, budget and financing options. The really effective contractors will be able to say what the monthly payments will be after energy savings. Contractors get paid when lenders cut a check, either at the closing of the loan or completion of the project. That is the beauty of the private lending market. If contractors don't get paid quickly, they won't use our financing products. For commercial projects, 70%-80% is financed up front. We have quality assurance standards in place. We review all paperwork and 5% of our projects get on-site inspections.

Montgomery County Green Bank: We see the contractors as key to the program as well. Generally, we pay out 50% of the loan at closing and then the balance at project completion. To get final payment, the contractor gives us the certificate of completion, the final project scope and final budget with energy savings. We also have contractor oversight for those getting into the program, and for completions as they start in the program.



Thinking Local: Benefits of a Green Bank for Your Community *Workshop*

Supported by a grant from the Town Creek Foundation

II. RESIDENTIAL SOLAR PRODUCTS

CLIMATE ACCESS FUND

Lynn Heller, Founder & Chief Executive Officer

The Climate Access Fund program's is based on certain desired goals around low-moderate income (LMI) households and community solar:

1. We want community solar to succeed in Maryland to help the state achieve its greenhouse gas reduction targets and politically, we believe that community solar will not succeed in Maryland unless it works for the LMI segment.
2. We see this as an important opportunity to enable LMI households to participate in solar. The potential to scale LMI solar participation – through community solar – is significant.
3. We are looking to maximize the energy savings and energy cost savings of lower-income residents.
4. We are trying to work ourselves out of a job. We want to demonstrate that FICO scores are not the best indicator of LMI payments for electricity, and we hope to provide data to support that hypothesis so that the private market will at some point no longer need an insurance product and will take over the LMI space.

We are looking to maximize the energy savings by lower-income residents.

In community solar, the state's pilot program allows community solar arrays with a 2 MW cap on each project: most developers try to get to the 2 MW level to achieve economies of scale. Thirty percent (30%) of projects in the program (60 MW of 200 MW) are to include at least 30% LMI consumption.

We're trying to level the playing field so that, with our credit enhancement product, community solar developers view the LMI market as equally attractive as the non-LMI market because the risk to them is the same. The clock is ticking on the three-year pilot and it is proving to be a challenge to get a model in place in time – we're already in year one of a three-year program.



Thinking Local: Benefits of a Green Bank for Your Community *Workshop*

Supported by a grant from the Town Creek Foundation



Montgomery County
GreenBank

Your partner for clean energy TM

At 30% LMI participation, each 2 MW community solar array can serve 100-150 families. Any Maryland resident can subscribe. Most Maryland residents will save 5%-10% through the program. In order to get more LMI subscribers into the program, we are working with developers to raise the savings benefit to 15%-20% per household. We believe the \$12 per month in savings per household is a sufficient motivator for the LMI community and that these savings are enough of an incentive to keep people paying their bills. (Unfortunately, the community solar pilot program does not include consolidated billing, so subscribers have to pay two bills, a utility bill and a community solar bill.)

We are raising money from impact investors for our credit enhancement product. We have estimated that approximately \$150,000 is needed per 2 MW community solar project for credit enhancement. Our model has the developer taking the first 3% of the LMI losses within the first 60 days, then CAF takes 100% of the remaining losses. The Maryland Energy Administration (\$1 million guarantee) is in a first loss position for bill non-payment, with private foundations (\$700,000) in a second loss position.

For the solar developer, in exchange for the credit enhancement, we require:

- maximum possible focus on LMI customers possible
- agreement to share default data with us
- an up-front fee to cover operating costs
- some degree of risk-sharing
- holding approval rights over the local partner that is recruiting LMI households. This is part of our risk mitigation strategy. It is important that we partner with an organization that knows the community and is trusted. It matters who is reaching out to the LMI community and how they are managing the turnover of subscribers.

We are working hard to not replicate anyone else's existing efforts – many players are needed to make this community solar program work. We are one puzzle piece: filling the financing gap resulting from perceived risk of LMI households.

One question we're working hard to solve is: can we come up with a fee for our credit enhancement that is attractive enough to project financiers, incentivizes deeper savings to LMI customers and covers our operating expenses? Developers understand the need for fees for the risk we are taking, but given the economics of solar in Maryland, project margins are already somewhat constrained. Another



Montgomery County
GreenBank

Your partner for clean energy™



Thinking Local: Benefits of a Green Bank for Your Community

Workshop

Supported by a grant from the Town Creek Foundation

question we are working to answer is how we might act as a one-stop-shop in partnership with LMI aggregators – performing customer acquisition and management – to reduce the administrative burdens for community solar developers working to develop these projects.

Starting out, we thought the big challenge would be raising capital, but the clock is ticking as it is taking more time that we thought to develop the market. A solar developer's main interest is in getting a project off the ground quickly, not establishing a model for scaling LMI clean energy access. In addition, and perhaps more importantly, the “newness” of the market means that there are a lot of unknowns. We are optimistic, but our success in the LMI community solar market will depend in large part on our philanthropic and public investors' patience as we work with solar developers and financiers to develop a scalable product.

CONNECTICUT GREEN BANK

Bert Hunter, Executive Vice President & Chief Investment Officer

In general, homeowners can finance solar in a number of ways: solar leases, power purchase agreements, solar loans, multipurpose energy loans, home equity loans, energy efficient mortgages and PACE. The first two are unsecured and the system is third-party owned. With the others, the homeowners own the system. (Residential PACE is not available in Connecticut.)

Over the last 5 or 6 years, there has been a shift in the US from a 75% lease or PPA market with 25% owned, to more recently 50%-50%. Why is it going more toward an ownership model? There are two reasons for this shift: the decreasing cost of solar (which results in more affordable loan payments) and the fact that the lease and PPA model touted early on has run into financial constraints and cannot support as much PPAs with the demands on its capital structure.

At the Connecticut Green Bank, our solar loan program started as a co-investment model. We put up 100% of funding of the loan, and then eventually we sold off about 80% of the transaction to a capital provider – in this way, we did not touch the contractor or the customer.



Thinking Local: Benefits of a Green Bank for Your Community *Workshop*

Supported by a grant from the Town Creek Foundation



Montgomery County
GreenBank
Your partner for clean energy TM

Why did we do this? It was an equity issue and access to capital for all. In 2012-2013, solar was an affluent product. There was no dedicated solar loan product unless you had a means to secure or have it tied to the manufacturer of the solar panels. The other reason was that we wanted to drive competition in the market. If you increase access to capital, the market will grow, more contractors would compete for business and the price will come down.

And that's just what happened over the years. This product was picked up by Mosaic; we showed them how it works and they ran with it. They've done \$1 billion in loans, up from our \$7 million. So, we don't do this solar loan program anymore. That fits with the green bank way: working our way out of products as they mature as private capital assumes the investment and risk without our involvement.

In another approach, we partnered with Posigen for solar. Posigen is a solar and energy efficiency service agreement provider. They have an alternative credit underwrite for LMI customers. They don't focus on FICO scores. They use statistics like employment checks and other criteria. Their proposition is based on community marketing campaigns. They get a lot of customers to co-sell with them. It's a popular product that they have rolled out across Connecticut (over 1,500 installations in less than three years). They came to us and asked us if we could be supportive. They were limited by capital, so they asked us if we could provide the financing. We did – and said we would take responsibility to bring more senior lenders to their structure.

Our solar program began as a co-investment model...if you increase access to capital, the market will grow...and the price will come down.



Thinking Local: Benefits of a Green Bank for Your Community *Workshop*

Supported by a grant from the Town Creek Foundation



Montgomery County
GreenBank
Your partner for clean energy TM

III. HOMEOWNER PROPERTY PRODUCTS

MICHIGAN SAVES

Mary Templeton, President & Chief Executive Officer

Our residential side is similar to our commercial side in that we have a loan loss reserve. We leverage public funding 20:1, we have unsecured loans (up to 12-year terms) and the loan amount can go up to \$50,000. We pay 50%-80% of the outstanding balance for any default at 90 days, depending on credit score.

For the residential loans, we partner with local credit unions. They were interested in working with us while banks were not as interested in the small transactions. Credit unions see this as an opportunity to grow their member base, get people in the door and sell additional products.

Contractors are key here, too. When the contractors have their conversation with the homeowner, they can tell the customer about the financing product and then the customer calls our call center. The call center takes their application, approves the loan and connects them to a lender. The customer signs a certification of completion after the work is completed. The lender will then cut a check to the contractor.

CONNECTICUT GREEN BANK

Bert Hunter, Executive Vice President & Chief Investment Officer

We copied the Michigan Saves model and tweaked it for our own purposes. We went to the same credit unions, and targeted ones sitting on a lot of cash – they could get much better returns with our loan product. We saw the Michigan Saves' loan loss of 1%-2% and built our loan loss reserve around that trendline. We said to the credit

**We copied the
Michigan Saves
model and
tweaked it for our
own purposes.**



Thinking Local: Benefits of a Green Bank for Your Community *Workshop*

Supported by a grant from the Town Creek Foundation



Montgomery County
GreenBank

Your partner for clean energy TM

unions, you take the first 1.5% loss, and we'll take 100% of everything over that up to 7.5%. For example, on a loan portfolio of \$1 million, they will take a 1.5% loss, \$15,000 of losses are theirs. Once they have absorbed that, we take the next \$75,000 of loss on that portfolio. We've had two claims over the last four years. Nothing has hit our loan loss reserves. We've also gone to community banks, who have some interest.

For contractors, we provide 70% of the loan up front, with the remaining 30% going out after completion with certification and spot check. We've set up a local working capital program for contractors for two years, with 100% guaranteed funds.

In our residential Smart-E program, we have done \$50 million in this product (2,700 loans) in a four-year period. Most of that growth has taken place in the last year with one community development financial institution (CDFI) (30% of loan volume), three credit unions (60% of volume) and six community banks (10% of volume). It has competed side by side with a subsidized utility loan product. It's succeeded because it's been more flexible. Windows are included, and you can use up to 20% of the loans to address other measures (for example, asbestos mitigation). With Smart-E, there's heavy involvement on our part, because we have to review and qualify the measures being submitted. The bank underwrites, but we interact with the contractor (as well as the lender) through a common online data platform.

TOWARD THE FUTURE MORE OPTIONS, MORE OPPORTUNITIES

Looking forward, the Coalition for Green Capital, in conjunction with other green banks, is currently working on a capital fund platform with New York Green Bank. This resource could support other green banks looking to support large-scale energy efficiency and renewable energy projects in their markets. New York Green Bank would provide the operational support and capital resource and the local green banks can source the opportunities and possibly participate in some of the operational work.

Michigan Saves and the Connecticut Green Bank are also examining a partnership to bring their residential loan product to more markets. Making a consistent product that can be deployed across multiple markets will help fill the gaps at the local level and create scale to manage the product's

Hosted by:



Thinking Local: Benefits of a Green Bank for Your Community

Workshop

Supported by a grant from the Town Creek Foundation



Montgomery County
GreenBank

Your partner for clean energy TM

operational requirements. And this will also help green banks work more consistently with contractors, many of whom work across regions.

Philanthropy is another area with potential to drive the green bank movement. Within the philanthropic community, the amount of program-related impact investing is growing. The Coalition for Green Capital has been engaging in conversations with philanthropists and foundations about support for the operations of green banks. Clean energy finance seems to be something that is rising on their agendas because they are seeing that a relatively small investment can make a huge difference. These trends will help shape the green bank movement in years to come.