

National Green Bank: Project Ready Day One

Conversations with:

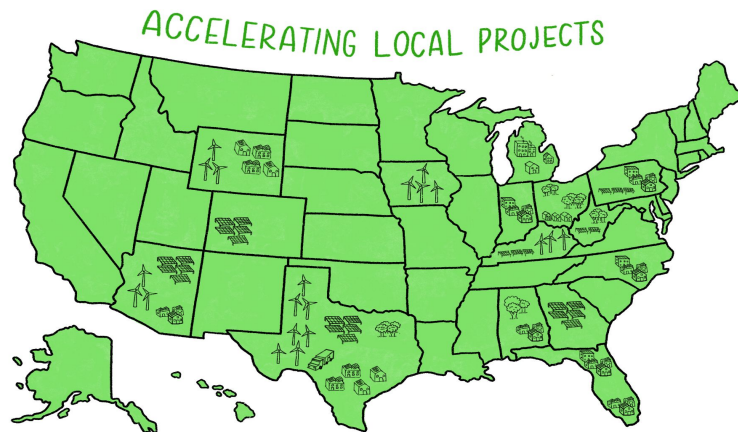
AMERICAN
GREEN BANK
CONSORTIUM

Big Picture: Green Banks are Crucial for Net-Zero

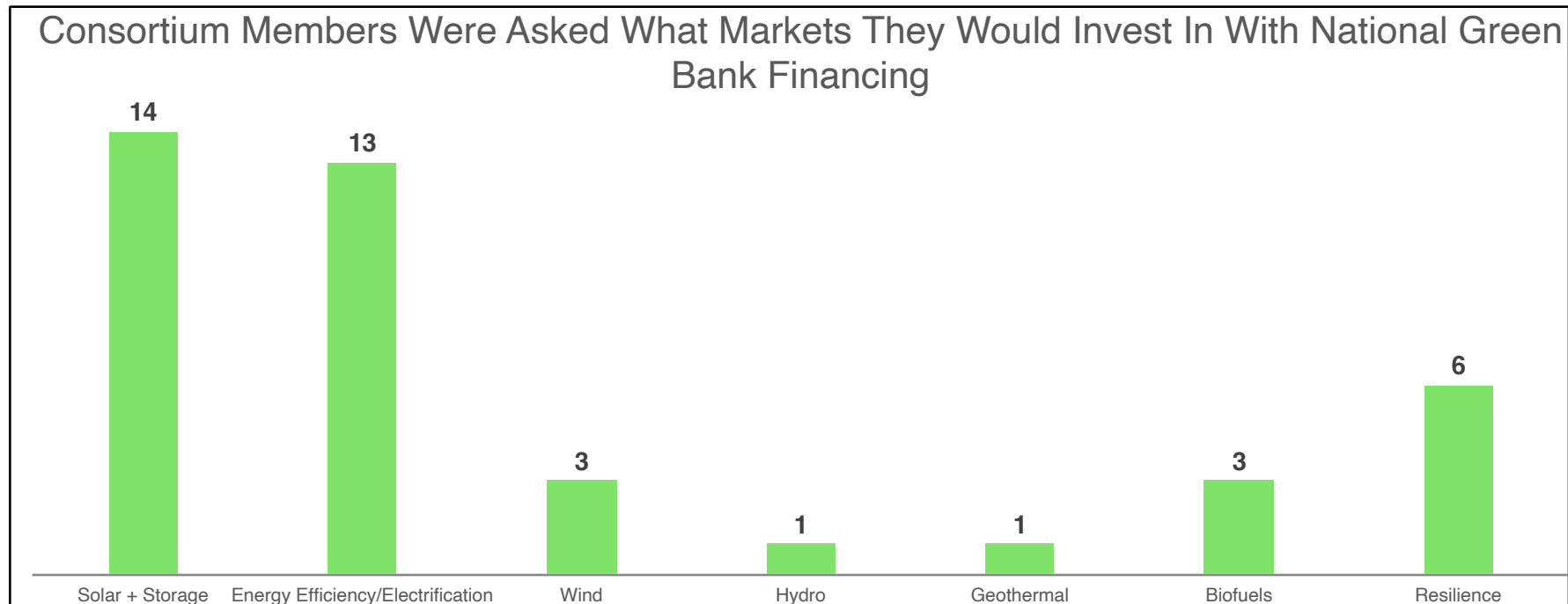
We had 60-minute interviews with every operational member of the Consortium. We discussed their plans to deliver visible victories on day 1, relative strengths and weaknesses, and long-term goals.

Major Findings:

- In every state where green banks operate, there are major emissions sources that only a green bank will address.
- Green banks are valuable both as proactive market builders and as reactive problem solvers that stop other big initiatives from failing. The national green bank must support both functions.



Consortium Member Vision for a National Green Bank is Focused on Distributed Energy Projects



Some Market Gaps Are Common Across All States...

Most green banks play heavily in these spaces and could benefit from centralized support.
There is heavy overlap with low-to-moderate income communities.

“Sub-PACE” Commercial Solar



Project values: \$50K-\$1m

LMI Residential Efficiency, Solar, and Electrification



Project values: \$6K-\$70k

Solar + Storage, Electrification, and Energy Efficiency in Affordable Housing



Project values: \$150K-\$30m

Green Banks Also Need Flexible Capital for Nonstandard Investments that Create “Inflection Points”

Green banks need flexible support for high-impact, nonstandard projects that unlock far greater investment. These projects need a dedicated source of patient capital.

California needs to co-locate geothermal assets with lithium extraction in the Salton Sea to support the battery industry.



New York needs to expand its port system to serve the growing flow of wind turbines heading out to sea



DC, Maryland, and Virginia share jurisdiction over a public bus fleet with no agreement on who's in charge of electrification and who will pay.



Hawaii needs a massive low-income roof replacement program before it can hit residential solar targets.



Green Banks Identify Four Key Needs

Consortium members consistently pointed to **four categories of National Green Bank offerings** that would lead to **early and medium term increases in activity**

1. **Operating grants** to expand administrative capacity
2. Low cost, long-term **debt facilities**
3. Access to “**equity-like instruments**”
4. Collective access to **secondary markets**

1. Operating Grants to Expand Admin Capacity

Nearly all Consortium members worry about inflating staffing costs beyond what their limited investment income can support. This problem makes some turn away workable deals and feel insecure about taking new capital.

“Capital is not our constraint right now, organizational capacity is. It takes forever to originate the LMI loans, but the loan performance is very high and everyone is happy to buy it.

I could easily take \$100 million with \$10 million in operating grants, but \$50 million with no operating grants is harder. I can't get the net interest to pay people to find more projects and deal with some very difficult public agencies.”

-Green Bank in Mid-Atlantic

*We really need operating grants in the short-run. That does not need to be forever. **We need to build the team to grow our portfolio, and then once we deploy we'll get enough interest to pay people** for our operations.*

-Green Bank in the South

2. Low Cost, Long-Term Debt Facilities

Green banks need access to extremely cheap capital with flexible repayment periods in order to expand their offerings.

*“There is a big opportunity to build fast vehicle charging infrastructure along I-70. I have a developer with \$10 million in pent up demand and hosts ready to participate. But the business model hasn’t been demonstrated yet and **its going to be thin for several years. If I’m going to participate, the capital from the national green bank has to be interest-only for at least 3-4 years**”*

-Green Bank in the West

*“Our lenders [that subscribe to our loan-loss reserve] won’t do small business solar because the **public market buyers won’t buy long-term loans, so lenders can’t make the 10-year loans that are needed to make the deals work.** Small businesses are stuck making balloon payments in year 5 or 7, and it doesn’t work. Small businesses here want solar, but they can’t pay it back in under 10 years. The national green bank can let us fill that gap.”*

-Green Bank in the Midwest

3. Access to “Equity-like Instruments”

Green banks want to use national green bank money to make some grants that facilitate market development. They hope the national green bank can offer a cushion to experiment and make mistakes.

“I would take 2/3 debt and 1/3 equity like instruments with no restrictions.”

-Green Bank in the Mid-Atlantic

“We want to use the national green bank to ‘green bank the green bank.’ We are criticized for being too conservative, and this could allow us to put more capital to work in the first loss position and get out of our comfort zone to build out our ‘demonstration function’ in things like affordable housing multifamily electrification where you have to underwrite to unproven savings and take a leap of faith.”

-Green Bank in the Mid-Atlantic

4. Collective Access to Secondary Markets

Green banks want help quickly recycling their capital. “Sub-PACE” (<\$1m) commercial solar loans are one area where all green banks identify a gap, and the national green bank could create nationwide securities that are easier to sell than regionally focused ones.

*“At this point I’m planning to hold all of my sub-CPACE loans on my balance sheet. **Right now, I can’t get banks to take anything below 5%, even if they have the most senior lien. That’s going to tie up a lot of capital** and it would be a great idea if the national green bank could buy those or arrange for someone else to buy them.”*

-Green Bank in the West

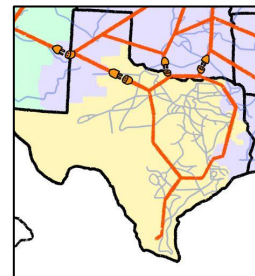
*“Right now, even C-PACE is still lending at 5% or 6% and it’s senior to the mortgage! Someone is making too much money on this, and the market has become uncompetitive. **The national green bank can be helpful in being an offtaker of inventory and making the market for sub-PACE lending.** That’s one area where I think standardized credit underwriting is a good idea.”*

-Green Bank in New England

Opportunities Exist for Additional National Projects

Most Green Banks are not yet addressing some key areas:

1. Interconnection/Transmission
2. Grid Infrastructure/Stand-Alone Storage
3. Transportation (Trucking and EVs)
4. Industrial
5. Small business support
6. Early coal retirement

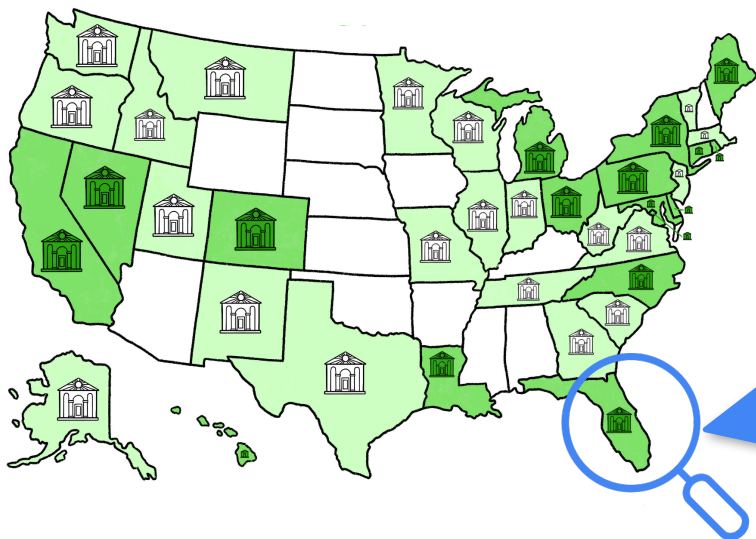


National Green Bank Triggers Flurry of Immediate Activity

- Nearly every green bank is prepared to deliver **significant early wins**
- Early activity to include **tangible projects and new programs**
- Day 1 projects **feature environmental justice**

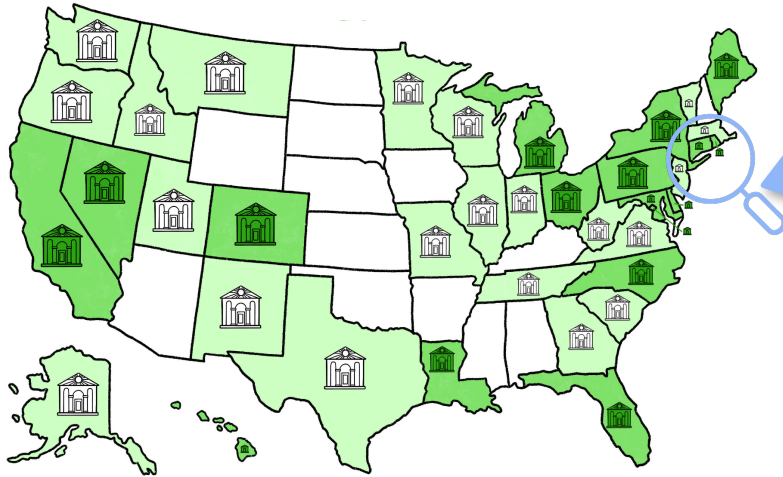
- **Texas:** \$28 m affordable housing efficiency and solar project
- **Louisiana:** \$25m green mortgage product
- **Maryland:** \$3m in small solar projects at nonprofits
- **Hawaii:** \$14 m smart meter project
- **Connecticut:** \$20m in LMI building electrification project
- **Rhode Island:** \$10m in loans for commercial Class B & C projects
- **Florida:** \$10m in LMI resilience, solar, and efficiency projects
- **Michigan:** \$2m for residential energy efficiency and solar projects
- **California:** \$15m for residential energy efficiency projects
- **Colorado:** \$10m for affordable housing EE and electrification
- **Pennsylvania:** \$3m in solar projects on Philadelphia public school roofs
- **New York:** \$50m in affordable housing EE, renewables, and electrification projects
- **DC:** \$15m in rooftop solar and energy efficiency projects for low- and moderate-income households.

SELF: Finishing off the Capital Stack for Multifamily PV+Storage



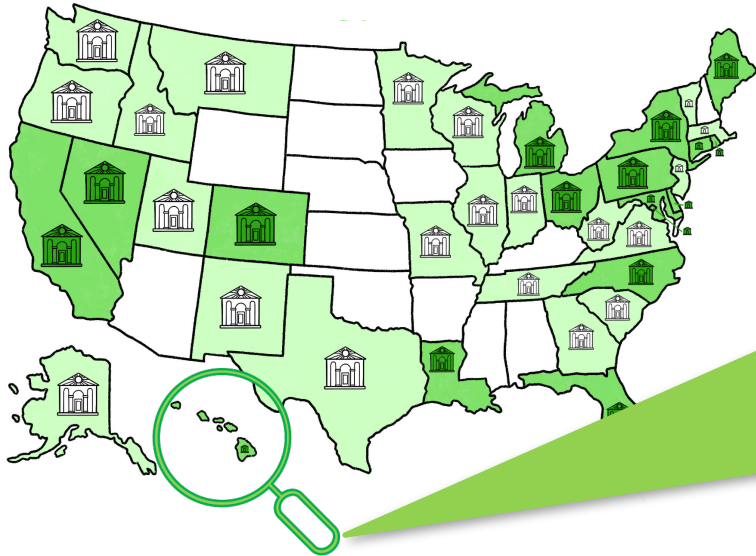
\$4-6 million in
subordinate debt to
enable a \$28 million
master meter PV +
Storage system at an
affordable housing
development.

Connecticut: Electrified heating for an underserved, fence-line community



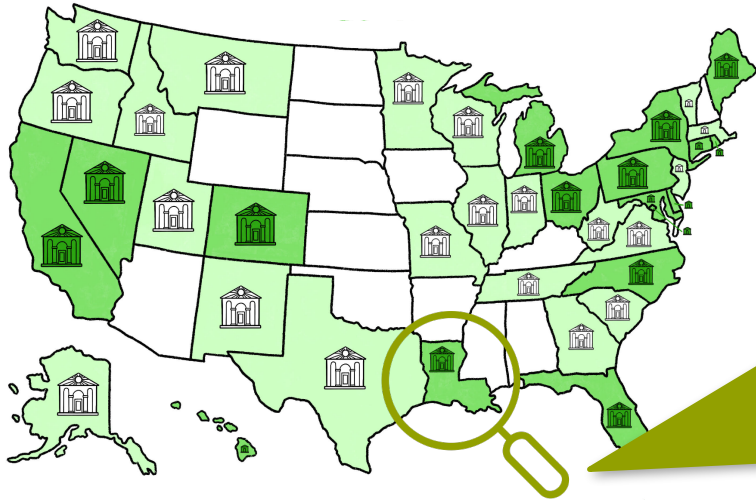
Provide \$20m to replace and electrify the heating systems in 924 units of a World War II era housing development near an immigrant community that was rezoned to allow for multiple coal plans.

Hawaii: Laying the Groundwork for rooftop solar on 100% of houses



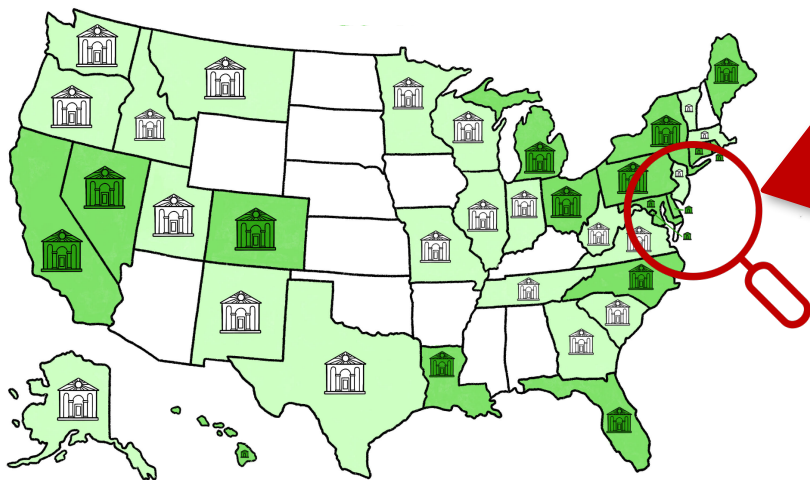
\$14 million to install a smart meter on every home in Hawaii to size every rooftop PV + storage system needed.

Finance New Orleans: Bring the “Green Mortgage” to scale



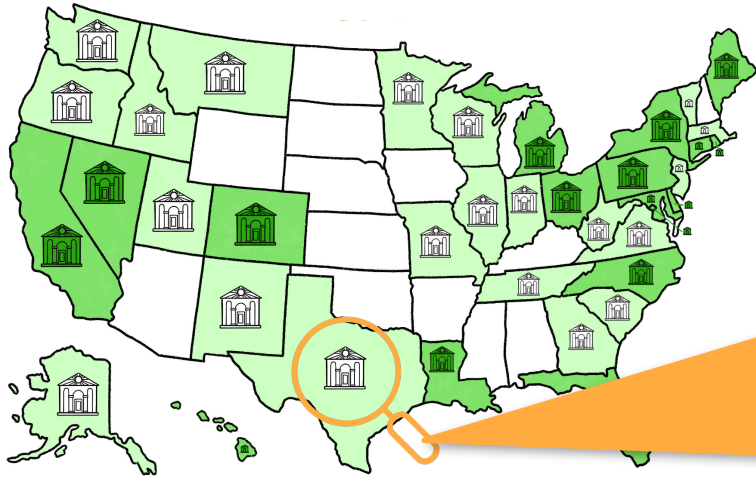
Use \$25m to Originate 150 (the threshold for selling to the secondary market) “green mortgages” that include energy efficiency, electrification, and PV + Storage before the homeowner moves in.

Montgomery County: On-site solar for underserved community orgs



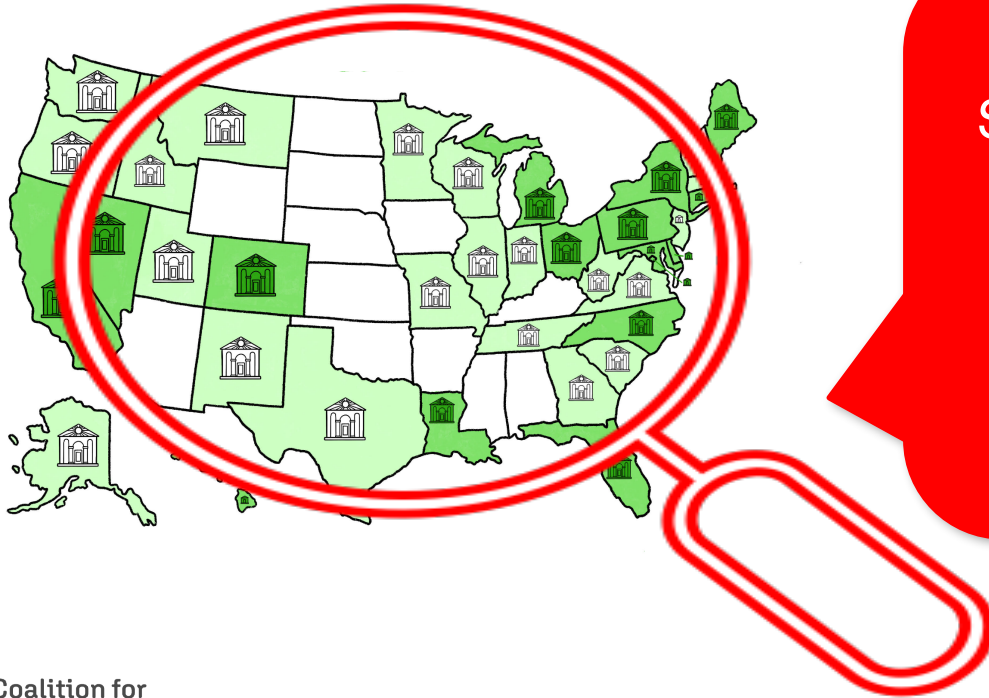
Provide \$182,000 in subordinate debt to a 113-kW solar system on the roof of a local non-profit as part of a broader effort to grow Maryland's PPA market. MCGB will immediately use \$3 million to finance 20 similar projects.

Texas: Creating a market for sub-CPACE lending



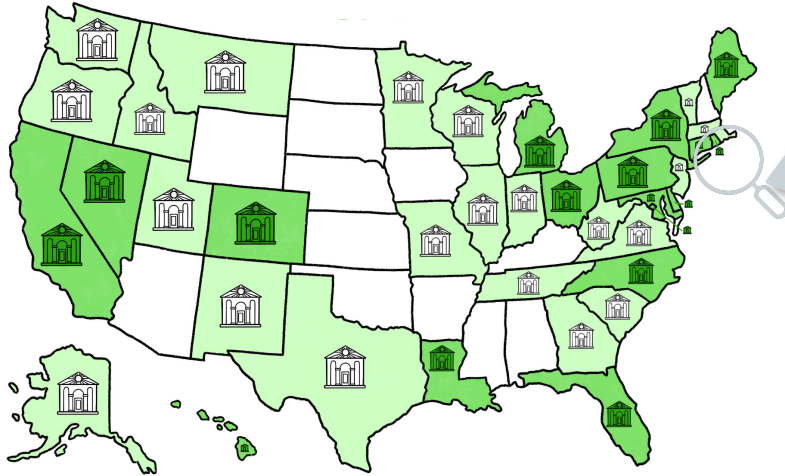
Provide \$150,000 loan to a Houston nonprofit (which has no other source of capital available) to replace HVAC, lights, and windows at its headquarters.

IPC: Expanding mission-oriented solar



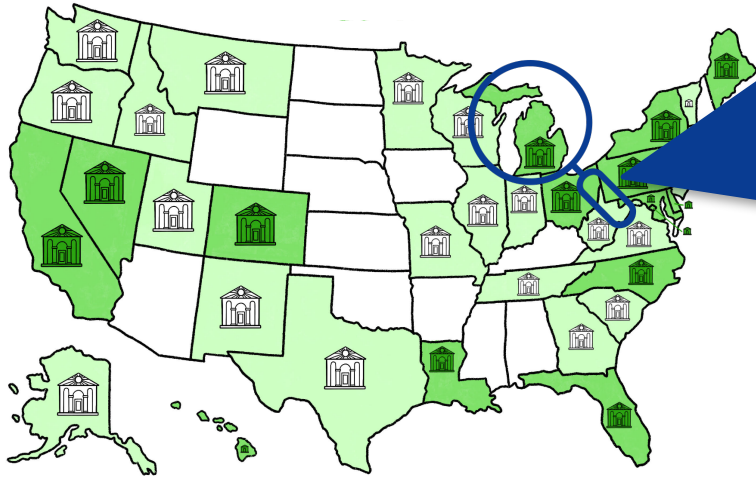
Sponsor \$86 million across 3 community and distributed solar pipelines that are community-owned, rural, or multi-family

Rhode Island: Closing the small commercial gap



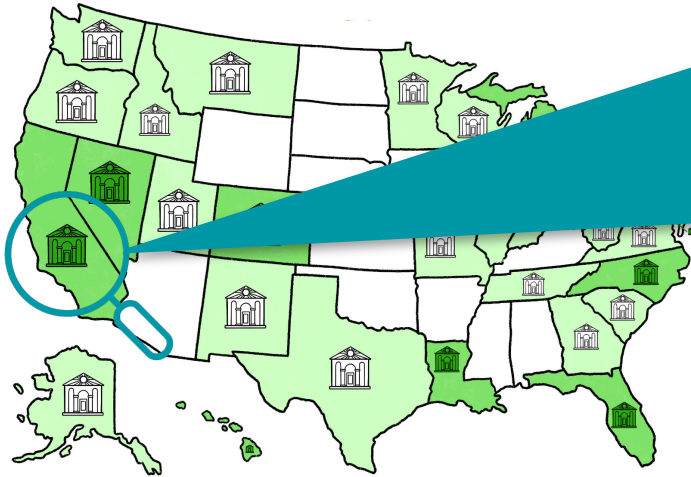
Use \$10m to create a revolving fund for class B and class C commercial buildings to take out loans for energy efficiency and solar projects of \$250,000 or less.

Michigan: Immediate Results from Loan-Loss Reserve Top-off



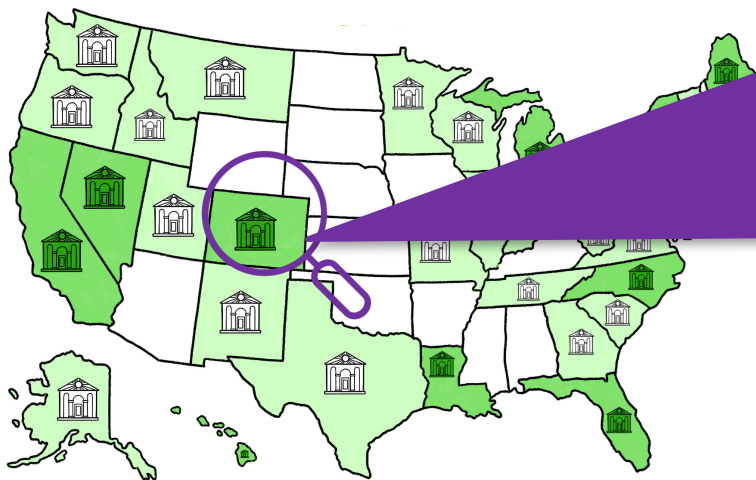
\$2m to top off loan loss reserve product resulting in immediate (within first 60 days ribbon cuttings) LMI residential energy efficiency and distributed generation projects

CAEATFA: Create Statewide Loan Loss Reserve for Energy Efficiency Projects



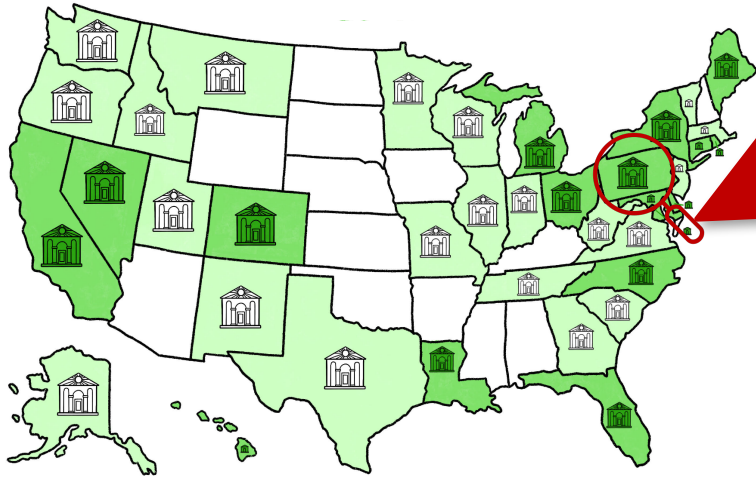
CAEATFA now has authority to operate outside IOU areas if it can find the money and will immediately extend its commercial and residential energy efficiency loan loss reserves statewide.

Colorado: Make multifamily affordable housing clean: energy and energy efficiency investments



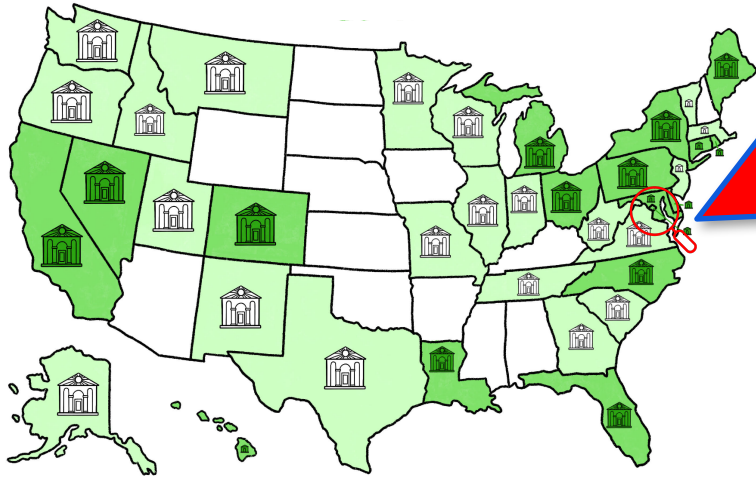
Use \$10m to launch a comprehensive renovation/build affordable housing loan alongside a CDFI that includes predevelopment, construction, energy efficiency, and solar + storage.

Philadelphia: Bringing solar to public schools



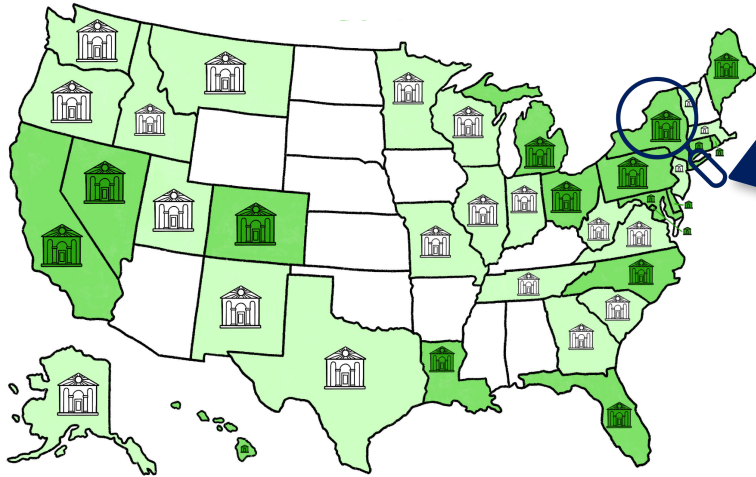
Pre-purchase solar renewable energy credits from 5 public schools to provide \$495,000 of capital to unlock \$2.5m to financing for 1,610 KW of solar generation on the roofs of Philadelphia schools.

Washington, DC: LMI Energy Upgrades



Invest \$15 million to expand a program that installs rooftop solar panels and energy efficiency upgrades in low-to-moderate income households.

New York: Affordable housing electrification



Create a credit facility to provide first-loss guarantees or other credit enhancements to allow NYGB to move more quickly on New York's most ambitious, highest-performance multifamily affordable housing electrification and efficiency projects, with the potential to unlock \$50M in NYGB financing.



Also \$3M in construction to permanent debt for project serving 100% LMI and just transition community

**\$21b+ Project Backlog: work on longer term pipeline
begins day one**

- Consortium members collectively identified **\$21b+ of projects** that require state and local green bank capital
- **Early wins** allow for larger and longer term programs/projects to be developed
- **Forty percent of funding** designated for disadvantaged communities

