



How a Green Bank Can Drive the North Carolina Clean Energy Economy: A Market Opportunity Overview

November 2020

Agenda

1. Welcome and Introduction
2. What is a Green Bank
3. Summary of Opportunities and Impact for the Green Bank in North Carolina
4. Capitalization Methods & the Clean Energy and Sustainability Accelerator
5. Steps Forward

Introductions



Hannah Beinecke
Program Director



Jill Bunting
Deputy Director



Jennifer Weiss
Senior Policy Associate,
Climate and Energy



The Coalition for Green Capital (CGC) is a non-profit organization focused on accelerating the growth of clean energy markets through the creation of Green Banks.



The Nicholas Institute for Environmental Policy Solutions at Duke University helps decision makers create timely, effective and economically practical solutions to the world's critical environmental challenges.

Welcome



Sushma Masemore
Deputy Assistant Secretary
State Energy Director
NC Department of
Environmental Quality

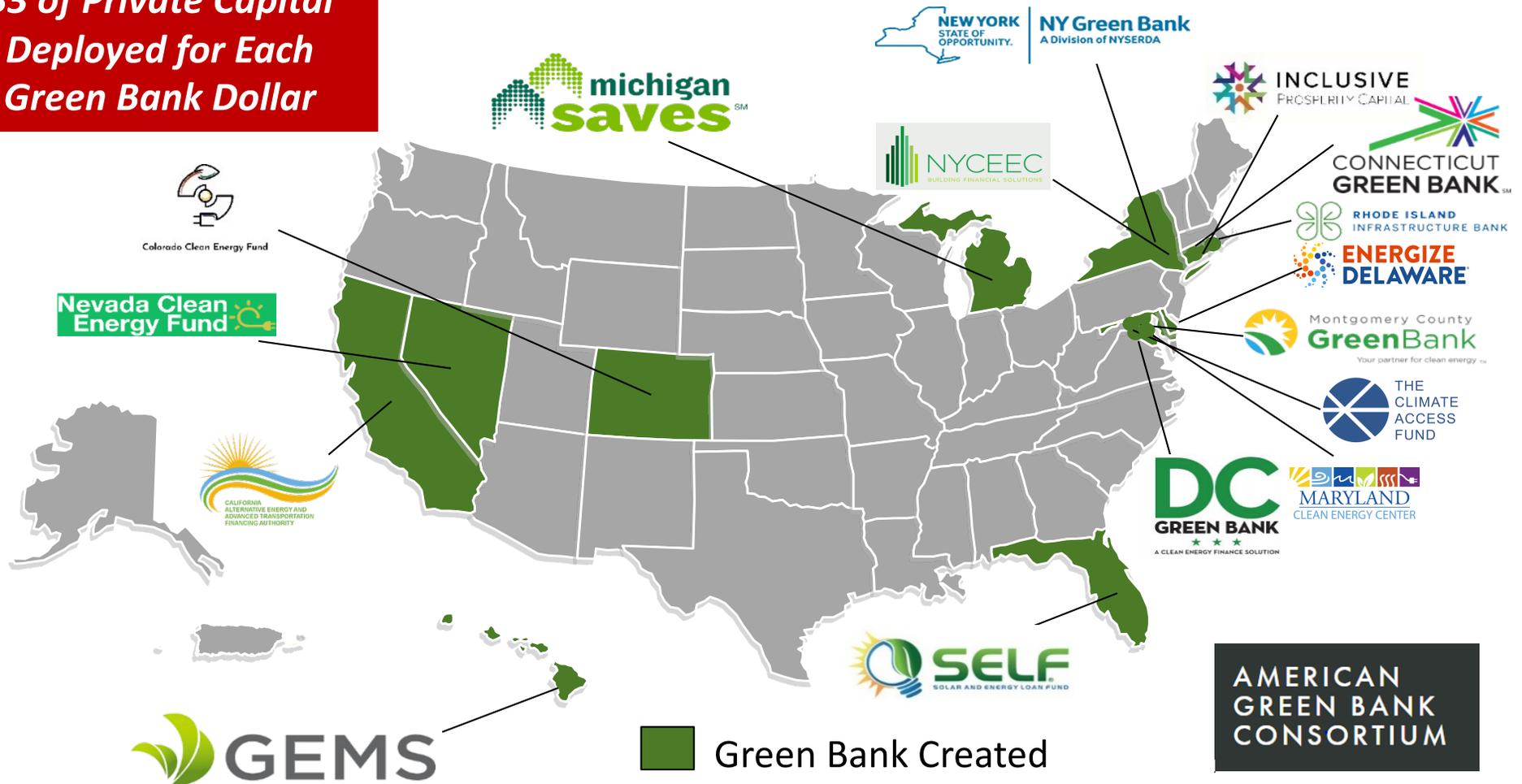
Green Banks are purpose-built to connect capital with clean energy projects



- Green Banks are clean energy finance businesses whose mission is to **use financial tools** to increase sustainable investment
- Green Banks bring together **commercial, public, and mission-driven capital** to drive clean energy investment in local markets
- Green Banks develop local expertise to **break down barriers & connect projects with capital**
- Green Banks use methods that **catalyze greater overall investment** beyond the dollars they deploy

Existing network of state and local GBs have driven \$5B of investment...

**\$3 of Private Capital
Deployed for Each
Green Bank Dollar**



Why are Green Banks Necessary? Business and capital barriers to market penetration of proven technologies

Need more technical capacity at local level

Collective action problems

Perceived LMI credit risk due to lack of credit history

Small projects not at sufficient scale for private capital

Low incentive to serve LMI communities by commercial lenders

Sales/install workforce too small

Need standardization for securitization

Low consumer awareness of financial options

Negative cash flow due to debt rate or term mismatch with project lifetime

Stranded asset value of fossil fuel investments

Green Banks knock down barriers for faster and cheaper private market growth with equitable deployment

Finance Strategies

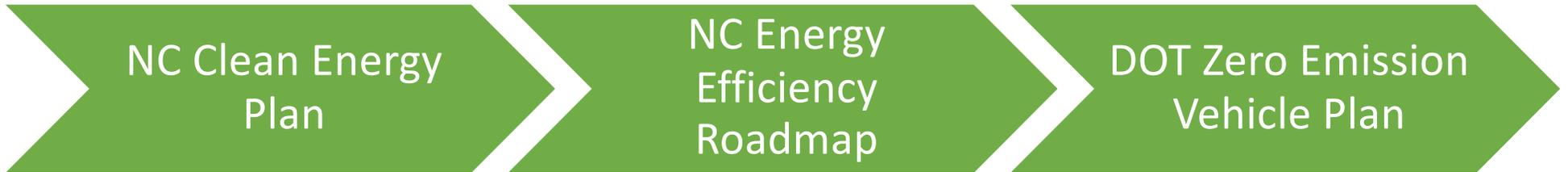
- Debt to make project work for investors & consumers (lower rates, longer terms)
- Alternative underwriting criteria to address households with limited credit history
- Credit enhancements to mitigate risk and induce private investment
- Standardize, aggregate & warehouse small projects to access capital markets
- Predevelopment and development capital to lower cost and increase speed of project construction
- Directly finance first-of-kind transactions to lead by example

Market Creation Strategies

- Standardization of products to enable speed, aggregation and securitization
- Act as first mover to spark deals that require collective action
- Partner with utilities to use non-debt based financing structures to not overburden households with more debt
- Partner with businesses to create and train massive new sales and installation workforce
- Employ innovative structures like C-PACE and on-bill financing products to expand access

PROCESS AND METHODS

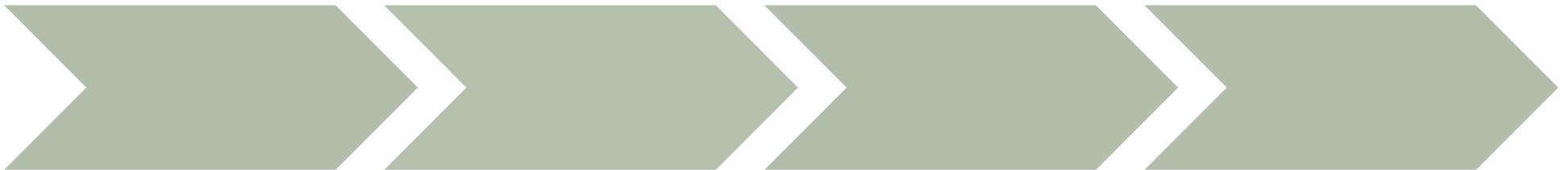
Green Bank Recommended in:



Duke Nicholas Institute & Coalition for Green Capital:



Steps Forward:



Example Roles for a Green Bank in North Carolina

Role	Barrier to Investment	Solution	Examples
Connector	First-of-kind-transaction	Technical assistance	Put in technical legwork that comes with closing more labor-intensive, innovative transactions
Risk Mitigator	Perceived project risk	Credit enhancement	Provide a loan loss reserve that can mitigate risk and allow investment to flow at longer term of lower rate
Direct Lender	Marginal economics	Co-investment	Lend to a project, in senior or junior position, to improve overall economics for investors and customers
Bundler	Inefficiencies of scale	Aggregation & Warehousing	Aggregate small projects to meet scale to attract private capital

Example Opportunities for a Green Bank in North Carolina

Role	North Carolina Opportunities
Connector	<ul style="list-style-type: none">• Provide technical assistance to support electrification and energy efficiency on-bill tariff programs for electric cooperatives and municipal utilities• Support cities in developing energy efficiency and clean energy projects
Risk Mitigator	<ul style="list-style-type: none">• Encourage traditional lenders to grow their energy efficiency offerings• Expand the affordable housing programs offered by the NC Housing Finance Agency
Direct Lender	<ul style="list-style-type: none">• Offer dedicated energy efficiency lending in agriculture• Electrify transit and school bus fleets
Bundler	<ul style="list-style-type: none">• Establish a Heat Pump Water Heater Program• Offer standardized energy efficient residential equipment loans

How a Green Bank Could Help:



Ajulo Othow
Founder, CEO of
EnerWealth Solutions



Amber Weaver,
Sustainability Officer,
City of Asheville

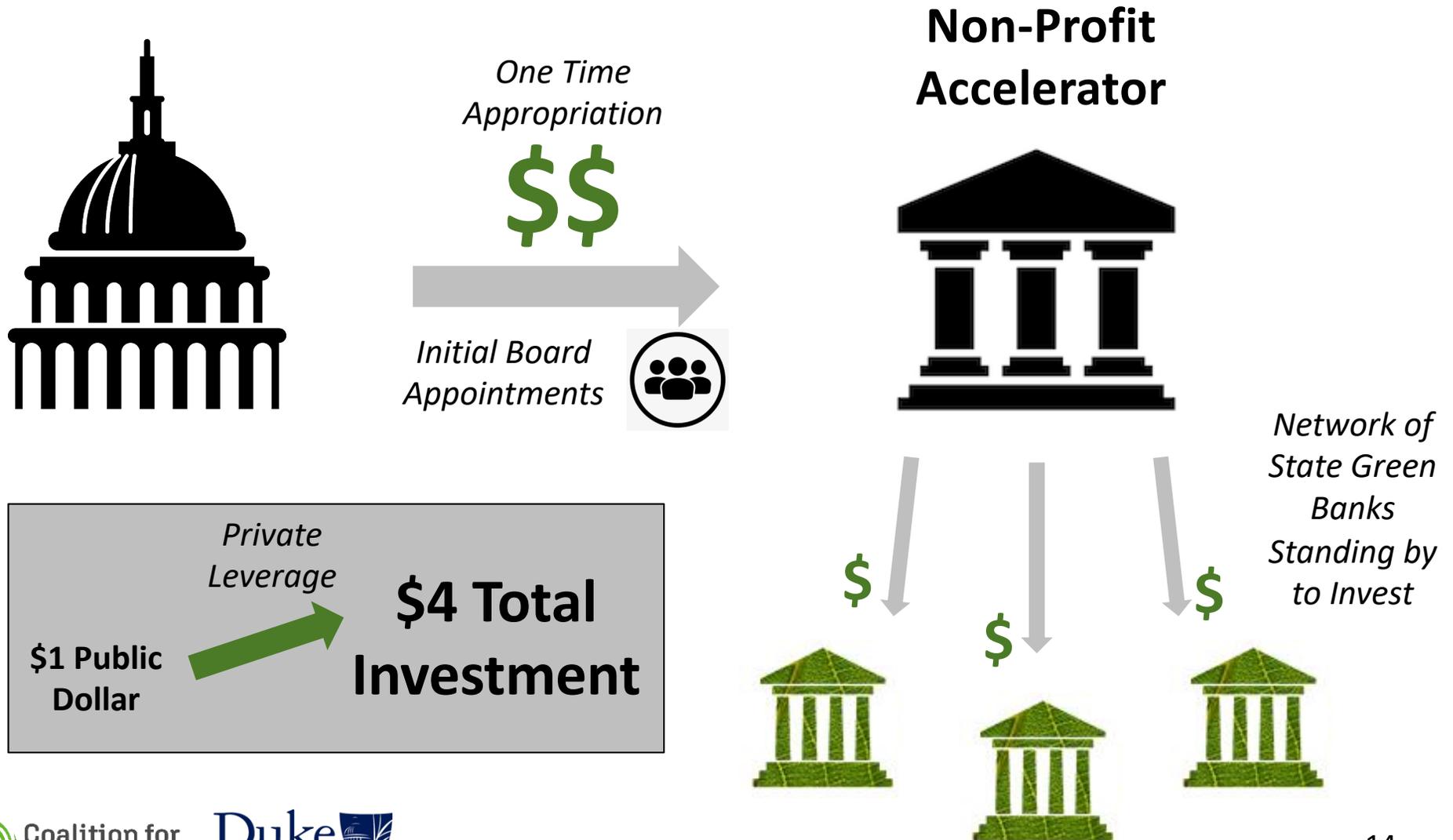


Terry Albrecht,
Director, Waste
Reduction Partners

Target for North Carolina Clean Energy Fund: \$100M to stimulate economy, just energy transition, and GHG reduction

- Economic Recovery & Job Growth
 - More than 21,000 NC clean energy workers remain unemployed in July 2020, or approximately 19 percent of the state's clean energy workforce
 - With \$100 million in seed capital, a Green Bank in North Carolina could create 15,000 jobs within its first five years with no other state policy changes
- Environmental Justice & Health Outcomes
 - Programs specifically focused on low-income, front line communities
- Emissions Reductions
 - Given the state's goals to reduce electric power sector greenhouse gas emissions by 70 % below 2005 levels by 2030 and attain carbon neutrality by 2050, significant investments are needed to build the necessary infrastructure and ecosystem support

Where will the money come from? New federal Clean Energy Accelerator is a promising avenue for NC



Accelerator & NC green bank will partner with private capital to fund businesses and build projects across sectors

Renewable Power



Buildings



Grid



Transportation



Industry



Sustainable Ag & Forestry



Climate Resilience



40% of investment made in disadvantaged communities to create jobs & businesses, lower energy costs

As non-profit, Accelerator has unique abilities to target investment for disadvantaged communities



Targeted Investment in Disadvantaged, Frontline Through State & Local Partners



Create Jobs



New Businesses



Lower Household Energy Burden



Improved Public Health

Accelerator bill co-sponsored by VP-Elect Harris, already passed 2x, can pass in early '21 as clean energy stimulus

- **Passed the House Twice** - Language of National Climate Bank Act included in \$1.5T Moving Forward Act, providing \$20B to a non-profit renamed the Clean Energy and Sustainability Accelerator
- **Model in President-Elect Biden's Climate Plan** - to “*develop innovative financing mechanisms that leverage private sector dollars to maximize investment in the clean energy revolution*”
- **Co-Sponsored & Endorsed by Vice President-Elect Harris**
- **In House Clean Economy Jobs and Innovation Act** – Featured piece of broad energy and innovation bill; be voted on this week
- **Nearly 100 organizations signed letter of support**, including:

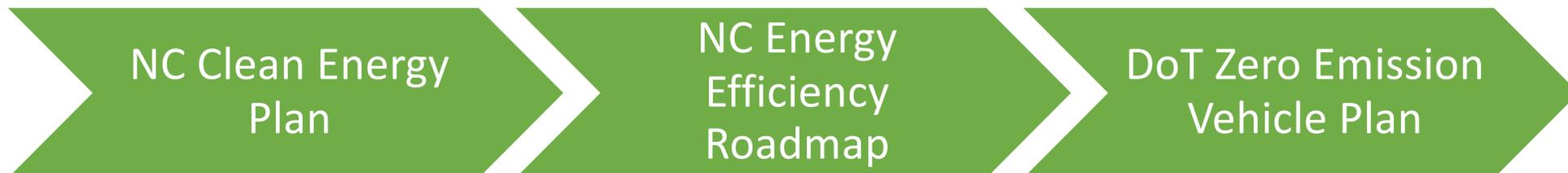


VOTE SOLAR



PROCESS AND METHODS

Green Bank Recommended in:



Duke Nicholas & Coalition for Green Capital:



Steps Forward:



Introducing the North Carolina Clean Energy Fund (NCCEF) Board Members



Ajulo Othow
Founder, CEO of
EnerWealth Solutions



Melissa Malkin-Weber
Sustainability Director
Self-Help Credit Union
& Ventures



Jennifer Weiss
Senior Policy Associate,
Climate and Energy
Nicholas Institute



Tyler Norris
Director of
Development, Cypress
Creek Renewables

Steps Forward for a North Carolina Green Bank: The North Carolina Clean Energy Fund (NCCEF)

- NCCEF must have support to move forward. We are actively seeking support through:
 - Letter of Interest
 - Pipeline Examples to demonstrate readiness to deploy funds
- Institutional development
 - Continue developing pipeline of financial products for the state of North Carolina to demonstrate readiness for capital deployment
 - Fundraising for staff positions and operations

Please reach out if you are interested in
supporting the NC Clean Energy Fund



Thank You

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How Green Banks Are Capitalized: Sources and Methods

National Climate Bank

- Federal Legislation creating a National Climate Bank

- Resilience Funds

- Decarbonization Funds

- If the state joins the Regional Greenhouse Gas Initiative (RGGI) and uses auction proceeds to capitalize the Green Bank

State Funding

- If the state mandates a carbon tax and some portion is used for the Green Bank

- General Funds

- Budget appropriations

- Issuance of a state Green Bond

- Grants

Foundations

- Program-related investments

Green Bank Pathways and Strategies for Creation

Pathway	Level of Capitalization	Method
Bootstrap Model	• \$1–3 million	Seed funding used to design and implement at most one financial product which the Green Bank can use as proof of concept to then start raising additional capitalization funds in future years.
Lean and Mean Model	• \$10–50 million	Capital used to stand up a Green Bank and roll out one or two programs. As the Green Bank grows, additional capital can be added through foundations, government action, or balance sheet borrowing.
Transformation Model	• \$100 million and more	This level of capitalization would allow the Green Bank to launch multiple financial products in order to transition the state’s energy economy to clean energy and recover from COVID-19 through job creation, and safer, more reliable, more resilient, and more equitable energy sources.