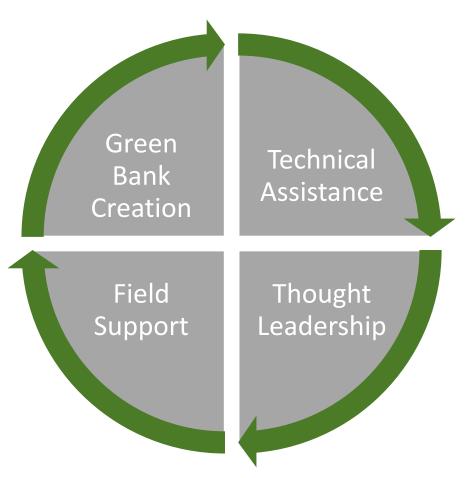


Scaling Green Bank Financing to Deploy Clean Energy & Win the Climate Battle

Coalition for Green Capital
NASEO Webinar - August 8, 2018

CGC unique role as GB field catalyst for decade, refining GB model, implementing on the ground, coordinating partners



- CGC, a non-profit, partners with governments, NGOs and market actors to create Green Banks that increase volume of clean energy investment
- CGC delivers on-the-ground technical expertise to design, start-up and operate GBs
- Helped design & create multiple GBs, which have catalyzed over \$2 billion in clean energy investment
- Currently working in over a dozen states in the U.S.
- Founder and CEO Reed Hundt, former chairman of U.S. FCC
- Supported by major global foundations



Green Banks are institutions purpose-built to deliver transformation - generate demand and draw investment



- Green Bank mission is to use finance tools to mitigate climate change.
- Finance institution dedicated to increasing and accelerating investment in clean power goods and services.
- Can be funded by government, charitable contributions or both.
- May deploy capital from public or private sources, invest on its own or in conjunction with private sector investors. Does not typically take deposits.
- Uses methods that catalyze greater overall investment.

Green Bank Goal is Volume & Scale



Governments have implemented the model through a number of forms

Public



Quasi-Public





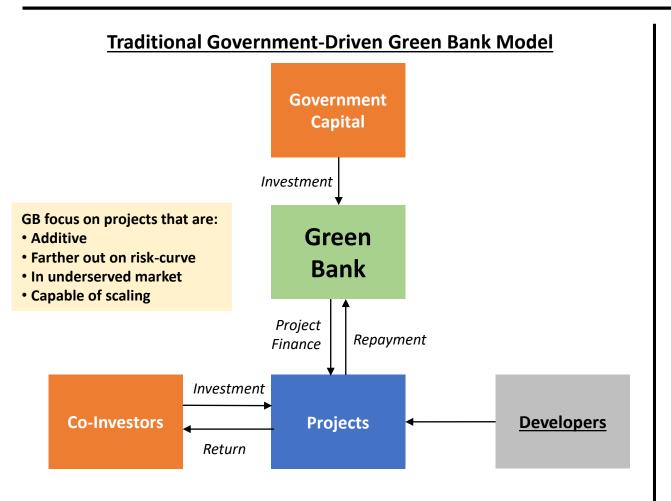
Private Non-Profit







Green Banks conceived as *public* institutions accelerating shift to clean power platform – but how to scale?



- In Waxman-Markey, Fed govt would form natl GB
- Some states imitated on their own, though often with strings attached
- Model proliferated, interest grew, but scalable solutions lacking

Still created \$2B+ of clean
power platform investment
without federal govt!!

What if governments aren't able to form and fund the GB?

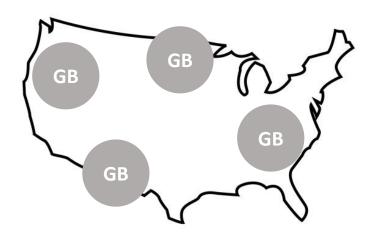


Growing Green Bank ecosystem also needs organized structure for collaboration, sharing, community-building

Today, all Green Banks operate independently, seeking capital and developing products on their own

- No operational partnerships
- No shared products
- No pooled capital
- No standing body to organization - exchange info only on ad hoc basis

Lack of coordinated activity inhibits scale



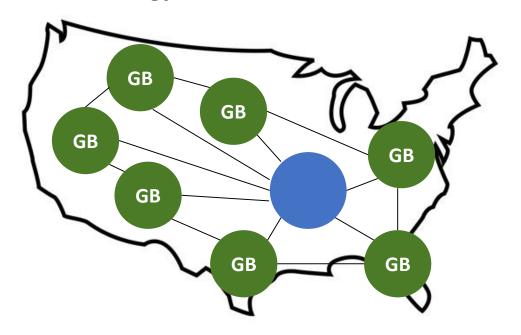


To meet opportunity, propose national GB expansion built for speed, scale, with networked institutions across U.S.

USGB Initiative & Green Bank Consortium will enable Green Banks to tap shared resources, capital, realize scale efficiencies

- Raise institutional capital to finance Green Bank projects around the U.S.
- Form non-profit, locally focused
 Green Banks to build demand
- Develop innovative products that can be deployed by multiple orgs, and expand
- Create organized network of U.S.
 Green Banks

Building a powerful network of capital, demand formation, investment, and collaboration to activate local clean energy markets across the U.S.





Unique partnership designed to relieve burden on govts to design, create, fund and operate GBs on their own

CGC, Foundations & NY Green Bank building USGB Initiative to <u>create non-profit</u> <u>Green Banks</u>, in partnership with local leaders, to get to work quickly!

1

Capital

 The new USGB formed by NYGB can provide centralized capital to finance sustainable infrastructure projects around the country through Green Banks 2

Operating Funds

CGC is raising funds
 from philanthropy to
 pay for the launch and
 start-up operating
 costs of non-profit
 Green Banks until they
 are self-sufficient

TA, Biz Plan & Op Support

CGC designs, forms

 and operates GB in
 partnership with local
 actors to ensure long-term success and
 stability of the
 organization



New model is taking shape in real time

Green Banks Under Development

Transition from government-driven quasi-public to independent non-profit with government "sponsorship" playing out right now

Washington, DC

Green Finance Authority

- Legislation passed last month to create quasipublic Green Bank
- Capitalized with \$35M of public funds
- Will be built with own capital, operations, products

Nevada

Clean Energy Fund

- Legislation passed last year, direction state energy office to incorporate a non-profit Green Bank
- No public funding
- Will draw on outside capital & resources

ColoradoClean Energy Fund

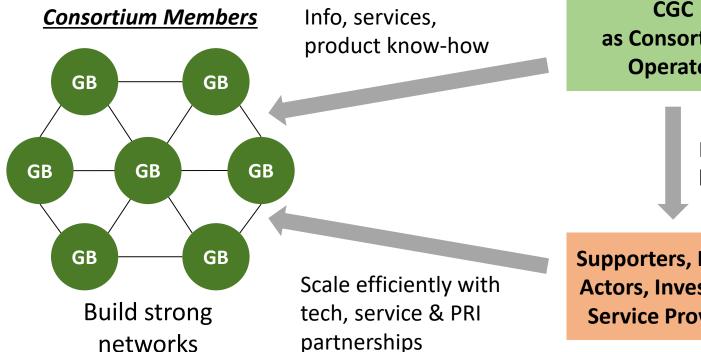
- No legislation process executed in coordination with state government
- Non-profit incorporated independent of government – no funding
- Will be connected to and "sponsored" by govt



All parties connected through new Green Bank Consortium to share products, know-how; access capital, services

Consortium to be *inclusive*, *large and collaborative*.

Contact CGC to learn more and join the Consortium!



CGC as Consortium Operator

> Partnerships to benefit members

Supporters, Market **Actors, Investors & Service Providers**



Thank You

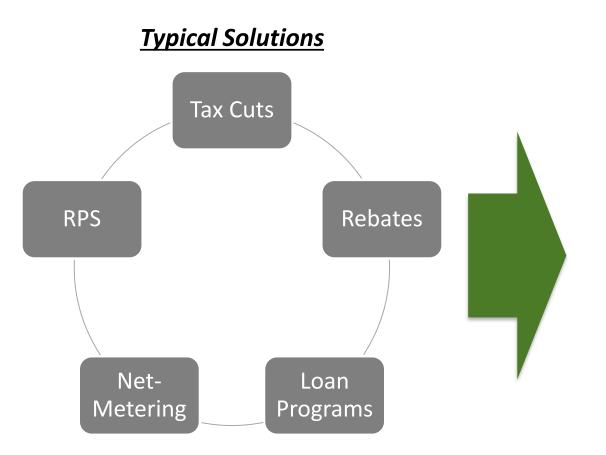
Jeffrey Schub, Executive Director

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Historical approach in U.S. is piecemeal – rebates, tax cuts, mandates don't add to transformative investment

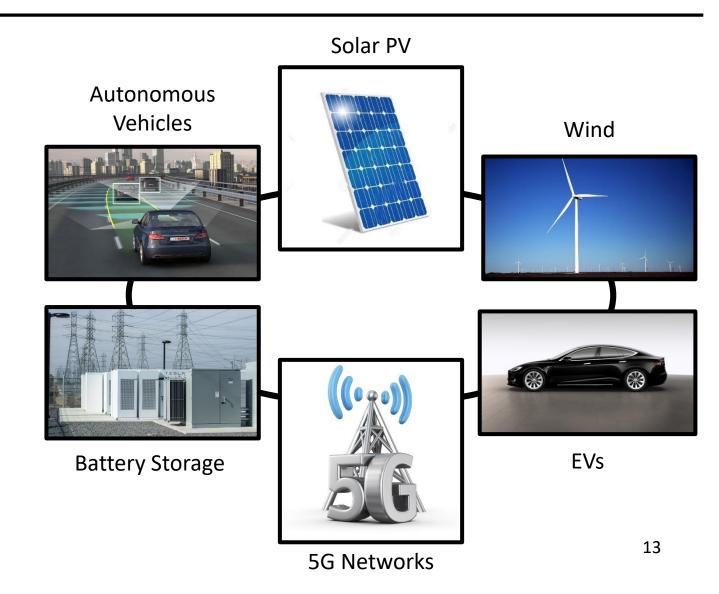


Insufficient Impact

- Total clean energy investment in U.S. flat since 2011
- Non-hydro renewable generation penetration still only 9.6% in 2017
- Plug-in electric vehicle penetration only 1.2% of new sales in 2017

Building clean power platform requires massive, systemic investment effort *right away!*

- Costs of breakthrough clean tech falling
- When combined, can create clean power platform
- Demand for power insatiable
- Secular stagnation leaves massive capital undeployed
- Piecemeal grants, incentives, mandates not transformational
- Few institutions focus on scaling investment





Positive outcomes, obstacles, and urgency call for change in Green Bank approach

Experience teaches hard truths

DON'T create Green Banks indefinitely dependent on government

• Need start-up P & L

DON'T create Green Banks solely capitalized by government

Need good, diverse balance sheet

DON'T fail to innovate

• Go beyond commercially comfortable practices

DO create Green Banks that break even, last as long as necessary

• Non-profit model indefinitely needed, moves forward to newer markets

DO form capital pool - private + public + mission-driven

• Keep hurdle rate low, especially as interest rates rise

DO catalyze project creation, demand for capital

• Market makers connect demand to supply



Green Bankers across the country agree now is time for ambitious, expansive, national Green Bank effort

Simultaneously, multiple Green Bank leaders independently saw the need to expand Green Banking nationally under a new model. What did we all see?

Surging demand for Green Banks

No federal leadership or funding

Existing Green
Banks more mature,
with good products

State govt interest, but no money or pathway Too slow to reinvent wheels

New sources of capital coming to the table

URGENCY!

Time for Coordinated Expansion with New Approach!



Proposal sees reciprocal needs; new GB formation most useful if paired with strong GB community – and vice versa

USGB Initiative

Green Bank Consortium

Many new GBs need to be formed quickly to increase investment volume.

Those GBs only operate effectively (i.e. maximize volume) if welcomed into strong, open, cohesive GB community, with clear pathway, TA and standardized processes to scale quickly.

Creating one-off GBs without coordinated system to foster broader growth has limited value.

A strong GB community needs to exist to support GBs and build network value.

That GB community only has value if it is large and inclusive, with many new GBs being formed and added to the network to expand investment base and build collective know-how.

Launching effort to support GB community without way to quickly add new GBs to network has limited value.



Lean, focused non-profit Green Banks across the country will develop markets and generate demand for investment



Engage Local Market Actors to Create Deal Flow

Local Clean Energy Markets

Developers, contractors, lenders, investors, specialty finance cos, tech cos, community orgs, government, others.

Form

- New GBs will be lean, scrappy start-ups
- Incorporated as non-profits, but with government "sponsorship" (MOU or Board)
- Formation takes days, not years!
- Join Green Bank Consortium for support
- Won't start with own balance sheet capital will focus on deal gen to draw on central capital

Action

- Meet with market actors to understand gaps, financing needs, product opportunities
- Proactivly market clean energy and financing
- Identify deals, projects, products and structures in need of investment

Future

 May build own balance sheet over time from local investors, PRI, government if desired

