



**coalition for green capital**

# **Growing Clean Energy Markets Quickly with Green Bank/EIP Financing & Market Development**

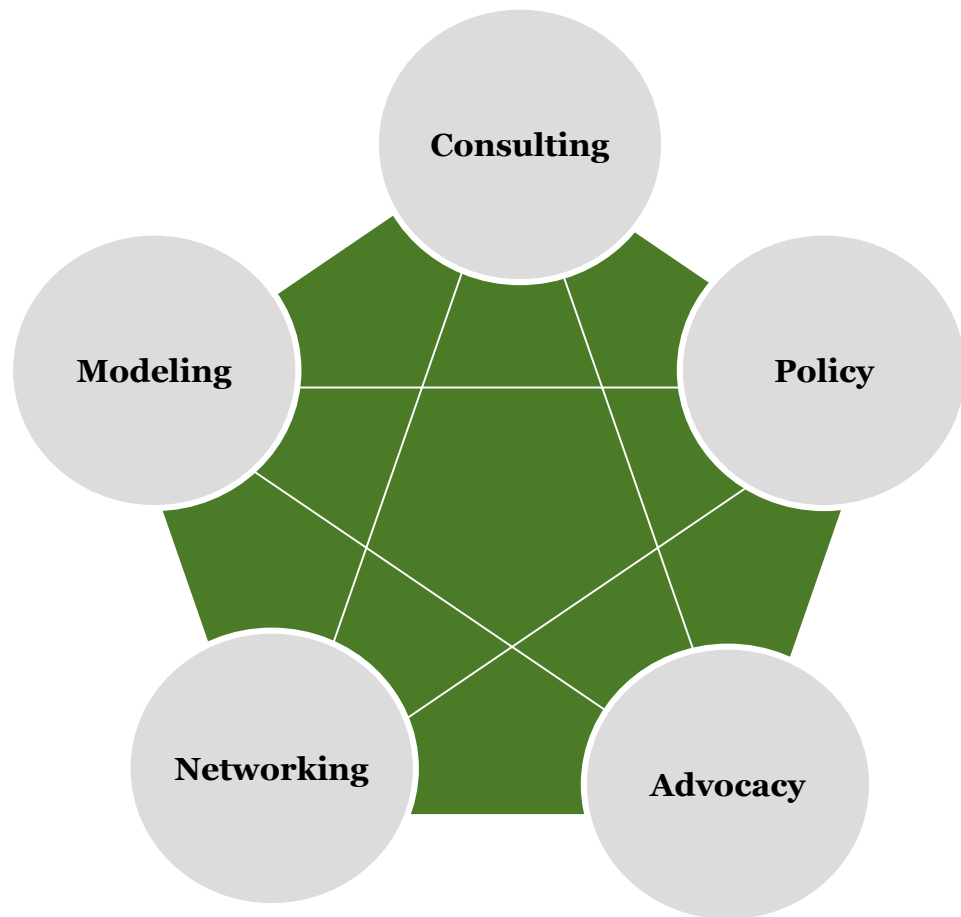
*Jeffrey Schub, Executive Director, CGC  
CDFA-DOE Energy Investment Partnership  
Webinar Series  
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# CGC provides expert support and advice to states exploring Green Bank creation

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**CGC's mission** is to use state finance, regulatory and legal power to accelerate move to clean power platform.

- Nonprofit 501(c)(3) organization
- CGC's leaders have been driving Green Bank movement since '09
- Based in Washington, DC
- Receives pro bono support from Latham & Watkins LLP & Covington & Burling LLP



Many large projects – fossil & renewable – can access financing, but not so for distributed projects

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## Centralized Projects

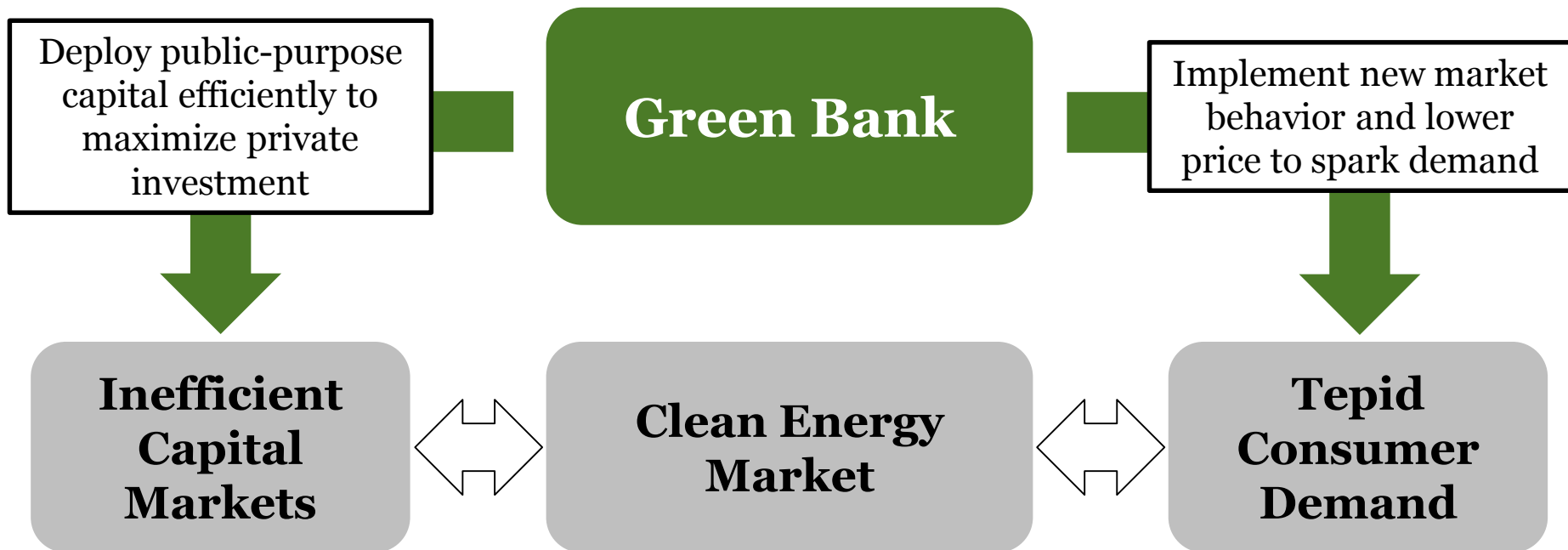
- Utility-scale
- Power directly to grid
- Strong credit
- Traditional project finance
- Relatively easy to finance

## Distributed Projects

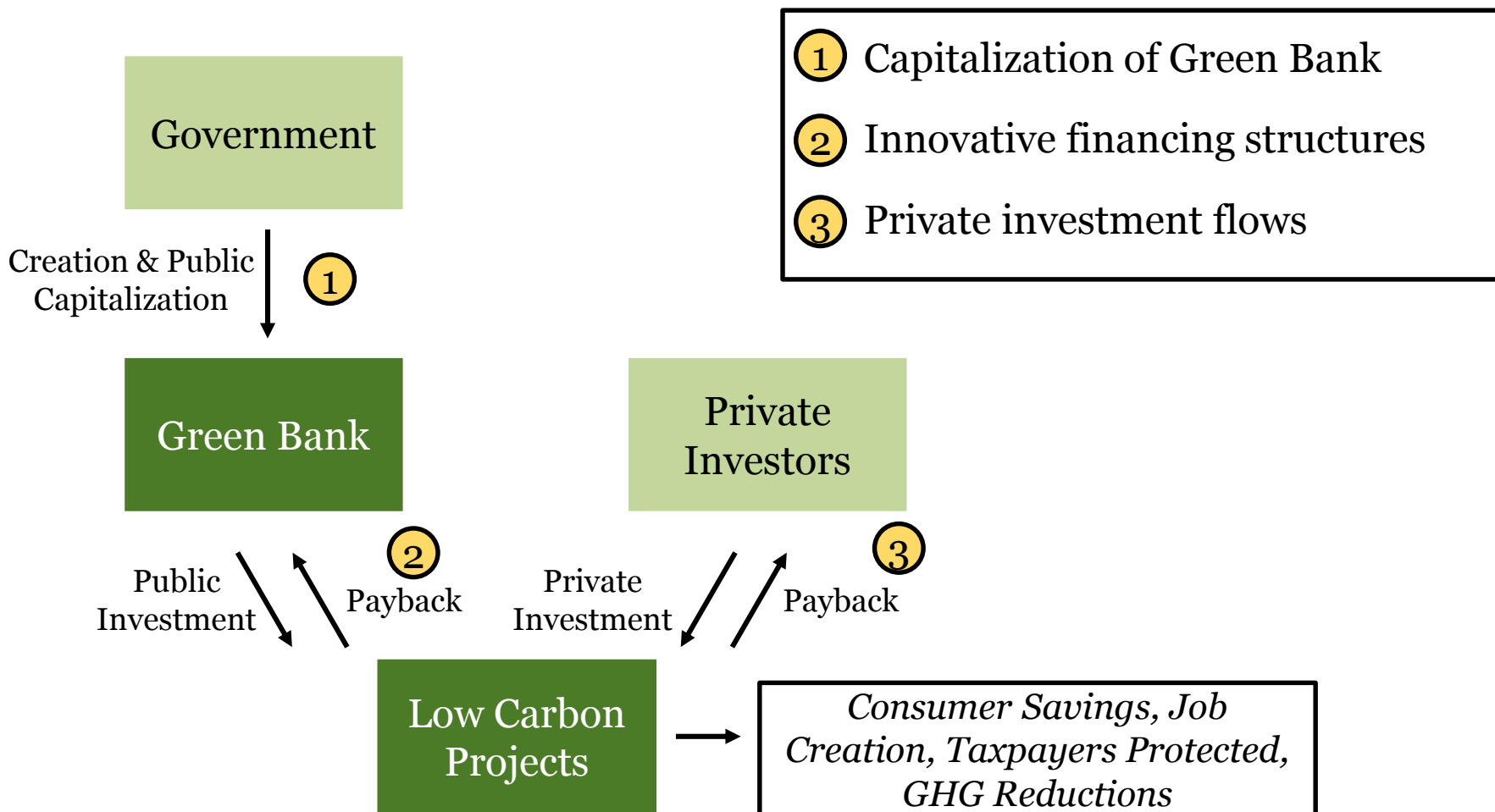
- Smaller scale
- Scattered locations
- On-site energy use
- Varying credits
- Range of structures and approaches to finance

# Green Banks (EIPs) fill the financing gap and draw in the capital needed to make clean energy markets grow

*A green bank is a public financing authority that leverages private capital with limited public-purpose dollars to accelerate the growth of clean energy markets*



# Green Bank is a publicly capitalized institution that channels public and private investment



# Green Bank plays dual role of increasing the flow of capital and building market to increase demand

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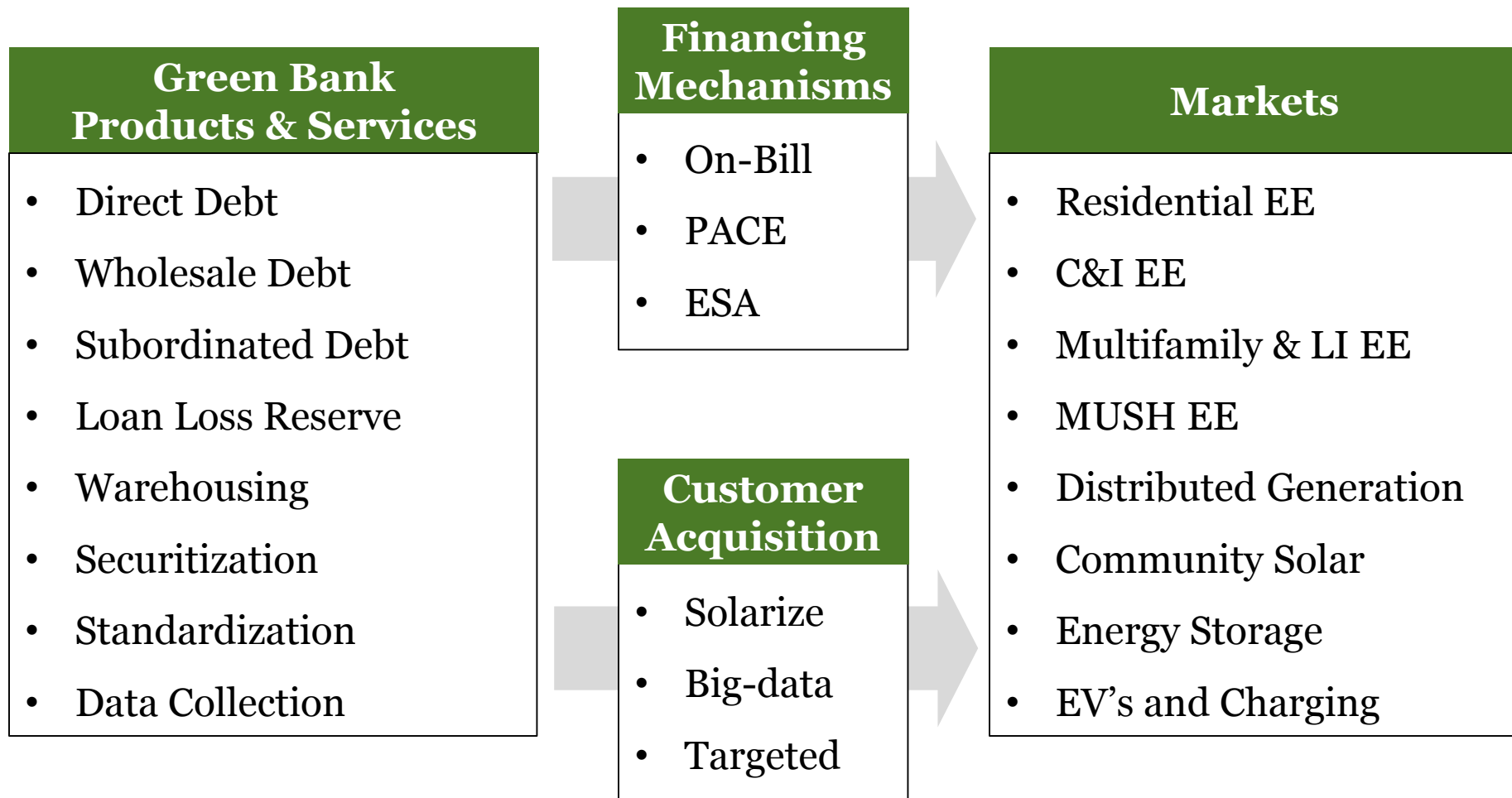
## Financing Projects

- Leverage public dollars
- Stimulate private investment
- Fill market gaps

## Generating Demand

- Turn-key solutions
- Support full market ecosystem
- Minimize customer confusion

# Range of financial tools, applied to prioritized markets, through innovative structures



# Green Banks are quickly spreading across U.S.

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## *Green Banks Operating Or Under Development/Consideration*





# Each government takes a different path to Green Bank/EIP creation

	Connecticut	New York
<b>Objective</b>	Create a dedicated institution that will deploy cheap and clean energy by financing mature clean energy technologies	Create a dedicated finance institution to animate private capital markets and increase total investment in clean energy
<b>Conditions</b>	<ul style="list-style-type: none"> <li>• Existing quasi-public grant-making entity with mixed mission</li> <li>• Large annual system benefit charge collected from ratepayers.</li> <li>• Newly elected governor sought to reform state energy apparatus</li> <li>• Bipartisan support for action</li> </ul>	<ul style="list-style-type: none"> <li>• Large existing state energy agency already had legal authority to provide financing</li> <li>• Large annual system benefit charge collected from ratepayers</li> <li>• Strong Governor support from the outset</li> <li>• Regulator controlled money</li> <li>• Unclear legislative path</li> </ul>
<b>Solution</b>	<u>Repurpose existing entity</u> into green bank through <u>legislation</u> , funded with a portion of the existing system benefit charges and RGGI proceeds	Create <u>new green bank division</u> of existing state energy agency and <u>petition regulator</u> to repurpose system benefit charge to capitalize the green bank

# ...More examples of Green Bank creation

	Rhode Island	Montgomery County, MD
<b>Objective</b>	Spark economic growth, create jobs and lower energy costs by deploying clean energy with financing mechanisms	Create a dedicated clean energy finance institution to reduce emissions, lower energy costs and help meet County environmental goals
<b>Conditions</b>	<ul style="list-style-type: none"> <li>• Newly-elected Governor campaigned on platform for green bank</li> <li>• Minimal desire to create new institution</li> <li>• Existing system benefit charge not a viable pool of funds</li> <li>• Governor sought quick action</li> </ul>	<ul style="list-style-type: none"> <li>• No desire to create new government institution</li> <li>• Quasi-public instrumentality would require state approval</li> <li>• County's electric utility in the midst of a large merger</li> <li>• No pool of existing public funds</li> </ul>
<b>Solution</b>	Through annual <u>budget bill</u> , expanded <u>existing quasi-public</u> water financing authority to become state infrastructure bank. Modest start-up funding paired with existing <u>bonding authority</u> .	Legislation directing an <u>independent non-profit be incorporated</u> to receive County's designation as the Green Bank. Funded by <u>utility-merger settlement</u> payment, negotiated by County with utility to secure County merger approval.

# Lessons Learned – Green Bank Creation

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- **Be Opportunistic** – take creative advantage of openings
- **Use What You Have** – often existing tools can be used
- **Communicate Economic Benefits**
  - Lower energy costs
  - Jobs & economic growth
  - Efficient use of public capital
  - Private investment
- **Cheap, Clean & Resilient Always Wins**
  - Market growth is incompatible with increased energy costs, even if it is cleaner; demand will also be low for something more expensive
  - Tell the story of how public-private financing reduces energy costs

# Lessons Learned – Green Bank Operation

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- **Experiment, Measure & Adjust**
  - It is ok to fail, learn from it and try something different; be flexible
- **Use the Whole Tool Box**
  - Credit enhancements, loans, leases, REC purchasing, contractor training, issue bonds, warehousing, technical assistance – the market needs all of this
- **Target Specific Markets**
  - Hard to make one solution work for all markets
- **Design Products For Ease of Use**
  - Easy to explain to contractors, easy for consumers to understand
- **CANNOT JUST OFFER CAPITAL**

Green Bank doesn't just create financing products with private sector – it delivers products to customers

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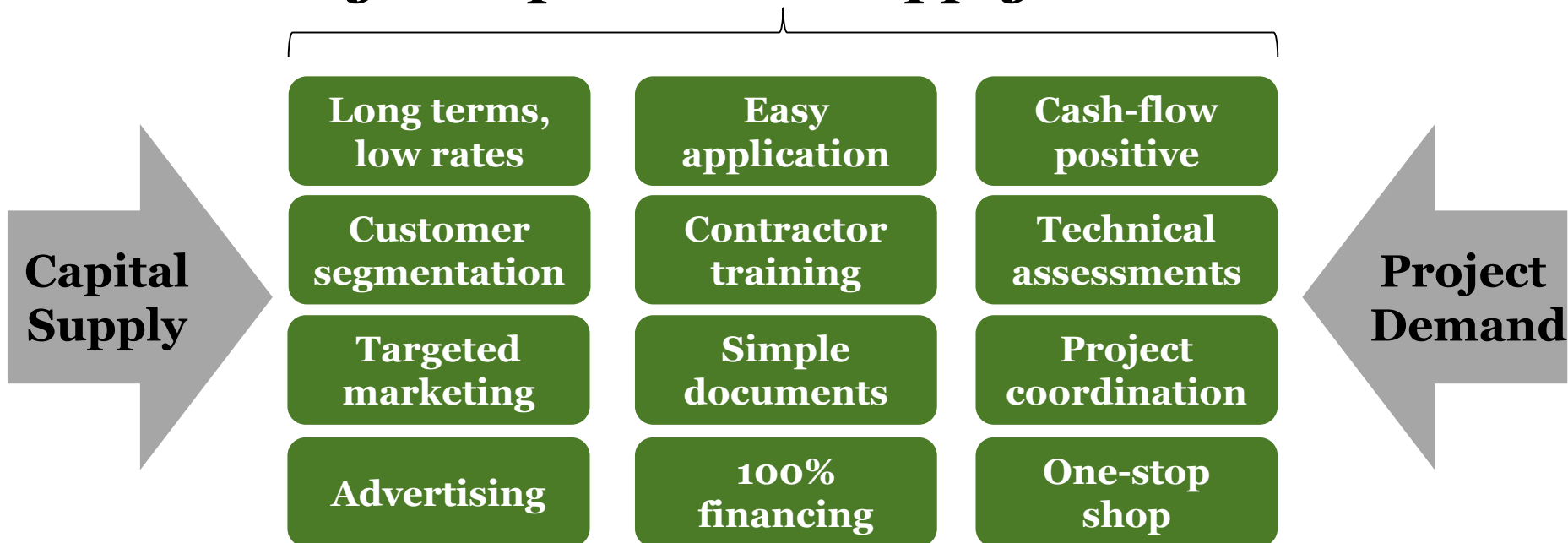
## **Financing Products *NOT* Useful to Customers**

- Residential EE loan at 10% interest rate and 4 year term
- Commercial building upgrade loan with max loan size of \$10,000
- Residential solar financing product with no outreach to contractors for channel marketing
- Multifamily EE financing with 1 year underwriting process
- LMI loan product that requires 680 FICO SCORE
- Whole-home upgrade with PV & EE with no savings calculation

*Simply making capital available is not effective – it must be packaged attractively, marketed, and sold to create demand.*

# Green Banks help bridge the long gap between capital supply and demand for clean energy

## *Green Bank Market Development Activity Bridges Gap Between Supply & Demand*



*All of this activity must occur to reduce barriers to demand – some can be done by green bank, some done by private partners*

# Technology, cost and policy trends all point to EIPs as key lever for clean energy market expansion

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- Public dollars are limited
  - Grants are expensive
  - Cannot scale
- Cost of clean energy technology is falling
  - Solar now cheaper than grid in 20 states, 42 states by 2020
- State & local governments taking the lead
  - Energy markets are local, can meet customers where they are
- Federal government supporting where possible
  - Potential funding from DOE LPO, USDA RUS & EPA SRF

**Adds up to surging government demand for  
EIP know-how & creation**



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# Thank You & Appendix

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