



GREEN BANK

DESIGN SUMMIT

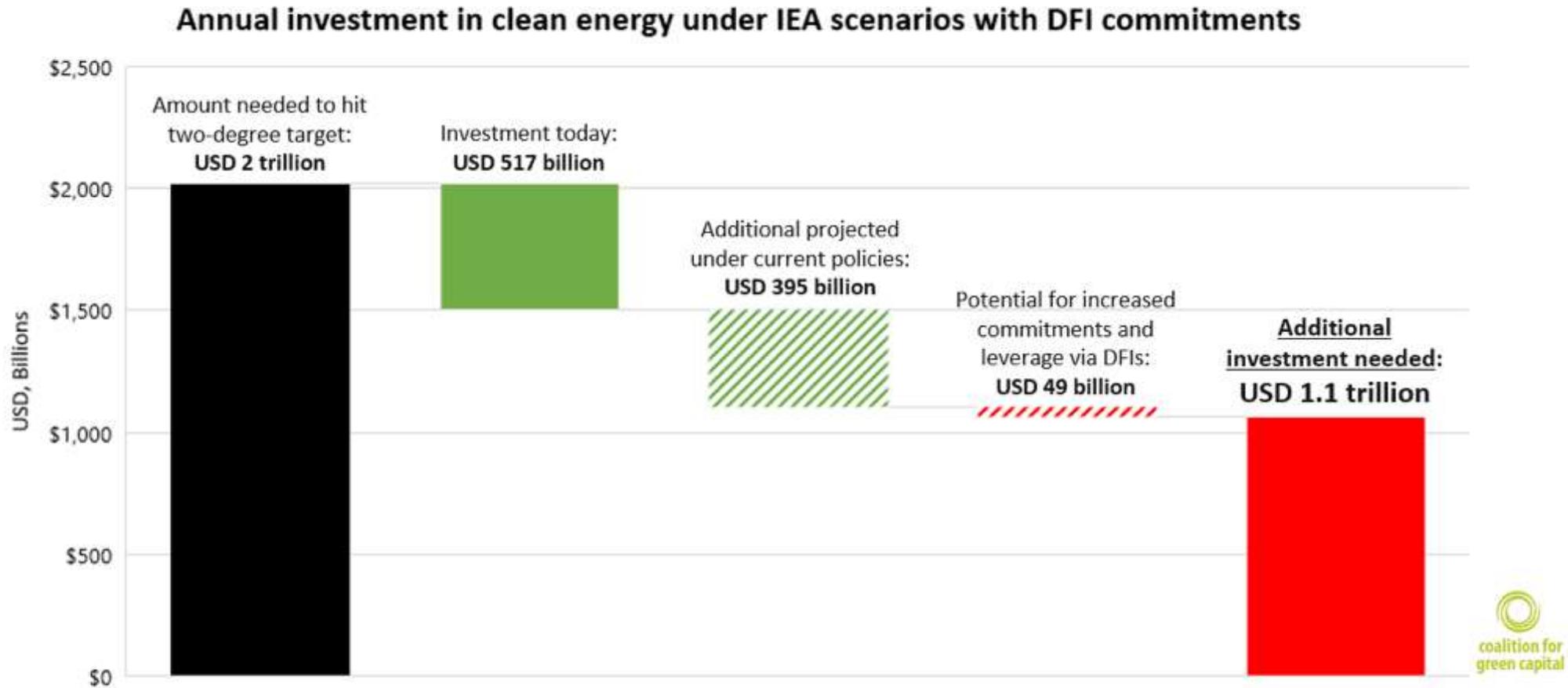
March 18–19, 2019



Introduction

Green Bank Fundamentals #1

WHY: There is a large climate investment gap that public funding alone can't fill





WHY: Why are green banks created? What problems are they trying to solve?

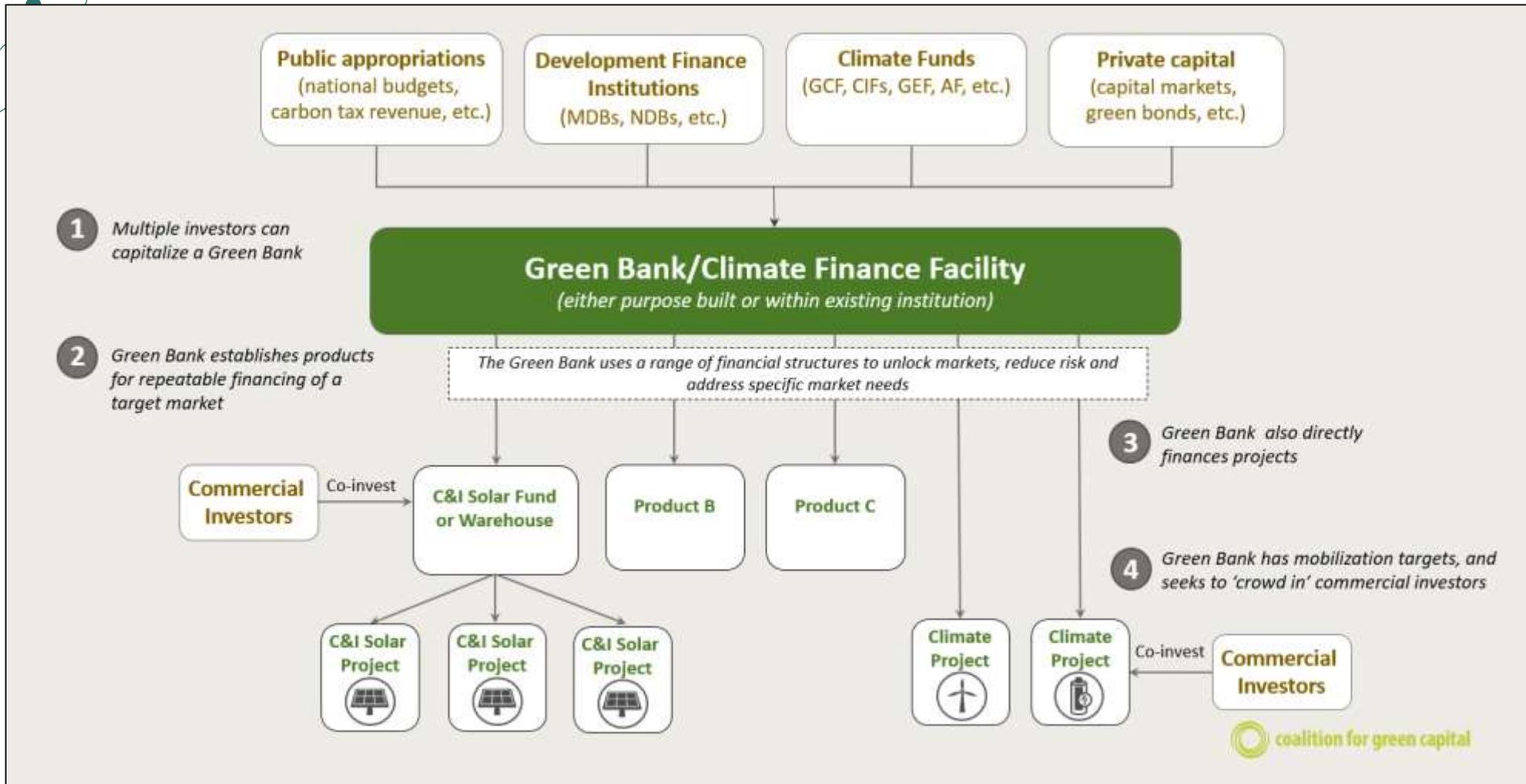
- **Reduce CO2 & address adaptation** and support policy goals on NDC/SDG investment
- **Fill gaps in public funding** by mobilizing private capital
- **Address market constraints** and meet the needs of underserved markets
- **Lead the market** by offering specialized investment skills in new sectors
- **Utilize available blended finance** to maximum catalytic effect



WHAT: The Green Bank model is flexible but generally shares 4 core tenets

- **Vision:** A clear mandate to *increase green investment and reduce CO2 emissions and address adaptation* in support of NDCs and other public policy goals
- **Mobilization:** A focus on using innovative financial products (typically with access to and/or blending patient capital) to *mobilize increased private sector investment* in NDC-related sectors
- **Expertise:** Development of *specialized expertise* to invest in underserved markets and build private sector risk appetite and investment capabilities
- **Sustainability:** *Self-sustaining financial institutions* that cover operating costs, and have a commercial orientation. NOT grant-making institutions

WHAT: Green Banks can take a variety of forms



HOW: How are Green Banks created?

Approach	Examples
➤ Legislation	-UKGIB, CEFC, CT Green Bank
➤ Regulation	-NY Green Bank
➤ Decisions by existing Development Finance Institutions	-DBSA's Climate Finance Facility -CORFO's Green Investment Platform
➤ Private or non-governmental initiatives	-Tata Clean Tech

HOW: How are Green Banks Capitalized?

Capital source	Sub-category	Select Examples
Public appropriations	Federal appropriations	-CEFC
	Subnational surcharge on public utility bills	-CT Green Bank, NY Green Bank
	Proceeds from carbon pricing or ETS	-Green Tech Malaysia
	Fines or compliance payments paid to governments	-Montgomery County Green Bank -DC Green Bank
	Sovereign Wealth Funds	-Norway Nysnø Green Fund -Senegal's FONSI "REE Fund"
International Public Sources	DFIs and MDBs	-Cambodia Climate Bank -CORFO GIP
	Climate Funds (e.g. GCF, CIFs, GEF, AF)	-DBSA Climate Finance Facility
Green bonds from private capital markets		-NDBs with clear mandates around catalyzing private investment in green projects
Philanthropic or impact investors		-Southeast Asia Clean Energy Facility (SEACEF)* *regional initiative, not country-led

HOW: How are Green Banks owned & managed?

Ownership	Management and Operational approach	Select Examples
Public ownership	Commercial approach and have independence in investment decisions	<ul style="list-style-type: none">- CEFC- UKGIB- CT Green Bank- DBSA Climate Finance Facility
Private ownership	Some level of public-purpose remit, & clear co-investment or mobilization targets	<ul style="list-style-type: none">- NYCEEC (non-profit)- Inclusive Prosperity Capital (non-profit)- Tata Clean Tech (for-profit)- Green Investment Group (for-profit)

“People make the institution” – professionals with real finance experience are key to success

Resources are available via Green Bank Network + the growing group of colleagues here today

GREEN BANK NETWORK

[ABOUT](#)

[DATABASE](#)

[KNOWLEDGE CENTER](#)

[NEWS AND EVENTS](#)

Reports and White Papers

Energy Policy
The multiple roles of state investment banks in low-carbon energy systems: An analysis of Australia, the UK and Germany
New Center for Public Policy, Policy & Practice
Energy Policy
2018

GREEN BANK NETWORK
PROGRAM RELATED INVESTMENTS:
Alternative Sources of Green Bank
Investment Capital in the United States

Clean Energy Finance: Green Banking Strategies for Local Governments
EPA
GREEN BANKING OVERVIEW
This report provides a clear overview of green banks. It identifies key roles, issues and opportunities for local governments to create green banks, and provides case studies. It also provides information on other green banking opportunities for local governments.
WHAT ARE GREEN BANKS?
Although there is no single green bank model, a green bank is generally defined as an institution that provides federal public dollars to other authorized private companies to drive energy or other "green" investments, such as green infrastructure projects. These banks typically use their funds to support energy efficiency, renewable energy projects, and other private clean energy technologies. The types of projects that they support vary depending on the local context and the programs provided at the end of this document. To date, more than 70 green banks have been established in the United States, and more than 100 green banks have been established in other countries.

CAPACITY, COGNIZANCE, CONFIDENCE, AND CAPITAL:
HOW GREEN BANKS ARE DRIVING ENERGY EFFICIENCY IMPROVEMENTS IN AFFORDABLE HOUSING

GREEN BANK NETWORK
全球绿色银行：
2018 年度回顾
2018年11月29日，上海

GREEN BANK NETWORK
GREEN BANKS
AROUND THE GLOBE:
2018 YEAR IN REVIEW
Prepared for the 10th Annual Green Bank Congress
Shanghai, November 27-29, 2018



Content Questions

Clarifying questions on content just provided?



Reflection Question

What are the top two insights that emerged?



Discussion Questions

WHY

- Why are you potentially interested in a GB? How do the examples or models presented differ or compare with existing initiatives in your country?

WHAT

- What problem are you trying to solve, and how might a Green Bank help you achieve that? Which of these models is most interesting to you, and why?

HOW

- Pros and cons of various Green Bank models in your country?
 - New vs existing
 - Private vs public fund manager
 - Capital from budget appropriations vs a DFI or other international source



Check Out

Based on what has been discussed, what questions do you need to answer to inform your work going forward?



Green Bank Fundamentals #2



How to approach the market?

Green banks use tools and products designed to:

- Catalyze private investment
- Address market gaps
- Be market responsive

In many markets this approach can be additional to business as usual

- Frequent and deep engagement with the private sector, including developers, contractors, investors--full ecosystem
- Provision of relevant information, including technical assistance, data sharing, education and outreach
- Flexibility of available instruments – looking beyond debt
- Mobilization of private sector investment in a way that leads to market transformation



Short discussion at your table

Which of these functions are already being performed by institutions in your country?

What major gaps or barriers remain?



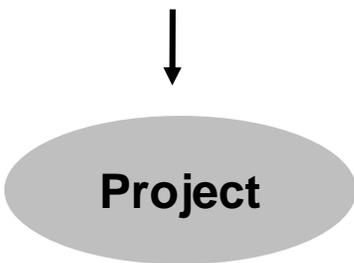
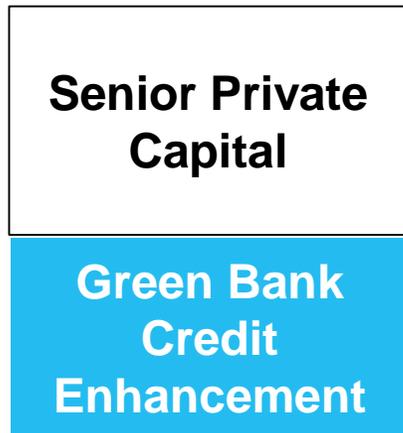
What kind of finance do green banks provide?

Answer: Whatever kinds are needed to fill market gaps, such as...

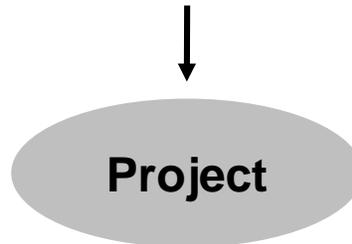
- Early/middle stage project finance, including for demonstration projects
- Long-term project finance
- Equity
- Corporate finance

Green banks do what is needed to fill market gaps...

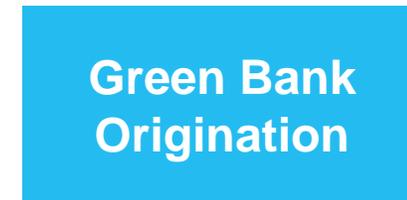
Credit Enhancement



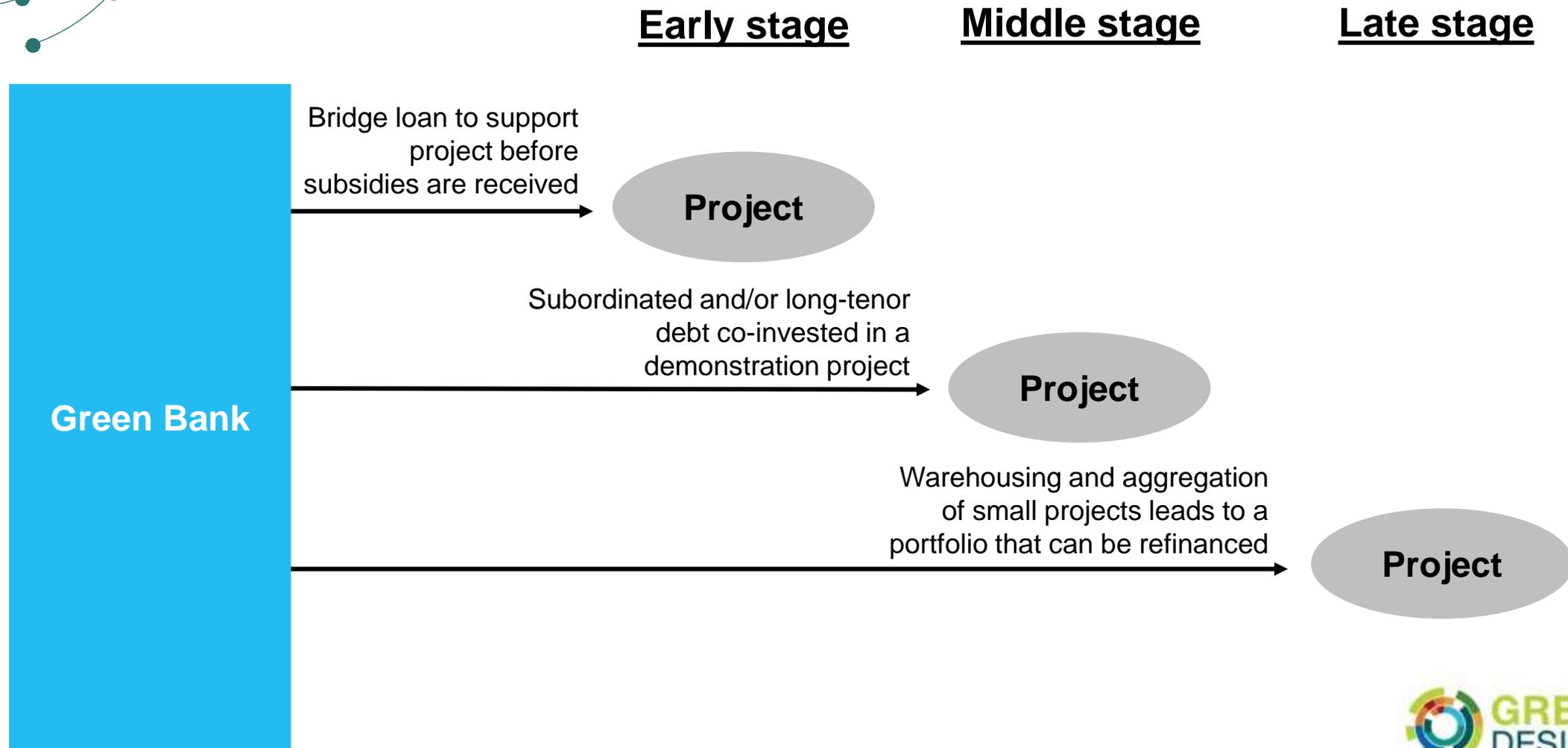
Co-Investment (debt & equity)



Aggregation, Warehousing & Securitization



... and often use a mix of financing to address different stages of the project development lifecycle



How do green banks address challenges?

Challenge	Solutions
High debt burden	<ul style="list-style-type: none">• Longer tenor• Subordinated tranche• Green on-lending facility
Lack of liquidity	<ul style="list-style-type: none">• Green bond purchases• Refinancing operating illiquid assets• Revolving credit facility for distributed assets
High perceived risk (technology, regulatory, etc.) by commercial lenders	<ul style="list-style-type: none">• Co-investment (subordinate or senior)• Demonstration project financing for e.g., integrated wind, solar, and storage• First of its kind financial structure (e.g., merchant risk solar PPA)• Energy savings insurance• Loan loss reserves or guarantees

See full list of challenges and solutions on handout



Discussion: how can green banks help?

- What barriers to broader adoption of this technology do you see in your country?
- With what you have learned about green banks, what methods do you think green banks would employ to overcome these barriers not just for a single project but for broader market adoption in the future?



Check Out

Based on what you've learned today, what role could a green bank play within the institutional landscape of your country?