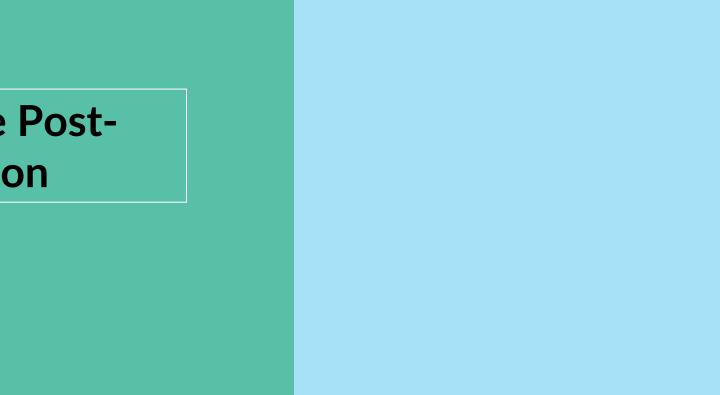
Green and Climate Finance Options to Support the Post-**Covid-19 Pandemic Recovery and Climate Action**





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Introduction

r c c at a Glance

Advancing sustainable development in developing and emerging economies

sustainable and inclusive economic growth.



Our Vision

A LOW-CARBON, RESILIENT WORLD OF STRONG, INCLUSIVE, AND SUSTAINABLE GROWTH



Sustainable Energy

The Global Green Growth Institute (GGGI) is a treatybased international organization focused on supporting developing and emerging economies to achieve



Our Mission

GGGI SUPPORTS ITS MEMBERS IN THE TRANSFORMATION OF THEIR **ECONOMIES** TO A GREEN **GROWTH** ECONOMIC MODEL.



Our Position

A TRUSTED ADVISOR & **DEVELOPMENT PARTNER** EMBEDED IN MEMBER & PARTNER GOVERNMENTS

Our Thematic Areas



Sustainable Landscapes



Green Cities

How we work

Headquartered in Seoul, Republic of Korea GGGI is working with 52 countries (41 Members, 4 operations, 7 partners & operations)

- GGGI has a unique in-country presence and prominent role as a neutral, trusted advisor and strategic development partner embedded in Member governments.
- GGGI's operating model maximizes the potential to translate green growth strategies and policies into green investment plans, mobilizing green finance commitments needed to bolster support for lowcarbon and climate-resilient economic development and strong institutional capacity development.



Closing the Climate Financing Gap

Public Sector • Philanthropy \$500B

• Foreign aid \$150B

Projects with No capital return projects (grants)

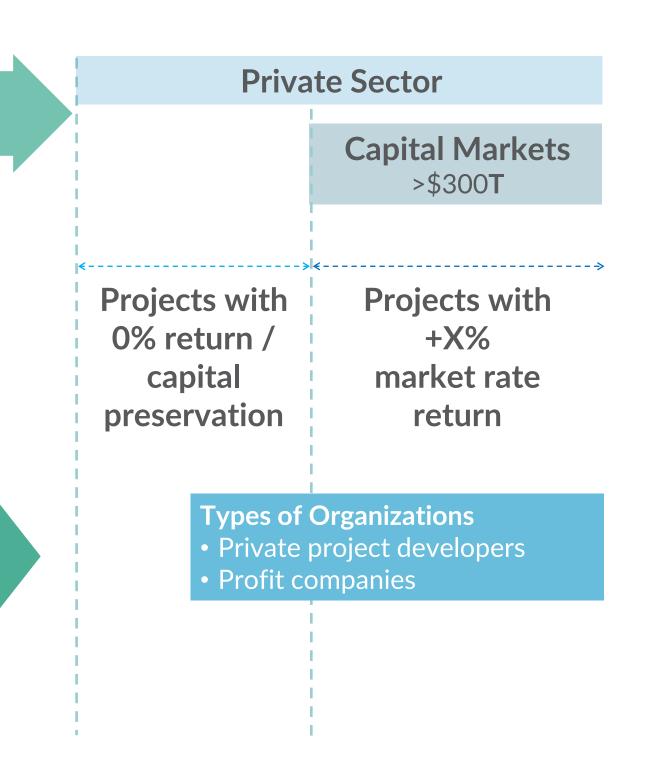
Types of Organizations

- Non-profits
- International organizations
- Governments

Gap in the market for hybrid projects



GGGI provides project preparation support and identify projects in their early stage of development without proven business models to make them bankable.



Closing the Climate Financing Gap Origination & Development process



Origination Process

- Conduct an initial diagnosis and green
 Support planning and policy impact assessment with key stakeholders
- Carry out an overall assessment to build awareness and a business case for green growth
- Focus on entry points for green cities planning and project development.
- Develop an institutional arrangement for continued engagement

- development across key urban sector
- Identify relevant partners for engagement Prioritize mainstreaming green growth into urban planning, management and and conduct resource mobilization to finance the project finance
- Identify opportunities to set clear targets for project ideas requiring investment.

Development Process

	٠	Design business models and outline initial
ors.		budget and resources required for
		selected projects

- Carry out preparatory studies in support of a detailed financial assessment and business model
- Provide support in structuring, arranging • financing capital and potential investors.

Green Investment Service Offerings

FINANCIAL INSTRUMENTS

Design innovative financial instruments to reduce risk and enable capital flows into the sector

BANKABLE PROJECTS

Develop projects that are bankable based on Nationally Determined Contributions (NDC) assessments, and connect with suitable sources of finance

Diagnosis

Development, economic growth and sustainability diagnosis

Green impact assessment

Sectoral green impact assessment and prioritization

Macro economic impact assessment

Sector/Sub-sector strategy & planning

Policy and institutions analysis

Analysis of costs and investment requirements Development of sectoral/subsectoral investment plans and selection

GGGI Value Chain

NATIONAL FINANCING VEHICLES

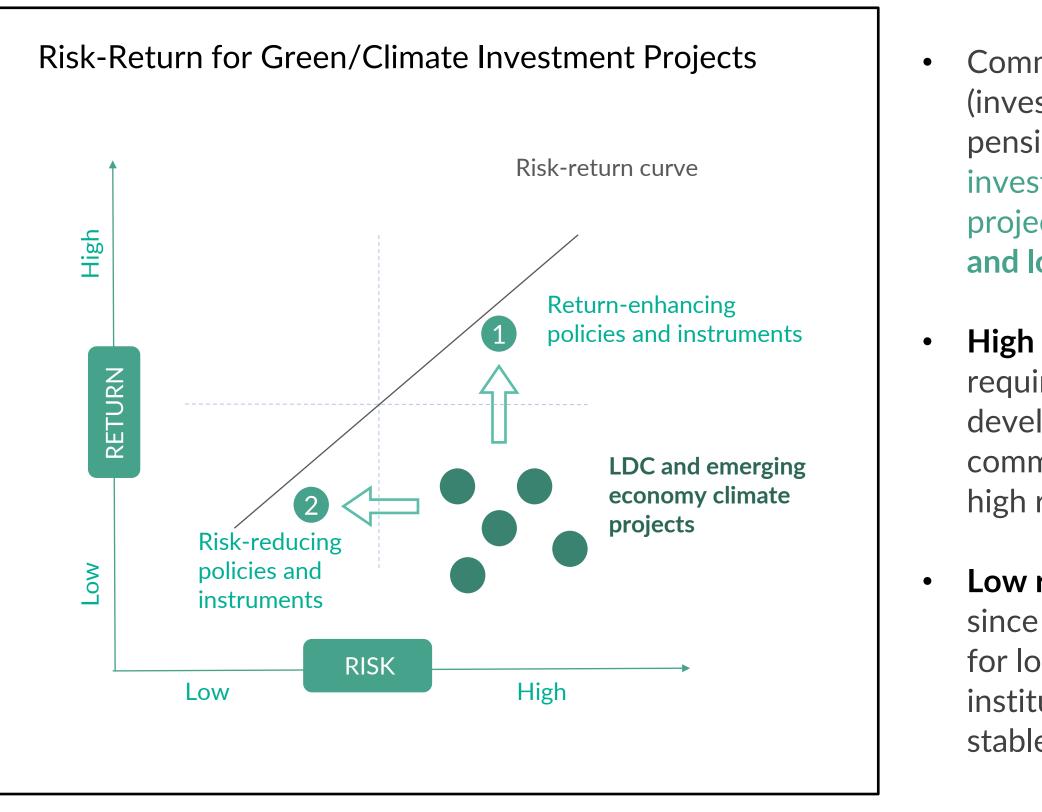
Design national financing vehicles to support countries to accept and effectively use climate finance towards projects and programs

Design, financing & implementation

Design: Project and policy preparation Financing: Identification of possible financial structure

Implementation

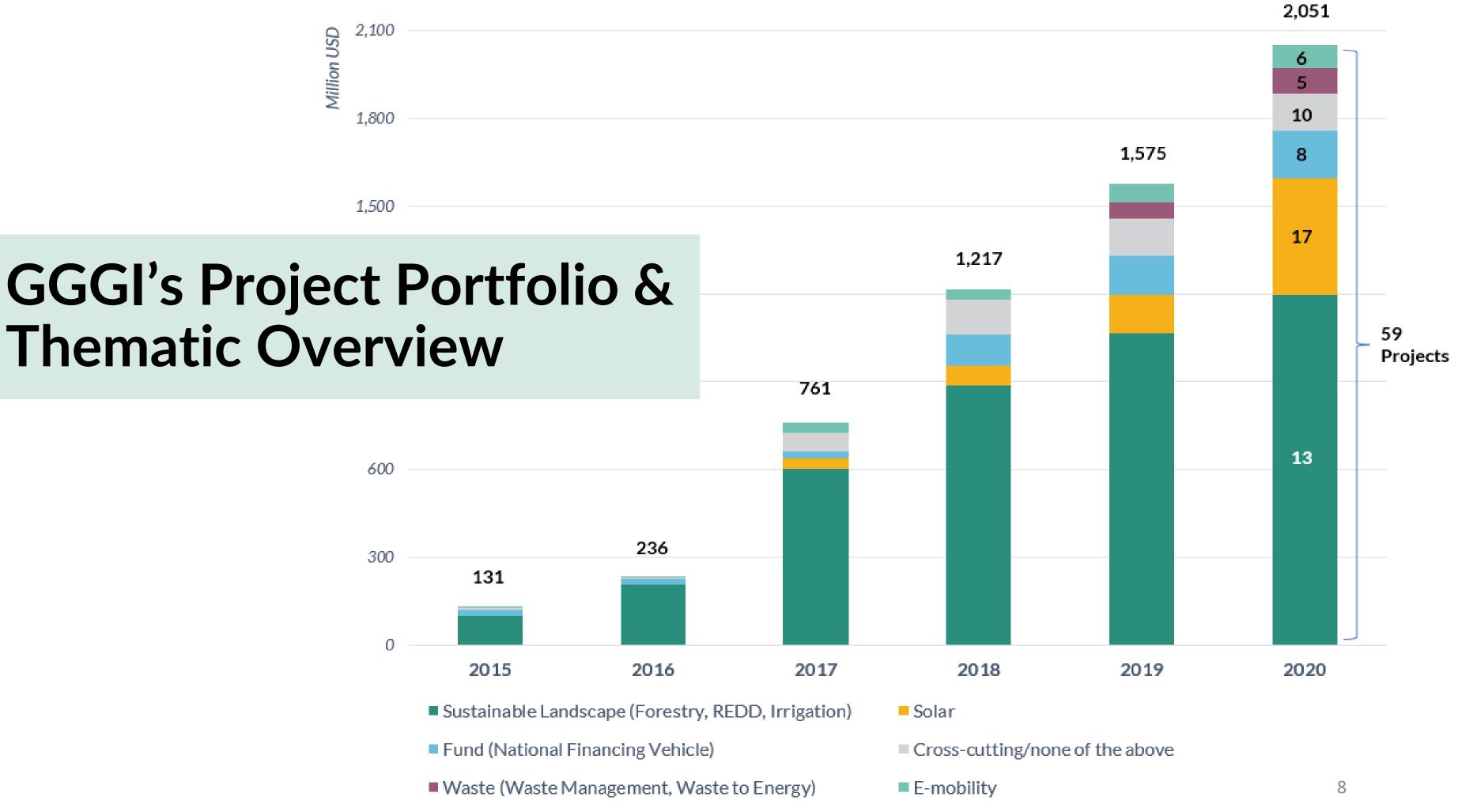
Meeting Investors' Expectations



Commercial (banks, PE firms) and institutional (investment funds, insurance companies, pension funds, sovereign wealth funds) investors perceive green climate investment projects in emerging economies as high risk and low return

High Risk due to large upfront capital is required to fund large infrastructure and development projects; more suitable for commercial investors looking for short-term high returns

Low return once the projects are operational since the projects generate stable cash flows for long time horizons; more suitable for institutional investors who look for long-term stable cash flows

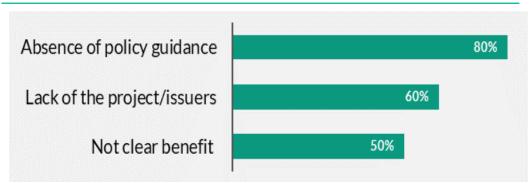


GGGI Project #1 Vietnam Green Bond Readiness Program (2020 – 2023)

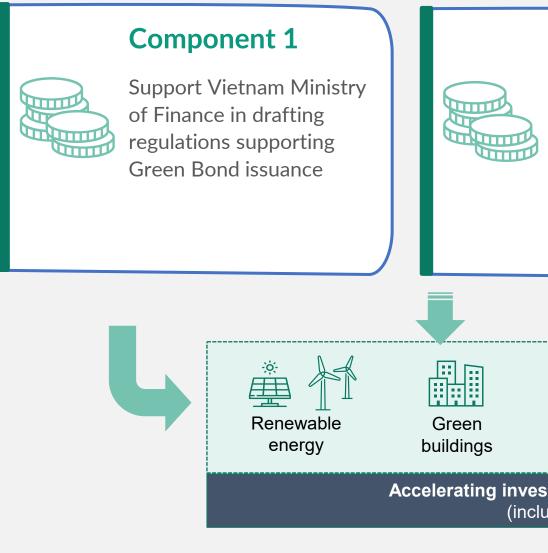


GGGI, in partnership with MOF of Vietnam, support to develop of the green bond market through 3 interventions: (1) Policy reforms, (2) capacity buildings for Green bond ecosystem and (3) Green Bond Pilot Issuances.

Key challenges



80% RESPONDENTS INDICATED THEIR BANKS ARE AT EARLY STAGE, WITH LIMITED AWARENESS ON GREEN BONDS



IMPACTS

Contribute to achieving NDC targets by reduced GHG emissions and increased green jobs through enhanced investments in sustainable projects







Hosted by Ministry of Finance of Vietnam LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG

Funded by The Government of Luxembourg



Component 2

Conduct capacity building activities to strengthen the key players in the Green Bond Ecosystem



Support Pilot Issuances by providing technical assistance to potential issuers of municipal and corporate green bonds

Component 3



Energy Efficiency

Waste to energy (Biomass, MSW)





Accelerating investment in eligible Green Projects in Vietnam, (including Renewable Energy sector)







GGGI Project #2: Vietnam Municipal Solid Waste to Energy

Project highlights

- GGGI took the role of financial advisor to complete project financing • for the construction of the first-of-its-kind 10 MWe MSWtE power plant.
- Project size: USD 58M (D/E ratio: 62.5/37.5) •
- Designed capacity: 500 tons per day, 10 MW •
- GGGI teamed up with the Energy and Environment Partnership • Program with the Mekong Region to identify a project developer that required technical support for project risk mitigation and finance.

Success factors and impacts

- The project is expected to operate during its 20-year lifetime to enhance environmental protection in the Bac Ninh province.
- Scalability of the project is up to 20 modern MSWTE plants in the secondary cities with an estimated CAPEX of USD 1B.
- Blended concessional finance made high-risk, on-recourse project debt finance more attractive for the local commercial bank partner.





2020>

<Initial construction at the project site at the end of

GGGI Project #3: Mongolian Green Finance Corporation (MGFC)

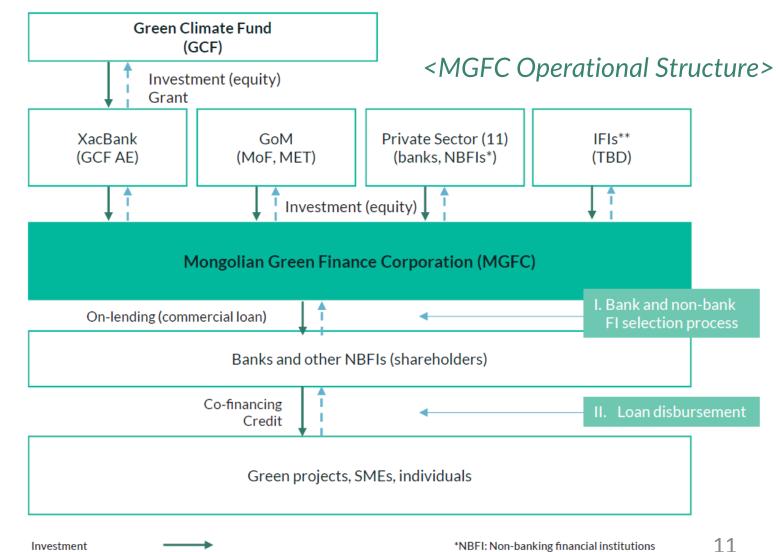
Project highlights:

- MGFC is the first GGGI supported NFV, the first NFV • financed by GCF, and the first PPP initiative in the financial sector of Mongolia.
- GGGI played an instrumental role in the establish of the • MGFC together with the Government of Mongolia and the Mongolian Sustainable Finance Association.
- Supported by GCF Readiness, this enabled development of ٠ the MGFC, and securing USD 26.7M from the GCF in Nov 2020.
- MGFC will accelerate low-carbon. climate-resilient • development through affordable financing for households and businesses to switch to low-carbon technologies.





Success factors and impacts



Reporting, paybacl

216,000 households and at least 127 businesses transitioning to low carbon and energy efficient practices.

 $3.75 \text{ mtCO}_2\text{e}$ of direct emissions reduction and indirect $333,000 \text{ tCO}_2\text{e}$.

**IFI: International financial institutions

1,470 jobs are expected to be created, of which 588 are for women.

GGGI Project #4. Climate Technopreneurship Program: GGGI-KDB Partnership to Access GCF Funding

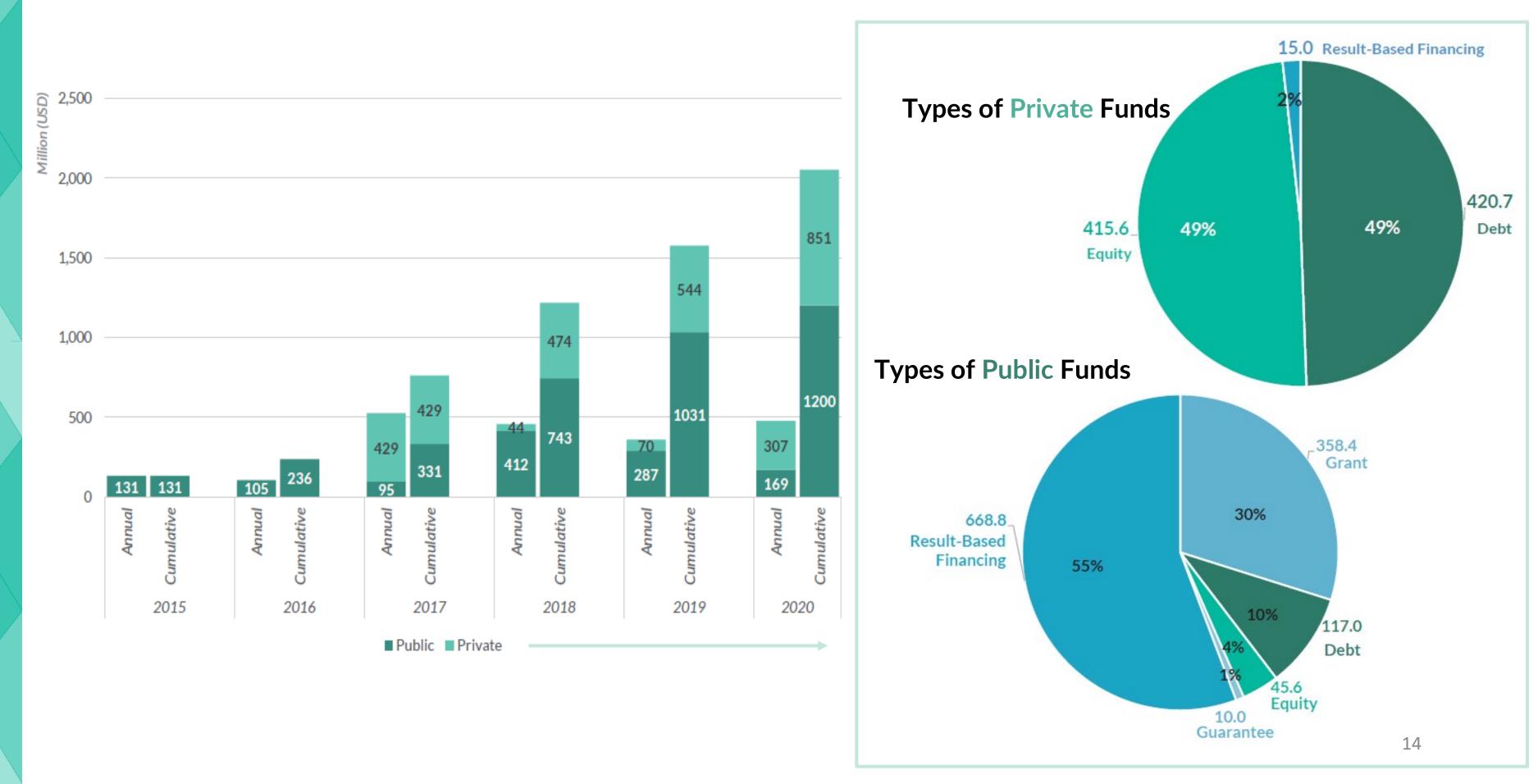
- GGGI is working with KDB and private partners to develop a GCF program to support entrepreneurs with climate technology-enabled solutions that will accelerate the low carbon and climate resilient transition in Southeast Asia.
- The program aims to address the gap between seed funding and the longer-term investment ("valley of death") by supporting joint ventures to be set up between local startups and global tech companies for effective technology transfer and diffusion and strengthening entrepreneurial ecosystems in countries.
- Project size: USD 120 million
- **Project component**
 - **Country-driven incubation for local** 1. **Greenpreneurs** (3M grant/in-kind)
 - 2. Global acceleration for Climate Technopreneurs (12M grant/in-kind)
 - Climate Technopreneurship Investment 3. Fund (100M debt & equity)
 - TA for strengthening climate 4. entrepreneurial ecosystems (5M grant)
- Current Status: PPF approved for F/S and program design (2021.6)



Sponsors and Investors, 2015-2020, (\$M)

Type of Investors	Total	Results-based financing	Debt	Equity	Grant	Guarantee
Private company/business	629.3	0	274.8	354.4	0	0
Development agency	524	430	0	0	94	0
International climate fund	229.1	103.8	23.9	4.7	96.7	0
Local government	211.1	0	38	40.9	132.2	0
Local state-owned company	186.1	0	133.1	52.9	0	0
Global carbon fund	110	110	0	0	0	0
Development financial institution	57	25	22	0	0	10
National financing vehicle	39.5	0	5	0	34.5	0
Multilateral development bank	26.3	0	25.4	0	0.9	0
Impact investor	23	15	4.8	3.2	0	0
Local private bank	13	0	8	5	0	0
Local public bank	2.7	0	2.7	0	0	0
Total	2051	683.8	537.7	461.1	358.4	10

Public vs. Private & Financial Instruments



GGGI Technical Report 20 Closing the Climate Financing Gap: Stocktaking of GGGI Green Investment Projects 2015-20



GGGI TECHNICAL REPORT NO. 20

Closing the Climate Financing Gap: Stocktaking of **GGGI** Green Investment Projects 2015-2020

September 2021



Thank You

