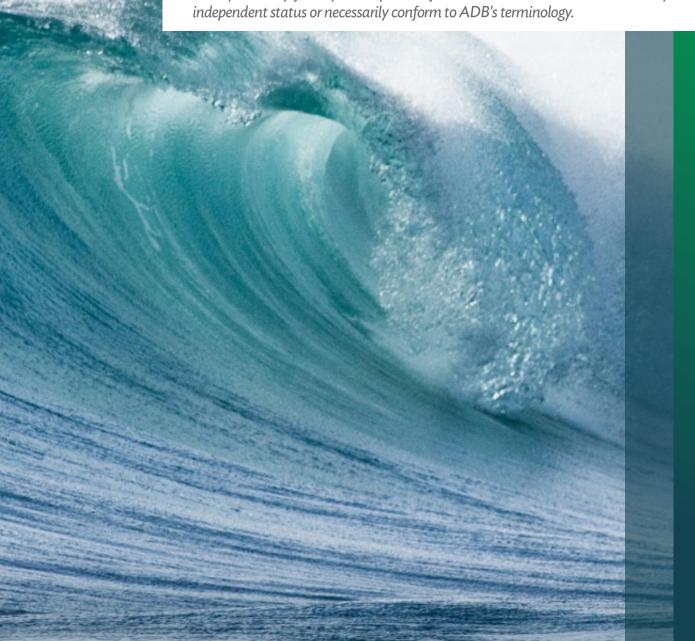
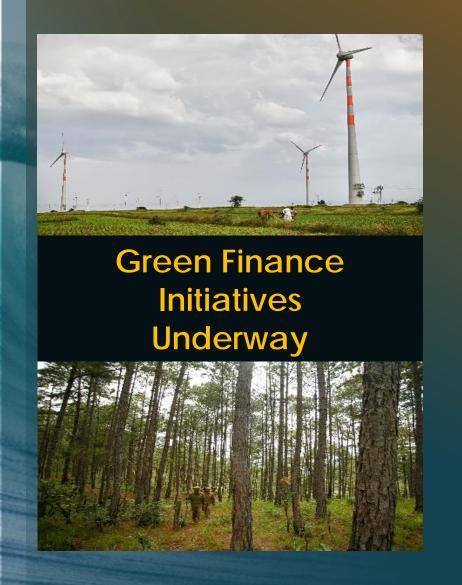
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# Catalyzing 'Green Finance'

Blending &
Leveraging
Sovereign Finance
For
Financially & Environmentally
Sustainable
Infrastructure Projects

October 2017



GFCF: A Knowledge Product

GFCF: Pilot Project in PRC

Leveraged Green
Finance Facility: Pilot
Project being
proposed in ASEAN

Capacity Building
Partnership on Green
Finance: Preliminary





Environment
Degradation at
Tipping Point

Governments are committing to 'Greening the Economy'

Infrastructure
A Major
Contributor
needing
solutions

57.8% urban pollution

• 28,300 premature deaths p.a.

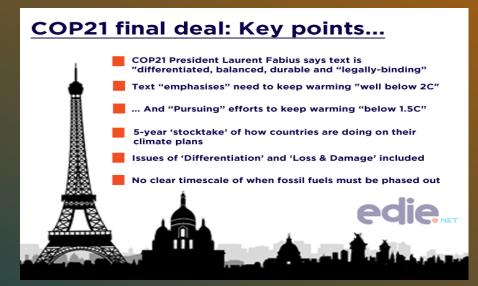
• 75% rivers & wells polluted PRC

• 26.4 m people displaced WW

• 1/3 arable land degraded

\$6.3-10.6 trillion p.a. econ. losses

21 of 37 aquifers past tipping point WW



 \$ 26 trillion infrastructure spend in Asia Pacific ...2016 - 2030



The Green Finance Impetus



GREEN FINANCE TASK FORCE, Established 2014

G20 Green Finance Study Group established 2016



















#### Towards a Sustainable Financial System in Indonesia

The UNEP Inquiry Into the Design of a Sustainable Financial System

In partnership with

The Association for Sustainable and Responsible Investment in Asia (ASrIA)

and the

International Finance Corporation



## **National Policies on Climate Change**

- Reduce the country's GHG emission in 2020 with national resources (INDO)
- Reduce the country's GHG emission by 2020 with international support



 Increase non-fossil fuel portion of energy mix from 11.2% to 20% (2030)

- Peak CO2
   emissions
   around
   2030,and before
   if possible
- Reduce carbon intensity (per unit of GDP) to 60-65% below 2005 levels (2030)





FOR DEVELOPING

## The need is to Green ALL Finance



#### Not just Green Bonds

The Financing of investments that provide environmental benefits in the broader context of environmentally sustainable development

Green Benefits:
"Liveability + Climate Change"

- Reduction in Air Water Land Pollution
- Reduction in Greenhouse Gas Emissions
  - Maximise conservation of Natural Resources
- Mitigation of & adaptation to climate change

Entire range of financial services, institutions, policies, products (debt, equity, insurance, guarantees)



The Challenge is the Huge Financing Needs from Non-Public Sources



- \$1.7 trillion p.a. annual infra needs developing Asia
- \$5-7 trillion annually globally for SDGs

Indonesia: **\$24.8 bn p.a**. (needed for 26% GHG level (US\$123.9 billion, 2015 - 2019))

• 45% Government

55% Private

China: \$ 6.7 trillion or \$320 bn p.a.

15% Government

85% Private

Actually...

- Govt PRC ....99%
- Govt India....57%
- Govt Indo,....90%

Asia Pacific: an invest. Gap of \$459 billion p.a.



# Overcome the Demand Side barriers - Bankability of project pipelines

Risk of Project Financials Capacities of Govt. agencies

Unquantified Green Benefits

Costs of new green technologies

A need for effective mechanisms to catalyse green private finance



Need to leverage concessional / sovereign finance MUCH BETTER

As a Risk Mitigant not asset financier

## "The Green Finance Catalysing Facility"

A Framework for a
Leveraging
Blended
Finance Mechanism
For Green Development



#### Rationale

- Creating a Pooled Vehicle for Institutional Finance Access
- Creating Green Capacities, Monitoring and Reporting Systems

Fostering Financially Sustainable Projects by Creating Bankable Project Structures

**GFCF** 

**Green Finance Catalyzing Facility** 

Fostering Environmentally Sustainable Projects by Creating Achievable Green Indicators

- Linking Concessional Financing with Achievement of Green Indicators and Targets
- Linking Concessional Financing with Private Finance Crowding-In
- Linking Concessional Financing with Capital Markets Access
- Incentivizing Technology Innovation, Implementation Process and Management Efficiencies

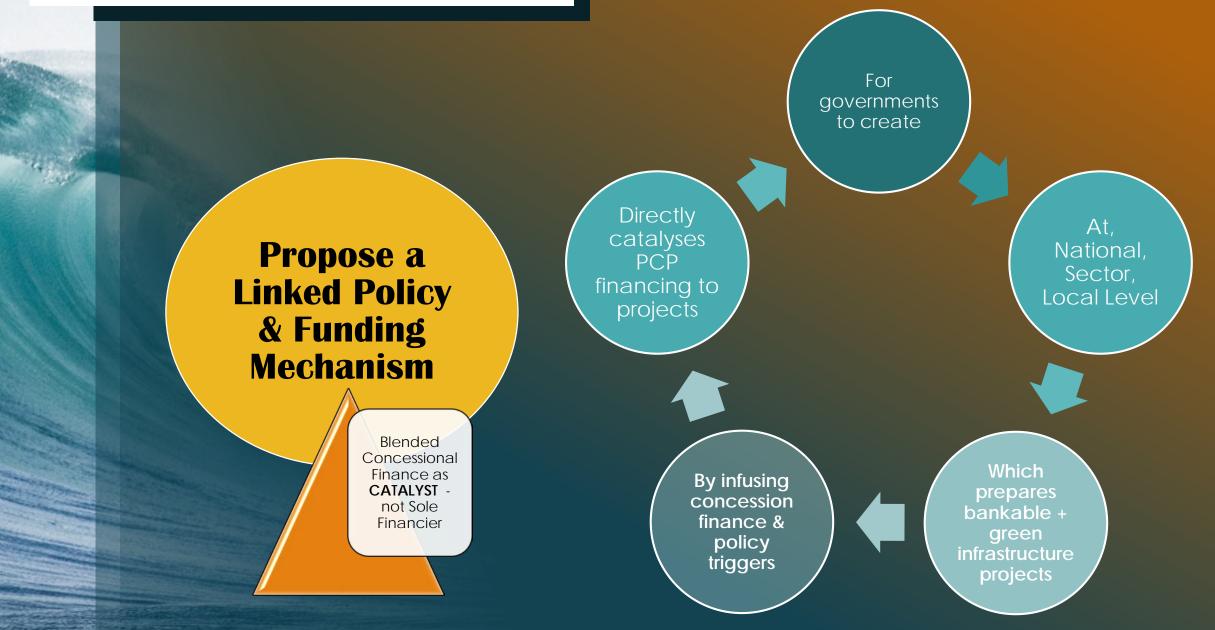
## **Objective**

To Help Countries Access Private -PCP - finance into green infrastructure Private Strategic Capital (PPP)

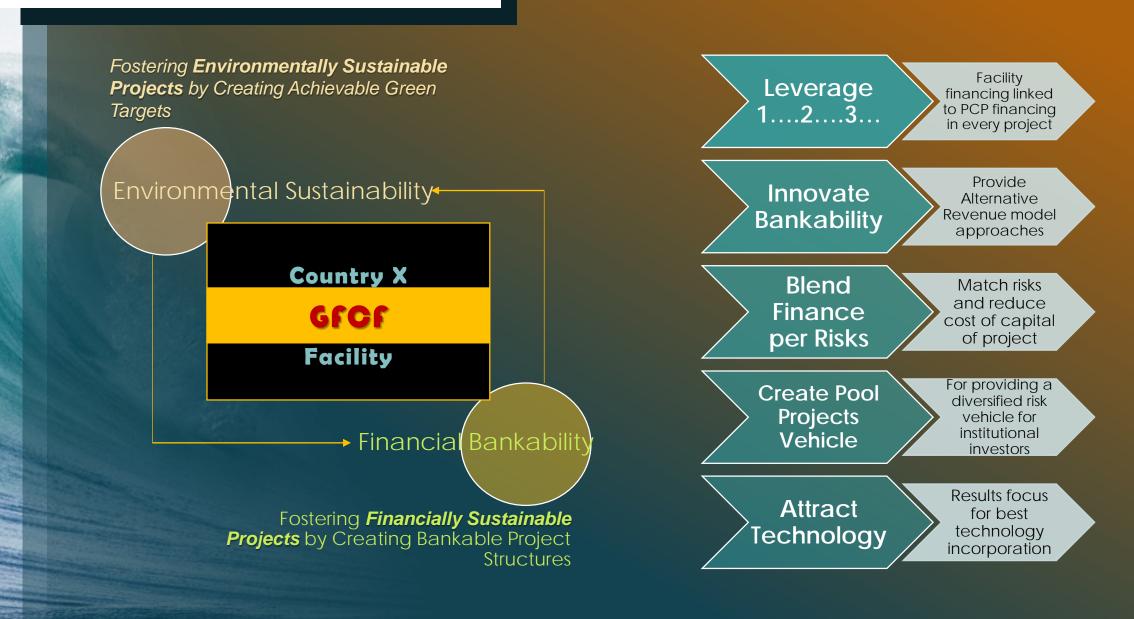
Private
Institutional
Finance
(pensions
/insurance

Commercial
Finance (banks
/ equity/capital
markets)

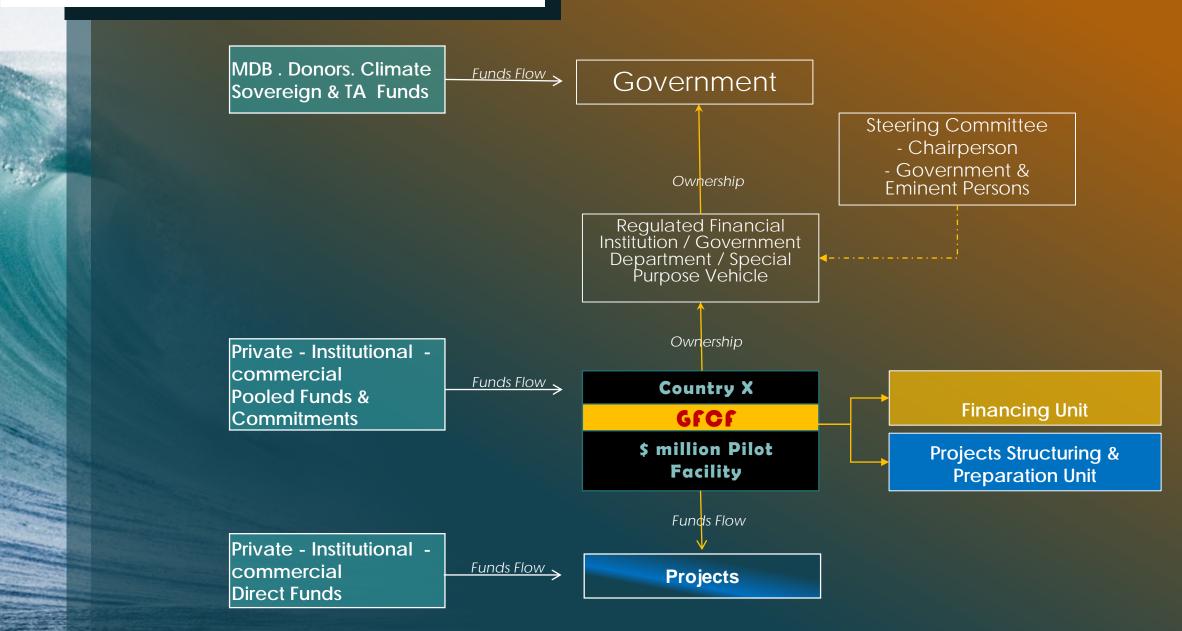
## **Approach**



## **Key Principles**



### **Proposed Institutional Structure**



### **Multi-Source Funding**

MDB - Direct

Long term Concessional Debt

Climate and Bilateral Donors

Concessional Debt & Grant Funds

Institutional & Commercial Funds and Commitments

Commercial funds

Green Bonds
Raised by GFCF Issuance
Commercial funds

Government - NO Capex Funding; ONLY Annual Revenue Support

Banks/ Institutional Investors Commercial funds

Sponsor Equity
Commercial funds

Funds Through Facility Country X

GfCf

\$ million Pilot Facility

Funds Directly
To Projects

**Projects** 

## **GFCF Usage Mechanics**

**Support:** 

**GFCF WILL Provide** 

For Capex
Debt + grant
50% Average

for Capex; upfront; 7 year term; From sovereign guaranteed donor funds through GFCF

Green Equity & Debt Upfront-Commercial For Capex 5% Average

> Raised by GFCF through institutional investors or green bonds

Grant Fund
Project
Preparation

From sovereign or donor grant funds through GFCF; to be recovered from bidders Green Equity & Debt Later -Commercial Refinancing in Year 7

> From institutional/ commercial investors through the GFCF

Guarantee Shadow Revenues

3 years of Operations for 14% IRR

From annual government budget support

**Conditionalities:** 

**Project MUST have** 

Green Indicators to achieve (Timebound Milestones)

Financial bankability indicators to achieve (Ratios)

Bankability Model Prepared to achieve at least 14% IRR

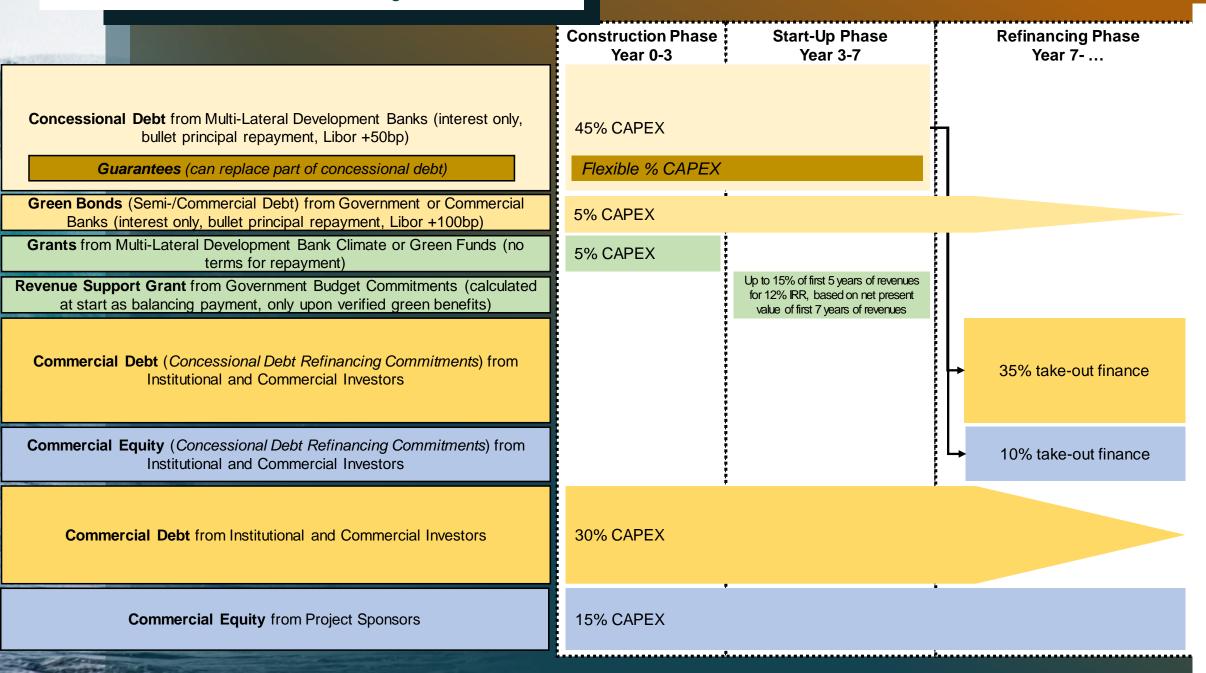
Sponsor Equity 10 - 15% Required

Commercial Debt 30 - 35% Reqd.

Capital Markets access roadmap

16

## **GFCF Mechanics - Project Level**



#### GFCF Capital Markets - Leveraged Bond

## Revenue Stream 2: Government

Annual Support –
 'Green Tax' Revenue

#### GFCF

**Green Finance Catalyzing Facility** 

#### **GFCF 50% Project Financing**

- Concessional Loans
- Equity Investments
- Preferential Shares
- Debt/Mezzanine Investments

#### Dividends

**Projects** 

**Revenue Stream 1:** 

Principal Repayment,

Debt Servicing, Interests

#### **Selected Pooled Project Portfolio**

(1/3 75% construction complete stage; 2/3 operational stage)

Green Project 1

Green Project 2 Green Project X... **Capital** 

**Markets** 

#### **Institutional Funds**

(Pension Funds, Insurance Companies, and Other Funds)

Subscribe

Long Term (30 Years)

Green Benefits Leveraged Bond
(Securitized Bond Issuance)

Subscribe

#### **Social Impact Funds**

(Corporate Social Responsibility, Social Impact Investors, and Other Funds and Investors)

## Contact for Information

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