INCLUSIVE GREEN GROWTH: INVESTING FOR A SUSTAINABLE FUTURE
Dialogue Session 3: Roadway to Sustainable Infrastructure

Catalyzing ‘Green Finance’
Blending & Leveraging Sovereign Finance
For Financially & Environmentally Sustainable Infrastructure Projects

Anouj Mehta
Head of Sustainable Finance Innovations and PPPs, ADB
31 January 2018
Green Finance Initiatives Underway

GFCF: A Knowledge Product

GFCF: Pilot Project in PRC

Leveraged Green Finance Facility: Pilot Project being proposed in ASEAN DMCs

Capacity Building Partnership on Green Finance: Preliminary
Environment Degradation at Tipping Point

- 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

Governments are committing to ‘Greening the Economy’

Infrastructure A Major Contributor needing solutions

- $26 trillion infrastructure spend in Asia Pacific …2016 - 2030
GREEN FINANCE TASK FORCE, Established 2014

G20 Green Finance Study Group established 2016
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

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

actually...

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

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 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 Green Finance Catalysing Facility”

A Framework for a Leveraging Blended Finance Mechanism For Green Development
Fostering Financially Sustainable Projects by Creating Bankable Project Structures

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

GFCF (Green Finance Catalyzing Facility)

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

Rationale
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

Propose a Linked Policy & Funding Mechanism

Blended Concessional Finance as CATALYST - not Sole Financier

For governments to create

Directly catalyses PCP financing to projects

At, National, Sector, Local Level

By infusing concession finance & policy triggers

Which prepares bankable + green infrastructure projects
Key Principles

Fostering Environmentally Sustainable Projects by Creating Achievable Green Targets

Country X Facility

Fostering Financially Sustainable Projects by Creating Bankable Project Structures

Financial Bankability

Environmental Sustainability

Leverage 1….2….3…
Facility financing linked to PCP financing in every project

Innovate Bankability
Provide Alternative Revenue model approaches

Blend Finance per Risks
Match risks and reduce cost of capital of project

Create Pool Projects Vehicle
For providing a diversified risk vehicle for institutional investors

Attract Technology
Results focus for best technology incorporation

Fostering Environmentally Sustainable Projects by Creating Achievable Green Targets

Fostering Financially Sustainable Projects by Creating Bankable Project Structures
Proposed Institutional Structure

MDB, Donors, Climate Sovereign & TA Funds

Funds Flow

Government

Regulated Financial Institution / Government Department / Special Purpose Vehicle

Steering Committee
- Chairperson
- Government & Eminent Persons

Country X

$ million Pilot Facility

Financing Unit

Projects Structuring & Preparation Unit

Private - Institutional - commercial Pooled Funds & Commitments

Private - Institutional - commercial Direct Funds

Steering Committee
- Chairperson
- Government & Eminent Persons

Ownership

Funds Flow

Projects

Ownership

Funds Flow
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**
Support: GFCF WILL Provide

Concessional Fund
For Capex
Debt + grant
50% Average

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

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% Req'd

Capital Markets access roadmap
Concessional Debt from Multi-Lateral Development Banks (interest only, bullet principal repayment, Libor +50bp)

Guarantees (can replace part of concessional debt)

Green Bonds (Semi-/Commercial Debt) from Government or Commercial Banks (interest only, bullet principal repayment, Libor +100bp)

Grants from Multi-Lateral Development Bank Climate or Green Funds (no terms for repayment)

Revenue Support Grant from Government Budget Commitments (calculated at start as balancing payment, only upon verified green benefits)

Commercial Debt (Concessional Debt Refinancing Commitments) from Institutional and Commercial Investors

Commercial Equity (Concessional Debt Refinancing Commitments) from Institutional and Commercial Investors

Commercial Debt from Institutional and Commercial Investors

Commercial Equity from Project Sponsors

Construction Phase Year 0-3

45% CAPEX

Start-Up Phase Year 3-7

Flexible % CAPEX

5% CAPEX

Refinancing Phase Year 7-…

Up to 15% of first 5 years of revenues for 12% IRR, based on net present value of first 7 years of revenues

35% take-out finance

10% take-out finance

30% CAPEX

15% CAPEX
Revenue Stream 2: Government
• Annual Support – ‘Green Tax’ Revenue

Revenue Stream 1: Projects
• Principal Repayment, Debt Servicing, Interests
• Dividends

GFCF Capital Markets – Leveraged Bond

GFCF Green Finance Catalyzing Facility

GFCF 50% Project Financing
• Concessional Loans
• Equity Investments
• Preferential Shares
• Debt/Mezzanine Investments

Selected Pooled Project Portfolio
(1/3 75% construction complete stage; 2/3 operational stage)

Green Project 1
Green Project 2
Green Project X...

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
Anouj Mehta, Principal Financial Management Specialist, ADB
AMEHTA@ADB.ORG