Paradigm Shifting Climate Finance Delivery Mechanism
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BACKGROUND

The rounds of pre-COP XXI meetings and negotiations, Paris 2015

1st Pre-COP XXI Meeting
Zero Draft of Geneva Text
February 2015

2nd Pre-COP XXI meeting
Bonn Co-Chairs Tools
June 2015

3rd Pre-COP XXI meeting
Negotiating Round
September 2015

4th Pre-COP XXI meeting
Negotiating Round
December 2015

UN SDG’s Goal #13 Take Urgent Action to Combat Climate Change and Its Impacts*

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- **Integrate climate change measures into national policies, strategies and planning**
- Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- **Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible**
- Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

*Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change*
Negotiation Issues

- Co-Chairs’ Tool Document is not yet a predetermined position for Paris Agreement in December 2015
- The SB-42 UNFCCC meeting has not yet managed to organize a consensus on the deal post-2020

Financing Issues

- A Need for Multilateral Financing
- There is still a lack of synergy between the efforts to mobilize public and private finance in ensuring the UNFCCC ambitious fundraising target of US $ 100 billion per year by 2020

- **INDONESIA’s Proposal to COP XXI UNFCCC**

  Indonesia offers novation on delivery mechanism for financing emission reduction in developing economies
NEW FINANCING DELIVERY MECHANISM
STAGE 1: Market segmentation

LANDSCAPE OF CLIMATE FINANCE 2014 USD 331 BN TOTAL
Landscape of Climate Finance 2014 illustrates climate finance flows along their life cycle for the latest year available, mostly 2013

SOURCES AND INTERMEDIARIES
- GOVERNMENT BUDGETS
  - AGENCIES
- NATIONAL, BILATERAL, MULTILATERAL
- CLIMATE FUNDS
- COMMERCIAL FINANCIAL INSTITUTIONS
- PRIVATE EQUITY, VENTURE CAPITAL, INFRASTRUCTURE FUNDS
- INSTITUTIONAL INVESTORS
- PROJECT DEVELOPERS
- CORPORATE ACTORS
- HOUSEHOLDS

INSTRUMENTS
- RISK MANAGEMENT
  - NE
  - GRANTS $11
- LOW-COST PROJECT DEBT $74
- PROJECT-LEVEL MARKET RATE DEBT $71
- PROJECT-LEVEL EQUITY $16
- BALANCE SHEET FINANCING $158
  - DEBT PORTION

RECIPENTs
- UNKNOWN $61
- PUBLIC $46
- PUBLIC/PRIVATE $32
- PRIVATE $191

USES
- ADAPTATION $25
- MULTIPLE OBJECTIVES $4
- MITIGATION $302

KEY
- PUBLIC MONEY
- PRIVATE MONEY
- PUBLIC FINANCIAL INTERMEDIARIES
- PRIVATE FINANCIAL INTERMEDIARIES
- CAPITAL INVESTMENT
- CAPITAL INVESTMENT AND INCREMENTAL COSTS
- FINANCE FOR INVESTORS & LENDERS
- NE: NOT ESTIMATED

SOURCE: CPI (2014)
NEW FINANCING DELIVERY MECHANISM
STAGE 2: Paradigm shift

"Risk Averse" paradigm and tend to reject new technologies

"Corporate Financing" paradigm and "Asset-Based Collateral"

Short loan-period paradigm
## Financial Structure: The MM Proposition

### M&M premise of Structure irrelevance

- No transaction Costs
- No taxes
- No cost of Financial Distress
- No agency conflict
- No asymmetric Information

### Real World situations

- Very high transaction costs that can affect the investment decision.
- Taxes are mostly positive and high and results in valuable tax shields.
- Capital and governance structure decreases risk thereby decreasing cost of distress.
- Behavior of various parties can be controlled through structure.
- Type and sequence of financing can improve information.
Green Financing & Risks in Developing Economies

Source: illustration

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Sponsors → Project Company → Lenders

EPC Contract → O&M Contractor → Network Distributor → Offtaker

Concession Company → Construction Contract → O&M Contract

Concession Authority
1. Environmental Licenses
2. Expropriations
3. Preliminary Design
4. Force Majeure
5. Toll Revisions

Contractors
1. Construction Risk
2. Delays
3. Overruns
4. Geological Risk

Insurance Companies
1. All-risk Construction
2. Business Interruption
3. Liability, casualty, fidelity
4. Force Majeure

Sponsors
Any risk not covered by others limited by equity and guarantees

Lenders
1. Non-recourse Long-term Debt
2. Fixed Rate
3. Take Commercial Risk
4. Environmental Risk
5. Expropriation Risk
6. Construction Risk
7. Termination and Force Majeure Risks (covered by others)

### Cash Flow Model
- Uses encashment schedule of signed contributions as basis of financial inputs
- Models the Fund’s three sources of resources separately to ensure compliance with non-subsidization rules: grants, capital and loan contributions
- Permits adjustments to business decisions (e.g., mix of financial instruments provided) and market/recipient behavior (e.g., NPLs, currency depreciation)

### Project Assessment Methodology
- Translates the project-wide risk categories approved in project/programme level risks to be assessed during project approval process
- Analyzes risks to the project as evaluated by the Accredited Entity as well as risks
- Incorporated into ongoing review of first set of projects to be discussed at next Board meeting

### Portfolio Management System
- Essential tool to generate the risk dashboard and perform overall tracking of portfolio of investments
- In addition to project/programme level risk data, presents disbursements, key progress indicator, time lag against planned implementation

### Instrument Management Systems
- Core system to manage disbursements and refloows of grants, loan, equity investments and other financial instruments provided by the Fund
- Key component of internal control mechanisms to ensure control over flow of funds

### Risk Mitigation Plan for Project Implementation
- Definition of approach to be taken for higher risk project/programmes (after all mitigation measures have been taken during approval)
- To include internal measures for risk mitigation, quarterly reviews and other steps taken jointly
Unlocking Greater Climate Finance Opportunity: Novation

Climate Finance Delivery Mechanism

| Source: GCF/B.09/11/Rev.01 6 March 2015 |
| Meeting of the Board 24-26 March 2015 |
| Songdo, Republic of Korea, Agenda item 15 |

### Propensity to invest in climate change in developing countries – including SIDS, LDCs and Africa

| Source: GCF/B.09/11/Rev.01 6 March 2015 |
| Meeting of the Board 24-26 March 2015 |
| Songdo, Republic of Korea, Agenda item 15 |

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### Special considerations:

- **Conventional investment funds**
  - No propensity to invest in climate change projects and programmes

- **Pension funds and insurance**
  - Appetite for extra-long tenors (greater than ten years) in line with climate-sensitive project finance requirements
  - Increasingly well-suited to a country-driven approach as governments ask that funds be invested domestically and place restrictions on cross-border placements

- **Sovereign wealth funds**
  - Some tolerance for taking on un-rated credit risk.
  - Some tolerance for taking on illiquidity.
  - Existing depth of funding in LDCs, SIDS and Africa.
  - Can invest in multiple types of financial products.

- **Alternative investment funds, including private equity**
  - High tolerance for risk.
  - Will take on illiquidity.
  - Appetite for exposure to LDCs, SIDS and Africa.
  - Can invest in multiple types of financial products.

### Commercial banks

- High tolerance for taking on unrated credit risk.
- Will take on illiquidity risk.
- Existing depth of funding in LDCs, SIDS and Africa.
- Do not require inordinate return on their investments
- Can invest in multiple types of financial products.
- Can accommodate multiple types of inter-investor and inter-creditor agreements
- Particularly well-suited to a country-driven approach given their current role in local economies
- Ability to mobilize funds in small and large projects

- Will require ratings when investing outside their home country
- Tenor/appetite is restricted to under 7 years (can be stretched to 10 years)
- High requirement for local track records in excess of five years. Low appetite for new technologies and projects

### Private wealth and “sophisticated” high net worth individuals

- High tolerance for taking on un-rated risk, both credit and equity
- Will take on illiquidity risk
- Depth and knowledge of LDCs, SIDS and Africa.
- Can invest in multiple types of financial products.
- Over US$ 5 trillion of new private wealth expected to be created over the next two years in developing countries.

- Require an elevated return on investments.
New financing delivery mechanism **STAGE 3: create a synergy of all existing financial arrangements**

- **Financing from State Budget**
- **International Public Financing (Multilateral, ODA, dll)**
- **Private Sector Financing**

**Hybrid Investment Model**

**Novation Climate Finance**

**Instruments**

- Form of transfer of asset
- Form of special purpose vehicle
- Form of credit enhancement
- Form of cash flow allocation
- Form transformation of cash flows
Design of Market Delivery Mechanism for Climate Finance in Developing Economies: the Case of Indonesia ...(2)

Credit risks
Liquidity risk
Servicer performance risk
Swap counterparty risk
Guarantor risk
Legal risks
Sovereign risk
Interest rate and currency risks
Prepayment risks

Credit
Enhancement
Guarantee
Interest Rate/Currency Hedges
Cash Flow Reallocation

Bonds Arranger

Senior Debt
Top Rating
Subordinated Debt
Lower Rating

Servicing Agreement
Bonds Agreement
Lease Agreement

Financier

Project Co.Ltd.

Investors

National Trustee

Guarantee Funds

SPONSORING AGENCY
ACCOUNTS RECEIVABLE
SALE OR ASSIGNMENT
PROJECT COMPANY
ACCOUNTS RECEIVABLE
ASSET BACKED CERTIFICATES

Top Rating
Lower Rating

Interest Rate/Currency Hedges

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Banks have historically handled most climate finance because they have the resources to assess a borrower's creditworthiness, and the regulatory approval to fund loans. However, this model has some key inefficiencies – interest rates are not individualized, the costs of underwriting loans are high, loan decisions can take months.

This has left room for the new climate finance delivery mechanism – that leverage the GCF (& NDA) to give both borrowers and investors a better deal.

Novation offer Climate Finance opportunities outside of traditional lending institutions. This platforms leverage metrics such as credit scores and social media activity to link borrowers and lenders at favorable interest rates. Platforms have lower regulatory burdens because they are merely acting as enabler between borrower, lender, and partner bank, and thus can keep fees and rates low.

**Indonesia Project Example**
Design of Market Delivery Mechanism for Climate Finance in Developing Economies: the Case of Indonesia ...(3)

Transaction Description of the Central Java Steam Power Plant

Source: IGGF (2012)
Enabling Market Financing Delivery Mechanism → Credit Enhancement / Guarantee Fund

Indonesian Business Process

Government of Indonesia

Land Fund
Viability Gap Fund (VGF)
Guarantee Fund (IIGF)
Capital market and regulatory reform
Infrastructure Fund (PTSMI, IIF, PIP)
Private Investors / Lenders

Land Acquisition
Project Feasibility
Political Risks
Cost of financing
Project Financing
Refinancing
Preparation
Bidding
Construction
Operation

MoF

IIGF

Multilateral Development Agency (MDA)

Climate Funds

Project Company (Private Sector)
Government Contracting Agency (Public Sector)
Lender/Financier

Policy & Equity Injection

Guarantee Proposal
Recourse Agrmnt
Guarantee Agrmnt
PPP Agrmnt
Financing Agrmnt
Co-Guarantee

Counter Guarantee for MDA's co-guarantee
The Means to Implement Market Financing Delivery Mechanism → In Shape for SDGs & 2020 Climate Finance

**Stakeholders Engagement**
- To improve GHG accountability and the quality of MRV of climate finance at national level.
- To establish ESG standard at national level which can be accepted internationally.

**Champions Role**
- Producing necessary policies for new market mechanisms creation
- Producing necessary incentive policies for stimulating new market mechanisms
Terima Kasih

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