Building the next generation of climate markets – the role of results-based climate financing

18th Meeting of the Global CDM DNA Forum
Bonn, Germany, September 19-20, 2017
“The overall objective of the forum is to raise the profile of the DNA Forum to effectively contribute in shaping the future of mechanisms including the CDM”  
(Introduction to agenda 18th Meeting of the global DNA Forum)
Domestic and regional carbon pricing: Growing global GHG emissions being priced

Threefold increase of carbon pricing initiatives in the past decade
An integrated approach to mitigation emerges

Domestic carbon price
Applies a consistent carbon price across different sources of greenhouse gas emissions within a jurisdiction

International climate markets
Enable the trade of mitigation outcomes internationally, either through linked domestic markets, between governments, and/or between private actors

Domestic policies
Play a host of roles including delivering mitigation, reducing costs, stimulating investment, mobilizing finance and altering incentives to improve the functioning of carbon prices

Climate finance
Delivery of concessional financial flows that support mitigation (and adaptation) action.
International climate markets: Cooperation saves costs of NDC implementation

An international cooperation through carbon market plays a critical role in:

- **Cost savings**
- Achieving more ambitious target (below two degree)
- Resource mobilization and facilitating of finance at large scale

**GLOBAL COST OF COOPERATIVE NDC IMPLEMENTATION**

- Each country acts alone
- Intl cooperation through carbon market by 2030: 30% savings
- Intl cooperation through carbon market by 2050: 50% savings
An international carbon market can generate significant financial flows.
Transition scenario: bottom-up pathway to greater international cooperation

- ARTICLE 6.4 MECHANISM
- INFORMAL COLLABORATION
- ARTICLE 6.2/3 OUTCOMES
- RESULT-BASED FINANCING
- SECTORAL AGREEMENTS
- EMERGENT MARKET DESIGN
- INTERNATIONAL STANDARDIZATION
- NETWORKED COMPARABILITY
- GLOBAL CARBON MARKET

Source: Vivid Economics
Climate finance within an integrated approach

Market mechanisms
- Price externalities to mobilize private finance
  - e.g. emissions trading and renewable energy certificates

Results based climate finance
- Increases market readiness and policy capabilities
  - e.g. payments for delivered mitigation or policy outcomes

Risk sharing
- Lower investment risk and financing costs
  - e.g. credit guarantees and risk sharing

Concessional finance
- Overcome missing markets using direct finance
  - e.g. grants and direct loans

Technical assistance for regulatory change and institutional reform
Support for market-based reform, and policies to address non-price barriers, including information asymmetries, principal-agent problems and network effects.
  - e.g. market liberalisation, energy efficiency standards, intellectual property protection
Role of RBCF

• Advancing the monitoring of emission reductions → **Increase MRV capacity**

• Enhancing national policies, strategies, regulations, and plans for climate action to facilitate structural change → **Support domestic policy processes**

• Recognizing the role of nonparty stakeholders → **“Crowd in” private actors**

• Supporting carbon pricing and market mechanisms → **Contribute to market creation**
RBCF expected disbursements

- Forestry and land-use sector
- Energy sector
- Others

Years:
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
- 2022
- 2023
- 2024
- 2025
- 2026
- 2027
- 2028
- 2029
- 2030

$ Millions:
- 500
- 450
- 400
- 350
- 300
- 250
- 200
- 150
- 100
- 50
- 0
WB experience with RBCF – two examples: Ci-Dev and TCAF

• Carbon Initiative for Development (Ci-Dev)
  • $100m fully committed for VER purchases;
  • 10 energy access programs in Sub-Saharan Africa;
  • Transitioning from CDM to new mechanisms post 2020: Standardized Crediting Framework.

• Transformative Carbon Asset Facility (TCAF)
  • $200m capitalization (targeted $500m) for VER purchases;
  • Transformative, large scale programs in middle income countries;
  • Outside CDM with a focus on cross-sectoral and policy crediting (building on policy MRV piloted by Carbon Partnership Facility (CPF).
Ci-Dev - From the CDM to a sectoral approach: The Standardized Crediting Framework

- Standardized baseline at sector level
- Additionality at sector level
- Reformed MRV
- Reformed Project cycle
SCF – Standardized ER determination per unit

Households receiving access × Average consumption × Baseline emission factor - Project emission factor = Emission Reductions
SCF – role of national authorities
# TCAF- cross-sectoral approaches: example of the urban crediting approach

## Scope:

<table>
<thead>
<tr>
<th>City role</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy maker, regulator and service provider</td>
<td>Incentives for public transport use, Traffic regulation/Parking policy, Procurement of municipal services</td>
</tr>
<tr>
<td>Implementer of national policies</td>
<td>Building codes, Waste management regulation, Vehicle efficiency standards</td>
</tr>
</tbody>
</table>

Driven by cities mandate & institutional capacity

## Scale:

<table>
<thead>
<tr>
<th>Scale of actions</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replication of mitigation actions at (sub-)sectoral level</td>
<td>Energy efficiency in buildings, Efficient street lighting, BRT</td>
</tr>
<tr>
<td>Integrated mitigation actions in several (sub-)sectors</td>
<td>Community-level energy rehabilitation, Sustainable communities</td>
</tr>
<tr>
<td>Transformational impacts in cities</td>
<td>Compact cities, Transit-oriented development</td>
</tr>
</tbody>
</table>

Multiple ways to achieve scale & transformation
TCAF - Crediting of policies

• Regulatory policies:
  • Technical standards (energy efficiency, buildings, vehicles);
  • Traffic regulation;
  • Waste sector regulation etc.

• Energy and carbon pricing policies:
  • Reduction/removal of fossil fuel subsidies;
  • Carbon taxation;
  • Emissions Trading System (ETS)

Crediting of carbon pricing policies of particular interest in context of linking carbon pricing schemes
Quantifying emission impact of policy through policy MRV

- Emission without-policy (baseline)
- Actual emission

2010 to 2015

tCO2e
GHG impact channels
example: energy pricing in power sector

1. Grid electricity dispatch

2. Investment in power plants

3. Off-grid and captive electricity

4. Total electricity demand

5. Use of substitute or other fuels

6. Spending of freed-up resource

CO2 emission
Baselines for RBCF operations and NDC targets
### Accounting and reporting

<table>
<thead>
<tr>
<th>Asset usage</th>
<th>Host country NDC</th>
<th>Contributor NDC</th>
<th>Net mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of operation</td>
<td>Climate finance</td>
<td>Market mechanism</td>
<td>Climate finance and market mechanism</td>
</tr>
<tr>
<td>Accounting/reporting</td>
<td>Framework for transparency of support</td>
<td>Framework for transparency of action, Art. 6 accounting</td>
<td>Frameworks for transparency of support and action, Art. 6 accounting</td>
</tr>
</tbody>
</table>
Pricing of VERs under RBCF

• Fixed guaranteed price over crediting period;
• Price level determination - principal approaches:
  • Market price (currently not observable);
  • Incremental costs;
  • Opportunity costs;
  • Negotiated price level.
• Put option model:
  • Right but not obligation to sell at a guaranteed price;
  • Price might be determined through auctioning.
Conclusions

• Continued growth in domestic and regional carbon pricing and related progress in integrated policy approaches;
• Strong economic case for international market mechanisms and an integrated approach climate market-climate finance;
• RBCF to pilot market mechanisms and connect finance and markets, experience made can inform UNFCCC process.

Sources:
• https://cpf.wbcarbonfinance.org/content/supporting-energy-pricing-reform-and-carbon-pricing-policies-through-crediting