Delivering results-based finance

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Javier Freire, WBG
Results-based finance using the CDM: rationale

• What is results-based finance - RBF?
  – Payments on delivery for a desired outcome (e.g. no. of people vaccinated, no. of poor households connected to the grid, tons of GHG emission reductions achieved);

• Why using results-based finance?
  – Effectivity of public spending to achieve desired outcomes;
  – Reaching scale to have transformational impact;
  – Building sustainable markets and private businesses, and leveraging private sector financing.

• Why using the CDM to deliver results-based finance?
  – Payment for achieved GHG ERs one option to deliver RBF;
  – Relevant if achieving GHG ERs is primary objective;
  – Existing infrastructure: methodologies, project cycle, issuance capacity, existing project pipeline.
# Preparing for the future

<table>
<thead>
<tr>
<th>WB Facility</th>
<th>Focus</th>
<th>Partners</th>
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<tbody>
<tr>
<td><img src="image" alt="Carbon Partnership Facility" /></td>
<td>Scaling-up carbon finance</td>
<td>7 selling countries, 3 buying countries and 4 donor participants</td>
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<tr>
<td><img src="image" alt="Ci-Dev" /></td>
<td>Support low-income countries to benefit from carbon finance</td>
<td>Donor governments aiming to sustain carbon market capacity and test results based finance frameworks</td>
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<tr>
<td><img src="image" alt="Pmr" /></td>
<td>Capacity building to support market based tools for GHG reduction</td>
<td>29 country participants including 13 donor governments</td>
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In 2009, Caixa Econômica Federal (CAIXA), signed an agreement with the World Bank to develop a program that would finance solid waste management and Emission Reduction activities.

**Motivation:** Limited use of Caixa’s funding for SWM due to insufficient municipal capacity to:

- Prepare financially sustainable projects that are viable and attractive to the private sector
- Access carbon markets
- Manage environmental and social issues related to SWM
• The project combines a WB loan with Caixa financing

• CAIXA is a financial intermediary, which on-lends to municipalities and to the private sector for investments in solid waste management

• CAIXA is the coordinating entity of the only solid waste management POA in Brazil, promoting the use of carbon finance in the sector
UNDERLYING ASSUMPTION – Landfills with LFG capture are better managed/operated than others with no gas capture

INNOVATION – Calculations of credit risk for SWM operations that are included in Caixa’s POA account for this improved model of management, resulting in lower risk ratings

DIRECT INCENTIVES TO BORROWERS

1. Interest rate of loans for SWM are reduced based on the progress of linked carbon finance operations:
   - **First reduction:** Applied to the interest rate of outstanding loan balance after CPA is registered with UNFCCC
   - **Second reduction:** Applied to the balance of the loan after completion of the 1st delivery of CERs, consistent with contract volumes

2. Future carbon revenues accepted as partial guarantee towards the loan
Methane Finance Study Group

An international group of experts convened at the request of the G8 in late 2012 was facilitated by the World Bank’s Carbon Finance Unit.

Mr. Samuel Tumina .................. Asian Development Bank
Mr. Jain Acharya .................. Asian Development Bank
Ms. Denise Seabra .................. Caixa Econômica Federal
Mr. Rupert Edwards .................. Climate Change Capital
Dr. Ken Newcombe .................. C-Quest Capital
Mr. Bo Riisgaard Pedersen ........ Danish Energy Agency
Dr. William Pizer .................. Duke University
Mr. Franck Portalupi ................ Environment Canada
Mr. Laurence Blandford ........... Environment Canada
Ms. Carey Bylin .................. Global Methane Initiative
Ms. Alejandra Posadas .......... Ministry of the Environment and Natural Resources (SEMARNAT) – Mexico
Mr. César Chavez ............ Ministry of the Environment and Natural Resources (SEMARNAT) – Mexico
Dr. M. Nasir Uddin .......... Ministry of Environment and Forests, Government of Bangladesh
Ms. Adriana Felipetto ........ Haztec
Ms. Josefa A. Ramos ......... Landbank of the Philippines
Mr. Prudencio Calado ......... Landbank of the Philippines
Mr. Raymond Babanawo ........ Ministry of Environment, Ghana
Ms. Suzanty Sitomuko .......... National Council on Climate Change, Indonesia
Mr. Ash Sharma .............. NEFCO
Mr. Einar Telnes ................. NORAD
Ms. Sun Biao ....................... Shanxi Jincheng Anthracite Mining Group Co. Ltd.
Dr. Bengt Boström ........... Swedish Energy Agency
Ms. Annika Christell ........ Swedish Energy Agency
Ms. Marlene Sieck .............. Federal Environment Agency, Germany
Mr. Jichong Wu .................. UN Foundation
Dr. Alexandra Saez ........ UNDP
Mr. Eric Usher .................. UNEP
Mr. Paul Bodnar ............... US Department of State
Mr. David Turk ............... US Department of State
The Study Group’s Three Main Findings

1. Deliver a Quick-Win: Paying for Methane Emission Reductions as a Climate Finance Pilot

2. Scale-up Methane Mitigation Actions of Multilateral Development Banks

3. Apply Pay-for-Performance to Methane NAMAs (Nationally Appropriate Mitigation Actions)
A “quick-win” proposal

• 1,200 methane abatement projects “at risk of decommissioning” in developing countries, representing 650 MtCO\textsubscript{2}e in emission reductions between 2015 and 2020 – a potential for a “quick win” for climate by abating this short-lived climate pollutant

• The projects and the infrastructure to verify their emission reductions are here – the incentive is missing

• Facility would support these projects by guaranteeing them a floor price for their future emission reductions

• This would be achieved by auctioning “put options”, i.e., a contract that gives the holder the right, but not the obligation, to sell its ERs to the facility at a given (“strike”) price

• **Not a carbon market support facility** but a climate finance pilot – if successful this pilot is easy to scale up and expand to other sectors.

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**Facility objectives include but are not limited to:**

1. Informing the design of scaled-up pay-for-performance climate finance approaches, including the Green Climate Fund, by piloting an innovative climate finance mechanism that leverages private capital and uses auctions to ensure maximum value-for-money;

2. Initially achieving “quick-win” methane emission reductions that otherwise would be released into the atmosphere due to a lack of other policy or financial incentives;

3. Maximizing the direct engagement and expertise of the private sector; and

4. Testing an innovative contract structure by offering put options to guarantee a minimum carbon price.
Pilot Auction Facility  For Methane and Climate Change Mitigation

How the Facility Works

1. Develop selection criteria and call for proposals
   - Pool donor resources to purchase tons of CO₂e from methane projects
   - List of criteria
     - E.g. country, technology, measurement standards, co-benefits etc.

2. Select and contract for methane reduction
   - Project implementers bid to purchase put option contracts from facility
   - Use auction to determine the winning bids
   - Sign put option contracts with winning bidders that permit the contracts to be transferred/sold

3. Implement projects
   - Contract in hard currency helps implementer overcome financial and other barriers

4. Verify & Pay-for-Performance
   - Monitor and verify tCO₂e using established GHG accounting standards
   - Should the market price be below the put option strike price, contract holders exercise options and facility purchases tCO₂e
## Attractive features of tradable put options and auctions

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<th>Attractive features of auctions</th>
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<td><strong>Tradability</strong></td>
<td><strong>Ensures value for money</strong></td>
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<tr>
<td>If an option holder cannot profitably deliver reductions, it would have an incentive to sell the option to another project owner who can abate methane at the same cost or more cheaply</td>
<td>Bidders with the lowest expected cost to deliver emission reductions will win, allowing the facility to catalyze the greatest number of reductions per dollar allocated</td>
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<td><strong>Maximize Emission Reductions</strong></td>
<td><strong>Price discovery</strong></td>
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<td>Owing to the tradability of the options the facility maximizes the likelihood of achieving emission reductions as contracts are economically redistributed from failing projects to successful ones</td>
<td>Donors do not need to know the precise cost of emission reductions a priori; instead bidders bid based on their projected costs – thus “discovering” the minimum subsidy needed</td>
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<td><strong>Recycling funds</strong></td>
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<td>Should the options not be exercised b/c of an increase in carbon market prices, the contributors could recycle the funds to other climate finance projects</td>
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What is needed for scaling-up RBF?

- **Proof of concept**
  - Pilot facilities of WBG and other organizations.

- **Recognition as a mechanism to deliver climate finance**
  - Bridging the carbon market and climate finance communities;
  - Results-based finance recognized under Green Climate Fund.

- **Pilot Auction Facility**
  - Further stakeholder consultations, your feedback and comments are welcome.
  - Stay tuned for the facilities announcement in September.
Obrigado!

World Bank carbon pricing initiative:


Javier Freire
Climate and Carbon Finance Unit
jfreirecoloma@worldbank.org