Introduction to the Paris Climate Bond concept
Green Bond Financing for Climate Action Webinar, Wednesday 23 January 2019
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Brazil’s Nationally Determined Contribution (NDC)

Key 2030 Targets in the NDC:

▪ Increase the share of sustainable biofuels to 18% of national market.

▪ Achieve zero illegal deforestation.

▪ Restore and reforest 12 million Ha of forests.

▪ Achieve 28-33% penetration of non-hydro renewables in the total energy mix.

▪ Restoration of 15 million Ha of degraded pasturelands.

▪ Restoration of 5 million Ha of integrated cropland-livestock-forest systems.

Brazil’s economy-wide NDC commitments

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2025</th>
<th>2030</th>
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<tbody>
<tr>
<td>CO2e Emissions including land-use change and forestry (Mt)</td>
<td>2,191</td>
<td>1,380</td>
<td>1,249</td>
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Paris Climate Bond (PCB) Concept

- PCB is a financing concept that provides cost-effective, long-term debt funding for projects and programs in emerging markets that are registered with current and future mechanisms of the UNFCCC.

- PCB raises funding primarily from the private sector. It also deploys climate finance available from public sources and aggregation concepts to optimize the risk and return profile of the finance mobilized.

- PCB is focused on creating and popularizing an asset class that provides international debt capital markets a liquid instrument through which to invest in low carbon infrastructure in emerging markets.

- In order to benefit from PCB financing, a core criterion for participation is that projects and programs be registered with current and future mechanisms of the UNFCCC (such as the CDM).

- PCB introduces a contractual mechanism by which the ex-ante volumetric mitigation outcome estimates, including CER delivery, are enforced.

- UNFCCC-registration and contractual enforcement provisions afford certainty to investors that projects are delivering climate and sustainable development benefits that are real, verified and additional to business as usual, determined in accordance with multilateral standards.

- The above features render PCB a much needed innovation in the area of climate-themed bonds and in the allocation of climate finance.
Procedural background to the PCB Concept

<table>
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<tr>
<th>Event</th>
<th>Details</th>
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<tr>
<td>COP21 Paris, 2015 &amp; CMP11, Paris, 2015</td>
<td>• Decision 6/CMP 11 – “Encourage the Executive Board to continue exploring options for using the clean development mechanism as a tool for other uses and report back to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its twelfth session.”</td>
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<td>SB44 Bonn, 2016 &amp; EB-91 Bonn, 2016</td>
<td>• Workshop held at SB-44 in Bonn at which Paris Climate Bond concept, developed by Climate Mundial and Baker &amp; McKenzie, was presented to delegates. PCB included in the concept note presented to EB-91 for formal support and included in report back to CMP12.</td>
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<td>COP22 Marrakech, 2016 &amp; CMP12, Marrakech, 2016</td>
<td>• Decision 4/CMP 12 – Based on the outcomes of SB-44 and EB-91, CMP12 agreed to ask the Executive Board “to continue its activities in response to decision 6/CMP.11, paragraphs 7 and 8”.</td>
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Paris Climate Bond Project

• PCB Project is designed as demonstration of the PCB concept including the following two important stages of work:

  ➢ Project Finance: making loans to eligible projects – that is, projects and programs registered with current and future mechanisms of the UNFCCC – in developing countries.

  ➢ Refinancing: establishment of a new entity to purchases PCB loans, the funding for which is raised via the issuance of PCB commercial notes.

• Together with our implementation partners we are designing PCB such that it may be possible in future to list both the Investment Vehicle(s) and PCB commercial notes on one or more exchange(s), leading to increased liquidity.

• Following first issuance of PCB commercial notes, a Best Practice Guide shall be published to generate additional interest and drive scaling-up.
Framework partnership to support developing countries efforts to raise finance for NDCs

Area I – Investment Portfolio Development Linked to National NDCs

- Development and maintenance of a portfolio and pipeline of investment opportunities that originate from the policies and programs nominated under the NDCs of developing countries.

Area II – Cooperative Approaches, Arrangement of Finance and De-risking

- Working with developing countries to ensure the arrangement of finance to implement the portfolio and pipeline of investment opportunities mentioned in (i) above, which may include the commercialisation of internationally transferrable mitigation outcomes issued pursuant to Article 6 of the Paris Agreement.

Area III – Capacity Building and Training

- Capacity building and training in the areas of business, investment and finance relating to sustainable development.
Example 2: The Philippines

Methane reduction and adaptation through water savings in rice cultivation.

- Engaged with the Philippines Government (led by the Philippines Rice Research Institute) UNDP and Deloitte to implement a nationwide sectoral program that provides financial incentives for small-scale farmers and irrigation associations to adopt Alternate Wetting and Drying (AWD) techniques instead of continuous flooding.

- Measurement and verification utilises a standardised baseline to increase efficiency.

- Financial incentives provided to farmers take the form of direct payments for emission reductions (in USD) and the provision of microfinance through local institutions.

- Carbon receivables finance, representing prepayment against the ERPA from the private sector, is the basis for funding program implementation.
Example 1: The Gambia

Grid-connected solar photovoltaic power generation.

• Engaged with the Government of The Gambia (led by the Ministry of Environment) and UNDP to implement a sector program that will deliver up to 15MW of distributed solar photovoltaic power generation connected to national and regional electricity grids over the next five years.

• Independent Power Producers (IPP) attracted to The Gambia with a long-term electricity off-take contract, land concession and cost-effective debt solution.

• Crucial step in the advancement of private sector participation in the delivery of sustainable electricity generation assets.

• Projects funded with private sector capital - equity and debt - leveraged through targeted deployment of public climate finance to de-risk investment.
Example 3: Ghana

Nationwide clean energy access program.

• Sector-based initiative aimed at increasing access to distributed clean energy solutions for small to medium-sized consumers in Ghana.

• Includes provisions to install 28 solar PV systems for commercial consumers with a total capacity of 400 kW, one million solar lanterns (200,000 in rural areas and 800,000 in urban areas), 40,000 solar home systems and 100,000 improved cooking systems.

• Systems made available via selected distributors and funded using consumer credit solutions via local financial institutions. The program is implemented over seven years, leading to further scaling up as national capacity is increased.

• Carbon receivables finance, representing prepayment against the ERPA, is the basis for arrangement of low-cost lines of credit to fund installations under the program.
Providing long-term financing to support NDC implementation in developing countries

**Broad Applicability with Private Sector Engagement**
- PCB offers opportunities to both public and private sector projects, across the full spectrum of sectoral scopes and in all countries able to participate in UNFCCC mechanisms, subject to confirmation through robust regulatory due diligence, to raise funding at scale.

**Benefits to Developing Countries**
- Financial benefits to projects and programs are delivered through a real funding cost advantage, which can be used to capitalise the value of the mitigation benefits to be delivered, with access to international capital markets and additional sources of finance.

**Transparency on Mitigation Outcomes**
- Public and private investors gain certainty over the quantity and environmental integrity of mitigation outcomes to be delivered, as well as a method to track title (via serial numbers) on transfers of units. Host countries accelerate implementation of NDC.
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