CLIMATE FINANCING FOR CITIES WITH GREEN BONDS

C40 Webinar
May 24th, 2017
Debt instrument that is exclusively destined for certified projects that produce a positive environmental impact.

### CLIMATE FINANCING NEEDS

<table>
<thead>
<tr>
<th>COST OF PARIS AGREEMENT</th>
<th>GREEN BONDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 billion USD</td>
<td>131 Billion USD</td>
</tr>
<tr>
<td>In the next 25 years.</td>
<td>from 2007 to 2016.</td>
</tr>
<tr>
<td>Necessities of the City</td>
<td>City flow</td>
</tr>
<tr>
<td>1 billion USD</td>
<td>11%</td>
</tr>
<tr>
<td>for the year 2050.</td>
<td>17 Billion USD</td>
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Sources: CIB, C40 Deadline 2020, Citiscope, ClimateKIC Report.
MEXICO CITY’S CLIMATE ACTION PROGRAM 2014-2020

Requirers 7.2 billion USD

To finance Mexico City’s Climate Action Program.

There are two NEW mechanisms to finance Climate Actions:

Mexico City’s Environmental Climate Change Fund

Mexico City’s Green Bond
FACTORS THAT LED TO THE ISSUANCE OF MEXICO CITY’S GREEN BOND

1. Defined policies and programs in Mexico City:
   ✓ Climate Change Fund.
   ✓ Climate Change Law.

2. Transparency:
   ✓ The PACCM has an online monitoring system to report on the progress and scope of the actions.
   ✓ The actions were certified by the company Sustainalytics.

3. Solid finances:
   ✓ AAA International Credit Rating.
   ✓ Secured through federal budget contributions.

4. Intersectoral coordination:
   ✓ Local agencies.
   ✓ National and international leadership of Mexico City.
   ✓ With institutions such as the Mexican Stock Exchange, HSBC and Sustainalytics.
ADVANTAGES OF THE GREEN BOND

Allows access to climate resources to invest in large scale projects at a lower cost.

It will finance sustainable transport, energy efficiency and water management projects.

✓✓ Resources are tagged for specific projects.
✓✓ They promote monitoring as well as technical and financial reporting of implemented actions.
FIRST CITY IN LATIN AMERICA TO ISSUE A GREEN BOND
GREEN BOND

Benefits

✓ Focuses on environmental issues.
✓ Attracts potential investors.
✓ Good financing conditions, under the common market.
✓ Optimistic prospect regarding future issuances.
✓ First local government in Latin America at this kind of issue.
✓ Boosts the development of the green bond market.
In Mexico only **4 green bonds** have been issued:

<table>
<thead>
<tr>
<th>NAFIN (Nacional Financiera)</th>
<th>Mexico City’s New Airport</th>
<th>Government of Mexico City</th>
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</table>

In 2017, Mexico City will issue another Green Bond and will conduct an annual compliance review.
The Green Bond was issued on December, 2016, for a total amount of 1 bn MXN.

Ticker: GCDMXB 16V.
Maturity of 5 years.
Oversubscribed by 2.5x
Floating rate (tie 28 days) +42bps.
A 28-Day Coupon.
Settlement: Bullet.
Rating: “Aaa.mx” by Moody’s, “AAA(mex)vra” by Fitch Ratings

Despite the turmoil after the US presidential election, the bond was oversubscribed, it enjoyed acceptance from institutional investors, translating into a highly competitive financing.

The experience suggests that future developments in the environmental area will be easily financed due to the attractiveness of the Green Bond framework, encouraging governments to work harder to fight climate change, making this a priority in the upcoming administrations.
Due to the great acceptance the green bond enjoyed, Mexico City is looking forward to issue again this year under the same principles. The city learned some lessons from the Green Bond Experience:

**LESSONS**

- Sticking to the global standards widens the universe of investors.
- Given the acquired knowledge, Mexico City is capable of issuing again and advising other cities or countries who are willing to do so.
- Investors are interested in climate change more than ever. It offers a big chance to finance green projects at a lower cost.
CHALLENGES

✓ Building a strong green bond market in the long run.

✓ Keeping the perfect debt rating in order to enjoy the same or higher acceptance. Develop relevant projects, with high social benefit.

✓ Preserve financial stability to gain confidence in the markets.
PACCM AS THE INSTITUTIONAL FRAMEWORK FOR THE PORTFOLIO OF GREEN BOND PROJECTS

The PACCM has: 7 strategic priorities to tackle climate change

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban and Rural Energy Transition.</td>
<td></td>
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<tr>
<td>Containment of Urban Sprawl.</td>
<td></td>
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<tr>
<td>Environmental Improvement.</td>
<td></td>
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<tr>
<td>Sustainable Improvement of Natural Resources and Biodiversity</td>
<td></td>
</tr>
<tr>
<td>Building Resilience.</td>
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<tr>
<td>Education and Communication.</td>
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<tr>
<td>Research and Development.</td>
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</table>

TOTAL 102 actions
CDMX RESILIENCE STRATEGY

Launched in September 2016.

PILLAR 01.
FOSTER REGIONAL COORDINATION

PILLAR 02.
PROMOTE WATER RESILIENCE AS A NEW PARADIGM TO MANAGE WATER IN THE MEXICO BASIN

PILLAR 03.
PLAN FOR URBAN AND REGIONAL RESILIENCE

PILLAR 04.
IMPROVE MOBILITY THROUGH AN INTEGRATED, SAFE, AND SUSTAINABLE SYSTEM

PILLAR 05.
DEVELOP INNOVATION AND ADAPTIVE CAPACITY
DEFINITION OF A SECOND OPINION

- The second opinion addressed the market’s concerns by providing an analysis and summary of City’s Environmental, Social and Governance (ESG) performance and the relevance of its projects.

- Highlighted the key aspects of the Green Bond.

- Provided an opinion on the alignment of the framework to the Green Bond Principles and City’s sustainability goals.

- This document may be published by the City to highlight the efforts and positive green aspects of the bond.
TECHNICAL CONSULTATION PROCESS FOR EXPERT SECOND OPINION

3-4 weeks

**Step 1**
**Kick-off Meeting**
- Understand issuer's bond and sustainability objectives
- Understand eligibility criteria and eligible projects (scope)
- Understand management and reporting process
- Identify relevant documents for evaluation

**Step 2**
**Evaluation**
- Evaluate use of proceeds, eligibility criteria and eligible projects
- Evaluate process of management of proceeds
- Review issuer’s ESG rating
- Draft and opinion

**Step 3**
**Feedback**
- Provide draft document to client and to Second Party Provider Sustainability Bonds Review Committee
- Receive feedback from client and the review committee
- Set up follow-up call if required

**Step 4**
**Final Document**
- Finalize evaluation
- Update opinion
- Receive client sign-off

**Step 5**
**Marketing**
- Provide marketing support during roadshows and investor meetings
- Coordinate press release
Annual Compliance Review (Optional)

- Investors are increasingly expecting on-going assessments of Green Bond’s compliance with the initial framework and themes.

- Some of the recent Green Bond issuers have committed to providing this type of assessment on an on-going basis, which is considered best practice.

- Assessment performed by a second party provider to ensure that the green alignment continues to be part of the process followed by City.

- Review projects for which the bond proceeds were allocated and check for their compliance with the eligibility criteria.

- Publish a short report annual report informing investors and City’s broader range of stakeholders that the bond continues to be in compliance with the pre-established set of criteria and the framework.
HSBC
On December 9th, 2016, HSBC Mexico acted as Sole Bookrunner and Sole Green Structuring Advisor on Mexico City’s (CDMX) Issuance of its inaugural Green Bond.

The transaction, which was successfully placed among Mexican investors represents the second milestone in the local green bond universe.
The local market welcomed Mexico City’s first Green MXN Debt Capital Markets transaction ever.

Amidst high volatility in the local markets after the US election, HSBC managed to price the transaction on a positive market window reopening the MXN market for plain vanilla bonds.

Following the recommendation of HSBC, CDMX took advantage of this window and successfully placed it first Green Bond issuance. Pricing came 18 bps inside guidance with an oversubscription of 2.5x.

This transaction is the first Green Bond placed by a Latin America City.

On the back of a supportive sales team, the order book received solid demand from a diverse investor base with more than 20 orders, which enabled GCDMX to tighten the issuance spread.

The transaction’s success is the result of a strong collaboration between HSBC’s DCM, Global Markets, and CMB Government teams.
# CDMX Green Bond Framework

## Governance, reporting and external review

| Governance | The Mexico City Finance Ministry will identify and propose potential green projects based on the eligibility criteria outlined in the CDMX Framework.  

The Mexico City Ministry of Environment will review all proposed (existing and future) potential green projects and confirm their eligibility under the CDMX Green Bond Framework and alignment with Mexico City's environmental and climate change policies and plans.  

The Mexico City Finance Ministry will manage the net proceeds of the Green Bond and will maintain internal records tracking the allocation of the net proceeds to eligible green projects.  

As required under Mexican regulations, the projects financed by the net proceeds will be registered with the Mexican Secretariat of Finance and Public Credit prior to bond issuance.  

As required under Mexican regulations, the net proceeds will be allocated by end of the fiscal year of bond issuance. Pending allocation, the net proceeds will be held in accordance with the normal liquidity management policy of Mexico City Finance Ministry. |
|---|---|
| Reporting | At the time of issuance, the Mexico City Finance Ministry will publish the list of projects to which green bond proceeds will be potentially allocated.  

Before the end of the fiscal year of Green Bond issuance, the Mexico City Finance Ministry will publish a CDMX Green Bond Report on its website. Where feasible, the CDMX Green Bond Report will include qualitative and (if reasonably practicable) quantitative environmental performance indicators on the eligible green projects. |
| External Review | Sustainalytics has reviewed the CDMX Green Bond Framework and provided a Second Party Opinion.  

The CDMX Green Bond Report will be accompanied by a report from an independent auditor or other appropriate external reviewer on the conformance of the allocation of Green Bond proceeds with the CDMX Green Bond Framework. |

## Use of Proceeds

<table>
<thead>
<tr>
<th>Category</th>
<th>Projects</th>
<th>Allocation (MXN million)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainable Transport</strong></td>
<td>New</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Mexico City Metro (STC): Installation and repair of equipment that improves accessibility and comfort, especially for elderly passengers, and reduces passenger transit times.</td>
<td>187</td>
</tr>
<tr>
<td></td>
<td>Refinancing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Mexico City Metro (STC)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Installation and repair of equipment that improves accessibility and comfort, especially for elderly passengers, and reduces passenger transit times.</td>
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<tr>
<td></td>
<td>- Construction and maintenance of Line 12.</td>
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<td></td>
<td>• Light Rail</td>
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<tr>
<td></td>
<td>- Acquisition of trains.</td>
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</tr>
<tr>
<td></td>
<td>• Bus Rapid Transit (Metrobús)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Construction and maintenance of first stage of Line 5.</td>
<td>210</td>
</tr>
</tbody>
</table>

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<th>Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Water and Wastewater Management</strong></td>
<td>New&lt;br&gt;• Construction, replacement and maintenance of water collection and drainage facilities.&lt;br&gt;• Construction of water treatment plants.&lt;br&gt;• Construction and maintenance of water, and storm-water pumps and reservoirs.&lt;br&gt;• Replacement and repair of drinking water wells and drinking water distribution lines.</td>
<td>538</td>
</tr>
<tr>
<td><strong>Energy Efficiency</strong></td>
<td>New&lt;br&gt;• Public Lighting&lt;br&gt;  - Installation, upgrades and maintenance of street lighting and lighting in city buildings to improve energy efficiency (LED bulb installation) and reduce need for new equipment/material.</td>
<td>65</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>1000</td>
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</tbody>
</table>

Use of Proceeds

“Sustainalytics is of the opinion that the proceeds from the bond will have clear positive environmental impacts and contribute to achieving Mexico City’s environmental targets to reduce GHG emissions, increasing the city’s resiliency to climate change, and achieving SDG 11, Sustainable Cities.”

“The [CDMX] Framework defines a strong eligibility criteria, demonstrates a structured and transparent project selection process that is supported by the Mexico City Finance Ministry and Mexico City Ministry of Environment, and outlines clear and transparent processes for the management of proceeds and reporting with KPIs that capture energy and water reduction.”

“Mexico City has strong commitments to manage and mitigate the impacts of climate change, as demonstrated by its policies, targets and international action. The CDMX Green Bond Framework and the city’s green bond issuances may also set a positive precedent for the promotion of sustainable infrastructure investment by public sector and state-owned enterprises in Mexico.”

Q&A