

**GLOBAL METHANE FORUM
TORONTO, CANADA**

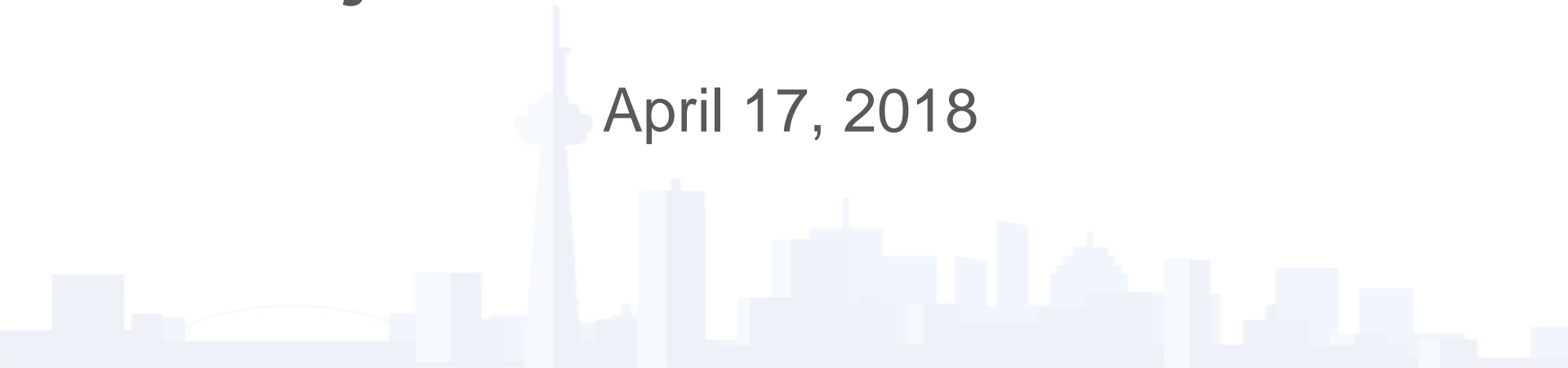


**CLIMATE &
CLEAN AIR
COALITION**
TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS



Financing SLCP Mitigation Projects in the Waste Sector

April 17, 2018





CLIMATE &
CLEAN AIR
COALITION
TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS

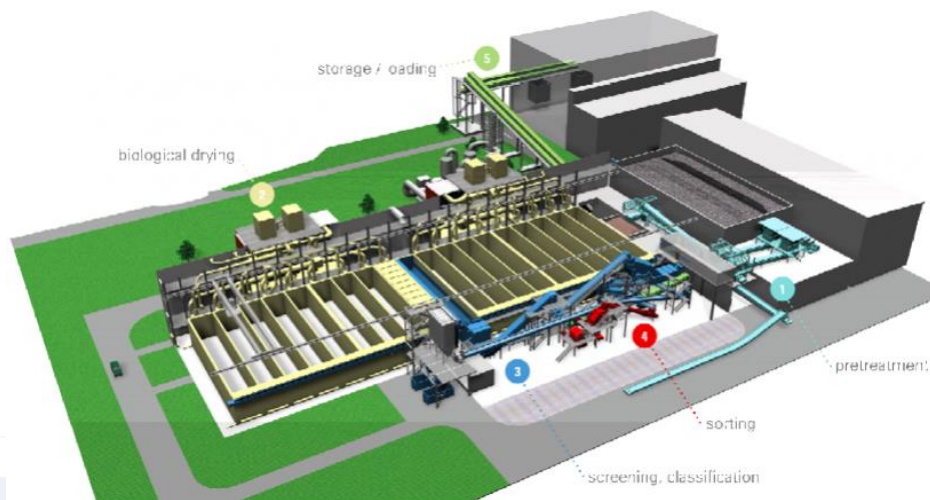


City Testimonial Naucalpan, Mexico

Roger Peniche Sala
Naucalpan, Mexico

Overview

Project	MBT (treatment of 1,348 tons/day - 50% organic) <ul style="list-style-type: none">● Mechanical Separation Plant● Anaerobic digestion Plant with energy recovery use with 3.0 MW (7.6 MW 5th year) of electrical capacity and 2.7 MW (7.3 MW 5th year) thermal capacity
Economic Indicators	<ul style="list-style-type: none">● CAPEX 50 Mill USD; OPEX 1.5 Mill USD/year;● Annual income of 5.0 Mill USD (7.7 M USD in 5th year); 4.5% (IRR, with grant we upload it to 14.17 %, to make the project viable for city and private)
Expected Benefits	Emission reduction of 40,331 tCO ₂ e/year; Improvement of air quality, savings in electricity, reduce the disposal of SW, improve conditions of workers, generation of new jobs.



Preparing the Project



Phase 1

- Pre feasibility study (2016) with support from the **CCAC and US-EPA**.
- **Financial readiness evaluation:** We identify a Fund of the federal government of Mexico (FONADIN) as the most convenient and we align our activities to its rules of operation. We also consider the **GCF**.
- Was defined to implement a public-private partnership scheme (**PPP**):
- Support was obtained from **international technical assistance**
- We want to take advantage of the **benefits of the Energy Reform** in Mexico: cities can now participate in the national electricity market

Phase 2

- **Feasibility studies:** Package of **10 studies** with funding from US-EPA, GIZ , KfW, FONADIN and Naucalpan (With a value of 1.2 Million USD)

Feasibility Studies

	Study	Technical Feasibility	Legal Feasibility	Economic and Financial Feasibility	Social Feasibility	Environmental Feasibility	Dates	Financing
1	Study of Characterization of Solid Urban Waste in Naucalpan						March-June 2017	US-EPA
2	Conceptual proposal for building a MBT Plant						May-April 2018	KfW-DEG
3	Studies in a pilot plant of anaerobic digestion, wet and dry.						June-December 2017	GiZ-UNAM
4	Study of current management of Solid Urban Waste in Naucalpan						October-December 2017	Naucalpan-Banobras
5	Convenience Assessment of the Project through a Public-Private Partnership (PPP) scheme						October-March 2018	Naucalpan-Banobras
6	Social Return Assessment (Economic Model)						November - March 2018	Naucalpan-Banobras
7	Study of estimation of climate benefits and other co-benefits						November -April 2018	US-EPA
8	Social Impact Assessment						November-May 2018	Naucalpan-Banobras
9	Strategic Consulting (bidding process, authorizations, permits)						January-June 2018	Naucalpan-Banobras
10	Electrical Interconnection Study						June-August 2018	Naucalpan-Banobras

Timeline 2018

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Mission to Europe for know MBT technology								
Finish the Feasibility Studies								
Approvals and permits of relevant authorities								
Develop of documents for international bidding process								
Meeting of the National Infrastructure Fund to approve grant								
Constitution of Trust.								
International Bidding Process /Allocation of the Contract of Concession								
Creation of decentralized organism								

Lessons Learned

- Is critical considering **environmental / climate change components**.
 - Quantifying, monitoring and reporting emissions
 - Access to international resources, credits and subsidies- less for SWM
- The **PPP** is a financially and operationally attractive option.
- **Cities must give a high priority** to projects:
 - integrate a **well qualified team** with capacities to develop and manage projects.
 - Consider **budget**
- Give **certainty and confidence** to all the participants:
 - Provide the best available info (technical, economic, legal).
 - Considering and managing all national regulations (environmental energy and fiscal).
 - Establishing a legal structure that protects investors.



GCF Process Experience



GREEN
CLIMATE
FUND

- Naucalpan requested assistance from U.S. EPA in evaluating potential funding opportunities with the GCF.
- Funding proposals to the GCF must go through Accredited Entities (AEs).
- AEs vary considerably in size, structure, and the scope of their capabilities to support GCF projects. In particular, AEs are approved based on the following categories:
 - Size
 - Level of risk
 - Fiduciary functions



CLIMATE &
CLEAN AIR
COALITION
TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS

GLOBAL METHANE FORUM



Global
Methane Initiative

Evaluation Criteria for Potential AE Partners

US-EPA (through Abt Associates) developed a Multi-Attribute Rating Table to help us identify and prioritize potential AE partners.

1. Whether or not the organization funds projects in the waste sector
2. Project sizes financed
3. Geographic distribution (or limitation) of projects
4. If the organization has financed any GCF projects to date
5. Whether or not the organization will consider projects with a quick turnaround time (not included in current weighting due to lack of available online information)

Results

The AEs were divided into three groups:

- **low/no potential Aes: 76%**, the majority were excluded because the geographic remits and because waste projects are outside of the organization's
- **medium potential Aes: 19%**, without a regional Latin American focus
- **high potential Aes: 6%: 3 Aes: IDB, CAF & CABEI**

High potential AEs

- Have a regional focus including Mexico.
- **IDB & CAF** have waste as a specific sectorial focus, and have previously funded or are currently funding a waste management-related project.
- **CABEI** does not denote waste as a specific sector of interest, they do list waste elimination and treatment as a possible initiative under their “human development and social infrastructure” focus area.



Next Steps

- SAP is a new application process for smaller-scale projects or programs.
- To be eligible for SAP, projects must meet the following criteria:
 - Ready for scaling up and having the potential for transformation, promoting a paradigm shift to low-emission and climate-resilient development;
 - A request for financing to the GCF of up to USD 10 million of the total project budget; and
 - The environmental and social risks and impacts are classified as minimal to none.
- AEs and NDAs submit concept notes
- In case it is not eligible for SAP, the project will have to go through the regular approval process.



**CLIMATE &
CLEAN AIR
COALITION**
TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS



**Global
Methane Initiative**

Thank you!

Roger Peniche Sala
rogerpenichesala@icloud.com

www.naucalpan.gob.mx



ccac_secretariat@unep.org

[@CCACoalition](https://twitter.com/CCACoalition) | facebook.com/ccacoalition

www.ccacoalition.org