Financing SLCP Mitigation Projects in the Waste Sector

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City Testimonial
Naucalpan, Mexico

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## Overview

| Project | MBT (treatment of 1,348 tons/day - 50% organic)  
|         | ● 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 | ● 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 tCO2e/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

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<th>Study</th>
<th>Technical Feasibility</th>
<th>Legal Feasibility</th>
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<td>March-June 2017</td>
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<td>2 Conceptual proposal for building a MBT Plant</td>
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<td>3 Studies in a pilot plant of anaerobic digestion, wet and dry.</td>
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<td>5 Convenience Assessment of the Project through a Public-Private Partnership (PPP) scheme</td>
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<td>6 Social Return Assessment (Economic Model)</td>
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<td>7 Study of estimation of climate benefits and other co-benefits</td>
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<td>8 Social Impact Assessment</td>
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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

• 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:
  o Size
  o Level of risk
  o Fiduciary functions
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:
  o Ready for scaling up and having the potential for transformation, promoting a paradigm shift to low-emission and climate-resilient development;
  o A request for financing to the GCF of up to USD 10 million of the total project budget; and
  o 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.
Thank you!

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