



Changing the paradigm of the Municipal Solid Waste Management in Naucalpan, Mexico

Part I: Sector of Project and relevance for NDCs

In Mexico, 102,895 tons of waste are generated daily, of which 83.93% are collected and 78.54% are disposed in final disposal sites. Only 9.63% of the waste is recycled.

The waste sector contributes to 4.6% of GHG emissions. 28% of these emissions would need to be reduced in order to reach Mexico's NDCs.

To achieve the reduction of GHG emissions, a proper management of solid waste is essential. This includes landfills closure, support for sanitary landfills and biodigesters construction and to operating organizations as well as the development of integrated waste management plans.



Aerial view of landfill in Naucalpan. With the project, the municipal solid waste would be separated and treated

Part II: Introduction of the municipality and the project

Naucalpan de Juarez is a municipality in the State of Mexico with a population of 872,320 inhabitants.

So far, in Naucalpan the waste is collected and then disposed into a landfill, not taking advantage of potential energetic use of the waste.

With the proposed project Naucalpan wants to significantly improve the waste management system. A municipal solid waste (MSW) separation and treatment in a mechanical and biological treatment (MBT) facility is envisaged to attain landfill deviation of MSW streams. All recyclable materials will be separated and sent through the existing recycling channels while the organic waste from a green bin collection will be treated at the anaerobic digestion facility.

FELICITY in a nutshell

"Financing Energy for Low-carbon Investment- Cities Advisory Facility" is an initiative of GIZ and the European Investment Bank (EIB) to support low-carbon urban infrastructure projects that have significant impact on economic development. As a project preparation facility, FELICITY offers technical assistance to cities in designing and structuring their infrastructure investment projects. FELICITY prioritizes the interest of cities and incorporates the perspective of international financiers.



Aerial view of Naucalpan municipality



Localization of the Municipality of Naucalpan, Mexico



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The estimated € 34 million budget will finance the following components:

- Infrastructure adaptation works
(i.e. ground stabilization and road reinforcement)
- Mechanical separation facility
- Anaerobic digestion facility
- Post-treatment of digestate to produce a high concentrate certified biofertilizer
- 3 Combined Heat and Power Units with 7.9 MW electric and 6.7 MW thermal installed capacity
- connection to the public electricity network
- 200,000 green bins for distribution to the Naucalpan population.

The project has an estimated potential reduction of 77,000 tonCO₂e/year of emissions. In addition, the municipality will improve its public service delivery for the citizens.

Part III: FELICITY Support

FELICITY will support the municipality in setting up adequate institutional arrangements for the planning and implementation of the project. This includes the establishment of a project implementation unit and the designation of roles and responsibilities. At the same time FELICITY will advise on improving and conducting relevant studies such as the economic analysis of the project and the environmental impact assessment. Additionally, FELICITY is supporting the procurement process in order for the project to comply with international requirements.

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