

CHANGING THE PARADIGM OF THE MUNICIPAL SOLID WASTE MANAGEMENT IN NAUCALPAN, MEXICO

In Mexico, 102,895 tonnes of waste are generated daily, of which 83.93% are collected and 78.54% are disposed of 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 the closure of landfills, support for sanitary landfills, the construction of biodigesters construction, operating organizations as well as the development of integrated waste management plans.

Waste management in Naucalpan

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

Currently, in Naucalpan waste is collected and then disposed of in 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. 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 infrastructure projects in cities that significantly contribute to sustainable development and climate change mitigation.

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.

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

The estimated budget of \$1,140 million MXN or €45 million will finance the following components:

- Infrastructure adaptation works (i.e. ground stabilisation 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 the Naucalpan population



“Aerial view of Naucalpan Municipality”.

The project can potentially reduce annual CO2 emissions by 77,000 tonnes. In addition, the municipality will improve its public service delivery for the citizens.

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FELICITY’s support to Naucalpan

FELICITY is supporting 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 as well as the designation of roles and responsibilities. At the same time FELICITY provides advice on improving and conducting relevant studies such as an economic analysis and environmental impact assessment. Additionally, FELICITY is helping the project’s procurement process to comply with international requirements.



“Localization of the Municipality of Naucalpan, Mexico”.

For more information on the project: [Proyectos México](#)



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