



Mainstreaming a sustainable energy transition for Public Buildings of Mexico City

Part I: Sector of the Project and relevance for NDCs

80% of Mexico's energy comes from fossil fuels. To achieve the goals of the Paris Agreement, Mexico committed to reduce greenhouse gas (GHG) and short-lived climate pollutant (SLCP) emissions by 25% below business-as-usual in 2030. For the energy efficiency sector, the goal is to achieve 50% of clean energy generation by promoting the use of clean technologies and fuels until 2050.

Additionally, Mexico's NDCs in the Residential and Commercial sector aims an 18% reduction of the GHG emissions by 2030.

The main strategies to meet Mexico's NDCs in the area of energy efficiency are to encourage the construction of sustainable buildings and to move towards energy-efficient and low-carbon footprint sustainable cities, as well as to promote the residential use of solar panels and heaters.



Solar Water Heaters installed on the rooftop of Public Building of Mexico City

Part II: Introduction of the city and the project

The total emissions in Mexico are 683 million tonCO₂e annually; 22 million tonCO₂e of these emissions are produced in Mexico City. 1,400,000 tonCO₂e are due to activities performed by local public administrations. 71.6% of these emissions come from electricity consumption in buildings and facilities. Mexico City's objective is to reduce 10 million tonCO₂ accumulated from 2014 to 2020.

The Ministry of Environment (Secretaría del Medio Ambiente SEDEMA) is actively promoting the use of energy-efficient technologies in public buildings. Currently, there are more than 3100 government buildings and facilities in the city that could benefit from this energy transition.

The project *Sustainable Energy Transition in Public Buildings* in Mexico City aims at:

- Promoting energy efficiency and renewable energy.
- Providing 50 public buildings in Mexico City with energy efficient appliances and/or solar water heaters.
- Ensuring monitoring and verification.

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.

This project is based on two pilot projects in Mexico City that have resulted in significant energy savings and the reduction of GHG emissions:

- Energy audits and retrofits in public buildings with an estimated reduction of 35% of electricity consumption.
- Solar water heaters installation in 12 public hospitals resulting in an estimated 35% reduction of fuel consumption.



Localization of Mexico City

Part III: FELICITY Support

FELICITY will support SEDEMA in the process of managing the energy transition in public buildings. This entails the support to a more detailed definition of the project, including the description of its scope, a stakeholder analysis, financial projections, a work schedule and operation and maintenance strategies. Additionally, FELICITY will assist the implementation unit of this project in conducting economic and financial calculations, as well as environmental and social impact assessments.



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Panoramic view of Mexico City

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