

# FELICITY - Advancing Energy Transitions in Public Buildings Across Mexico City



## Project Profile



### Challenge

A transition to a clean and climate friendly energy system requires the drastic reduction of the consumption of fossil fuels. With an electricity grid highly dependent on oil and gas, Mexico has committed to reducing its greenhouse gas emissions by 35% until 2030. In the case of Mexico City, this transition requires a reduction in the electric consumption by public buildings and other government facilities, as these are among the highest contributors to the city's emissions.



### Support

FELICITY provided capacity development and technical advisory services to Mexico City in order to accelerate its energy transition in public buildings. The project involved promoting energy efficiency, renewable energy, and the implementation of monitoring and verification systems. Eventually, this effort will contribute not only to reducing the electricity consumption in the buildings, but to an overall energy transition that reduces Mexico's dependency on fossil fuels for electricity, and in turn, also reducing overall greenhouse gas emissions.



### In Detail

FELICITY's support to Mexico City included technical studies such as a gap analyses and energy efficiency modelling among 22 municipal offices, and 28 public hospitals. These included 5, tier two, energy audits which analysed social and environmental risk management and impacts. Additionally, investment plans and cost-benefit analyses were developed. FELICITY's support also included the development of a financial model and the assessment of financing options. After thorough consideration, Mexico City opted for a Public-Private Partnership model to advance the project.

These advisory products are in line with national requirements and international standards.



**FELICITY** (Financing Energy for Low carbon Investment – Cities Advisory Facility) is a project preparation facility implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and financed by the German International Climate Initiative (IKI) of the Federal Ministry for Economic Affairs and Climate Action (BMWK), between 2017-2022.

FELICITY works in close cooperation with the European Investment Bank (EIB) to support urban investment projects that significantly contribute to sustainable development and climate change mitigation. FELICITY offers technical assistance to cities in designing and structuring their infrastructure investment projects. FELICITY's support to cities has the potential to leverage EUR 541 million.

This is achieved through low-carbon project pipelining and preparation; capacity development for cities and national intermediaries such as National Development Banks (NDBs); policy recommendations on specific national framework conditions; and the development of knowledge networks for climate finance projects.



### Partners

The technical studies and capacity development were carried out in cooperation with various State Ministries, including the Ministries for Environment, Health and various others; additional support came from various municipalities across the State of Mexico City.

FELICITY supported the set-up of a Project Implementation Unit (PIU) in Mexico City to ensure coherent preparation and implementation of the infrastructure projects and for maintaining sustainability when the financing is approved.

More than 30 events and workshops on capacity building were organised as part of FELICITY's support, which emphasised skill enhancement on climate change, sustainable infrastructure, and project management.

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FELICITY has helped us to locate funding options for renewable energy and energy efficiency in buildings of the government of Mexico City.

Oscar Vazquez  
(Director of Climate Change at the Ministry of Environment of the Mexico City Government)



## FELICITY has Supported These Achievements:

### Enabling Access to Climate Finance

The project is published in the international project preparation tool SOURCE and presented at COP26 in the context of the launch of the Fast Infra Label to attract private investors. Based on the work of FELICITY, discussions were held with the National Development Bank, NAFIN, to explore financing options for implementing projects across 15 hospital buildings.

### Ensuring Continuity

FELICITY provided support for the continuity of the project during the period of administrative transition in late 2018.

### Developing Local Capacities

A “Project Preparation Readiness Training Program” was developed for project promoters in Mexico and organized by FELICITY in 2020 alongside the Cities Climate Finance Leadership Alliance (CCFLA), and other partners. The multi-stakeholder training series attracted more than 2.000 participants from 18 countries.

### Supporting National Regulation

FELICITY supported national ministries in the elaboration of new standards and guidelines for low-carbon infrastructure. Together with the Ministry of Finance, the methodology for the “Socio-Economic Assessment of Energy Transition Projects in Public Buildings” was published. With the Ministry of Environment, the “Guidelines for Energy Efficiency in Hotels” was elaborated.

## Outlook and Scaling

So far, 15 buildings are under evaluation for financing. Through FELICITY’s support, Mexico City’s Ministry of Environment is actively seeking financial structures for the remaining buildings.

Over 3.100 public buildings have been identified in Mexico City for meeting prerequisites to enable increased project scaling. Discussions are ongoing with strategic partners such as the Inter-American Development Bank which may facilitate coordination with the private sector and unlock further scalability of the project.

The experiences of Mexico City have been shared with other municipalities and states across Mexico, as well as with the Inter-American Development Bank and Mexican Federal Government. The data collected during the studies is expected to be utilized by the national government on policymaking issues related to energy efficiency and renewable energy.



## Project in Numbers

- In total, it is expected that **50 public buildings** in Mexico City will be provided with energy efficient appliances or solar water heaters.
- The projects are expecting investments totalling **EUR 13-25 million**.
- The energy efficiency and renewable energy measures in the 50 buildings have the potential to create savings of **374 tCO2** per year.

## Contact

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