



Transportation Working Group (TWG) - LEADS GP
Regional Platform for Latin America and the
Caribbean (LEADS LAC)

“Lessons Learned from the Experience of Electrification of Public Transportation in Bogotá, Colombia”

Executive Summary
Coordinated by Asociación Sustentar
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Context:

The need to address climate change is driving countries to undertake adaptation and mitigation policies urgently. Electric mobility is the low-emission strategy of choice for public and urban transportation systems. Although successful experiences are beginning to emerge, there is still limited knowledge and installed capacity in the Latin America and Caribbean Region for electric mobility adoption, causing barriers for implementation. Therefore, it is necessary to strengthen the abilities of the transportation sector in the LAC region for the planning, design, and adoption of electric mobility.

Colombian global contributions on greenhouse gases (GHG) are equivalent to 0,46%. The transport sector is responsible for 11% of the national GHG emissions. In the capital city of Bogotá, the transport sector represents 58% of the city's emissions. Concerning the Nationally Determined Contributions, Colombia includes more than 140 mitigation actions.

Objective:

Electric mobility is one of the most elected low-emission strategies for public and urban transportation systems. TRANSMILENIO S.A, the managing body of the system, is managing a project to adopt zero-emission buses locally to the Integrated Public Transport System of Bogotá (in Spanish called SITP). This paper aimed to describe the course of action, challenges encountered and lessons learned from this experience. It seeks to document and disseminate the progress and lessons learned in the City of Bogota, Colombia, in planning energy efficiency strategies for the transportation sector.

Learned lessons:

According to the investigations, the steps to establish the electrification strategy are:

1. **Technical characteristics and Pilot Project:** Define technical requirements (type of units, recharging forms, and infrastructure, etc.) and conduct a pilot project to assess technical feasibility is needed.
2. **Promotion of electric mobility: It is essential to have a** regulatory and policy framework to ensure the promotion. Bogotá promoted agreements and formulated a key district policy to accomplish the proposed goals.
3. **Selection processes for supply and operation:** A call for tenders launched for migration to electric buses to begin. The compromise of the stakeholders (for example energy traders and distributors) is fundamental to establishing a viable business model adapted to the conditions of the city.

Public transport electrification projects require a study of current operating conditions to identify opportunities for electromobility implementation. The case study analysis emphasizes the methodology to elaborate transition plans of these characteristics and the need to consider the implementation of pilot projects to establish the initial parameters for a correct selection of technologies, charging infrastructure, and desired operating conditions.

In a technological transition experience of these characteristics, it is fundamental to have: strong cooperation between the different entities involved is essential, as well as a comprehensive approach to the varied dimensions that make up the system, and a promising, clear, and efficient policy and regulatory framework for the massification of new zero and low-emission technologies.

[Link to published case study \(Spanish\)](#) - [Link of Infographic \(Spanish\)](#)