

# Colombia

Partner country

Status of the project: ongoing technical assistance



## Basic Information

Population: 50 662 678 (2020) | Growth rate: 0.8%

Percent of urban population: 77.1%

GDP per capita: USD 16,264

Percentage of the population living below the national poverty lines: 27%

Nationally Determined Contribution (NDC):

Committed reduction of 51% of overall GHG emissions compared to BAU by 2030, unquantified mobility target

National GHG emissions per capita: 3.75 (tCO<sub>2</sub>e)

Proportion of transport related GHG emissions: 12%

Exposure to climate change: High

## Context

Colombia is the third most populated country in Latin America after Brazil and Mexico. The capital city Bogotá has the biggest population number and is the centre of the economic, political and financial activities in the country. About 77.1% of its citizens live in cities and the other 22.9% in rural areas where access to education, public health and other basic services is still in many regions limited. Poverty and inequality are big challenges for Colombia, with a multidimensional poverty index of 20.2% and a GINI index of 0.522, placing it as the second-most unequal country in Latin America only after Honduras (UNAL, 2018). The Gross Domestic Product has been growing for the last two decades, with an average annual growth rate of 3.8%, according to the reports of the National Ministry of Finance and Public Credit. This is a remarkable achievement given the country's long-standing internal conflict. Colombia is an upper middle-income country (World Bank). Historically, petroleum and other energetic products have played an important role in Colombia's economy. The country's priority exports and industrial growth areas are petroleum, electronics, agriculture, information technology, and shipbuilding.

Since ground transportation in Colombia was responsible for 12% of the overall country GHG emissions (29 MtCO<sub>2</sub>e) in 2017, tackling the transport sector is crucial for complying with climate change mitigation goals and electric mobility can be a major tool for achieving this. Additionally, public concern about the negative impacts of air pollution on public health has increased over the past years. According to latest studies, in Colombia urban air pollution is responsible of 10 thousand premature deaths and 75% of national health costs. The transport sector (Diesel freight and public transport, mainly) is responsible for 25% of PM<sub>2.5</sub> emissions in large cities, which is the most relevant air pollutant.

Buses play an important role in Colombia's transport landscape. However, given the increasing urban population densities and the deteriorating air quality (23% of Bogotá's local air pollution is generated by buses), the bus systems' various configurations – from small feeder buses to bi-articulated high frequency buses – together present an untapped potential for providing access to clean urban mobility.

Electrification of Public Transport is an intersectoral priority of at least four national policy agendas (Energy Efficiency, Climate Change, Air Pollution and Urban Mobility), and three international policy commitments: the Paris Agreement, the New Urban Agenda and the Sustainable Development Goals.

Since the electrification of transport is considered to be key for complying with climate commitments, for promoting green growth, and for protecting human health, the National Government has started developing a National E-Mobility Strategy in 2019.

As electric busses have considerably higher upfront investment costs compared to traditional technologies and the technology is relatively new in Colombia, the aim of the technical assistance is to overcome these barriers with a program that supports the electrification of Colombia's public passenger transportation systems.

The technical assistance has four workstreams:

- **Technical and regulatory design:** Identify the technical and regulatory needs that should be located at the transport policy level in the country to enable the transition to electric public transport systems.
- **Financial design:** Analyse the context, barriers, costs, and financial conditions of public passenger transportation in Colombia, to construct in conjunction with our counterparts an instrument to facilitate investments on electric fleet and infrastructure.
- **Design of coordination and governance scheme:** Through a systemic process with the national government counterparts, define the decision-making frameworks and processes to approve and follow up on the policies and plans that enable technological advancement.
- **Design of MRV system:** Build methodologies and capacities to monitor the development of policies and their impacts, especially regarding the mitigation of Greenhouse Gases.

## Support from the Partnership

**Technical Assistance:** National Urban Mobility Policy or Programme (NUMP)

**Type of NUMP:** Programme NUMP

**Funded by:** BMU

**Implemented by:** GIZ through the TRANSfer III project

**Local counterpart:** Ministry of Transportation

**Main purpose of the NUMP:**

The TRANSfer project is developing a National E-Bus Promotion Program that comprises a technical and financial design, MRV system and a steering structure.

**Supported activities:**

- E-bus workshop in Cali, Colombia (24-25 February 2020, 70 participants from cities, Ministry of Transportation, and academia)
- Support to the governance on the recently established inter-ministerial Roundtable for Sustainable Transport
- Support in the organization of roundtables on the National Strategy for Sustainable Transport

## Status of implementation

**Project start:** 2019 Q1

**Expected project completion:** 2021 Q4

**Completed outputs:**

- Financial Study on E-Buses in Colombia
- Pre-Feasibility Study
- E-bus workshop in Cali, Colombia (24-25 February 2020, 70 participants from cities, Ministry of Transportation, and academia)
- Design of MRV Model
- Proposal for governance structure

**Next expected outputs**

- Assessment of regulatory and capacity building needs of e-bus operation
- Structuring of E-Mobility fund

## Core impact indicators baselines

Indicator	Baseline - 2017
<b>Total annual transport related GHG emissions</b> (Mt CO <sub>2</sub> eq)	29 Mt CO <sub>2</sub> eq
<b>Annual transport related GHG emissions per capita</b> (kg CO <sub>2</sub> eq)	591 kg CO <sub>2</sub> eq / capita
<b>Road safety</b> Annual traffic fatalities in the urban area, per 100,000 inhabitants	14 fatalities / 100,000 hab

## Highlights in the past year

The latest Colombian National Development Plan for the first time allows national co-financing of up to 70% for clean technologies in massive transport systems. Additionally, the Colombian Government established an increasing quota stating that by 2035 100% of the new buses that are to be incorporated into public transport systems need to be electric.

To help the industry make the most of this government support, GIZ offered an E-Bus Workshop for 70 mobility experts, academics and decision makers from eleven Colombian cities in Cali in February 2020. The participants analysed appropriate scenarios to accelerate electric vehicle technology in public transport systems and discussed the motivations, requirements, challenges and advances in electric mobility.

During 2020 GIZ supported the Interinstitutional Roundtable on Sustainable Transport in the design of the National Strategy for Sustainable Transport.

The proposal of an E-Bus Fund is under development.

## The impact of COVID-19 on project preparation.

In Colombia, the transport sector is responsible for 36% of energy-related greenhouse gas emissions, mainly due to road transport, which is almost exclusively dependent on fossil fuels. In particular, carbon-intensive transport modes such as motorbikes account for a large part of the growing vehicle fleet (58%) and are also the biggest competitor to public transport, which loses about 2% of passenger numbers annually. This trend could worsen in the wake of COVID 19, as people increasingly switch to private transport for fear of contagion and the falling passenger numbers increase the deficits of the transport companies. According to initial estimates by the Colombian government in June 2020, the shortfalls in the largest seven cities due to the pandemic already amount to 1.8 trillion pesos, about 436 million Euros.