

# Accelerating the Transition to Sustainable Mobility and Low Carbon Emissions in Panama City

Technical Assistance 7000002657

Implementer: LOGIOS

December 2020

## Statement of Intended Outcome

Panama City suffers from poor air quality, in great part due to increasing car ownership, urban development, and resulting traffic problems. Public transportation buses meet, at best, Euro III standards, contributing to the degradation of air quality and public health. Transportation is responsible for the majority of the carbon emissions in Panama.

Panama will be able to identify the best technology options to renew their bus fleet. The Technical Assistance (TA) provides Panama with tools to better plan the type of electric buses needed to meet their operational requirements and minimize the risk of underperformance or overspending. Key deliverables include:

- Economic assessment of the various bus configurations for conditions in Panama
- Assessment of barriers and drivers of electric mobility in Panama
- Technical evaluation of public bus routes for electrification in Panama City and charging strategy
- Capacity building of local stakeholders to learn to use LOGIOS's advanced tool for electric bus planning.

Environmental benefits anticipated from this TA are potentially significant. It is estimated that 10,380 tCO<sub>2</sub>e could be avoided per year, if 150 Euro III buses are replaced with the right type of electric buses. This TA is the first rigorous technical analysis of electric buses that integrates real operational data with computational models to produce credible projections of bus performance in a metropolitan area in Latin America. To the extent that the results provided to Panama are integrated into procurement decisions, the TA will result in more efficient, more successful deployments of electric buses. This will contribute to mitigate the perceived risk of the technology and support further analyses and investments in the region.

Transport sustainability needs, beyond zero emission buses, a wide perspective, including accessibility to the elderly and persons with disabilities, preserving the personal safety of women. As women tend to be more dependent on public transportation for their personal mobility, clean technologies reduce their exposure to toxic emissions and thus help create a more gender-equitable transportation system.

At a minimum, this TA makes contributions to three SDGs, namely:

- SDG7.b - *By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support;*
- SDG11 - *Make cities and human settlements inclusive, safe, resilient and sustainable; and*
- SDG13.2 - *Integrate climate change measures into national policies, strategies and planning.*