

TC Document

I. Basic Information for TC

▪ Country/Region:	MEXICO
▪ TC Name:	Sustainable Mobility at the National and Local Levels
▪ TC Number:	ME-T1451
▪ Team Leader/Members:	Fioravanti, Reinaldo Daniel (INE/TSP) Team Leader; Crotte Alvarado, Amado (INE/TSP) Alternate Team Leader; Ceron, Nelly (CID/CME); Diaz Acosta, Claudia (INE/TSP); Eduardo Cafe (INE/TSP); Gonzalo Rodriguez Valverde (INE/TSP); Mix Vidal, Richard Alexander (INE/TSP); Navas Duk, Cristian Lee (INE/TSP); Rodriguez Gonzalez, Roberto Eduardo (INE/TSP); Rodriguez Molina, Raul (INE/TSP); Sanmartin Baez, Alvaro Luis (LEG/SGO); Sosa Sartori, Martin Daniel (INE/TSP); Urteaga Dufour, Jose Antonio (INE/ENE)
▪ Taxonomy:	Client Support
▪ Operation Supported by the TC:	
▪ Date of TC Abstract authorization:	23 Sep 2022
▪ Beneficiary:	Secretariat of Agrarian, Land, and Urban Development (SEDATU) and Mexican cities
▪ Executing Agency and contact name:	Inter-American Development Bank
▪ Donors providing funding:	United Kingdom Sustainable Infrastructure Program(SIP)
▪ IDB Funding Requested:	US\$1,250,000.00
▪ Local counterpart funding, if any:	US\$0
▪ Disbursement period (which includes Execution period):	24 months
▪ Required start date:	March 15 th , 2023
▪ Types of consultants:	Firms and individual consultants
▪ Prepared by Unit:	INE/TSP-Transport
▪ Unit of Disbursement Responsibility:	CID/CME-Country Office Mexico
▪ TC included in Country Strategy (y/n):	Yes (Strategic Objectives: 1. Contribute to equitable and sustainable access to social services. 3. Contribute to a more stable and sustainable territorial development).
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality; Productivity and innovation; Economic integration; Institutional capacity and rule of law; Environmental sustainability; Gender equality

II. Objectives and Justification TC

- 2.1 **Sustainable low carbon infrastructure can support Mexico to achieve strong, green, and inclusive economic recovery.** It can provide a pathway for Mexico's economic growth and a transition to a net zero economy while closing the gap in public services. For 2023, the amount budgeted for investment in infrastructure (US\$55,921 million) was 25% higher in real terms than 2021, representing 14.3% of the total public spending and 3.8% of the Gross Domestic Product (GDP).¹ This is an upward trend since 2019. From 2014 to 2019 the trend overall has been downward, decreasing as a percentage of GDP by 1.3 percentage points in five years and well

¹ Sources: [Expansión México](#), 2022.

below the 4% to 6% of annual GDP required to achieve sustained growth to meet the Sustainable Development Goals.

- 2.2 On November 28th, 2022, President Andrés Manuel Lopez Obrador announced an infrastructure plan worth 1.10 billion pesos (US\$55 billion) that includes highways, railways, ports, and airports as well as investments in telecommunications with most of the capital coming from the private sector. In addition to that, Mexico's Government expects public and private investment in infrastructure to reach almost US\$600 billion approximately over the next five years to raise the country's economic growth capacity. The first stage of a later amended version of the plan was expected to be implemented in 2020 with 431 billion pesos of outlays going largely to the tourism and transportation sectors.
- 2.3 To meet the Mexican Nationally Determined Contribution's (NDC) commitments, approximately US\$123,831 million of investment is required. Transport, electricity generation and industry are the three sectors with the greatest mitigation potential and represent 85% of the investment required. This implies a greater role of public development banks, commercial banks, stock market and greater financial inclusion of small and medium enterprises.
- 2.4 **The Mexican infrastructure gap has the potential to be closed by leveraging private sector investment to bankable sustainable projects.** Hence, the UK Sustainable Infrastructure Program (UKSIP) intends creating a country platform to continue and accelerate a transformational change for the Mexican Government to achieve a sustainable low carbon infrastructure, as a mean to a sustainable recovery. The Mexican UKSIP country platform is designed to mainstream sustainability principles across the national, sectorial, and institutional upstream planning level, as well as to increase institutional capacity and prioritize and build sustainable infrastructure bankable pipelines to mobilize private sector financing. Investment in the improvement of transport infrastructure has demonstrated to relief Mexico's challenges regarding to social exclusion and inequality, low productivity and innovation, and limited economic integration. For example, a sustainable and inclusive public transport can reduce gender violence and facilitate mobility among people with disabilities, in Mexico cities, and have a bigger impact to these groups.²
- 2.5 **The objective of this TC** is to develop studies and regulations about low carbon sustainable infrastructure to achieve a strong, green and inclusive economic recovery in the transport sector. Additionally, it will provide a pathway for Mexico's economic growth and a transition to a net zero economy while closing the gap in public services.
- 2.6 **Results.** The TC will support Mexican cities to achieve the following results:
(i) tools and methodologies implemented by the cities to promote sustainable low carbon infrastructure, in the planning, operation and financing (commercial banks, bonds and public development banks as financing sources) of these modes;
(ii) bidding documents for new public transport system published by the supported cities, fostering the participation of the private sector in the public transport in the

² In Mexico City, women do not feel safe on public transportation, since they are victims of sexual harassment. The complaints against harassment have increased 433% over a period of four years (from 2014 to 2017), as the percentage of women who use public transport as a form of displacement decreased by 64% for 52% in a decade. Regarding the people with disabilities and transport, though many Mexican states have policies to give discounts and infrastructure improvement to aid people with disabilities, 17 of them do not have one of three policies (infrastructure adaptation, benefits or discounts). Source: [Mexican Government, 2015](#).

Mexican cities (small and medium operators); and (iii) reduction of Greenhouse Gas (GHG) emissions by the transport sector in Mexico City. These results will contribute to a cleaner, safer and inclusive public transport system.

- 2.7 **Strategic Alignment.** This TC is consistent with the Update to the Institutional Strategy of the Inter-American Development Bank (IDB) Group 2020-2024 (AB-3190-2) and is aligned with the development challenges of: (i) social inclusion and equality by promoting public transport service improvements in the outskirts of Mexico City, where public transport infrastructure is limited and in bad condition, this will provide better access to deprived areas of the city, especially access to work, and health services for women, who tend to spend more time travelling; (ii) productivity and innovation, as a study will be conducted to launch a new scheme to substitute public transport buses and freight trucks. This will allow transport companies to reduce diesel consumption, increasing the productivity of their businesses. The study will encourage the acquisition of electric public transport buses to reduce emissions and continue the modernization of the sector; and (iii) economic integration, as by renewing their freight fleet, transport companies will have less maintenance costs, which will allow them to reach new production and consumption areas, increasing the economic integration of various regions in Mexico. It is also aligned with the cross-cutting issues of: (i) gender equality and diversity, as all studies will have a focus on providing better transport services for women so that they have the same opportunities to access jobs and health services; (ii) Climate Change (CC) and environmental sustainability, as this TC will focus on the provision of cleaner transport services in the medium and long run by building transport corridors that will substitute old low capacity transport vehicles with bigger and cleaner buses, especially trolleybuses that have a lifespan of over 15 years; and (iii) institutional capacity and the rule of law, as the TC and the studies conducted will provide relevant analyses and international best practices which will allow government agencies to increase their knowledge and institutional capacity to design and implement sustainable transport policies. Some of the studies will specifically include a deliverable associated with the institutional framework required for the successful implementation of public policies. The TC is also aligned with the IDB Group Country Strategy with Mexico 2019-2024 (GN-2982), in the strategy objective of improve regional planning. In addition, this TC is aligned with the objective of the UKSIP to support countries in Latin America and the Caribbean (LAC) to deliver their NDCs to the Paris Agreement. In the following SIP logframe indicators: number of low carbon related policies reflected in planning and procurement processes and/or infrastructure investments; number of low carbon infrastructure projects which reach financial close that have benefited from SIP Technical Assistance (TA); sustainable low carbon infrastructure policies or regulation adopted that have received support from SIP TA activity; number of relevant public sector institutions that have adopted methodologies, tools, and approaches to promote sustainable low carbon infrastructure as a result of SIP TA.
- 2.8 Likewise, the TC is aligned with the Transportation Sector Framework Document (SFD) (GN-2740-7) and its focus on “Promote efficient, inclusive, sustainable and quality urban and interurban passenger mobility” and “Promote the technological transformation of the sector”, and with the CC SFD (GN-2835-8), as it will contribute to “make CC considerations more central to the transport sector actions”. It is also aligned with the Sustainable Infrastructure for Competitiveness and Inclusive Growth IDB Infrastructure Strategy (GN-2710-5), by supporting the development of sustainable transport infrastructure.

III. Description of Components and Budget

- 3.1 **Component I: Mass public transport at the local level (US\$550,000).** This component will support local governments in the design and implementation of public policies and infrastructure that supports Mexico's CC mitigation commitments in the transport sector and improve the quality and coverage of public transport. This component includes: (i) analysis of current transport routes, fleet characteristics, demand, and willingness to pay of transport services in pre-selected Mexican cities;³ and (ii) a comprehensive assessment of the public transportation system in Mexico City to collaborate to a safer, cleaner and more inclusive system, including a transport demand studies and current lines, a plan to structure the public transport and implement a more efficient bus fleet control. These studies will measure current GHG emissions and how the multiple scenarios could improve to reduce it. The diagnosis, assessments and guidelines will include mitigation impact of the solutions, with baseline of GHG emissions and different projections based on the alternatives. It will also include a gender analysis, and gender action plan to address the problems identified in the public transport system.
- 3.2 **Component II: Electromobility (US\$200,000).** This component will support the Mexico City Government, with collaboration of the IDB Invest, in the adoption of regulations to foster private concessionaires in the adoption of electric technologies to reduce GHG emissions. The main activity is the diagnosis of the public transport routes, including metrobus lines, that would be suitable for an electric fleet according to transport demand and authorized fares, in Mexico City.
- 3.3 **Component III: Active mobility (US\$300,000).** This component includes the elaboration of: (i) guidelines to support local governments⁴ in the design of policies to increase active mobility, such as bicycle road infrastructure programs and bicycle parking infrastructure at public transport stations; and (ii) sustainable mobility policies at the subnational level, aligned with the Mobility and Road Safety. The studies will focus on the impact of these recommendations to reduce GHG emissions at the local level. It will also consider alternatives that offer better mobility to children and household care (often, made by women), and also related to vulnerable users (elderly people and people with disabilities).
- 3.4 **Component IV: Green hydrogen for long-distance freight transport (US\$150,000).** This component includes: (i) high level diagnostics, as well as the business model to promote the green hydrogen for long-distance freight transport in northern Mexico; and (ii) roadmap for the implementation of the potential of green hydrogen to mitigate GHG emissions. The products will be based on the roadmap for the implementation of the potential of green hydrogen to mitigate GHG emissions prepared by the Mario Molina Center with resources from the UKPACT.⁵

³ The TC has pre-identified three projects at the municipal level: (i) complementary studies of the Tijuana-Rosarito commuter railroad, related to the restructuring of feeder routes, infrastructure integration, tariffs and operations; (ii) analysis of the public transportation concession system in the states of Nayarit and Hidalgo, and recommendation of a restructuring and fleet replacement program; and (iii) studies to promote sustainable transport in the city of Torreón, Coahuila. During the execution, SEDATU will confirm with IDB the cities who will be the beneficiaries to the TC.

⁴ The TC will also focus on cities in the South and Southern Mexico, where active mobility and public transportation have been a challenge.

⁵ The "Green hydrogen opportunities for Mexico and international review of technologies and experiences" study is an overview of the opportunities for green hydrogen in each main sectors of Mexican economy,

- 3.5 **Component V: Communications and Dissemination (US\$50,000).** This component will finance activities to share the results of the previous components to make knowledge available to decision makers and other stakeholders in the LAC region and to increase capacity for its implementation, such as: (i) webinar and online course (electromobility); (ii) design, editing and printing of publications; and (iii) stories of transport users (specially of women, girls and people with disabilities) about the challenges of mobility in their cities and about how the projects financed by this TC could impact their lives, and dissemination of the initiatives.
- 3.6 **Indicative Budget.** The total budget for this TC is US\$1,250,000, coming from the UKSIP.

Indicative Budget (US\$)

Component	Description	IDB/SIP Fund Funding	Counterpart Funding	Total Funding
Component I	Analysis of current transport routes, fleet characteristics, demand, and willingness to pay of transport services in pre-selected Mexican cities	300,000	0	300,000
	Comprehensive analysis of public transport in Mexico City	250,000	0	250,000
Component II	Diagnosis of the public transport routes, including metrobus lines, that would be suitable for an electric fleet according to transport demand and authorized fares	200,000	0	200,000
Component III	Guidelines to support local governments in the design of policies to increase walking, cycling and active mobility in general, aligned with the Road Safety and Mobility Law, and sustainable mobility policies at the local level	250,000	0	250,000
	Online course to disseminate the guidelines on sustainable transport and mobility to local authorities, focused on the reduction of GHG emissions	50,000	0	50,000
Component IV	High level diagnostics, business plan and road map as well as the business model to promote green hydrogen	150,000	0	150,000
Component V	Design, editing and printing of publications	50,000	0	50,000
TOTAL		1,250,000	0	1,250,000

IV. Executing Agency and Execution Structure

- 4.1 **Executing Agency.** The Mexican Ministry of Finance and Public Credit (SHCP) has requested for the IDB, through the Transport Division (INE/TSP), to be the executing agency of this TC in the country, in order to facilitate institutional coordination as well as the appropriate development of studies, in accordance with the guidelines of TC Operating Guidelines (GN-2629-1). The execution will include: (i) hiring of consulting firms and/or individual consultants; (ii) recurring meetings with each beneficiary

with a roadmap for the implementation of pilot projects in the mining sector. This component will apply in a specific region for the long-distance freight transport, not studied before.

governmental agency to achieve their participation and involvement in all stages of activities, from elaboration and feedback of Terms of Reference (ToR) to revision and follow up of deliverables; and (iii) administrative and technical follow up of all hirings done by the IDB. The Project Committee will comprise on representatives from UK Embassy in Mexico and UKSIP, Secretary of Agriculture, Territory and Urban Development (SEDATU), and IDB who will be in charge of: (i) study local government petitions, following criteria; (ii) validate ToR; and (iii) validate the technical quality of products. The projects will be selected based on the following criteria: (a) there is no duplication of efforts in other transport initiatives in Mexican cities. This means that any project financed by the TC will be built based on previous studies or will not duplicate efforts of ongoing projects about the same matter. IDB and the UK Embassy in Mexico will coordinate efforts to avoid any duplications and ensure that the initiatives potentialize what has been done in the field; (b) the project will generate a baseline of GHG emissions, and the alternatives will seek for its reduction; and (c) the project will intend to promote a public transport that it is inclusive for women and people with disabilities.

- 4.2 The IDB will execute this TC due to the technical weakness of the beneficiaries to draft ToR and ensure technical quality of products, since local governments do not have the expertise on methodologies to calculate GHG emissions for public transport projects neither structuring public transport systems.
- 4.3 Procurement. The Bank will contract individual consultants, consulting firms, and non-consulting services in accordance with the Bank's current procurement policies and procedures: (i) the individual consultants will be hired in accordance with the guidelines set out in the AM-650; (ii) the procurement process for consulting firms will follow the Bank Policy for the Selection and Contracting of Consulting Firms for Bank-executed Operational Work (GN-2765-4) and the related Operational Guidelines (OP-1155-4); and (iii) the procurement of non-consultant services will follow the Bank Corporate Procurement Policy (GN-2303-28).

V. Major Issues

- 5.1 There are not relevant risks identified in the execution of the TC, with the only exception of coordination between governmental institutions. As a mitigation measure, the IDB and UKSIP will continue its current dialogue with the different institutions to ensure their collaboration.

VI. Exceptions to Bank Policy

- 6.1 There are no exceptions to Bank Policy in the execution of the TC.

VII. Environmental and Social Strategy

- 7.1 This TC does not intend to finance pre-feasibility or feasibility studies for specific investment projects or environmental and social studies associated with them; therefore, the requirements of the Bank's Environmental and Social Policy Framework (ESPF) do not apply to this TC.

Required Annexes:

[Request from the Client - ME-T1451](#)

[Results Matrix - ME-T1451](#)

[Terms of Reference - ME-T1451](#)

[Procurement Plan - ME-T1451](#)