

TERMS OF REFERENCE

Service: "Generation of background information and analysis for the implementation of congestion pricing and low emission zones"

I. Introduction

The Climate and Clean Air in Latin American Cities Program (CALAC+) is a regional initiative funded by the Swiss Agency for Development and Cooperation (SDC) and implemented by Swisscontact. The main objective is to improve air quality and mitigate climate change in four Latin American cities: Lima, Santiago, Mexico City, and Bogotá through three thematic areas:

- a. The first area, Cleaner Urban Transport, aims to ensure that emissions of ultrafine particles, black carbon, and greenhouse gases (GHG) from urban public transport systems are significantly and sustainably reduced.
- b. The second area, Policy Incubator for Off-road Mobile Machinery, seeks to support the development of policies for a significant reduction of ultrafine particles, black carbon, and greenhouse gases (GHG) from construction machinery.
- c. The third area of CALAC+, Regional and Global Cooperation, aims to share, at the regional and global level, a systematized experience of successful policies, cost-effective actions, and technologies that reduce fuel consumption, air pollution, and carbon emissions in the urban context.

II. Background

The CALAC+ Program, in relation to Less Polluting Urban Transport, both the Chilean Ministry of Environment (MMA) and the Ministry of Transport and Telecommunications of Chile (MTT), through its SECTRA Urban Road and Transport Program, have requested support from the Clean Air and Climate in Latin American Cities Program to hire the services of a natural or legal person to carry out the service called Generation of background information and analysis of the implementation of road pricing for congestion and low emission zones. The purpose is to develop the necessary background and technical inputs to establish the terms of reference for the execution of a study on Sustainable Mobility Management Measures.

Road pricing represents a fundamental tool for traffic management in highly congested cities, as well as for promoting more sustainable mobility in urban environments. Its effective and equitable implementation can have a significant impact on transport efficiency, congestion and pollution reduction, and the improvement of the quality of life for urban center inhabitants. The success of this strategy lies in the coordination between political will, regulatory tools, adequate and complementary technical design of a set of measures, citizen participation, and adaptation to the specific needs of the transportation system users.

III. General Objective

Explore the options for implementing road pricing (RP) and low emission zones (LEZ) in Chile, as well as provide a comprehensive view of the political, regulatory, social, and technical challenges associated with their application, using international cases as a reference, such as those in the United Kingdom, France, Belgium, China, Denmark, Germany, Hong Kong, Indonesia, Italy, Japan, the Netherlands, Norway, Portugal, Spain, Sweden, among others.

IV. Specific Objectives

- a. Conduct a survey of the state of the art of international RP and LEZ by identifying achievable transportation benefits and environmental benefits, characterizing the relevant technical parameters for defining an LEZ and RP in Chile (perimeter, rate, vehicle type, schedules, etc).

- b. Address the technical examination of the implementation of road pricing systems and low emission zones, identifying the necessary technological conditions for their compliance, defining public policies, legislative and regulatory changes, and financial design.
- c. Define the tasks of a future study aimed at designing an implementation project for LEZ and RP.
- d. Evaluate the impact of the measures analyzed on different stakeholder groups with particular emphasis on low and middle-income groups, designing compensatory measures for the funds raised in the impacted areas at the provincial, municipal, or local level.
- e. Develop a clear roadmap detailing the stages of implementation.
- f. Identify actions that allow minimizing undesired effects.
- g. Develop a practical guide that can be used as a reference for implementing these systems in other countries considering different urban and regulatory contexts.

V. Activities of the Current Work

- a. Diagnosis, Survey of the "State of the Art" of International RP and LEZ.
 - This task must include a literature review based on the background reviewed in previous studies developed by the MTT and the examination of new literature and recent experiences, as well as an analysis of the state of the art of the application of these transport management measures worldwide.
 - The report should include the review of background from the technical, legal, economic, financial, social, and environmental perspectives of implementing such measures.
 - Additionally, other existing and applied demand control mechanisms worldwide will be reviewed to develop a critical analysis of the measures, including their advantages and disadvantages.
- b. Definition of Application Schemes for Congestion Road Pricing and Low Emission Zones and Complementary Measures.
 - Once the successful schemes currently implemented worldwide have been reviewed, an analysis of the feasibility of implementation in the Chilean reality will be carried out, analyzing various scenarios of technical and legal solutions, such as critical zones, average speed, areas of interest, vehicle types, impact on emissions, and their corresponding mortality rate, and the impact on social welfare due to the effects applied to different social groups, with special emphasis on lower and middle-income groups impacted by the measure.
 - The goal is to understand the advantages and disadvantages of the solution, the associated implementation process, and the expected results, among other topics.
- c. Definition of Characteristics and Selection Criteria for Candidate Cities for Implementation.
 - Define the characteristics, conditions, and selection criteria that candidate cities must meet for the implementation of LEZ and RP in Chile.
 - Extrapolate the characterization of candidate cities for LEZ and RP to the methodological guide requested in point VI.g. This should deliver a product that allows cities to be tested through a generalizable test, replicable by third parties, achievable with available data, and providing information on the impact on different social groups of the measure to be implemented.
- d. Preparation of the Terms of Reference for an Implementation Study of an LEZ and RP in Chile.
 - In light of the background reviewed in the previous stages, the terms of reference for the analysis of the implementation of RP and LEZ must be generated, which will constitute the technical bases for bidding for the study of Stage II of the initiative.
 - For this purpose, the general and specific objectives of the study, initial considerations, general approach, details of the associated tasks, schedule and activity plan in weeks and

months, expected results and products, and a detailed valued budget, among other items, should be included.

VI. Contractor

Swisscontact, Swiss Foundation for Technical Development Cooperation, within the framework of the Climate and Clean Air in Latin American Cities Program (CALAC+).

VII. Beneficiary Partners

- Ministerio de Transportes y Telecomunicaciones - MTT (Ministry of Transport and Telecommunications)
- Ministerio del Medio Ambiente - MMA (Ministry of the Environment)

VIII. Monitoring and Considerations

- a. The consultant will coordinate directly with the designated coordinator of the CALAC+ program regarding the schedule for executing activities.
- b. The consultant will prepare two progress reports and a final report (detailed products in section X.) that present all the study results and recommendations for its implementation. For each report submitted, the consultant must make a presentation to the Technical Advisory Committee (see the following point VIII.c.) in meetings agreed upon with the CALAC+ program coordinator, with at least one week's notice before the presentation.
- c. The Technical Advisory Committee of the CALAC+ program is composed of the local work coordinator from MTT, the local work coordinator from MMA, the Director of the CALAC+ Program, the Regional Coordinator of Cleaner Urban Transport CALAC+, the Regional Coordinator of Non-Road CALAC+, and the CALAC+ Chile country coordinator.
- d. The Technical Advisory Committee will be responsible for:
 - Supervising and controlling the development of the contract, ensuring compliance with its objectives and established deadlines.
 - Providing information within its scope to the consultant for the provision of the service if necessary.
 - Reviewing and approving the delivery of services prior to payment.
 - Verifying compliance with the deadlines for submitting the progress report and the final report.
 - Receiving, reviewing, and ensuring that the final report meets the requirements defined in the specific objectives regarding content and quality, formulating the relevant observations to the consultant to make the necessary corrections for approval.
- e. Any doubts during the project's execution will be resolved in meetings with the contractor and project beneficiaries.

IX. Bidding Schedule

The stages and deadlines for the bidding process are detailed below:

STAGES	DEADLINES
Publication.	Date indicated on the CALAC+ Program website.
Vendor Queries.	From the publication date on the CALAC+ Program website until three days later, with closure at 18:00 hours of the business day.

Sending Responses and Clarifications.	Within five business days after the closure of vendor queries.
Bid Submission Deadline.	Within 10 days from the publication on the CALAC+ Program website.
Estimated Offer Evaluation Date.	If up to three offers are received, within seven business days following the bid submission deadline. If more than three offers are received, within ten business days following the bid submission deadline.
Estimated Award Date.	Within two business days after the evaluation of offers.
Notification to Vendors	The business day following the award.
Estimated Contract Signing Date.	Within ten business days following the notification to the awarded vendor.

X. Consultancy Schedule, Deliverables, and Reports

The consultancy period will last 90 days from the date of the contract signing. During the consultancy, two progress reports and a final report will be delivered, which will systematize the information generated in the study. The consultant must deliver the following reports according to the specified schedule and contents:

Report	Delivery Deadline	Contents
First Progress Report	30 days after contract signing	a. State of the Art and Experience Report (Activity V.a).
Second Progress Report	75 days after contract signing	b. Definition of Tarification Road (TV) and Low Emission Zones (ZBE) Schemes (Activity V.b). c. Definition and Justification of Candidate Cities for Implementation.
Final Report	90 days after contract signing	d. Preparation of Terms of Reference for Implementation.

XI. Cronograma de pagos

The consultant will submit their offer for the requested service, including taxes in the country of residence of the service provider and any other costs incurred during its execution. Payments will be processed once the deliverables are received according to the following schedule:

- a. 1st Payment:** 30% upon receipt and approval of Deliverable 1, corresponding to the First Progress Report.
- b. 2nd Payment:** 30% upon receipt and approval of Deliverable 2, corresponding to the Second Progress Report.
- c. 3rd Payment:** 40% upon receipt and approval of the Final Report.

XII. Qualifications and Experience Requirements

Interested individuals or entities must submit their technical and financial proposals to the email address franco.fuentes@swisscontact.org within 10 days from the publication on the CALAC+ program website, with the subject “Propuesta Tarificación Vial Chile.” The proposal should include the following documents:

- a. **Work Plan:** This should detail all specific tasks and activities to be carried out. The plan should include defined deadlines for each activity, a detailed sequence of these tasks, and clear milestones for the delivery of reports and subproducts as specified in these terms of reference and those considered by the consultant (certificates are not required).
- b. **Supporting Documentation:** Demonstrating experience in the consultancy topics.
- c. **Methodologies:** To be used for generating the required products.
- d. **CVs:** Clearly detailing the projects worked on and the roles within them, with the following minimum requirements:
 - **Project Manager:** With at least 6 years of professional experience (years elapsed since the issuance of the degree) related to consultancies, economic analysis, research, or similar in mobile sources.
 - **Technical Capacity:** To carry out the study, including within the team experts with experience in transport, economics, public policies, environment, and other necessary fields.
 - **Experience:** In developing methodologies for transport system planning, considering all aspects of urban mobility, with experience in tariffed systems and in the public sector.

XIII. Intellectual Property

Any product arising from the execution of this contract, including audiovisual materials and scripts, or any other materials that constituted the basis for its preparation, shall be the exclusive property of the CALAC+ program and MTT. It is understood that the consultant may not use any material and/or product resulting from the execution of this contract without the written agreement of the beneficiary institutions and the contracting entity.

No alteration that may be attempted or made to the products resulting from the execution of this contract, with the intention of adapting or modifying them, of any kind, form, or extent, shall be considered as giving rise to a new intellectual work, whether original or derivative, that could correspond to the authorship or ownership of any person other than the contracting entity.

It is not permitted, in any way, to copy, assign its use, enjoyment, or disposition, or transfer the products resulting from the execution of this contract.

Adrián Montalvo
Director
CALAC+ Program

Consultant