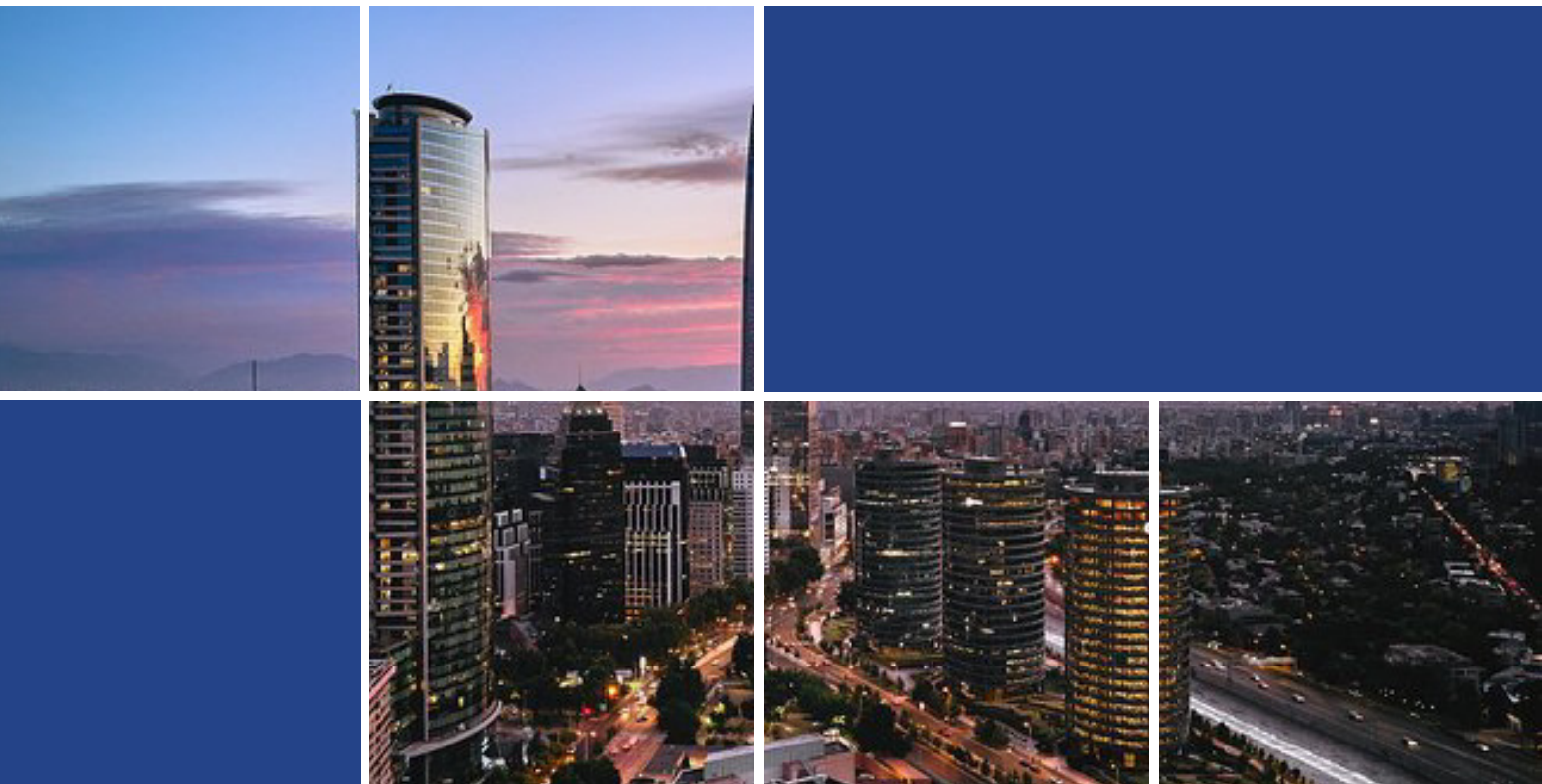


External Evaluation of the "Climate and Clean Air in Latin American Cities" Programme CALAC+ - Phase 2 Final Report



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CALAC+ Phase 2 - Final Report

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Acronyms and abbreviations

Abbreviation / Acronym	English	Español
AAP	Peruvian Automotive Association	<i>Asociación Automotriz del Perú</i>
AILAC	Independent Alliance of Latin America and the Caribbean	<i>Asociación Independiente de Latinoamérica y El Caribe (Grupo de negociación ante la CMNUCC)</i>
ATU	Urban Transport Authority of Lima and Callao	<i>Autoridad de Transporte Urbano de Lima y Callao</i>
CALAC	Clean Air Programme in Latin American Cities	<i>Programa de Aire Limpio en Ciudades de Latinoamérica</i>
CCAC	Climate and Clean Air Coalition	<i>Coalición por el Clima y Aire Limpio</i>
CCVC	Short-Lived Climate Pollutants	<i>Contaminantes Climáticos de Vida Corta</i>
CDMX	Mexico City	<i>Ciudad de México</i>
PDC	Programme Steering Committee	<i>Comité Directivo del Programa</i>
CITV	Vehicle Technical Inspection Centre (Peru)	<i>Centro de Inspección Técnica Vehicular (Peru)</i>
UNFCCC	United Nations Framework Convention on Climate Change.	<i>Convención Marco de las Naciones Unidas para el Cambio Climático.</i>
SDC	Swiss Agency for Development and Cooperation	<i>Agencia Suiza para el Desarrollo y la Cooperación</i>
DTPM	Metropolitan Public Transport Directory of Chile	<i>Directorio de Transporte Público Metropolitano de Chile</i>
EGR	Exhaust Gas Recirculation System	<i>Sistema de Recirculación de Gases de Escape</i>
GCF / FVC	Green Climate Fund	<i>Fondo Verde para el Clima</i>
GEF	Global Environment Facility (GEF)	<i>Fondo del Medio Ambiente Mundial (FMAM)</i>
GHG / GEI	Greenhouse Gases	<i>Gases de Efecto Invernadero</i>
NGV	Natural Gas Vehicles	<i>Gas Natural Vehicular</i>
HEBASH	Environmental and Human Health Benefit Assessment Tool	<i>Herramienta de Evaluación de Beneficios Ambientales y Salud Humana</i>
HEMAQ	Economic and environmental impact analysis tool for NCMs	<i>Herramienta de análisis del impacto económico y ambiental para MMNC</i>
HETRANS	Economic and environmental impact analysis tool for the transport sector	<i>Herramienta de análisis del impacto económico y ambiental para el sector transporte</i>
IDEAM	Institute of Hydrology, Meteorology and Environmental Studies (Colombia)	<i>Instituto de Hidrología, Meteorología y Estudios Ambientales (Colombia)</i>
INECC	Mexico's National Institute of Ecology and Climate Change	<i>Instituto Nacional de Ecología y Cambio Climático de México</i>
Integrity Group	UNFCCC Negotiating Group (Switzerland, Mexico, South Korea, Monaco, Liechtenstein)	<i>Grupo de negociación en la CMNUCC (Suiza, México, Corea del Sur, Mónaco, Liechtenstein)</i>
MADS	Colombian Ministry of Environment and Sustainable Development	<i>Ministerio de Ambiente y Desarrollo Sostenible de Colombia</i>

Minambiente	Acronym for Ministry of Environment and SD Colombia	Acrónimo para el Ministerio del Ambiente y Desarrollo Sostenible de Colombia
MINAM	Ministry of the Environment of Peru	<i>Ministerio del Ambiente de Perú</i>
MINEM	Ministry of Energy and Mines of Peru	<i>Ministerio de Energía y Minas de Perú</i>
MMA	Chilean Ministry of Environment	<i>Ministerio del Medio Ambiente de Chile</i>
MMNC	Non-Road Mobile Machinery	<i>Maquinaria Móvil No de Carretera</i>
MOP	Ministry of Public Works - Chile	<i>Ministerio de Obras Públicas - Chile</i>
NDC	Nationally Determined Contributions	<i>Contribuciones Determinadas a nivel Nacional</i>
RTP	Mexico Passenger Transport Network	<i>Red de Transporte de Pasajeros de México</i>
SCR	Selective catalytic reduction system	<i>Sistema de reducción catalítica selectiva</i>
SEDEMA	Mexico City Ministry of Environment	<i>Secretaría de Medio Ambiente de la Ciudad de México</i>
SEMARNAT	Ministry of Environment and Natural Resources of Mexico	<i>Secretaría de Medio Ambiente y Recursos Naturales de México</i>
SEMOVI	Secretariat of Mobility of Mexico City	<i>Secretaría de Movilidad de la Ciudad de México</i>
SFOE	Swiss Federal Office of Energy	<i>Oficina Federal de Energía de Suiza</i>
SITP	Integrated Public Transport System in Bogotá	<i>Sistema Integrado de Transporte Público en Bogotá</i>
ToR / TdR	Terms of Reference	<i>Términos de Referencia</i>

1. Executive Summary

1.1. Presentation

The Climate and Clean Air in Latin American Cities Programme (CALAC+), hereafter 'the Programme', is funded by the Swiss Agency for Development and Cooperation (SDC) and implemented by Swisscontact, in coordination with the ministries, local environmental and transport authorities, public bodies for public transport management and air quality, of the selected Latin American cities: Mexico City, Bogota, Lima, and Santiago de Chile.

The CALAC+ programme carried out its Phase 1 activities from March 2018 to July 2021. As a result of the intervention and the commitment shown by the actors involved, the Programme formulated Phase 2, the implementation of which began in August 2021, and will culminate in July 2025. The objective of Phase 2 is to continue and consolidate the momentum achieved by the Programme, and focus efforts on reducing harmful air pollutants and greenhouse gas (GHG) emissions through the deployment of clean, soot-free engine technologies to mitigate climate change and protect the environment and human health.

At the end of the four-year implementation period, the SDC's Lima Regional Hub has commissioned the firm DEUMAN to carry out the External Evaluation of the Programme in Phase 2, as a final evaluation, which aims to critically examine the process and the extent to which the objectives have been achieved, the expected outputs have been obtained, and the activities have been developed with respect to the Programme document and its logical framework of intervention. The evaluation is aligned with the Terms of Reference (ToR) of the assignment, and is carried out within the criteria proposed by the Organisation for Economic Co-operation and Development (OECD), adapted to the context of the Programme led by the SDC's Lima Regional Hub.

1.2. Brief description of the CALAC+ Phase 2 Programme

Phase 2 of the Programme has been formulated on the basis of the progress made in Phase 1 and the consolidation of progress and achievements, with a view to achieving the following results in the medium and long term, which in turn are operational components of the Programme:

- **Component / Outcome 1** - *Cleaner urban transport: Key stakeholders with strengthened capacities to make informed decisions, achieved through support for technical input generation, technical assistance and policy formulation support.*
- **Component / Outcome 2** - *Urban Policy Incubator for NCMs. Recognition of the importance of introducing the issue of NCMs, in addition to the promotion and development of technical aspects to achieve NCM regulations.*
- **Component / Outcome 3** - *Global and international cooperation. The dissemination of the activities carried out and the exchange of experiences at country and regional level will serve as key mechanisms to preserve and consolidate what has been learned over time.*

1.3. Summary of the External Evaluation

The CALAC+ Programme in its Phase 2 responds to a design and objective of continuity and consolidation of the actions and enabling products for change, which were introduced in Phase 1 of the Programme, defining with greater precision the actions, indicators and immediate final goals in the Programme's execution time, and the prospects for long-term impact.

In this sense, the evaluation reveals the need to differentiate the intermediate results obtained from the final results of the objective, which have a longer time frame. Likewise, the Programme's indicators, such as quantification of emissions, allowable values, and others, must be closely linked to the achievement of enabling conditions; and secondly, to the final goals.

The scores¹, according to the evaluation criteria, are applied in this section to the overall Programme, taking into account the differences in the timing and progress of the Programme - some substantial - in the four selected countries, which are in any case mentioned in more detail in the subsequent sections of the report.

Relevance - (VS) Very Satisfactory

The initiative promoted by the Programme is highly appreciated by the central actors involved. The needs and priorities promoted coincide with the national and local policies and plans of the participating countries. Dissemination efforts to beneficiaries are still required, within the framework of health and environmental well-being; but it is notorious in each country that the transport and air pollution problem is already in the awareness and concern of governments, academia and civil society in general.

The orientation of the Programme, already successfully tested in Phase 1, has been fine-tuned to meet the needs of stakeholders and decision-makers. The main aspects of the design that are mentioned as highly positive are: the exchange of experiences with other countries, the technical quality of the team and consultants, the capacity building, and the governance and organisational format.

Consistency - (S) Satisfactory

The intervention is compatible in its design and objectives with other interventions, but the internal coherence achieved depends on the progress made in each country in terms of regulations, information and policies. In Chile and Colombia there is a good level of coordination and inter-institutional coherence. Mexico is taking advantage of shared experiences; and Peru still require, for synergic action, greater coordination between the governmental sectors involved in environmental and transport issues, and with the private sector and academia.

The CALAC+ Programme relates positively to other environmental and climate projects promoted by the Swiss Cooperation in the region and at the global level, continuing the strategy of Phase 1.

¹ The scores refer to SDC's internal Evaluation Grid, which is attached as a separate Annex to this Report: with the following gradation: 0=No rating; 1=Very satisfactory; 2=Satisfactory; 3=Unsatisfactory; 4=Very unsatisfactory.

Effectiveness - (S) Satisfactory.

The CALAC+ Programme's approach and strategies are the most appropriate given its aim to enable enabling conditions to achieve concrete results, and have been well implemented.

Phase 2 of the Programme is expected to achieve its results, in terms of enabling and implemented outputs and actions, or in the process of implementation. To more accurately assess achievements going forward, it is necessary to differentiate and verify in each country the sequence and milestones between the enabling intermediate results of regulations and implementation of measures, with the consequent and measurable final results of improvements in air quality and environmental health, including in economic and social terms.

Efficiency – (VS) Very satisfactory

A short- and medium-term cost-benefit analysis of the Programme reveals that the investment in the promotion of measures and their technological implementation is highly positive. The convergence of the Programme's actions with the expected investments in the countries and synergies with other interventions in the long term, if the sustainability of progress is fostered, will result in even greater cost-effectiveness.

The evaluation of the intervention, which is still in the process of achieving its results, should refer to the progress of the *Outputs* and their effect on the long-term *Outcomes*, whose indicators are not yet fully applicable. In this sense, the evaluation considers that the effort and allocation of resources has been efficient and reasonably adjusted to the timetables in each country, and a satisfactory final budget execution is foreseen.

The quality of the Programme's operational management, according to the documents and the mentions reiterated by the actors, is appreciated as very efficient in its adaptive and flexible implementation in the face of local realities, and in the high quality of the management team, both in local coordination and in technical advice.

Impact - (S) Satisfactory

The impact, in terms of medium and long-term effects, is complementary, progressive and cumulative between the two phases of the Programme. By increasing and updating technical knowledge, key actors have been able to take ownership of the interest in international environmental commitments on urban air quality.

The immediate impact has been estimated in terms of enabling intermediate outcomes. While this impact is relative depending on progress in each country and the potential for sustainability of the momentum initiated, it is estimated that the inertia initiated will have a positive outcome in the medium term, even taking into account the current risks of interference and slowdown in post-Programme decision-making.

Sustainability - (S) Satisfactory

Partners generally express a high level of interest in the continuation of government and private sector actions, and expectations for further exchange of experiences and capacity building.

It is considered that financial resources may be variable between countries; and that budget allocations will depend on the priority given to international commitments in sectoral plans. International support and regional cooperation will be key.

Contextual factors - which vary from country to country - generally favour the continuation of activities towards results. As in the preceding analysis, the possibility of partnerships, cross-cutting cooperation and international pressure should be foreseen in a plan for the sustainability of the initiative.

1.4. Summary of Conclusions, Recommendations, and Lessons Learned.

On the design and implementation of Phase 2 of the Programme.

- The testimonies and opinions obtained express a broad recognition by the actors of the qualities and virtues of the CALAC+ Programme. In particular, reference is made to the positive sequence between Phase 1 of support to initiatives and regulations related to air quality in relation to urban transport in the capital cities of the selected countries; and the continuity obtained with Phase 2, which has been oriented towards concrete achievements and results derived from the initial progress, towards a level of realisation.
- Stakeholders repeatedly appreciate the structure of Programme Components, outputs and activities for the four countries and their respective selected cities. The promotion of exchange and learning from experiences is appreciated with a governance scheme that combines support with technical and coordination staff working within key government entities with capacity building activities, exchange of experiences at the international level, and specialised technical advice.

On the Relevance of the Programme

- A broad consensus is expressed on the relevance of the Programme in relation to national plans on environmental quality in general, and air quality in particular. Governmental actors appreciate the support and support with technical and methodological inputs for the formulation of regulations and advances in relation to international commitments to reduce emissions, and national air quality needs in health, economy, and transport regulation.

On Coherence

- The openness and flexibility of the Programme in the face of local realities and preceding initiatives in each national context is highlighted, as well as the regional vision of technical and experience exchange to accelerate the demonstration effect and the interest in technological progress.

On Effectiveness

- The overall effectiveness of the Programme's actions and results is considered positive at the regional level, even taking into account the different progress in each component, city and country, considering the synergies achieved and the weighted measurement of global and country progress towards results.

On Implementation Efficiency

- The Programme's management and administration of financial, technical and human resources is rated as satisfactory, due to its capacity to adapt to external events, as in the case of the health emergency throughout the Region, and its flexibility in meeting the need for changes and adaptations of activities to local political and governance realities and contexts.
- The Programme management performance of SDC's Lima Regional Hub, as well as that of the executing agency, Swisscontact, is highly satisfactory in terms of capacities and work modalities, especially due to the proximity and frequency of interaction with government actors, the guidance and support of the Programme Steering Committee (PDC), and the flexibility and adaptability in monitoring and solving barriers with alternative solutions agreed upon by consensus in the technical committee and approved by the PDC.

On the Impact of the Programme

- The impact of the Programme is cumulative and has a medium and long-term effect. There is a promising post-Programme horizon for a global impact and in each country, due to the ownership of governmental bodies and the growing interest in alignment with international environmental commitments, both on climate change and air quality in cities.

On the Sustainability of the Programme

- The sustainability of the Programme's actions at the close of operations is a matter of uncertainty among key stakeholders in all countries. It is recognised that the Project's actions will settle down and progress will continue towards regulatory measures and technical progress, both in urban transport quality and in the reduction of emissions and fine particulate matter, as well as in the introduction of effective emission control in Non-Road Mobile Non-Road Machinery (NRMM). But there is a perceived risk of slowing down the momentum gained when it is left to government administration and the pace of bureaucratic decision-making.
- Political changes and changes in the orientation of governments in the region are not and usually are not predictable, and can change energy priorities, resource use, and even environmental considerations and long-term vision. These changes, although they do not substantially affect the technical levels of studies, preparation of standards and progress in coordination with academia, private actors, and local governments, do influence high-level decision-making, compliance with international commitments, and budgetary allocations.

Summary of Recommendations

- Design and promote, in the remainder of the implementation period until March 2025 - with the leadership of the actors themselves - a consensual exit strategy that commits governments, associated associations and academia, as appropriate, to continue and provide sustainability to the effort initiated. Some actions to be undertaken in this regard would be, among others:
 - a. Establish a permanent working group in each country, formalised with ministerial arrangements, and with the participation of the main governmental actors, to continue on complementary actions

and optimise budgetary resources to complete the pending regulatory frameworks in each country.

- b. Propose the global organisational basis, based on the Pacific Alliance, to institutionalise capacity building and exchange of experiences at regional and global level, underpinned by the Programme.
 - c. Invite the ministries of economy and finance and the private financial sector to participate in the continuation of the actions, with guidelines to promote analysis and dissemination of studies that support the medium and long-term socio-economic benefits of the measures and technical regulations.
 - d. Support and ensure the realisation of Chile's proposal to host and maintain the repository of experiences and technological know-how promoted by the Programme, in particular on the growing interest in the innovative topic of NCMN.
 - e. Install the presence of the Programme and its results in the environmental networks of the Region, with a view to meetings and conferences on the subject of clean air, including the occasion of UNFCCC negotiation meetings with AILAC and the Integrity Group, and decisions on the subject in the NDCs (clean air, sustainable urban transport and renewable energies, based on the progress and results of the Programme).
- Promote the preparation of a commensurate project, eligible for financing by the Green Climate Fund (GCF), that gathers the experiences of the Programme, and promotes actions to consolidate policies, methodologies, regulations, and technological implementation in selected countries of the Region and cities of second national rank, in support of the relevant contents of the respective NDCs.
 - Promote the dissemination, experiences and technical publications of the Programme with wide distribution in the countries, at the academic level, the private sector, trade unions and mobility and urban development NGOs in other planned cities, stimulating internal and international exchange with new public and private actors.

Key lessons learned and vision for the future.

- The experience and mutual learning between countries in the Region is welcomed by actors in technology profile initiatives, and is extremely valuable as a starting point for new interventions.
- The structure of the Programme, combining close interaction at the country level with governmental entities and technical coordination at the international level, has been substantial for the successful ownership of the results and the consolidation of clean air awareness.
- It is important to have a counterpart, designated as permanent if possible, within partner institutions and actors, or in national platforms, to optimise coordination and overcome barriers and political interference in institutions.
- The impact of international cooperation, as well as institutional autonomy in political administration, are key resources in the face of risks of political or legal interference.
- It is crucial to promote and maintain a repository, and an institutional focal point in charge of systematising experiences, expanding know-how and systematically managing the knowledge

acquired during and after the implementation of the Programme, and of any project in general. It is also important to have specialists and spaces for frequent learning and input generation, as well as studies and analyses with a focus on green economy and sustainable financing.

- Maintain flexibility and conceptual openness in the approach and design of products and activities, especially when the technology market evolves faster than studies and policy proposals.

2. Introduction to External Evaluation

2.1. Background and Description of the CALAC+ Programme

The CALAC+ Phase 1 Programme started in 2018 and ended in July 2021. Its main objective was to reduce pollutant emissions in cities by promoting sustainable solutions. The CALAC+ Programme was implemented by Swisscontact, in coordination with ministries, local environmental and transport authorities, public transport and air quality management agencies of major cities in four Latin American cities (Bogota, Mexico City, Lima and Santiago de Chile).

The results of Phase 1 were encouraging, achieving the establishment of agendas and regulations on air quality and emissions issues in the intervention countries. Although implementation was affected by the health crisis caused by COVID-19, the Programme's level of impact was satisfactory in the lines of action proposed, although there were some opportunities for improvement.

Due to the success of the Programme, a Phase 2 was proposed with the objective of continuing the momentum achieved, focusing efforts on reducing harmful air pollutants and GHG emissions through the deployment of clean, soot-free engine technologies. Phase 2 of this Programme started in August 2021 and is developed in three components, the implementation of which is feasible in a simultaneous, articulated and interdependent manner:

Component 1 focuses on significantly reducing emissions of ultrafine particles, air pollutants and greenhouse gases from the public transport system.

Component 2 focuses on transferring capacities and successful experiences in the intervention countries to strengthen the development of a regulatory framework for the incorporation of construction machinery with electric or low-emission technology.

Component 3 focuses on efficient policies, actions and technologies that have been validated, systematised and shared for scaling up at regional and global levels.

2.2. Evaluation Methodology

In the third year of the implementation period, SDC has commissioned the firm DEUMAN to carry out the External Evaluation of the Programme in Phase 2, as a final evaluation, which aims to critically examine the process and the extent to which the set objectives have been achieved, the expected outputs have been obtained, and the activities have been developed with respect to the Programme document and its logical framework of intervention. The evaluation is aligned to the Terms of Reference (ToR) of the assignment, and is executed within the criteria proposed by the Organisation for Economic Co-operation and Development (OECD), adapted to the context of the SDC-led Programme.

The evaluation methodology is aligned to the indications and structure prescribed in the ToR, and to the adoption of the evaluation principles and criteria adopted by the OECD. The external evaluation of the Programme started in July 2024 and the methodology developed was structured as follows:

- Prior coordination with the SDC Offices in Lima and Berne on the generalities of the process and guidance on the necessary coordination.

- Presentation of the Work Plan, which was approved by the Lima Office, including the evaluation matrix, selection of interviewees, work schedule, and scheduling of trips to Colombia and Mexico, while the consultants from Peru and Chile attended their respective countries.
- Collection and review of the relevant technical and administrative documentation of the Programme, provided by the Programme Directorate in Lima.
- Participation in two international meetings (Santiago de Chile and Lima) to present progress and technical presentations by the actors, including visits to local companies linked to the Programme's thematic area.
- Execution of the interview programme and field trips to Mexico (Jaime Parada) and Colombia (Eduardo Durand); and review of opinions and impressions received in a systematisation of the interviews carried out. **Annex E** presents the questionnaire-guide used for the interviews and adapted in each case to the people, institutions, roles with respect to the Programme.
- Desk analysis of the results obtained, triangulation with the content of the documentary information received, analysis of the Theory of Change, and review of the Programme's Logical Framework.
- Presentation on 23 September 2024, in a virtual meeting with SDC, of the results of the field mission and preliminary findings and conclusions, receiving comments and observations.
- Preparation of this Preliminary Report as of 27 September in order to receive the necessary observations and comments with a view to submitting the Final Report on 25 October, including the Annexes, infographic documentation and versions in English and Spanish.
- Development of infographics on the Programme and its evaluation, aimed at dissemination and knowledge of the various stakeholders.
- Final review by SDC and translation into English (British) of the products and report of the External Evaluation.

3. Logical evaluation of the Programme

3.1. Relevance

The Programme's main objective and intervention to contribute to reducing harmful air pollutants and greenhouse gas emissions in major cities in Latin America is highly relevant in the context of the Region.

The four countries selected for the development of the Programme (Chile, Colombia, Mexico and Peru) share common challenges related to environmental quality, in particular outdoor air quality, which makes the intervention convergent with the respective national policies and plans.

The governmental actors responsible for this issue appreciate the support provided, and mention in particular the technical and methodological inputs provided for the formulation of regulatory schemes; and the support for the fulfilment of international commitments on emission reductions. These efforts will have a positive impact on air quality, health, the economy and transport regulation, contributing to the overall economy and the well-being of citizens.

From the above, it is concluded that the approach of the intervention strategy, established in Phase 1 of the Programme, was appropriate and conducive to the objectives, which merited its continuation and consolidation in Phase 2, currently being completed. The Programme's strategy proposes three Components / Outcomes:

- **Component / Outcome 1 - Cleaner urban transport:** Key actors with strengthened capacities to make informed decisions, achieved through support for the generation of technical inputs, technical assistance and support in the formulation of public policies.
- **Component / Outcome 2 - Urban Policy Incubator for NCMN².** Recognition of the importance of introducing the issue of NCMs, as well as the promotion and development of technical aspects to achieve NCM regulations.
- **Component / Outcome 3 - Global and international cooperation.** The dissemination of the activities carried out and the exchange of experiences at country and regional level will serve as key mechanisms to preserve and consolidate what has been learned over time.

The three Components / Outcomes complement each other to ensure their own objectives and the overall objective and impact. Moreover, it can be seen that they respond directly to the problems identified in the Region, so it is expected that the Programme's intervention in Phase 2 will achieve the expected impacts and benefits.

In terms of country relevance:

In **Chile**, the national approach that the Programme has maintained since Phase 1 has been crucial to formulate effective public policies. In particular, the alignment of the Programme with governmental objectives on climate change and clean air has demonstrated a strategic relevance that contributes to the national policy agenda, generating concrete measures. The critical review of various related studies, such as the *Life Cycle Analysis of electric buses* or the evaluation of green hydrogen fleets in Santiago, demonstrate the relevance of integrating technical-economic analysis as a basis for policy making. The parallel economic-social analysis, related to the heavy-duty vehicle emission ceilings standard (Euro VI),

² MMNC: Non-Road Mobile Machinery for its acronym in Spanish.

ensures that policies are not only effective from an environmental point of view, but also relate to the economic and social reality of the country.

In **Colombia**, there is notable satisfaction with the design and implementation of the Programme, as it has addressed local issues in a relevant manner, and has taken advantage of the experiences of other countries to apply them to the national context. The support to the Ministry of Environment and Sustainable Development (MADS) in the elaboration of the inventory of NCMs is considered a significant step towards the strengthening of GHG emissions inventories in the region. Likewise, the support in the revision of the Environmental Self-Regulation Programme in Bogotá and the collection of information on hybrid vehicles demonstrates a comprehensive approach that not only improves regulation, but also facilitates the transition towards more sustainable technologies.

In **Mexico**, the Programme's alignment with the national context is considered relevant as it responds to the country's specific needs and adapts to local realities. Strengthening the technical capacities of decision-makers has been fundamental and has ensured that the initiatives implemented are based on sound and relevant information. Activities such as the course given on maintenance for the RTP, the support to SEDEMA in the self-regulation programme for freight trucks and the campaign to measure particulate matter in heavy vehicles in Mexico City, will serve as a starting point for future collaborations and audits that can be carried out in the country. Similarly, the support received in the revision of the official Mexican standard on NRMM highlights the importance of integrating technical expertise into regulatory development, ensuring that policies are relevant and effective. Taken together, these actions highlight the relevance of the programme and its capacity to generate a positive impact both locally and globally.

In **Peru**, the relevance is seen in the Programme's ability to promote effective solutions related to mobility and the improvement of environmental quality in transport. The Programme facilitated the exchange with other countries and accelerated progress in an area where national progress was limited, such as in initiatives like the development of the roadmap to update the standard related to the homologation of vehicles, including those with Euro 6/VI, electric and hydrogen technologies. Progress has also been made in the control of emissions in Vehicle Technical Inspection Centres (CITV) and support has been provided for the preparation of documents for the GEF-7 project on electric mobility. Furthermore, technical assistance to the ATU has been crucial to create an action plan to facilitate the introduction of electric buses. Another important point has been the assessment of the first national inventory of NCM emissions in collaboration with the General Directorate of Environmental Quality (MINAM).

3.2. Coherence

The CALAC+ Programme, developed in the framework of climate change negotiations and national environmental policies, is positively related to other environmental and climate initiatives promoted by the Swiss Cooperation in the region, such as the Clean Air (AL) project in Bolivia. The latter aimed at reducing GHG emissions and toxic substances produced by the vehicle fleet by improving the quality and efficiency of public transport, and is directly related to the objectives of the CALAC+ Programme, since both address the improvement of air quality through actions to measure emissions, technical assistance, establishment of policies, and adaptation of new technologies. The LA project was not implemented in

any of the countries involved in this Programme, but in Bolivia, which demonstrates the potential of these initiatives for successful replication in other countries of the Region.

On the other hand, within the framework of the formerly known as Global Programme on Climate Change and Environment (GPCCE)³ of the Swiss Cooperation, the CALAC+ Programme is coherent with the GPCCE Programme Framework 2021- 2024 and is directly related to the following components:

Strategic Component 2 - Low Carbon Development: Seeks to increase access to affordable, reliable and clean energy for all, while improving the sustainability of the built environment, thus contributing to low carbon development.

Strategic Component 3 - Climate Resilient Development: Seeks to ensure that the capacity of governments and the most vulnerable and disadvantaged people to implement effective, evidence-based adaptation measures is enhanced and contributes to climate resilient development.

In this sense, the SDC's international networks and contacts on environment and climate change have a relevant role in linking projects and programmes in their approaches to reducing GHG emissions, promoting knowledge transfer, and disseminating information on political and scientific developments. On the other hand, there is internal compatibility and coherence of the Programme with individual initiatives and work in each country, as outlined below.

In **Chile**, the coherence of the Programme has been maintained through the same relevant actors, through strategic selection planning, taking advantage of the experience and capacities of those involved.

In **Colombia**, access to high-level technical information, based on real experiences from other countries and organisations, provided by the programme, has allowed a coherent approach to national objectives to be maintained. This has made it easier for public officials to develop projection and an understanding of ways to solve environmental problems.

In **Mexico**, the country's goals have been established based on the experiences and progress of other countries, which has been a positive indicator of coherence, since replicating successful experiences reduces the learning curve and the margin for error, and strengthens the impact on the formulation of public policies.

In **Peru**, coherence is evident with other parallel initiatives in force in the country, such as those developed by MINAM, and other technical contributions from related sectors. The Programme's capacity for coordination and capacity building on air quality issues in mass public transport and mobile machinery has made it possible to counteract the delays caused by political instability in the country and the high turnover of high-level officials.

3.3. Effectiveness

Component / Outcome 1 seeks to achieve cleaner urban transport by strengthening the knowledge and implementation of EURO VI technologies in the four intervention countries. Although progress varies from country to country, the approach has been regionally appropriate. Positive synergies have been generated

³ Currently referred as "Climate, Disaster Risk Reduction and Environment Section" (CDE).

and weighted measurement of progress overall and in each country against the expected results. In addition, significant progress has been identified in the programmed activities. In **Chile** and **Colombia**, notable progress has been made in the generation of technical inputs for particle number measurement, emission reductions, as well as studies related to green hydrogen. In **Mexico**, programmed activities continue to be developed. In **Peru**, although activities have slowed down due to political and civil servant changes, significant progress has been made in the technical assistance provided for the development of regulations.

In **Component / Outcome 2**, related to policy incubators for the NCMN, the approach to this issue is considered adequate. In terms of achievements, progress has been made in relation to the NCMN. In **Chile**, technical support for the drafting of protocols for the verification of new machinery, as well as for the acquisition and implementation of NCM filters, stand out. In **Colombia**, progress has been more moderate, focusing on the inventory of NCM emissions. In **Mexico**, efforts to develop national and local inventories of NRMM allowed the formulation of a standard regulating this type of vehicles. In the case of **Peru**, a diagnosis has been carried out that establishes the regulatory framework for NCMs and lays the groundwork for the development of an inventory of mobile machinery emissions.

In **Component / Outcome 3**, on regional and local cooperation, an adequate exchange of experiences and capacity building has been achieved. However, one limitation of the programme's effectiveness is the need for greater dissemination of its achievements and scope in order to increase its impact on government policies and the interest of other related sectors. In terms of progress, the programme has been implemented as planned, carrying out activities to strengthen the capacities of key actors such as partners, academics, technical staff, among others relevant to the programme. Likewise, the dissemination of information on electric machinery and green hydrogen has been carried out. Although other activities such as the automation of customs data processing for the HEMAQ tool are still under development, significant progress has been made in the four countries involved.

Some factors have been identified that have influenced the achievement of the objectives set:

- The implementation of measures to reduce pollutants in the cities has been key to the inclusion of a professional within the working team of partner and governmental institutions. This has allowed for continuous coordination, facilitating the achievement of the established objectives. However, in Peru, the socio-political context has created a situation of high turnover of civil servants in the state apparatus, limiting the scope of actions and achievements.
- The solid base established in Phase 1 to introduce the issue of NCMs has allowed for continuing the approach to the problem of their contribution to emissions in this second phase. Another factor that has favoured the achievement of the objectives has been the exchange of experiences between the countries, given that, being a topic with few precedents, the results obtained in the four intervention countries have been beneficial for achieving the global objective.
- The use of digital tools for the exchange of experiences and the dissemination of results, through the Programme's own platforms, or others such as those of CCAC and the Pacific Alliance. In this regard, the need has been identified to expand the dissemination of achievements and achievements to other sectors of interest linked to transport issues, trade unions, civil society, private investment and end users.

3.4. Efficiency

According to the information presented, the activities have developed according to plan, with some delays, due to exogenous reasons, which have been managed with adaptive actions.

In **Component / Outcome 1**, the main delays come from government bodies in the intervention countries, especially in Peru, where the socio-political context and the high turnover of civil servants in the public sector have caused delays in the progress of the Programme.

In **Component / Outcome 2**, in Mexico, the prioritisation of certain activities, such as the formulation of a standard on measuring NCM emissions, has led to delays in other programmed activities.

In **Component / Outcome 3**, at the regional level, activities are being implemented according to the planned timelines.

The mechanisms used for efficient implementation have been adequate. The intervention strategies, such as the adaptation of the Programme's goals to the contexts and environmental objectives of the partner countries, have made it possible to meet the specific needs of each intervention country. Similarly, the management of the country coordinators, designated and present as counterparts in the partner governmental institutions' own facilities, has allowed for sustained and results-oriented coordination. On the other hand, having technical coordinators, both by component and by country, has made it possible to approach the work from an integral perspective, connecting the operations of each country, and facilitating the development and monitoring of activities.

Internal coordination mechanisms have been adequate. It has been identified that in each country the actors maintain constant contact and a high frequency of interaction with governmental actors. The programme has shown remarkable flexibility and adaptability, allowing the technical team to follow up and solve eventual situations and potential conflicts.

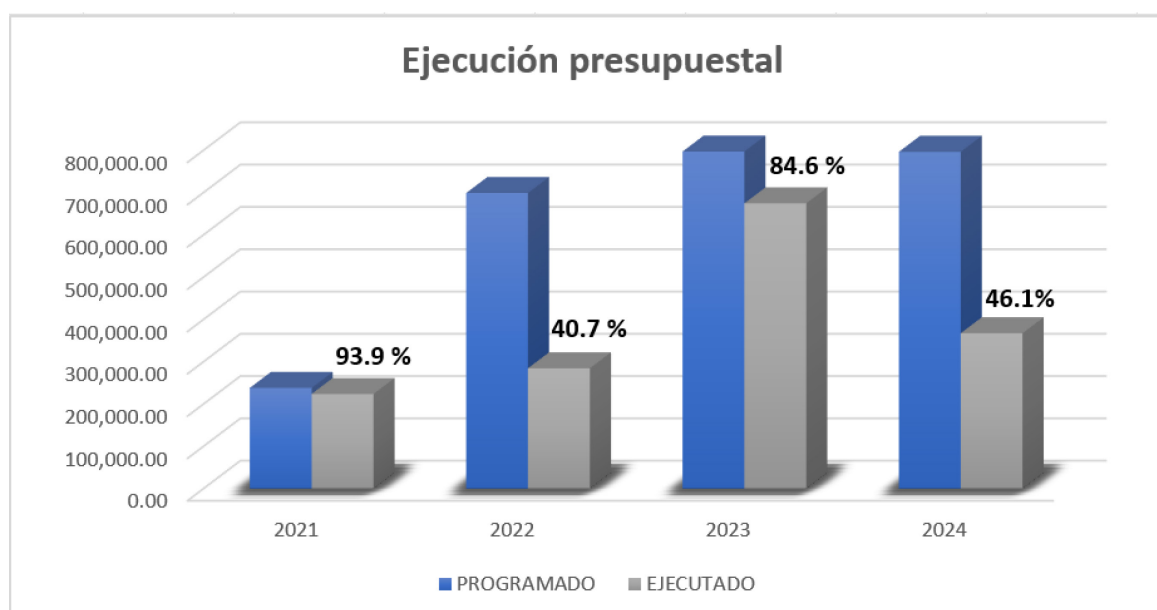
In terms of efficiency in financial execution, **Table 1** and **Graph 1** are presented. Phase 2 of the Programme has a cumulative execution (as of June 2024) of **50.9%** and the annual execution, based on the respective programming, has fluctuated from 93.9% in the period August-December 2021, to **40.7%** and **84.6%** in the years 2022 and 2023, and **46.1%** in 2024 (June).

The increased pace of implementation during 2023 and the progress to June 2024, together with a better outlook for progress in the opinion of the actors, as well as the overcoming of barriers in Peru, make it possible to foresee that an annual implementation at the end of 2024 of the order of **85-90%** and a total implementation at July 2025 of the order of **85-88%** would be achieved. This apparent lower investment, however, would reflect financial savings, rather than under-execution of goals; and could be due to positive changes and optimisation of virtual work and inter-institutional coordination.

Table 1. Annual and cumulative budget execution

Annual implementation in Swiss francs (CHF)			
Year	Programmed	Executed	% annual execution
2021	238,231.00	223,786.73	93.9
2022	699,040.00	284,614.59	40.7
2023	797,090.00	674,554.00	84.6
2024 (Jun)	796,463.67	367,506.20	46.1
TOTAL	3,045,550.00	1,550,461.52	50.9
Cumulative implementation (CHF)			
Year	Total budget	Cumulative implementation (as of June 2024)	% total execution
2021	-	223,786.73	7.3
2022	-	508,401.32	16.7
2023	-	1,182,955.32	38.8
2024 (June)	-	1,494,580.00	49.1
	3,045,550.00		

Graph 1. Budgeted vs. executed annual execution



Source: Programme Financial Reports (2024, as of June).

3.5. Programme Impact

The Programme's impact is revealed in the trust generated between governmental and non-governmental bodies to ensure the continuity of ongoing initiatives. This is due to the Programme's influence and the creation of an environment of collaboration between institutions and countries in the region, generating synergies that will last over time.

The impact is cumulative, with medium and long-term effects. Through the increase and updating of technical knowledge, it has been achieved that key actors take ownership of the interest in international environmental commitments, such as air quality in cities. In this sense, Component/Outcome 3 will ensure the dissemination of the experiences generated by the four countries, facilitating replication in other cities and countries.

In **Chile**, the actions promoted by the Programme on electromobility have been significant. The government has considered it necessary to promote other alternatives, such as the implementation of green hydrogen in vehicles, as an option to reduce polluting emissions; and has also recognised the potential of this technology to meet its target of 25% black carbon reductions by 2030 in the framework of its Nationally Determined Contributions (NDCs). On the other hand, there is a growing interest in formulating public regulations, such as the emission standard for heavy duty vehicles and particulate matter in public transport emissions. In this case, the technical support of the Programme has been provided through the General Analysis of Economic and Social Impacts (AGIES).

Capacities have been strengthened through exchanges, such as the one coordinated with the Federico Santa María Technical University to develop machinery (MMNC) that uses hydrogen as an energy source, in order to show the technological possibilities to governmental actors such as the MOP and the MMA. In addition, the technical mission to Brazil provided an insight into the guidelines for the control of SCR and EGR systems.

In **Colombia**, the greatest impact on emissions reduction was achieved through the evaluation of particle counters for vehicle emissions, as valuable information was obtained on the technology required for measurement and regulation under the Euro 6/VI and EPA 2010 standards. In addition, NCM emission inventories were strengthened, especially in cities such as Bogotá, Medellín and Cucuta, with the support of IDEAM and Minambiente. These actions contribute to national and local efforts to control emissions and improve air quality. They are also expected to have a direct impact on Bogotá's Air 2030 Plan, which envisages the introduction of construction machinery with lower emission levels.

In terms of capacity building, the Programme has participated in various spaces such as the Regional Conference on Zero Emissions Public Transport, the Colombian Congress, the International Conference on Air Quality, Climate Change and Public Health, the event *Pacto Unidos por un Nuevo Aire* (SDA), and the periodic event 'Aire WEB'. These spaces have brought together academics, governmental and private actors, facilitating the socialisation of issues related to air quality, presentation of technologies and technical issues related to national and international regulations.

In **Mexico**, the main impact has been the increase of clean mobility in the city. CALAC+'s support to SEDEMA in the implementation of the self-regulation programme for private freight trucks has encouraged private companies to increase the fleet of electric trucks. In addition, a campaign to measure

the number of particulate materials in heavy-duty vehicles was carried out, which served as support for the development of a control programme for diesel vehicles equipped with particle traps. These efforts have influenced other entities such as Metrobus, which after the above-mentioned campaign implemented an internal control policy for its DPF-equipped buses.

The active participation of the Programme in the promotion of the official Mexican standard for NCMM was key to the construction of the regulatory proposal, and its scope was extended to five cities through a cost-benefit analysis. The role of CALAC+ in strengthening environmental regulations, with impact at the national level, is highlighted. Other activities such as the Research and Development Congress of the Monterrey Institute of Technology and the participation in the Clean Mobility and Cities of Tomorrow Forum, strengthened capacities through learning.

In **Peru**, the main impact of the programme has been the contribution to the reactivation of vehicle homologation. Despite delays in the formation of the Vehicle Homologation Committee, efforts have continued and the inclusion of private sector organisations, such as the NGO *Transitemos* and the AAP, has been achieved due to their experience in the subject. Another impact of the programme has derived from the support to the General Directorate of Environmental Quality of MINAM to facilitate the initiation of the GEF-7 project on electric mobility. This project would have the potential to establish a National Electromobility Plan, driving the transition to cleaner transport at the national level.

In addition, the transfer of knowledge to different entities, through virtual events such as the dissemination of the study carried out by CALAC+ in Chile "Technical-economic evaluation of hydrogen bus fleet implementation in the RED metropolitan transport system", has promoted collaboration and learning in the sector.

3.6. Sustainability

The sustainability of the Programme lies in the success, permanence and replicability of the initiatives at the regional level. The high degree of commitment and ownership achieved by key actors is an asset that adds up to implementation, institutional strengthening and the collective construction of intergovernmental and international cooperation. In order to consolidate what has been achieved and maintain the pace of positive evolution, it is essential to design an exit strategy and a sustainability plan articulated among the participating countries.

The following section sets out how potential sustainability manifests itself in each country:

In **Chile**, it has been identified that the symbiosis generated between the Programme and government institutions will be fundamental for its sustainability. Institutional involvement strengthens internal capacities and ensures that key people can manage the initiatives in the future and keep them on government agendas. Government involvement from the outset in the design and implementation of the Programme has fostered a sense of commitment, ensuring continuity of activities. However, an exit strategy is needed that includes clear plans to facilitate the transition to institutional autonomy and increase the long-term viability and replicability of the programme.

In **Colombia**, the main risk identified is the possible slowdown of government actions and decisions that have been supporting the Programme, at the end of Phase 2. However, it is expected that progress will be consolidated in such a way as to ensure the sustainability of the Programme's results and objectives in the long term.

In **Mexico**, the experience, the documentation generated, and the changes in public policies will serve as a solid basis for future initiatives. This will ensure that progress will endure over time and allow for the transfer of knowledge and experience gained through the programme. However, the sustainability of the actions could be compromised due to the frequent turnover of managers in key institutions, which can disrupt the continuity of the initiatives, mainly when new authorities are not committed to the objectives of the programme or do not understand the importance of the proposed policies and actions.

In **Peru**, which is clearly lagging behind its peers in the region, there is a clear need to design an exit strategy that includes actions agreed with the main actors in the country, and that promotes the continuity of the actions initiated through inter-institutional agreements and the inclusion of the issue in the proposals for international commitments, specifically related to air quality and climate change.

3.7. Summary table of the Evaluation Grid.

The following is the Summary Table of the Evaluation and Assessment of Achievements Grid required by the ToR, the SDC template version of which is incorporated as a separate Annex to this final report.

Table 2. Summary of the Evaluation Grid.

Evaluation criteria	Score	Justification
Relevance / Relevance		
1. The extent to which the objectives of the intervention respond to the needs and priorities of the target group.	1 Very Satisfactory	The initiative promoted by the Programme is definitely appreciated by the central actors involved. The needs and priorities promoted coincide with the national and local policies and plans of the participating countries.
2. To what extent the objectives of the intervention respond to the needs and priorities of indirectly affected stakeholders (not included in the target group) in each country of intervention.	2 Satisfactory	There is no evidence available of reactions from indirect actors, and the highly technical nature of the actions and products would not make it easy to know. No effort has yet been made to disseminate information to beneficiaries in the language of health and environmental wellbeing, but it is clear in each country that the issue of transport and air pollution is in the awareness of governments, academia and civil society in general.
3. To what extent and which elements of the fundamental design of the intervention (such as the theory of change, the structure of the programme components, the selection of services and intervention partners) adequately reflect the needs and priorities of the target group.	1 Very Satisfactory	The orientation of the Programme, already successfully tested in Phase 1, has been fine-tuned to meet the needs of stakeholders and decision-makers. The main aspects of the design that are mentioned as highly positive are: the exchange of experiences with other countries, the technical quality of the team and consultants, the capacity building, and the governance and organisational format.

Evaluation criteria	Score	Justification
Coherence		
4. Internal coherence: the extent to which the intervention is compatible with other Swiss development cooperation interventions in the same country and thematic area (coherence, complementarity and synergies).	2 Satisfactory	The intervention is compatible in its design and objectives with other interventions, but the internal coherence achieved depends on the progress made in each country in terms of regulations, information and policies. In Chile and Colombia there is a good level of coordination and inter-institutional coherence. Mexico is taking advantage of shared experiences; and in Peru there is still a need for greater articulation between governmental, private and academic actors.
5. External coherence: the extent to which the intervention is compatible with interventions of other actors in the country and thematic field (complementarity and synergies).	2 Satisfactory	The CALAC+ Programme relates positively to other environmental and climate projects promoted by the Swiss Cooperation in the region and globally, continuing the strategy of Phase 1. .
Effectiveness		
6. The extent to which the approaches/strategies during implementation are adequate to achieve the desired results.	1 Very satisfactory	From the point of view of its enabling purpose of creating favourable conditions for achieving concrete results, the approach and strategies of the CALAC+ Programme are the most appropriate and have been well implemented.
7. To what extent the intervention has met or is expected to meet the desired objectives (Outputs and Outcomes).	2 Satisfactory	Phase 2 of the Programme is expected to successfully achieve its results, in terms of outputs and enabling actions implemented or in the process of implementation. A more precise evaluation requires further differentiation and verification of the succession between the intermediate results of policy and implementation of measures, and the final results in terms of measurable improvement of air quality and environmental health, in economic and social terms, in each country.
8. To what extent the intervention has achieved or is expected to achieve the desired results in relation to the cross-cutting themes.	2 Satisfactory	The Programme has focused on substantially technological issues, and of complex formulation, for their implementation based on demanding regulations, with varying progress in each country. Cross-cutting issues (environmental health, gender approach, transport economics, and others) have not been the subject of specific products;

Evaluation criteria	Score	Justification
		however, there are indirect positive results, disseminated, supported or reported by the Programme.
Efficiency		
9. The extent to which the intervention achieves the results (Outputs, Outcomes) in a cost-effective way.	1 Very Satisfactory	A brief short- and medium-term benefit-cost analysis reveals that the investment in the promotion of measures and their technological implementation is highly positive. The convergence of the Project's actions with the expected investments in the countries and synergies with other interventions in the long term, if the sustainability of progress is fostered, will result in a much higher return.
10. The extent to which the intervention achieves the Outputs, Outcomes in a timely manner (on schedule or reasonably on schedule).	2 Satisfactory	The evaluation of the intervention, which is still in the process of achieving its results, should refer to the progress of the Outputs and their effect on the long-term Outcomes, whose indicators are not yet fully applicable. In this sense, the evaluation considers that the effort and allocation of resources has been efficient and reasonably adjusted to the timetables in each country, and a satisfactory final budget execution is foreseen.
11. To what extent management, monitoring and piloting mechanisms support efficient implementation.	1 Very Satisfactory	The quality of the Programme's operational management, according to the documents, has been repeatedly mentioned by stakeholders as efficient in its adaptive implementation to local realities and high quality of the management team, local coordination and technical advice.
Impact		
12. To what extent the intervention has generated or is expected to generate "higher level effects" as defined in the intervention design document.	2 Satisfactory	The impact is cumulative with the two phases of the Programme in its medium and long term effects. By increasing and updating technical knowledge, key stakeholders have been able to take ownership of the interest in international environmental commitments, such as air quality in cities.

Evaluation criteria	Score	Justification
13. How immediate the impact of the Programme's actions is expected to be.	2 Satisfactory	Immediate impact should be measured in terms of enabling intermediate results. In this sense, impact is relative depending on progress in each country, and the potential for sustainability of the momentum initiated, taking into account the risks of interference and slowdown in future decision-making.
Sustainability		
14. The extent to which partners are able and motivated (technical capacity, ownership) to continue activities that contribute to the achievement of the Outcomes.	1 Very Satisfactory	Partners generally express a high level of interest in the continuation of government and private sector actions, and expectations for further exchange of experiences and capacity building.
15. To what extent partners have the financial resources to continue activities that contribute to the achievement of the Outcomes.	2 Satisfactory	It is considered that financial resources may be variable between countries; and budget allocations will depend on the priority given to international commitments and in sectoral plans. International support and regional cooperation will be key .
16. To what extent contextual factors (e.g. legislation, politics, economic situation, social demands) favour the continuation of activities leading to Outcomes.	2 Satisfactory	Contextual factors - which vary from country to country - generally favour the continuation of activities towards results. As in the preceding analysis, the possibility of partnerships, cross-cutting cooperation, and international pressure should be foreseen in a plan for the sustainability of the initiative.

4. Conclusions, recommendations, and vision for the future

4.1. Conclusions

On the design and implementation of Phase 2 of the Programme.

- The testimonies and opinions obtained express a broad recognition by the actors of the qualities and virtues of the CALAC+ Programme. In particular, reference is made to the positive sequence between Phase 1 of support for initiatives and regulations related to air quality in relation to urban transport in the capital cities of the selected countries; and the continuity obtained with Phase 2, which has been oriented towards concrete achievements and results derived from the initial progress, towards a level of realisation.
- The importance of the innovative introduction of the non-road mobile machinery (NRMM) theme is recognised under Component 2, with the promotion and development of the technical and normative aspects of the subject.
- Stakeholders repeatedly appreciate the quality of the structure of the Programme Components, products and activities for the four countries and their respective selected cities, expressing that it has the virtue of promoting the exchange and exploitation of experiences with a governance scheme that combines support with technical and coordination staff working within key governmental entities, with capacity building activities, exchange of experiences at the international level, and specialised technical advice.
- It has been pointed out that the Programme should have included studies and activities that denote relevance to aspects of economics and finance, in addition to the tools of benefit-cost analysis, and the involvement of government actors in the issue.

On Relevance / Relevance

- A broad consensus is expressed on the relevance of the Programme in relation to national plans regarding environmental quality in general, and air quality in particular. The governmental actors in charge of the subject appreciate the support and support with technical and methodological inputs for the formulation of regulations and advances in relation to international commitments to reduce emissions, and the national needs of air quality in health, economy and transport regulation for the well-being of citizens.

On Coherence

- Coherence with other activities in each country is revealed in the openness and flexibility of the Programme to local realities and preceding initiatives in each national context, as well as the regional vision of technical and experience exchange to accelerate the demonstration effect and interest in technological progress.
- In this sense, the initiative of the executors in Chile to assume the repository and management of the knowledge that will be derived from the lessons learned at the end of the Project is valued, as well as

the potential regional effect to maintain the sustained and coherent interest of the participating countries, with a view to its extension to other cities and countries in the region.

- Regarding the gender equity approach, it is mentioned that even though it is not a direct focus of the Programme in terms of products and activities, there is growing interest in countries and national governments, that the Project has contributed to by disseminating the concept and actions of other actors, as well as aligning the composition of the technical team and country coordinators to the concept.

On Effectiveness

- The overall effectiveness of the Programme's actions and results is considered positive at the regional level, even taking into account the different progress in each component, city and country, considering the synergies achieved and the weighted measurement of global and country progress towards results.
- There is awareness that the results of each component have different horizons for full achievement, as they are innovative and gradual implementation actions, whose appropriation at the national level and in other cities requires time and continuous promotion. Nevertheless, the importance of the tools developed, capacity building and experience exchange events are highlighted as key instruments that should sustain the post-Programme process.
- It is mentioned as a limitation to the Programme's effectiveness the need for greater dissemination of its achievements and scope to increase its impact on government policies and the interest of other sectors linked to the transport problem, trade unions, civil society, private investment and end users. This analysis recognises the difficulty of familiarising different sectors with the technological aspects of the Programme, due to the budgetary limitations of the Programme for this purpose.

On Efficiency

- The Programme's management and administration of financial, technical and human resources is rated as satisfactory by national actors, due to its adaptability to external events, as in the case of the health emergency throughout the Region, and flexibility in meeting the need for changes and adaptations of activities to local political and governance realities and contexts.
- The programme management performance of the Swiss Cooperation (SDC), as well as that of the executing agency, Swisscontact, is highly satisfactory in terms of capacities and working modalities, especially the proximity and frequency of interaction with government actors, the guidance and support of the PDC, and the flexibility and adaptability in the follow-up and solution of barriers with alternative solutions agreed upon in the technical committee and approved by the PDC.

On the Impact of the Programme

- The impact of the Programme is cumulative and has a medium and long-term effect. There is a promising horizon for a global impact and in each country due to the ownership of governmental bodies

and the growing interest in alignment with international environmental commitments, both on climate change and air quality in cities.

- The tools and arrangements for maintaining the repository of technical information and inputs in Chile, the strengthening of coalitions and agreements, and future improvements in measurement tools and methods will contribute to the overall impact of the Programme in the Region and at the global level.
- In general, there is a clear conviction among the actors and beneficiaries of the Programme that they have increased and updated their technical knowledge and national and local capacities to assimilate technological innovations in current mass transport systems and future challenges.

On the Sustainability of the Programme

- The sustainability of the Programme's actions at the close of operations is a matter of uncertainty among key stakeholders in all countries. While there is a recognition that the Project's actions will settle down and continue progress towards regulatory measures and technical progress, both in urban transport quality and in the reduction of emissions and fine particulate matter, as well as in the introduction of effective control of NCMs, it is perceived that there will be a slowing down of the momentum gained and promoted by the Programme, when it is left to government administration and the pace of bureaucratic decision making.
- On the other hand, political changes and changes in the orientation of governments in the region are not and usually are not predictable, and can change energy priorities, resource use, and even a reduction of environmental considerations and long-term vision. These changes, although they do not substantially affect the technical levels of studies, preparation of standards and progress in coordination with academia, private actors, and local governments, do influence high-level decision-making, compliance with international commitments, and budget allocations.
- The level of commitment and ownership that the Programme has managed to establish, despite the aforementioned sustainability risks, is a valuable asset in addition to the legislation being implemented, the institutional strengthening of the Programme's themes, and the collective construction of intergovernmental and international cooperation that has been achieved. In order to consolidate what has been achieved and maintain the pace and positive evolution of impacts, it will be crucial to design an exit strategy and a sustainability plan articulated among the countries.

4.2. Recommendations

For immediate implementation

- Design and promote, in the remainder of the implementation period until March 2025 - with the leadership of the actors themselves - a consensual exit strategy that commits governments, associated associations, and academia, as appropriate, to continue and provide sustainability to the effort initiated. Some actions to be undertaken in this regard would be, among others:
 - a. Establish a permanent working group in each country, formalised with ministerial arrangements, and with the participation of the main governmental actors, to continue complementary actions and optimise budgetary resources to complete the pending regulatory frameworks in each country.

- b. Propose the global organisational basis, based on the Pacific Alliance, to institutionalise the capacity building and exchange of experiences cemented by the Programme.
- c. Invite the ministries of economy and finance and the private financial sector to participate in further actions, with guidelines to promote analysis and dissemination of studies that support the medium- and long-term socio-economic benefits of the measures and technical regulations.
- d. Support and ensure the realisation of Chile's proposal to host and maintain the repository of experiences and technological know-how promoted by the Programme, in particular on the growing interest in the innovative topic of NCMN.
- e. Install the presence of the Programme and its results in the Region's environmental networks, with a view to meetings and conferences on the subject of clean air, including the occasion of UNFCCC negotiation meetings with AILAC and Integrity, and decisions on the subject in the NDCs (clean air, sustainable urban transport and renewable energies, based on the Programme's progress).

For short/medium term implementation

- Promote the preparation of a commensurate project, eligible for financing by the Green Climate Fund (GCF), that gathers the experiences of the Programme, and promotes actions to consolidate policies, methodologies, regulations, and technological implementation in selected countries of the Region and cities of second national rank, in support of the relevant contents of the respective NDCs.
- Promote and facilitate the establishment of functional models of inter-institutional coordination to be established according to the respective national norms, which guarantee an effective cross-cutting treatment of environmental issues in general, and in particular in actions in favour of clean air (health, education, economy, urban development, transport and mobility, and other relevant ones) with the inclusion of key variables such as gender, interculturality and generational inclusion.
- In the opinions gathered, there is an underlying expectation of continued financial and technical support from the Swiss Cooperation, with some phase of consolidation and crystallisation of key achievements in each country, or alternative synergies with convergent cooperation on the issue at the regional or country level. The institutionalisation of forms of coordination, monitoring and exchange is already emerging from Chile's decision to take on the repository; but it should also be articulated within each country and at the regional level as a permanent practice whose funding is assured.
- As an alternative to new phases of expansion of the Programme, promote the dissemination, experiences and technical publications of the Programme with wide distribution in the countries, at the academic level, the private sector, trade unions and mobility and urban development NGOs in other planned cities, stimulating internal and international exchange with new public and private actors.
- Promote an international network of government officials and technicians with training incentives, occasional consultancies, scholarships, experience exchange trips, and others, to strengthen the technical base of sectoral agencies in the face of the high turnover of civil servants.
- Stakeholders have referred to the need to reinforce the dissemination of the Programme's results and to make them better known by public and private stakeholders related to the environmental sector, such as health, education, financing, trade unions and urban NGOs.

At Component / Outcome level by country.

- *Component / Outcome 1:* In Chile and Colombia, it is recommended to strengthen the use of green hydrogen in urban transport as an alternative to reduce emissions; and the possibility of considering and including the growing problem of the proliferation of motorbikes. In Peru and Mexico, it is crucial to maintain the ATU and Metrobus, respectively, as allies in order to implement actions related to electromobility.
- *Component / Outcome 2:* Establish a repository of experiences and technological baggage, where all the products generated at regional level can be compiled and made available to interested sectors in the Region.
- *Component / Outcome 3:* It is recommended that the dissemination of the Programme be extended to other key actors in order to broaden interest in the problem and contribute to the Programme's long-term sustainability. In this regard, it is suggested to establish the basis for the creation of an international network of government officials and technicians, which promotes training, eventual consultancies, scholarships and experience exchange trips. This would strengthen the technical capacities of sectoral agencies and guarantee sustainability after the end of Phase 2.

4.3. Vision for the future and lessons learned

- The experience and mutual learning between countries is welcomed by actors in technology profile initiatives, and is extremely valuable as a starting point for new interventions.
- The structure of the Programme, combining close interaction at the country level with governmental entities and technical coordination at the international level, has been substantial for the successful ownership of the results and the future consolidation of clean air awareness.
- For sustained coordination, it is important to have a counterpart, designated as permanent if possible, within partner institutions and actors, or in national platforms, in order to mitigate political barriers and interference in institutions.
- The impact of international cooperation, as well as institutional autonomy in political administration, are key resources in the face of risks of political or legal interference.
- A repository should be promoted and maintained, and an institutional focal point in charge of systematising experiences, expanding know-how and systematically managing the knowledge acquired during the execution of a project and its implementation sequences, as well as having specialists, spaces for frequent learning and input generation, and studies and analyses with a vision of green economy and sustainable financing.
- Maintain flexibility and conceptual openness in the approach and design of products and activities, especially when the technology market evolves faster than studies and policy proposals.

ANNEXES

- A. Logical Framework and Progress towards Results
- B. Field Mission Report
- C. Documents Reviewed
- D. Evaluation Matrix
- E. Interview Guide Questionnaire

[Special Annex: SDC Evaluation Grid \(In Spanish\)](#)

A. Logical Framework and progress towards Results

Impact (Global Objective)	Impact indicators	Baseline (2021)	End of Programme Target (2025)	Achievements at the end of the Programme according to ET	ET comments	Rating
Reduce harmful air pollutants and greenhouse gas emissions in major Latin American cities by deploying clean soot-free engine technologies and other pollutants in urban public transport and non-road mobile machinery to protect human health and mitigate climate change.	- Greenhouse gases avoided (tCO₂eq) [CCE_TRI 4]. - Avoided black carbon emissions (t BC) - Number of people benefiting from reduced exposure to pollution [GPCCE]. - Four Latin American capitals implement soot-free city buses and non-road mobile machinery within realistic timeframe - Effectiveness of existing or newly introduced national policies and legal frameworks in the field of climate change/environment. - Additional funds allocated/invested at national and sub-national level for pollution abatement.	0 0 34 million inhabitants Not applicable (2018- 2021): USD 2.3 billion	2.1 Mt CO₂eq 133 t BC 42 million inhabitants Existing and new national policies and legal frameworks from 2021 onwards. (2021-2025): USD 4.1 billion	Governmental action on standards and implementation technology, as well as capacity building related to the measurement and control of pollutant emissions, has been promoted to varying degrees in the participating countries.	The impact targets on emission reduction and beneficiaries of improved air quality still require verification and homologation between countries and the region, with respect to European and US standards. The most important impacts, which are rated as satisfactory overall, weighing barriers and difficulties in country progress, relate to indicators of enabling actions in preparation or under implementation, and changes in sectoral policy priorities and private sector interest.	S

Component / Result 1	Key Indicators	Baseline (2021)	End of Programme Target (2025)	Achievements at the end of the Programme according to ET	ET comments	Rating
01 - Cleaner urban transport The plans and measures supported by the Project result in the introduction of cleaner buses in cities, which contribute to the targets of the Nationally Determined Contributions (NDC), Long Term Strategies (LTS) and decontamination plans.	- High-level political commitments in four LAC countries to achieve soot-free city buses. - All four countries implement at least one measure that contributes to climate or air quality management targets. - Stricter fuel and vehicle emission standards are in force:	Chile: (2021): 15 ppm sulphur in diesel and petrol - Euro 5/V. Colombia: (2021): 20 ppm sulphur in diesel - Euro 4/IV. 90 ppm sulphur in petrol - Euro 2. Mexico: (2021): 10 ppm sulphur in diesel and petrol - Euro 4/IV or EPA04. Peru: (2021): 50 ppm sulphur in diesel and petrol - Euro 4/IV.	10 ppm sulphur in diesel and petrol, Euro 6/VI. 15 ppm sulphur in diesel - Euro 6c/VI. 50 ppm sulphur in petrol - Euro 4 10 ppm sulphur in diesel and petrol - Euro 6/VI or EPA-10. 15 ppm sulphur in diesel - Euro 6c/VI.	In overall terms of the Programme, and although the end-of-Programme targets still require verification and follow-up with respect to the baseline, the indicators relating to the actions of enabling standards and undertaking commitments show a prospect of effective compliance. MEXICO: Promotion of the introduction of Euro VI technology to reduce emissions in the urban bus fleet (based on experiences in Colombia and Chile). COLOMBIA: A strategy for the promotion of vehicle renewal was implemented, including labelling standards such as environmental labelling. PERU: Promotion of the introduction of Euro VI technology to reduce emissions in the urban bus fleet (based on experiences in Colombia and Chile). CHILE: An evaluation of the efficiency of electric buses in circulation and their life cycle was carried out.	Measurement of results in terms of the end goal of the Programme is not yet available. However, the progress and achievements that will enable improvements in urban transport and air quality in the medium and long term are already in place and the Programme has contributed effectively to this process.	S

Component / Result 2	Key Indicators	Baseline (2021)	End of Programme Target (2025)	Achievements at the end of the Programme according to ET	ET comments	Rating
02 - Public policy incubator for non-road mobile machinery. The NCM policy framework makes the sector visible and sets the enabling conditions for the introduction of less emission-intensive construction machinery.	- High-level political commitments in four LAC countries to achieve soot-free non-road mobile machinery. - Host countries have technical information on the inventory of emissions in machinery (such as the equipment register, emission inventories of short-lived climate pollutants, among others) and have a series of concrete actions to reduce pollutants. - All four countries introduce at least one measure to reduce emissions from machinery as part of their decontamination plans or strategies to regulate, control and monitor machinery emissions.	There are no rules in force.	Chile: Stage IV standard for NCMN. Colombia, Mexico, Peru: Stage IIIB minimum standard for NCMM.	This Component/Outcome has managed to consolidate the progress made in Phase 1 with a greater emphasis on the importance of the NCMN issue, with the introduction of studies, standards and regulations of varying progress among the countries, but with an exchange of experiences and mutual strengthening of capacities. MEXICO: Efforts are being made to incorporate regulation on new machinery in the city's decontamination plans. COLOMBIA: Introduced regulation of new machinery entering the country at the level of emission standards. PERU: Efforts are being made to incorporate regulation on new machinery in the city's decontamination plans. CHILE: It has been possible to broaden the positioning and scope of the country's internal targets for the reduction of emissions from this machinery. Experiences in the country are being applied in other countries.	The target indicators are in various processes of technical improvement and exchange of experience, and the prospects for further action in this area are favourable.	S

Component / Result 3	Key Indicators	Baseline (2021)	End of Programme Target (2025)	Achievements at the end of the Programme according to ET	ET comments	Rating
03 - Regional and global cooperation The experience generated by the programme on cost-effective policies, actions and technologies, good practices and successful lessons learned are disseminated regionally and globally and scaled up through existing networks and platforms, such as the CCAC and the Pacific Alliance, and experts from the region are linked to other decision-makers and actors in academia.	The outreach strategy is carried out by sharing successful experiences of cost-effective policies, actions and technologies with ministries and stakeholders in recipient and other countries.	0		In this Component/Outcome it has an almost non-existent baseline, and no specific targets or indicators; however, the Programme's actions in this aspect have given rise to the greatest expectation and dynamics of progress among stakeholders.	There is scaling up and replication of strategies and actions for exchange, training and technological capacity building. The agreements underway for the sustainability of the management of acquired knowledge, and the efforts made by Chile to act as a repository of information on the initiative at regional level, stand out in this respect.	MS
	Number of people trained on climate change.	0	500, including at least 100 officials from the new cities.	A dynamic of consultations and exchanges has been generated between public officials from the four countries on the full cycle of public policy formulation to improve air quality.		
	Number of high quality knowledge products and dissemination events	0	20			

Qualification Key:

Green Target reached	Yellow Target in progress	Red Target not reached	White Not assessable
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According to the SDC Evaluation Grid: **1=VS** = Very Satisfactory; **2=S** = Satisfactory; **3= U** = Unsatisfactory; **4= VU** = Very Unsatisfactory; **5= NR** = No Rating

B. Field Mission Report

General considerations	
Questionnaire	Semi-structured with 26 questions divided into 4 sections: General Questions, On the design and formulation of the project, On the implementation of the Programme and On the results and impacts.
Invitations for interviews	Invitations were sent out through the SDC team in the week of 12 - 16/08. Based on the responses of the actors, dates and times for the interviews were agreed upon.
Date of the missions	26 August to 05 September, in both countries.
Responsible : Jaime Parada	
Countries	Colombia, Peru
N° of people interviewed	15
Responsible: Eduardo Durand	
Countries	Chile, Mexico
N° of people interviewed	13
Limiting factors	
Interviews were conducted virtually and in person, according to the availability of the interviewee.	
Some of the relevant actors of the Programme were not in the cities visited, therefore, virtual interviews were conducted with these actors.	
Three interviews could not take place due to the time constraints of the actors; these were scheduled at least twice, however, the meeting was not possible.	

C. Revised Documents

N°	Revised documentation
1	Project Document (ProDoc) for phase 2
2	Operational Report 1 (Aug. 21 - Dec 21)
3	Financial Report 1 (Aug 21 - Dec 21)
4	Operational Report 2 (Jan 22 - Dec 22)
5	Financial Report 2 (Jan 22 - Dec 22)
6	Operational Report 3 (Jan. 23 - Dec. 23)
7	Financial Report 3 (Jan. 23 - Dec. 23)
8	Operational Report 4 (Jan. 24 - Jun 24)
9	Financial Report 4 (Jan 24 - Jun 24)
10	List of CALAC+ Actors
11	Financial planning
12	Terms of Reference for the External Evaluation
13	Programme exit strategy

D. Evaluation Matrix

Evaluation questions	Indicators	Sources	Methodology
Relevance: The extent to which the objectives and design of the intervention have responded to the needs, policies, priorities and expectations of the countries, partners, stakeholders and beneficiaries; to the objectives of SDC; and to environment and development programmes at local, national and LAC regional levels.			
Have the objectives and implementation strategies of the Programme been consistent with regard to: (i) global, regional and national environmental problems and needs; ii) the expectations and needs of countries, cities, and key stakeholders iii) the mandate, programming and policies of the Swiss Cooperation at the time of design and implementation;	Degree of appreciation by national stakeholders of the appropriateness of the Programme design and implementation to local realities and existing capacities. Level of participation and expressed satisfaction of government officials and other partners in the process of designing, initiating and implementing the Programme.	- Strategy documents of SDC and the governments concerned - respective SDGs - Proposal and Programme Document (ProDoc) - Progress reports - Technical reports and periodic reports - Primary stakeholder information. - Programme Initiation Report, Mid-Term Evaluation Report (MTR) and Phase 1 Report. - Interviews with implementers, executors and key actors of the Programme	Comparative documentation analysis, data analysis, semi-structured interviews
Were stakeholders sufficiently analysed, and did those potentially involved in or affected by the programme have the opportunity to contribute to its design and strategy?	Level of participation of the population potentially affected by the implementation of the Programme during its formulation and design.	- ProDoc - Programme Inception Report - Stakeholder interviews	Cabinet work Document review Impressions from field visits.
Were gender, interculturality and social inclusion taken into account in modifying the programme strategy in the last two years of implementation?	Level of involvement of men and women in gender issues. Positive changes in products and activities for a better gender focus,	- ProDoc - Programme Inception Report - Stakeholder interviews - Gender Action Plan - Records disaggregated by gender	Cabinet work Document review Impressions from field visits. Review of reports and systematisation of interviewee responses
Were previous experiences and appropriate technical opinions, including those linked to the gender approach, adequately incorporated in the design of the programme?	Level of incorporation of technical, social and gender experiences and visions from previous related experiences in the design of the Programme.	- ProDoc - Participants in the design. - Interviews with consultants, SDC officials, programme implementers and country governments.	Documentation analysis, data analysis, interviews
Does the Programme reflect the recommendations and lessons from Phase 1 for the current phase and relevant lessons and experiences for future similar programmes?	Level of systematisation of lessons learned from Phase 1 and ways of implementation. Degree to which stakeholders are aware of the results of Phase 1.	- Programme documentation - Periodic reports, Progress Reports - Interviews with key actors	Documentation analysis, data analysis, semi-structured interviews or surveys

Evaluation questions	Indicators	Sources	Methodology
Does the intervention logic and the Theory of Change Programme - TDC (implicitly or explicitly) identify and prioritise the problems of the national context (political, economic and social), especially in relation to the environmental quality of cities and the efficient management of transport and use of machinery?	Explicit articulation of relationships and interaction in the ToC between causal, risk, assumptions and inertial drivers. Level of familiarity with the ToC by the implementation and enforcement teams.	- Theory of Change and discussion of modifications - ProDoc - PDC Minutes	ET Inception Workshop Cabinet work Document review Interviews
Are the links between the general objective, specific objectives, expected results and activities logical in the design? What was the quality of the defined objectively verifiable indicators, including baseline information?	- Robust baseline supports clear and explicit articulation of the results hierarchy. - Level of implementers' knowledge of the Results Framework.	- ProDoc - Results Logical Framework - EMT Report	Cabinet work Document review Interviews
During the first phase of implementation, were the expected results of the Programme relevant to local and national city development priorities and policies, including the context of changing circumstances in the country (e.g. socio-political context)?	Changes made in the results hierarchy to align with local and national development priorities, and changes in the socio-political context.	- Inception Workshop Report - EMT Report - Results Logical Framework - PDC Minutes - Progress reports.	Cabinet work Document review Interviews ET Inception Workshop
Were the assumptions made during Phase 1 valid and were the potential risks adequately foreseen?	Traceability of ProDoc assumptions and risks in relation to reported progress.	- ProDoc - Progress Reports	Cabinet work Interviews
Does the SRF fit the Programme and does it meet the S.M.A.R.T. criteria?	Level of compliance of the results framework with the S.M.A.R.T. criteria and consistency with the ToC.	- ProDoc - Results Logical Framework - SDC Guidelines planning and monitoring of development results - Monitoring tools	Cabinet work Interviews Field visits
Did the Programme design adequately incorporate social safeguards, consultation principles and mechanisms for collaboration with local user communities (transport, machinery)?	Evidence of the application of the principles and the existence of conflicts or barriers by users.	- ProDoc - Progress Reports - Safeguards Plans - Local Development Plans or municipal	Documentation analysis, data analysis, interviews Field Visits
To what extent does the design of the intervention reflect the rights of people of all genders and include the views of a wide range of local stakeholders?	Evidence of implementation of gender-responsive approaches	- ProDoc - Progress Reports - Gender Action Plan - CC.II Life Plans	Cabinet work Interviews Field visits.

Evaluation questions	Indicators	Sources	Methodology
Coherence: Compatibility of the intervention with other interventions in the country, sectors or institutions: Internal coherence: The extent to which the theory of change, components, activities and M&E system are in line with the Programme's objectives and take into account previous and other relevant good practices and interventions. External coherence: Consistency and compatibility of Programme interventions with other activities and strategies implemented in the country; compatibility with sectors, institutions and other organisations and synergies or trade-offs involved.			
Does the Programme complement (or overlap with) other policy-related interventions (financial and technical cooperation) in efforts to finance or improve the status of transport and other activities affecting outdoor air quality?	Level of coordination and articulation with other national and city-level institutional interventions and actions.	- ProDoc - Progress reports - Government reports - Technical reports from other countries or Development Partners, Agencies and NGOs.	Documentation analysis, data analysis, interviews Field Visits
To what extent has synergy with other programmes/programmes mentioned in the ProDoc baseline been taken into account in the design and implementation of the Programme?	Nature and types of partnership developed by the Programme	- ProDoc and other programmes. - Annual Work Plans - Synergy agreements with other programmes. - Progress Reports	Document analysis Interviews Direct information (if necessary)
How has the Programme integrated other cross-cutting issues?	Incorporation of new parameters into the Programme's Results Framework	- ProDoc - Inception Workshop Report - Annual Work Plans - Results Matrix - Minutes of PDC - Budget Meetings; and others	Document analysis and progress reports Field visits Interviews (if necessary)
How have the results of the Programme been scaled up and replicated in other areas?	Cooperation agreements and number of meetings.	- Progress Reports - Minutes of meetings - Interviews.	Cabinet work Interviews
To what extent are the design, implementation and outcomes of the intervention consistent with international legislation and commitments on emissions, air quality, environment and liveability, urban wellbeing, health and environmental education?	Degree of alignment of the gender perspective of the Programme with national priorities and at the macroeconomic level. Relation to relevant plans in each country.	- ProDoc - Action Platforms - SDG targets - National and local measures and assessments of permissible limits.	Document analysis and progress reports Field visits Interviews (if necessary)
Effectiveness: The extent to which the Programme's outputs, outcomes and objective have been or are likely to be achieved, taking into account their relative importance, as well as the potential for transformational change at scale.			
To what extent has the central objective of promoting improvements in urban air quality related to transport and the use of non-road machinery been achieved?	Level of progress towards the Programme's of the Programme in relation to the level expected at the current point of implementation.	- Programme documentation - Periodic reports - Key actors	Documentation analysis, data analysis, questionnaire and interviews

Evaluation questions	Indicators	Sources	Methodology
To what extent has the intervention generated or is expected to generate "higher level effects"? as defined in the ProDoc? 1. Impact on local development planning processes (by country). 2. Impact on capacity building (by country and region). 3. Leverage and/or mobilisation of funds (public, private, academia). 4. Applicable recommendations to increase impact towards the end of the phase.	Level achieved on Outcome indicators vs. targets at end of Programme	- Progress reports and RIPs - Tools for Monitoring - M&E reporting - Concrete products (publications, studies, plans, etc.) - Interviews with key actors. - Ministerial or municipal news and assessments.	Cabinet work Analysis of monitoring results Relevant field visits and interviews.
Was the design of the Programme realistic in terms of the capacities and resources of the implementing agencies? Were partners adequately identified and roles and responsibilities agreed upon prior to the start of the Programme? Did the resources and capacities of partners, the enabling legislative framework and appropriate arrangements for the management of the Programme exist or were they maintained at the start of Phase 2?	Level of effectiveness of programme implementation Level of efficiency of programme implementation Level of effectiveness and efficiency of programme implementation	- Programme documentation - Periodic reports - Audits - Memorandum of Understanding - PDC Minutes	Documentation analysis, data analysis, interviews, Personal remarks. Documentation analysis, data analysis, interviews, Personal remarks.
Were key stakeholders effectively involved in the development of the planned results?	Registered stakeholder participation in the achievement of outputs.	- Mention of roles of key actors in tangible outputs (publications, studies, etc.) - Interviews with stakeholders and beneficiaries	Desk work and interviews
Do the methodologies and/or approaches adopted by the programme work? Why, or why not?	Technical analysis of the robustness of methodologies and approaches	- Technical reports - Interviews with consultants and subcontractors.	Cabinet work Interviews Specific enquiries
To what extent was the programme's management structure (organisation, resources, distribution of responsibilities, communication and coordination mechanisms) adequate to make progress towards the expected results?	Organisational scheme vs. implementation analysis. Comparison with evaluations of previous programmes	- Organisation chart and roles and responsibilities. - Evidence of successfully implemented programmes	Cabinet analysis Questionnaires and field visits Interviews
Are the roles and responsibilities of all stakeholders initially identified in the stakeholder analysis understood and performed effectively?	Contents and comparative analysis	- Organisational chart, respective roles and responsibilities - Evidence of successful implementation programmes	Cabinet work Ad hoc questionnaires Field visits Interviews
Have there been improvements in monitoring tools (capacity building, etc.) since the baseline was established?	Consistent improvement in the scorecards or scorecards systems of monitoring tools.	- Monitoring tools - Interviews with actors	Cabinet analysis Interviews

Evaluation questions	Indicators	Sources	Methodology
What obstacles remain to achieving the Programme's objective that can be overcome with little or no investment after the closure of operations?	Identification of barriers and strategies to overcome them. Formulation of a sustainability or exit strategy for the programme	- Progress reports - Minutes of meetings - Stakeholder interviews	Cabinet analysis Interviews
What lessons can be learned about effectiveness for similar programmes in the future?	Stakeholders' impressions on changes that would have been necessary in the design of the Programme or during its implementation to improve achievements and results.	- Questionnaire - Interviews	Interviews with key actors Field visits Key questions in questionnaire.
Were the theory of change and results framework informed by gender equality analysis, political economy analysis and human rights? If so, to what extent?	Incorporation of criteria and analysis in programme design, articulation of causalities, assumptions, risks and inertial or change drivers.	- ProDoc - Theory of Change - Progress Reports	Cabinet work Workshops and <i>focus groups</i> with stakeholders and beneficiaries Interviews
To what extent and why would effectiveness be different for people of different sexes?	Expert-based analysis of gender issues.	- Programme Gender Plan - Progress Reports	Cabinet work Workshops and <i>focus groups</i> with stakeholders and beneficiaries Interviews
Efficiency: The extent to which the intervention will, or is likely to, achieve results in a cost-effective and timely manner.			
Were the results framework and work plans of the Programme and changes to them actively used as management tools during implementation?	Timeliness and adequate provision of reports	- ProDoc - Evaluations	Analysis of key documents Interviews
To what extent did the Programme succeed in establishing synergies with other initiatives that led to opportunities for increased cooperation and coordination between similar interventions?	Inter-institutional collaboration agreements. Joint or synergistic activities with other programmes.	- ProDoc - Progress reports - Agreement documents - PDC Minutes	Cabinet work Document review Interviews
Have monitoring and evaluation systems and budget been adequate to assess and improve results?	Level of achievement % of M&E budget in line with international cooperation policies	- ProDoc - Progress reports and monitoring tool.	Cabinet work Document review Interviews
How did the operational implementation compare to the original planning (in terms of time)?	Level of compliance with the Programme's periodic plans.	- Progress Reports - Interviews with the Programme Management Unit.	Document review Interviews with key actors.
Were the necessary resources (human, technical and financial) available to carry out the work?	Annual Plans vs. Goal Achievement	- Interviews with the Programme team	Data analysis Interviews

Evaluation questions	Indicators	Sources	Methodology
Were resources allocated in a gender-equitable manner? If so, how were they allocated, and was the differentiated allocation of resources adequate?	Annual Plans vs. Goal Achievement	- Interviews with the Programme team	Data analysis Interviews
In any case, what have been the main reasons for the delays/changes in implementation, and have they affected the implementation, costs and effectiveness of the Programme?	List of reasons, validated by the Programme team	- Notes from interviews with the Programme team.	Interviews Eventual lessons learned workshop
Have implementing partners or allies been effective in the implementation process?	Level of leadership of the programme manager and ownership by other team members.	- PDC and IPU minutes and working reports - Programme Outputs - Interviews with key actors.	Cabinet work Interviews with key actors Direct observation Opinion of actors.
To what extent were programme funds and activities delivered in a timely manner?	Level of compliance with programme activities within the planned timeframe. Level of compliance with annual budgets and POAS.	- Programme documents. - Programme Team - Stakeholders	Documentation analysis, data analysis, interviews
Has SDC been effective in supporting the Programme?	Level of quality and timeliness of attendance and support	- Progress Reports and RIPS - Product Delivery	Documentation analysis, data analysis, interviews
Since inception, have there been any delays in programme implementation, disbursement of funds, contracts, agreements or procurement?	Level of compliance with schedules, and deviations from what was foreseen in the procurement analysis.	- Annual Operational Plans - Product Delivery - Completed acquisitions	Documentation analysis Interviews with Programme staff and partners.
Has the work planning for the Programme been effective and efficient (i.e. disbursement of funds, programming, etc.)?	Responsiveness to substantial implementation problems.	- Annual Operational Plans - Product Delivery - Financial execution reports	Documentation analysis Interviews with Programme staff and partners.
Outcome/Impact: The extent to which the intervention has generated, or is expected to generate, significant higher-level effects, positive or negative, intended or unintended.			
To what extent has the SDC been instrumental in this initiative?	Additionality of SDC AND appreciation of the increase	- Comprehensive review and determination	Document review Field visits Interviews
Has the Programme contributed, or is it likely to contribute, to long-term social, economic, technical and environmental changes for the people, communities and institutions associated with the Programme?	Trends in descriptive and comparative analysis.	- Comprehensive review and determination	Document review Field visits Interviews
Are beneficiaries better off than they would have been without the Programme?	Appreciation of beneficiaries, including gender, urban cultures and socio-economic levels.	- Comprehensive review and determination	Document review Field visits Interviews

Evaluation questions	Indicators	Sources	Methodology
Have there been any unintended effects (positive or negative) of programme interventions?	Descriptive analysis	- Programme Results Framework - Progress reports - Incidental notes - Plan and budget documents	Document review Field visits Interviews
To what extent have decision-makers and other stakeholders had access to the Programme's products (e.g. studies, methodologies, etc.), and what effect has this had?	Results Framework Indicators	- Programme Results Framework - Progress reports and PIR - Incidental notes - Plan and budget documents	Document review Field visits Interviews
Sustainability: To what extent will the net benefits of the intervention continue, or be likely to continue, and to what extent are there financial, institutional, socio-economic and environmental risks to the long-term sustainability of the Programme's results?			
Has a sustainability/continuity plan(s) been developed for the programme?	Active planning for the closure of the Programme.	- Approved sustainability plans	Document review
Have knowledge management and knowledge sharing been sufficient to support the sustainability of the Programme's interventions?	Evidence of knowledge transfer.	- Knowledge Management Plan	Document review Interviews
Are the legal frameworks, policies and institutional arrangements conducive to sustaining programme results ex post?	Processes and insertion or impact of the Programme's objectives in national policies and plans.	- Environmental, environmental and urban development policies and plans - New concurrent policies to support urban and regional integrity and connectivity.	Document review Interviews
Will stakeholder engagement be sufficient to sustain programme results? Have protected area managers and beneficiaries been involved in a sustainability strategy to sustain programme results?	Delivery of Plans and ongoing knowledge transfer.	- Sustainability Plan - Progress reports - Interviews	Document review Interviews
What is the likelihood that adequate financial resources will be available to sustain programme results after operational closure?	Evidence of opportunities from multiple sources for financial sustainability.	- ProDoc - Progress reports	Document review Interviews Field visits
Have operational budgets been established and are they in place, and have gaps been reduced?	The NPAs are in better condition relative to the Programme's baseline.	- Operating costs and financing gaps	Document review Interviews
Adaptive Capacity: Extent to which the application of M&E, lessons learned and adaptive management have been used to meet indicator targets and mitigate programme problems.			
To what extent did the national or regional context (political, environmental, social, institutional) change during the implementation of the Programme, and how was adaptation managed in this respect?	Reported adaptive measures in response to changes in context.	- Progress reports - Interview notes - IPU and key stakeholders	Document review Interviews

Evaluation questions	Indicators	Sources	Methodology
Since the inception of the programme, how have risks and risk mitigation been managed?	Extent to which risks, assumptions and impact factors are managed. Quality and adequacy of risk mitigation strategies and their monitoring and progress reports.	- Forecasting and risk management documents - Progress reports	Analysis documents Interviews with PMU staff
Was adaptive management adequately implemented, and were cost- or time-saving measures implemented to ensure that the Programme achieves its results to the maximum extent possible within budget and timeframe?	Measures taken to improve the implementation of programmes on the basis of their monitoring and evaluation	- Progress reports - PIR - Notes from interviews with the PMU	Analysis documents Interviews with staff of the PMU and PDC
To what extent did the programme results contribute to climate change adaptation and GHG emission reductions?	Positive effects of the Programme on climate change adaptation and mitigation	- Programme Documentation - Key actors - Programme Team - Periodic reports	Documentation analysis, interviews

E. Interview Guide Questionnaire.

CALAC+ Project Evaluation - SDC - Questionnaire Interview Guide

To: Project Management Unit and Country Coordinators

B: SDC and Swisscontact

C: Government and official entities

D: Private sector and non-governmental associations

NAME: ENTITY: POSITION: COUNTRY:

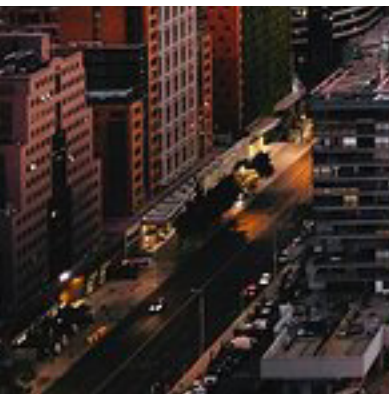
Date/Time:

	Interviewee Category				QUESTIONS AND ANSWER NOTES
	A	B	C	D	INTRODUCTION
					<i>[Introduction, thank you for your willingness; purpose of the interview and assessment; name, contact and position of the interviewee].</i> <i>[Confidentiality and treatment of the information provided; authorisation to record the session or take notes].</i> <i>[Length of the interview and sequence of questions alternated by the interviewers].</i>
1					What is your current relationship, or role and functions, with respect to the implementation of the Programme?
2					How familiar are you with the Programme and its objectives? How much do you know about its design, formulation and implementation?
	On the design and formulation of the Programme				
3					Were you involved in the design of the Programme and the formulation of the implementation strategy?
4					What do you see as the main strengths and advantages of the Programme design?
5					Would you say that the Programme has been designed on a participatory basis with stakeholders and beneficiaries involved? Has gender been appropriately considered in the Programme design?

6					If you could redesign the Programme, what changes would you make or what provisions would you include to make it work better?	
7					Have changes or amendments to the ProDoc, operational plans and budgets been necessary to adapt to unforeseen situations?	
8					Do you feel that the Programme has convened and worked with all relevant stakeholders? Do you feel that the Programme has been understood and aroused the interest of stakeholders?	
9					What monitoring and evaluation systems have been used to monitor Programme activities? Which actors have been involved in this process?	
10					How do you perceive SWISSCONTACT's support in the Programme implementation process?	
11					How do you perceive the support of the Programme Board and the government in general, in the process of Programme implementation?	
12					How do you perceive the role of the Programme's technical team (Programme Management Unit (PMU) and the country coordination?	
13					To what extent has the Programme been affected in its technical and operational implementation due to Covid 19? What measures were taken?	
	On the results and impact of the Programme					
	Relevance / Relevance					
14					How does the Programme support national and governmental policies?	
15					How does the Programme support the mission and experience of Swiss cooperation and key actors?	
	Effectiveness					
16					How do you perceive the implementation of the Programme to date, in terms of meeting deadlines and activities in the achievement of Results?	
17					What do you think have been the main barriers or bottlenecks to the implementation of the Programme activities?	

19					How do you think the Programme has contributed to gender equality and women's empowerment?	
	Efficiency					
20					How do you consider that human and financial resources have been managed in the implementation of the Programme?	
21					What have been the main administrative and budget execution contingencies and how have they been addressed?	
	Sustainability					
22					How do you perceive the sustainability of the results and impact of the Programme (institutional, financial, social, environmental policy)?	
23					What are the main risks to the continuity of the Programme's actions and are they linked to the Programme's own activities and management, or are they external factors?	
24					Are actors (individual, government or civil society) being involved who are able to promote the sustainability of the Programme?	
25					What changes or modifications do you estimate would be favourable to the sustainability of the Programme, including legal, institutional, economic, environmental or social provisions in the short, medium and long term?	
26					What lessons learned do you see emerging from the implementation of the Programme to date?	

ANNEX F. Evaluation Grid for SDC (Attached to the Final Report)





Management Response to the External Evaluation of the programme “Climate and Clean Air in Latin American Cities Plus (CALAC+) Phase 2”

Management Response

The Management Response (MR) states the position of the SDC on the recommendations of the External Evaluation of the programme “Climate and Clean Air in Latin American Cities Plus (CALAC+) Phase 2”. The MR provides a solid basis for strategic decision-making.

Assessment of the evaluation

The evaluation was conducted by DEUMAN¹ in accordance with international standards. The evaluation process was well managed and included close involvement of the SDC’s reference group comprising to the Programme Officers (Bern and Lima) in charge of CALAC+ programme.

The main objectives – make a critical evaluation of the extent to which the results and objectives have been achieved in CALAC+ phase 2, recommendations for the phase closure – have been met by the evaluators. The SDC appreciates the comprehensiveness of the evaluation report and the sound analysis of key elements of the SDC’s performance in CALAC+ Phase 2 programme.

The report’s analysis and resulting recommendations are considered to be useful for strengthening the strategic orientation of CALAC+ Phase 2 programme.

Main findings

The external evaluation was carried out in an appropriate manner, with a thorough methodology, in terms of planning, compliance with the requirements indicated in the ToRs, documentary review and validation of results with the actors involved.

The main conclusions of the evaluators were:

- (i) CALAC+ programme is widely recognized for its support in air quality initiatives, innovative non-road mobile machinery (NRMM) theme, and promoting technical exchanges. It supports national environmental plans and helps formulate national regulations.
- (ii) The programme fosters technical exchange, regional interest, and gender equity. It provides key tools and capacity building for sustained impact despite varied progress in the intervention countries.
- (iii) The programme’s management is satisfactory, showing adaptability and flexibility. SDC and Swisscontact (implementer) perform excellently in government interactions and problem-solving.
- (iv) The programme’s impact promises long-term effects, but sustainability is uncertain. An exit strategy and sustainability plan are crucial to maintain progress.

The recommendations of the External Evaluation have been clustered into a total of three (03): two (02) ‘fully agree’ (green), and one (01) ‘partially agree’ (orange) - see table below. SDC is committed to use this opportunity to optimise the path to closure as well as to take lessons learned for future interventions, by taking specific actions in line with the recommendations.

- | | |
|--|--|
| 1. Promote a consensual exit strategy until March 2025, ensuring sustainability with a permanent working group, global organisational basis, financial sector involvement, Chile’s repository, and programme presence in regional environmental networks and conferences on clean air. | |
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¹ www.deuman.com

2.	Promote programme dissemination, experiences, and publications widely across sectors, and establish an international network with training and exchange incentives. Emphasize the need to enhance programme results' visibility among public and private stakeholders in environmental and urban development sectors.	
3.	Develop a project eligible for Green Climate Fund financing to consolidate programme experiences, policies, methodologies, regulations, and technological implementation in selected countries and second-rank cities, supporting relevant Nationally Determined Contributions (NDCs).	
Fully agree		Partially agree
		Disagree

Overview of recommendations, management response and measures

Recommendation 1		
Promote a consensual exit strategy until March 2025, ensuring sustainability with a permanent working group, global organisational basis, financial sector involvement, Chile's repository, and programme presence in regional environmental networks and conferences on clean air.		
Management Response		
Fully agree	Partially agree	Disagree
Fully agree, given that an exit strategy agreed with the main partners should guarantee the sustainability of CALAC+ results at least in the short term, however, it is considered more effective to have the exit strategy until January 2025.		
Measures	Responsibility	Timing
The CALAC+ team will present a phase closure strategy agreed with the key project stakeholders. This will define: a) Roles and deadlines for maintaining the activities that CALAC+ has led: the programme website, communities of practice, visibility of results. b) Capitalisation and visibility products of what CALAC+ has achieved in its two phases. c) Dates for operational and administrative & financial closures. d) Activities related to the closure of the programme (such as webinars, participation in events, among others).	CALAC+ team	31/01/2025

Recommendation 2		
Promote programme dissemination, experiences, and publications widely across sectors, and establish an international network with training and exchange incentives. Emphasize the need to enhance programme results' visibility among public and private stakeholders in environmental and urban development sectors.		
Management Response		
Fully agree	Partially agree	Disagree
Fully agree, given that this is the end of the programme, it is essential to have the capitalisation and visibility products of what has been achieved by the programme between 2018 and 2025. It is important to note that these products can be shown by the partners as well SDC during the COP 30 in Belem (Brazil).		

Measures	Responsibility	Timing
a) Develop material to disseminate the results achieved by CALAC+: videos, publications, infographics, technical sheets with figures achieved, among others.	<u>CALAC+ team</u>	continuous up to 31/07/2025
b) Involve SDC HQ, particularly the CDE Section in activities related to phase closure to ensure greater visibility. For instance, a learning event on air pollution together with CDE Network. Starting point will be the capitalization of CALAC+.	<u>Regional Lima Hub</u>	continuous up to 31/07/2025
c) Taking into account that in the medium term the partners will have to do it on their own, encourage key government partners to generate dissemination and capitalisation activities using the dissemination material generated by CALAC+ (i.e in the CCAC Annual Conference 17-20th March 2025).	<u>CALAC+ team</u>	continuous up to 31/07/2025

Recommendation 3		
Develop a project eligible for Green Climate Fund financing to consolidate programme experiences, policies, methodologies, regulations, and technological implementation in selected countries and second-rank cities, supporting relevant Nationally Determined Contributions (NDCs).		
Management Response		
Fully agree	Partially agree	Disagree
Partially agree, due to the fact that in the current context of cuts and the new priorities set in the new CDE strategic framework for the next four years, nevertheless, it is possible for the Lima Regional Hub to promote policy dialogue and advice with the main CALAC+ key partners		
Measures	Responsibility	Timing
a) The Lima Regional Hub with support from HQ offers advisory and networking work for key partners in the 4 CALAC+ passes to develop a scaling-up project to be financed by the Green Climate Fund.	<u>Regional Lima Hub</u>	Offered and then on demand