



GGGI Mexico Country Program Evaluation

April 2018

Introduction

GGGI's Impact and Evaluation Unit (IEU) commissioned an independent evaluation of the Mexico Country Program with the purpose of gathering evidence on the results that have been achieved to date and providing recommendations for improvements in future program design and delivery.

The Mexico Country Program comprises of 5 program areas: Air Quality, Public Transport, Green Growth Planning, Climate Technologies, and Knowledge Sharing. Projects under these program areas are expected to generate intermediate outcomes, which in turn are expected to generate long-term outcomes through the logic of the Theory of Change (ToC) 2013-2017. The ToC is based on evidence and assumptions that should enable achievement of those outcomes and is elaborated in the [Evaluation Approach Paper](#) developed by IEU in preparation for this independent evaluation. The approach paper also describes the evaluation methodology and highlights three key evaluation questions (KEQs):

- A. What are the main outcomes (intended/ unintended/ positive/ negative) achieved by the Mexico Country Program from 2013-present, across all 5 program areas?
- B. Under the transport and air quality program areas, how much progress has been made against the program logic to enable the development of clean, high quality, efficient and inclusive public transport and improving air quality in Mexico? Is there sound evidence to support the theory of change underpinning this logic?
- C. How can GGGI Mexico Country Program build on previous results to scale, replicate and maximize impacts in the transport and air quality program areas?

In response to these questions, this evaluation has a major focus on the Air quality and Public transportation program areas, which are subjected to further analysis regarding the soundness of the program logic in terms of causal pathways to longer-term outcomes, and the evidence to support these pathways. Also, insights are provided on how the Mexico Country Program can build on previous results to scale, replicate and maximize impacts.



GGGI in Mexico supporting the development of clean, high quality, efficient and inclusive bus public transport

Cross-cutting Findings and Recommendations

The evaluation included a comprehensive assessment of the different program areas. The following **key achievements** of the program were identified:

- Developed high quality and technically sound outputs across the different projects under the Mexico Country Program.
- Contributed to the establishment of the Environmental Commission of the Megalopolis (CAME) as part of the air quality program area. In addition, specific inputs contributed to the development of the Mexican Official Standard (NOM) for the air quality index, which is expected to be adopted in 2018.
- Promoted the implementation of an integrated mass transportation system in the City of Cuernavaca under the public transport program area. Also, contributed to reform the Transportation Law of the State of Morelos to allow for such a new system to be implemented.
- Contributed with the Municipalities Risk Management and Vulnerability Diagnosis to the National Strategy on Climate Change (ENCC) to serve as a baseline to identify specific lines of action under the adaptation section of the strategy.
- Supported the Government of Sonora which has publicly endorsed and committed to a Green Growth Strategy and has installed a Green Growth Cabinet to coordinate the actions under the strategy.
- The strategic framework to inform policy and investment on innovations in energy technologies has influenced the operation of the Mexican Center for Innovation in Geothermal Energy under the climate technologies program area.

In addition to program specific recommendations provided further below, the following are the main cross-cutting recommendations aimed to guide future programming in Mexico:

1. Complete the development of the Country Planning Framework (CPF) as the guiding strategy describing the rationale and considerations for the selection of specific program priorities going forward, with corresponding details of actions to be taken under each priority. The CPF should also identify all relevant stakeholders (social, academic, private and government sectors) and consider their interest from the inception of any specific program area.
2. Assign measurable targets for project implementation, as well as performance and outcome indicators to quantify its contribution to the strategic objectives to be identified in the CPF and GGGI's Strategic Outcomes.
3. Secure formal commitments from the government-implementing counterparts to unlock intermediate- and long-term outcomes for each program area.
4. Prepare internal reports and keep records of results of each project to allow for monitoring of impact and transparency for partners and donors.
5. Expand from the prevailing environmental focus, towards a more balanced focus with the economic and social aspects of green growth.
6. Take advantage of the upcoming elections to strengthen the national partnership and increase the number of sub-national partners, as well as to secure continuity of current work and pursue the launching of new projects.



Program Specific Findings and Recommendations

The following table presents all 5 program areas and provides a brief description of the main outputs (KEQ A), a summary of how much progress has been made against the program logic to enable the intermediate and long-term outcomes (KEQ B), and concise recommendations as to how the GGGI Mexico Country Program can build on previous results to scale, replicate and maximize impacts (KEQ C).

Program area	Main outputs under the specific program area (KEQ A)	Progress vs. the program logic to enable intermediate and long-term outcomes (KEQ B)	How to build on previous results to scale, replicate and maximize impacts (KEQ C)
Air quality (2013-2015)	<p>GGGI focused on the collaboration with CAMe:¹</p> <p>a) Contributed to the establishment of CAMe by funding personnel who promoted air quality issues (air quality monitoring, air quality index, air quality improvement programs, contingency programs, vehicle emission testing, etc.); and</p> <p>b) Funded 4 studies on economic instruments for the CAMe region:</p> <ul style="list-style-type: none"> i) Green license – plate environmental criteria, ii) Vehicular control zone design – Low Emission Zone (LEZ), iii) Vehicle ownership tax, and iv) Surcharge tax for fuels in the megalopolis. 	<p>The work done under the air quality program is relevant and of high quality. Nevertheless, there are issues regarding the possibility of implementing and/or measuring its impact.</p> <p>The air quality index work promoted from CAMe was formalized into public policy and is expected to become a Mexican official standard during 2018.²</p> <p>The impact of the other work is hard to trace; i.e. work on air quality monitoring and air quality programs; evidence is in the form of internal working documents, making it hard to track the outputs and measure the outcomes.</p> <p>Recommendations provided on LEZ were considered in three cities, but momentum was lost due to changes in local governments. The other economic instruments are not being endorsed by any government due to their political implications.</p>	<p>7. Consider supporting the control of emissions sources other than vehicles.</p> <p>GGGI Mexico previously supported work focused on mobile sources but it is highly recommended to explore other significant emission sources from industrial and area (disperse) sources.³</p> <p>8. Expand the attention outside the Megalopolis of central Mexico and work with other Mexican States or cities.</p> <p>There is need to support coordination among parties to the CAMe and implementation of measures to solve the challenges of the region. There are other cities that could benefit from the support to make a significant difference.</p>

¹ The Megalopolis includes Mexico City, municipalities of the State of Mexico, Hidalgo, Morelos, Puebla, Tlaxcala, and Queretaro, as well as the federal government represented by the Ministry of Environment and Natural Resources (SEMARNAT).

² The draft of the Mexican standard PROY-NOM-172-SEMARNAT-2017 was published for public comments on January 2018.

³ For example, the Mexico City Metropolitan Area emissions inventory reports other equally important emissions sources, such as point and area sources, that represent numerous industrial, service and commerce facilities, as well as other significant emission sources like off-road vehicles, construction, roads, waste, etc. These account for major emissions of PM2.5 and emissions of VOC and NOx (that are precursors of secondary PM2.5 and O3).

Program area	Main outputs under the specific program area (KEQ A)	Progress vs. the program logic to enable intermediate and long-term outcomes (KEQ B)	How to build on previous results to scale, replicate and maximize impacts (KEQ C)
Public Transport (2015- Ongoing)	<p>a) Compiled best practice concession models to transform the bus transport system in Morelos.</p> <p>b) Provided recommendations on technical aspects of mobility for the Transportation Law of the State of Morelos.</p> <p>c) Developed a tool for economic options modeling for the State of Morelos to determine the break-even point for bus operations and facilitate decisions on the type of operating model and tariffs charged for the services.</p> <p>d) Provided recommendations to leverage an existing megalopolitan trust fund to finance bus fleet renewal in the Megalopolis region.</p> <p>e) Developed a transport externalities calculator to determine the environmental, economic and social externalities of public transport under different intervention scenarios.</p>	<p>Outputs under this program area are recognized as having good technical quality. However, further work is needed to address specific issues that may facilitate the adoption of a political decision or a specific action by a government.</p> <p>The Government of the State of Morelos adopted recommendations on mobility and reformed the Transportation Law to allow for an integrated massive transit system and new concession models. Although now legal, these actions have not been implemented yet due to a switch in local government priorities after the September 2017 earthquake. Therefore, there is an intermediate outcome, but additional efforts should be made to unlock the long-term outcomes.</p> <p>There is no evidence yet of effective implementation of the proposed leverage for the existing megalopolitan trust fund to finance bus fleet renewal in the Megalopolis region.</p> <p>There is no evidence yet of a current use of the transport externalities calculator by any government agency.</p>	<p>9. Support other aspects of mobility; it is necessary to look at other modes and infrastructure elements of mobility and accessibility.</p> <p>For example, to make mobility more efficient, it is necessary to consider the interactions of mass transit and other mobility alternatives, like non-motorized transportation: sidewalks, bikes, etc.</p> <p>10. Include the latest key commitments of the New Urban Agenda to broadly address public transportation issues as part of an urban challenge.</p> <p>For example, interventions in mobility shall ensure that all citizens have access to equal opportunities and face no discrimination, promote measures that support cleaner cities, establish partnerships with businesses and civil society to find sustainable solutions to urban challenges, etc. These considerations can allow to foresee and prevent or mitigate associated undesired outcomes and also for a balance on the environmental, social and economic aspects of green growth.</p>
Green Growth Planning (2013- Ongoing)	<p>a) Municipalities Risk Management and Climate Change Vulnerability Diagnosis for the National Strategy on Climate Change (ENCC) and the Special Program on Climate Change (PECC).</p> <p>b) Development and implementation of the Green Growth Strategy for the State of Sonora (GGSS).</p>	<p>The ENCC and the PECC have incorporated the analysis conducted by GGGI and helped set the scene for long-term climate change adaptation at the municipality level; both ENCC and PECC are the basic references for planning for adaptation at the national and sub-national level.</p> <p>The Government of Sonora has publicly endorsed and committed to the GGSS and has installed a Green Growth Cabinet to coordinate the actions under the Strategy.</p>	<p>11. Promote a National Green Growth Strategy to complement the ENCC and to scale and frame national efforts towards a strong, inclusive and sustainable economic growth. Approach other Mexican States to replicate the effort in Sonora and develop more sub-national green growth strategies.</p>
Climate Technologies (2015-2016)	<p>a) Evaluation of the Mexican innovation ecosystem and of 13 clean energy technologies.</p> <p>b) Preliminary prioritization of technologies.</p> <p>c) A detailed analysis for solar photovoltaic.</p> <p>d) Extensive consultation with stakeholders to create a strategic framework for policy innovation.</p>	<p>These studies contributed to foster governmental involvement in promoting energy technological innovation.</p> <p>The work is relevant and, according to interviewees, the strategic framework has influenced the operation of the Mexican Center for Innovation in Geothermal Energy (CEMIE⁴ Geo).</p> <p>However, there is no documented evidence or measurable targets to determine the extent of the impact.</p>	<p>12. Provide an open and participative space to adjust and adapt the strategic framework for policy innovation to be used by other CEMIEs and oversee the replication process.</p> <p>In order to do so, it is necessary to approach CEMIE Geo and document how they are using the framework and what has been the impact or results of using it.</p>



⁴ CEMIEs are groups of public and private research centers, universities, private sector and government entities intended to jointly work on developing technologies, products and services based on Mexico's potential on main renewable energies. These Centers are autonomous but supervised by the Ministry of Energy.

Program area	Main outputs under the specific program area (KEQ A)	Progress vs. the program logic to enable intermediate and long-term outcomes (KEQ B)	How to build on previous results to scale, replicate and maximize impacts (KEQ C)
Knowledge sharing (2016-Ongoing)	GGGI Mexico co-organized the following meetings: a) "Long Term strategies for the Implementation of the Paris Agreement", in June 2017. b) "First Regional Forum on Green Cities: Achieving Green Growth through Climate Change and Air Quality Management", in 2016. c) "Technologies for Climate Change Adaptation and Mitigation", in 2016.	SEMARNAT wants to continue this cooperation and the Mexican Agency for International Development (AMEXCID) is interested in further cooperation. However, high-level actors within these entities may change with the upcoming elections. According to interviewees, Mexico is a potential "Regional Hub" since it has connectivity to Mesoamerica and South-America; has experience on green growth; participates in the Green Climate Fund (GCF); and has institutional capabilities.	13. Prepare a compelling Regional Knowledge Hub proposal focused on relevant issues (public transportation, air quality, etc.) for the new federal government and specific relevant potential partners, such as AMEXCID and the Ministry of Foreign Affairs (SRE).

The following table presents a set of general findings regarding the non-programmatic aspects of the GGGI Mexico Country Program and a set of recommendations for improving and strengthening future work.

General non-programmatic issues	Findings	Recommendations
Funding	According to GGGI, most of the Country Program's funding in the past has come from GGGI's core resources. In order to scale up the program and meet the priorities of the new CPF there is a need to initiate complementary resource mobilization through external earmarked sources.	14. Build capacity to prepare for the new combined funding model. Transition from core-funding to external earmarked-funding requires the GGGI Mexico team to develop capabilities to execute with the highest quality two main activities: preparation of proposals (to obtain funding) and results reporting (for accountability purposes).
Personnel	The current staff includes two well-qualified persons. However, the number of personnel should match the size (number of projects) and scope (targeted strategic objectives) of the new Country Planning Framework (CPF).	15. Review and adjust the number and expertise of personnel so it corresponds to the number and ambition of projects included in the new CPF. The expertise of the personnel should include managerial skills and should match the topics covered (strategic objectives).
Branding	GGGI is part of a vast group of international organizations working with the Government of Mexico (GoM). Some interviewees do not have clear knowledge of the GGGI Mexico Program.	16. Build a branding and outreach strategy and specific work-plans for each program area, to increase the recognition of GGGI and differentiate it from other organizations working in Mexico, to present the work and initiatives supported, and to add value for GGGI, its partners and all stakeholders.

