

# Mexico

## Subnational Strategy

2022-2025





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## Acronyms

<b>BANOBRAS</b>	Bank of Public Works (Public Development Bank)
<b>CAMe</b>	Environmental Commission for the Megalopolis
<b>CONAGUA</b>	National Water Commission
<b>CONAFOR</b>	National Forestry Commission
<b>CONANP</b>	National Commission of Natural Protected Areas
<b>CONAZA</b>	National Commission for Arid Zones
<b>CPF</b>	Country Planning Framework
<b>EE</b>	Energy Efficiency
<b>FIRA</b>	Trust Funds for Rural Development (National Development Bank)
<b>FSM</b>	Faecal Sludge Management
<b>GCF</b>	Green Climate Fund
<b>GGGI</b>	Global Green Growth Institute
<b>GGS</b>	Green Growth Strategy (subnational)
<b>GoM</b>	Government of Mexico (federal)
<b>GOP</b>	Global Operational Priority
<b>GHG</b>	Greenhouse Gases
<b>INECC</b>	Institute of Ecology and Climate Change
<b>LT-LEDS</b>	Long-Term Low-Emission Development Strategies
<b>MRV</b>	Monitoring, Reporting and Verification
<b>NAFIN</b>	Nacional Financiera (National Development Bank)
<b>NBS</b>	Nature Based Solutions
<b>NFV</b>	National Financing Vehicle
<b>NDC</b>	Nationally Determined Contribution
<b>PV</b>	Photo-voltaic
<b>RE</b>	Renewable energies
<b>REDD+</b>	Reducing Emissions from Deforestation and forest Degradation
<b>SDGs</b>	Sustainable Development Goals
<b>SME</b>	Small and Medium Enterprises
<b>SADER</b>	Secretariat of Agriculture and Rural Development
<b>SEDATU</b>	Secretariat of Agricultural, Territorial and Urban Development
<b>SEMARNAT</b>	Secretariat of Environment and Natural Resources
<b>SHCP</b>	Secretariat of Finance and Public Credit
<b>SRE</b>	Secretariat of Foreign Affairs



CHAPTER 1  
**INTRODUCTION**





# 1. Introduction

This section summarizes GGGI’s mandate and key programmatic documents, to provide a coherent framework for the Mexico Subnational Strategy 2022-25.

## GGGI’s mandate

GGGI was founded to support and promote a development model known as green growth, which balances strong economic performance with poverty reduction, job creation, social inclusion, and environmental sustainability. Based out of Seoul (Republic of Korea), GGGI envisions a resilient world achieved through strong, inclusive, and sustainable growth; to this end, GGGI supports the transition of its 43 member countries (all of them developing and emerging economies) towards a green growth model.

## GGGI’s 2030 Strategy

The GGGI Strategy 2030 sets out long-term ambitions to help its member countries achieve green growth as fully aligned with the Paris Agreement and the UN Sustainable Development Goals (SDGs). To achieve the GGGI Strategy 2030 goals, GGGI focuses on the delivery of the following Programmatic Global Operational Priorities (GOP) and Programmatic Solutions (PS) presented in Figure 1 below:

Figure 1. GGGI’s Global Operational Priorities (GOP) and Programmatic Solutions

GLOBAL OPERATIONAL PRIORITIES (GOP)	PROGRAMMATIC SOLUTIONS
<b>GOP 1</b> Catalyzing and accelerating access to climate finance/green investments for Member’s public and private sectors.	<b>PS 1 Green Investments</b> (green bankable projects, investment proposals, NFVs, green and climate instruments, carbon-focused engagements).
<b>GOP 2</b> Supporting our Members in strengthening policy, planning and regulatory frameworks and institutional capacity to achieve green growth outcomes.	<b>PS 2 Climate Action</b> (inclusive green growth plans, LT-LEDS <sup>1</sup> , NDC support, MRV system design, climate diplomacy).
<b>GOP 3</b> Achieving a sustainable and circular bioeconomy while securing healthy natural systems.	<b>PS 3 Climate Resilient Agriculture</b> (solar irrigation, RE application in agri-value chain, resilient cropping practices, resource conservation). <b>PS 4 Sustainable Forests</b> (REDD+, landscapes financing mechanisms, innovation of natural capital markets). <b>PS 5 Coastal Resilience</b> (mangroves as ecosystem for livelihoods, aquaculture, marine issues fisheries, flood protection and pollution). <b>PS 6 Waste Management</b> (circular economies, urban and agricultural waste, wastewater, FSM, waste to resource).
<b>GOP 4</b> Making cities and communities sustainable liveable and resilient, supported through green jobs, services and green infrastructure capital markets innovations.	<b>PS 7 Sustainable Mobility</b> (e-mobility, non-motorized transport). <b>PS 8 Green Buildings</b> (green urban infrastructure norms/standards/policies, energy efficiency in residential & commercial buildings). <b>PS 9 Solar PV</b> (energy transition access and productive use solar water pumping, solar PV auctions, rooftop, utility scale plants, storage). <b>PS 10 Green Industries</b> (green industrial parks, green supply chains, EE in SMEs, labelling and standards).
<b>GOP 5</b> Accelerating progress in our country programs in poverty eradication and gender equality.	<b>Cross cutting</b> in all programmatic solutions.
	<b>PS 11 Carbon Pricing</b> (Carbon policy design, carbon trading through institutional strengthening, transaction structuring and knowledge sharing).

<sup>1</sup> Development strategies with low greenhouse gas emissions in the long term.

### Mexico's Country Planning Framework 2021-25

The Mexican Government recognizes the importance of a green growth approach to reach its full development potential. To do so, the CPF 2021-2025 has identified the following challenges and opportunities to lend a strategic approach to country-level initiatives and contribute to transformational impacts in the long term:

- *Reduce poverty and construct social welfare*
- *Enhance capacities to mobilize significant climate finance flows*
- *Wider adoption of climate technologies considering local contexts and traditional customs*
- *Paradigm shifts towards clean(er) energy*
- *High potential for gender equality and social inclusion*
- *Protect natural resources*
- *Foster a greener post Covid-19 recovery*

This Country Planning Framework (CPF) outlines five strategic outcomes that will guide the next phase of GGGI's partnership with Mexico from 2021 to 2025. At its core, this CPF aims to assist Mexico in delivering its NDC mitigation and adaptation targets:

**Green Investments.** Support the strengthening of institutional capacities to increase both flows, sustainability, and greater democratization of access to inclusive climate finance (US\$650 million).

**Climate Action.** Provide technical assistance to national and local counterparts to mainstream their climate agendas (plus enabling conditions) to ultimately increase overall climate ambition (20 technical advisory documents and 10 capacities strengthening activities).

**Sustainable Landscapes.** Ensure green economies that secure Mexico's biocultural wealth, GGGI will foster wellbeing through integrated land management practices contributing to climate change adaptation and mitigation, increasing climatic resilience and biodiversity conservation. Replacing deforestation with regeneration and harnessing the AFOLU sector as an engine for green jobs, greener recovery plus enhanced gender inclusion (3 sectoral knowledge exchange events; 4 strategies aimed at mobilizing USD \$50M).

**Waste Management.** Provide comprehensive solutions away towards circular approaches to waste (mobilize USD\$300M).

**Sustainable Mobility.** Support relevant stakeholders to accelerate the transition to a more inclusive and less carbon intensive mobility, as it is key to achieve Mexico's NDCs (2 sectoral policies developed; financial facility of USD\$250M; implementation of 3 projects).





CHAPTER 2  
**MEXICO: KEY CHALLENGES  
AND OPPORTUNITIES**



## 2. Mexico: Key Challenges and Opportunities

### 2.1 National Overview

**Country Highlights.** Mexico's 2020 national census reported a population of 126 million people, 79% of which is urban and 21% rural<sup>1</sup>. Although Mexico is considered an upper-middle income country<sup>2</sup> (it belongs to the following organizations: OECD, APEC, WTO and the G20), its average economic growth between 1980 and 2020 (2.24% of GDP) has been insufficient to significantly lift its population out of poverty: in 2020, 52.8% of the population --66.9 million people-- lived in poverty conditions and 17.2% --21.9 million people-- lived in extreme poverty<sup>3</sup>. Although the level of human development has increased, poverty, gender inequality and marginalization continue to represent a serious challenge. It stands out that the Human Development Index for the national indigenous population in 2008 was lower (0.6608) than that of the non-indigenous population (0.7447).

- Area: 1,964.4 million Km<sup>2</sup> (14th largest country globally)
- 15th largest world economy and 11th largest GHG emitter
- 32 provincial governments
- Federal republic with a centralized budget (~80-90% dependence on federal transfers) = little fiscal margin of maneuver

**Mexico's Climate Agenda.** Mexico is the 12th global greenhouse gas (GHG) emitter. Top contributing sectors are power (and transport sectors. Mexico's updated NDCs (2020) pledge to unconditionally reduce GHG emissions by 22% and 51% of black carbon emissions by 2030 (as compared to the baseline business-as usual scenario or BAU), and to increase its contribution to up to 36% of GHG emissions and 70% of black carbon emissions, conditional to international assistance (appropriate technology transfer and financial resource mobilization).

Figure 2. Mexico's mitigation NDC baseline

Sector	2013	2020	2025	2030
	MtCO <sub>2</sub> e			
Transport	174	201	225	250
Power generation	149	166	174	186
Industry	124	149	173	199
Agriculture and livestock	98	106	114	122
Oil and gas	73	70	93	101
Waste	44	50	52	56
Residential comercial	26	26	27	28
Land-use change and forestry (LUCF) (emisión)	21	36	42	49
<b>Total gross emissions</b>	<b>709</b>	<b>804</b>	<b>902</b>	<b>991</b>
LUCF (Absorption)	-169	-163	-161	-158

The country has assumed the responsibility of complying with its Nationally Determined Contribution (NDC) referred to in the Paris Agreement. Mexico's NDC contemplates a 22% reduction in GHG and a 51% reduction in black carbon in an unconditional manner compared to the baseline scenario. This commitment could increase up to 36% in GHG reductions and a 70% reduction in the case of black carbon, if there is international cooperation that favors access to financial resources and/or technology transfer, through the establishment of an international carbon price. or of the adoption of a global agreement corresponding to the challenge that climate change represents.

<sup>1</sup> [https://cuentame.inegi.org.mx/poblacion/rur\\_urb.aspx?tema=P#:~:text=En%201950%2C%20en%20M%C3%A9xico%2043,es%20de%2079%20por%20ciento.](https://cuentame.inegi.org.mx/poblacion/rur_urb.aspx?tema=P#:~:text=En%201950%2C%20en%20M%C3%A9xico%2043,es%20de%2079%20por%20ciento.)

<sup>2</sup> <https://data.worldbank.org/?locations=MX-XT>

<sup>3</sup> <https://www.coneval.org.mx/Medicion/Paginas/Pobrezalnicio.aspx>



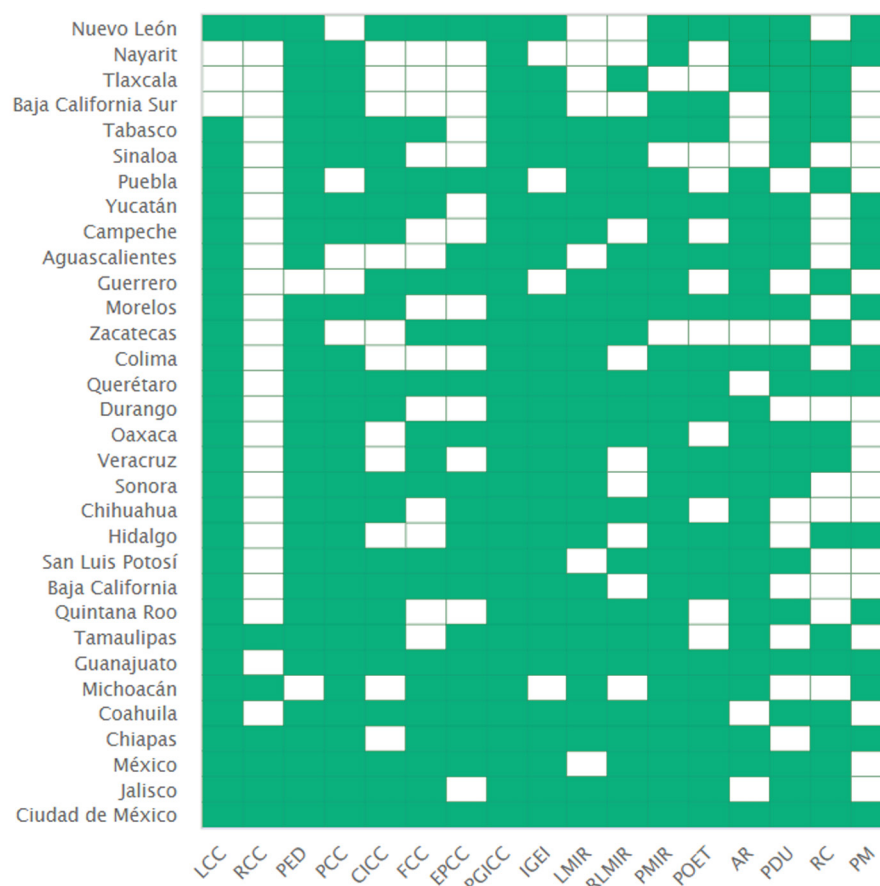
**Mexico's Climate Targets require bridging a USD\$126 Billion Finance Gap.** Mexico needs to mobilize important climate finance to comply with its unconditional NDCs (~10% of its GDP<sup>4</sup> or US\$126 billion<sup>5</sup>) and mitigate 1,520 MtCO<sub>2</sub>e by 2030. The leading sectors are electricity (US\$67.7 billion, 54% of the total) followed by transportation (US\$29.5 billion, 24%), AFOLU (US\$11.8 billion, 9%) and industrial (US\$7.8 billion, 6%). As of 2018, GFLAC estimated that between 2014 and 2018, all climate funding equivalent to USD\$7.7 billion, only 6% of the \$ 126 billion mitigation goals.

**Subnational governments need to play a key part of this rise in ambition.** Mexico's subnational budgets are made up in 80% average by federal transfers, plus many sectors (such as waste and transport and industry) are clearly within subnational (state and municipality) jurisdictions. Enhancing simultaneous greater flows, subnational agency and sustainability of climate finance will require encouraging greater private investment in low-carbon technologies plus investments that have a social return, plus a clear and localized view of the cobenefits fostered.

## 2.2 Subnational Challenges and Opportunities

**Climate Policy Gaps.** In 2012, with the publication of the General Law on Climate Change, the powers and responsibilities of subnational governments for mitigation and adaptation to climate change were established. Since then (and in some cases even before), state governments have advanced in the development of specific policy instruments, provided for both in the Law and in the National Climate Change Strategy, as well as in the incorporation of this approach for care of other public problems also provided for in the Law.

Figure 3. Climate Policy Instruments per State (GoM, 2022)



<sup>4</sup> 2019 estimates

<sup>5</sup> INECC. (2018). *Costos de las Contribuciones Nacionalmente Determinadas de México. Medidas Sectoriales No Condicionadas. Final report.* National Institute of Ecology and Climate Change (INECC), Mexico.

However, there is little clarity regarding the current level of progress of these state efforts. INECC's Subnational Platform reveals disjointed planning instruments matching climate and development agendas (see Figure 3). There is significant heterogeneity regarding capacities in territories to implement the policies and projects: for example, Mexico City complies with all 17 State-level planning instruments, while the States of Nayarit, Tlaxcala and Baja California Sur have less than 50% of their planning instruments.

**Lack of diversified finance.** Subnational governments in Mexico (states and municipalities) generate, on average, only 12% of their own revenues<sup>6</sup>. This limits their budgetary autonomy and leaves them dependent on external variables: for example, during 2021 (in a pandemic context), federal transfers to states and municipalities fell 5.5% compared to the previous year, confirming a sustained downward trend for 3 consecutive years<sup>7</sup>. At the same token, 75% of Mexican states still do not have capabilities or experience diversifying their debt portfolios (e.g., issuing thematic debt in the stock market, which earmarks funding to projects with important climate and social co-benefits). This is an important barrier to entry in a context where the costs of borrowing has a clear increasing trend (under the baseline or business as usual scenario).

Even though Mexico has had successful experiences launching thematic (green/sustainable) bonds at a national scale, these efforts are still considered exceptions (Mexico City in 2018; State of Mexico in 2022, State of Baja California in 2023\*) yet to permeate to the subnational (state) scale. Hence, there is an unmet need to make subnational thematic bond issuance available to those states complying with the Mexican Law of Financial Discipline (plus other enabling conditions) to raise affordable long-term financing needed to finance and implement priority climate mitigation and adaptation actions with a local focus.

**Sustainable Landscapes: sustained biodiversity loss and degradation.** Mexico is the fifth most megadiverse country with an abundant wealth of endemisms, ecosystems and a great genetic variety of diverse taxonomic groups. Approximately 71.2% of the total surface of the national territory (194 million hectares) is covered by some type of vegetation (of which 40.8% corresponds to arid zone vegetation, 24.6% to temperate forests and 22.9% to jungles, the rest is made up of other types of vegetation). The rest of the territory (28.8%) corresponds mainly to areas of agriculture, livestock, and urban areas. Similarly, Mexico is among the top 15 with the greatest biocultural diversity in the world, as it is a multicultural and multilingual nation with at least 68 indigenous peoples. The foregoing highlights the relevance of moving towards an economy that internalizes the essential functions of nature towards circular, sustainable, and inclusive bioeconomies, capturing the value of natural capital, generating greater opportunities to achieve economic, climate and development goals. Such as those established in the National Development Plan (2019-2024), national strategies within the framework of the UNFCCC, CBD, UNCCD, the Paris Agreement and the 2030 Agenda.

Mexico's PROMARNAT 2020-2024<sup>8</sup> indicates that despite significant efforts made in recent years to protect and conserve natural resources, some **biodiversity-rich states have lost up to 80% of their original ecosystems to agricultural land**. Addressing biodiversity loss, climate change, and land degradation is imperative. Deforestation and ecosystems degradation pose risks to human well-being and livelihoods, particularly for indigenous peoples and local communities. Protecting Mexico's natural resources necessarily entails the conservation and sustainable use of oceans and marine resources for sustainable development, plus fostering a more sustainable use of land ecosystems, combating desertification, reversing land degradation, and halting the loss of biological diversity, by carrying out governing actions by the Mexican state aligned to the promotion, verification, and surveillance of the regulatory framework in the field of natural resources.

Particularly, the population belonging to indigenous peoples in rural areas has registered the highest levels of poverty in Mexico, with a high level of dependence on natural resources (agriculture, livestock, timber and non-timber forest resources, wildlife, among others) and the situation is more complex for indigenous women living in rural areas where 8 out of 10 live in poverty and 4 out of 10 live in extreme poverty.

<sup>6</sup> [https://imco.org.mx/wp-content/uploads/2020/02/20200213\\_HABLEMOS\\_DE\\_INGRESOS\\_Documento-3.pdf](https://imco.org.mx/wp-content/uploads/2020/02/20200213_HABLEMOS_DE_INGRESOS_Documento-3.pdf)

<sup>7</sup> <https://www.mexicoevalua.org/numerosdeerario/gasto-federalizado-la-perdida-de-recursos/>

<sup>8</sup> [https://www.dof.gob.mx/nota\\_detalle.php?codigo=5596232&fecha=07/07/2020](https://www.dof.gob.mx/nota_detalle.php?codigo=5596232&fecha=07/07/2020)



Although the scope of the proposed objectives requires close intersectoral and multilevel collaboration. In this sense, **the implementation of the various strategies at the federal level requires a specific approach and planning, and according to the needs and interests of the state governments in the country.** For this reason, GGGI seeks to promote green growth under a sustainable landscape approach hand in hand with subnational governments. Generating collaborative initiatives -both at the federal and subnational levels is key to preserve the biocultural wealth of Mexico and provide support in its transition towards an environmentally sustainable and socially inclusive economic growth model.

**Cleaner Transport: addressing technological, capacity, and financial barriers.** Generally, Mexico's public transport service is perceived as inefficient, low-quality, congested, and with an unprepared road network that provides no transit priority. The lack of high-quality, low-carbon public transport in the fast-growing urban areas of Mexico is taking a toll on the country's productivity, efficiency, health, and the environment. Long distances, insufficient connectivity, and scarce public transport options (effects of the rapid unplanned urbanization) increases commuting times, hence reducing citizens' productivity, wellbeing, and health.

In Mexico, subnational (e.g., state and city) governments are responsible for developing urban and suburban transport projects; however, transport planning and projects require strong inter-governmental cooperation among local agencies/departments (urban development, infrastructure and civil works, transport, public security, environment, and finance), which usually is a strong bottleneck for transformative projects. 87.8% of the transport operators are "hombre-camión" (individual operators) and only 12.2% are formal companies. The current array requires additional efforts, resources, and time to liaise, regulate and commission transformative transport initiatives.

Where there have been efforts to revitalize / update transport interventions in the country, public tenders and procurement for private operators still reward the **lowest upfront cost** (as opposed to full cycle analysis accounting for O&M). Other technology barriers point towards the complexity to predict performance ex ante linked to limitations in space (amount of battery packs buses can accommodate on their frames) existing infrastructure (how to place charging stations in current yards) and route-specific design considerations (length, speed, slope), training of operators and maintenance, plus others. Figure 4 (below) summarizes main barriers to wider adoption of clean (electric) public transport alternatives:

Figure 4. Barriers to Electric Mobility in Mexico

	Description
Institutional	* Subnational (e.g., states, municipalities and cities) governments are responsible for developing urban and suburban transport projects; however, transport planning and projects require strong inter-governmental cooperation among local agencies/departments (urban development, infrastructure and civil works, transport, public security, environment and finance), which usually is a strong bottleneck for transformative projects.
	* Public tenders and procurement rationale still reward the lowest upfront cost (as opposed to full cycle analysis accounting for O&M or economic environmental impacts), placing e-buses adoption at a disadvantage.
	* Administration terms (3 years) are usually perceived as incompatible with longer planning frameworks.
	* 87.8% of the transport operators are "hombre-camión" (individual operators) and only 12.2% are formal companies. The current array requires additional efforts, resources, and time to liaise, regulate and commission transformative transport initiatives.
	* Conventional (diesel-fueled) buses in Mexico often have a life cycle between 10 and 20 years, leading to delays in fleet renewal efforts.
Technological	* Difficulty to predict the performance in projects, e.g., linked to limitations in space (amount of battery packs buses can accommodate on their frames), existing infrastructure (how to place charging stations in current yards) and route-specific design considerations (length, speed, slope).
	* Perceived barriers to train operators and maintain the infrastructure.
Financial	* Insufficient revenue capabilities or public resources at government levels; on average, ~90% of public funds come from the Federal Treasury creating dependencies.
	* The capital cost gap between e-buses and conventional diesel buses is still significant, making it difficult to absorb; diesel buses are 50% to 100% cheaper than electric buses.
	* Individual operators have low or null creditworthiness; also, they are typically not financially or technically able to add electric bus technology without risk to their business.

**Waste: bottlenecks preventing a bolder shift to circular economy.** Mexico generates 107,055.54 daily tonnes of solid waste. 83.93% of this figure is collected, 78.54% is disposed of in final disposal sites, leaving only 9.63% to be recycled (SEMARNAT, 2017). Basic management of MSW predominates, which consists of collecting and disposing of waste in sanitary landfills through a linear economy paradigm. As a result, 82% of the emissions from the solid waste sector in Mexico (29 million tCO<sub>2</sub>e) are generated in final waste disposal sites (sanitary landfills or open-air dumps). Complying with Mexico's nationally determined contributions (NDC) signed in the Paris Agreement (2015) requires a 28% reduction in emissions from its waste sector with respect to its business-as-usual scenario (BAU); To achieve this, two mitigation entry points are contemplated: zero methane emissions in landfills and eradicating open-air burning of waste by 2030.

Although advances are recognized in the regulatory and diagnostic framework at the federal level, it is not clear how the National Zero Waste Vision can be implemented sustainably at the local level: according to the LGPGIR, waste management is an attribution municipal. And it is precisely at the local scale where more support is required: of the 2,203 final waste disposal sites, 90% do not have biogas capture infrastructure on site; 47% do not have adequate infrastructure or capacities to monitor, process and control, and 65% have reached their full capacity and have no remaining useful life. This reveals an opportunity to boost the percentage of recycled solid waste, plus elicit green growth opportunities (e.g., green recovery, green jobs) through circular solutions and waste valorization (e.g., waste to energy).

**Cross-cutting: Insufficient capacities to structure transformative public-private partnerships (PPPs).** Mexico has a long track record of implementing Public Private Partnerships (PPPs). Since 1990, 360 PPPs have been implemented in the country, with a cumulative investment of US\$ 96,403 million<sup>9</sup>. Institutional capacity bottlenecks are suggested by the World Bank's Benchmarking Infrastructure Development (BID), which elicits several areas for improvement for Mexico's currently PPP policy framework: lack of marked assessments; insufficient sustainability criteria requirements for infrastructure projects, plus lack of diversified procurement procedures; lack of standardized implementation practices (e.g., manuals). PPPs to date have focused on traditional PPPs sectors (roads, energy), with little attempts to apply the PPP model to climate change adaptation and mitigation projects (with the notable exception of the energy sector).

Assessing climate change risks and impacts and establishing appropriate plans to reduce carbon emissions and increase resilience are key for developing climate-smart PPP projects. To deliver climate-smart infrastructure solutions under PPP schemes, the governments of Mexico (Federal and subnational) must be able to integrate environmental, social and climate change measures throughout the PPP origination, design, and development process.

<sup>9</sup> [https://storage.googleapis.com/wb-bid/Economy/Summary/BID\\_2020\\_Mexico\\_PPP\\_Summary.pdf](https://storage.googleapis.com/wb-bid/Economy/Summary/BID_2020_Mexico_PPP_Summary.pdf)





CHAPTER 3  
**MEXICO SUBNATIONAL  
STRATEGY**



### 3. Mexico Subnational Strategy

#### Vision

*“GGGI is a recognized enabler of Mexico’s policies at the subnational level, working from the territory alongside key partners”.*

#### Key Drivers

- Build-up from scattered project-based logic to a more structured programme-based logic.
- Bring GGGI closer to the territories through regional offices and strategic partnerships with public, private and social stakeholders.
- Consolidate a coherent narrative bridge between GGGI’s subnational governments and Mexico’s CPF 2021-25 through a sectoral approach.
- Provide a framework which prioritizes resources (human, offices and financial sources including bonds, PPPs and co-finance from states) over time.
- Develop a self-funding strategy: in the short term, GGGI will aim for \$250-400k USD interventions (project-level) to create track record. Eventually, these interventions should turn into consolidated multi-year programme-level facilities within the \$1-2M USD range.

#### Outcomes

- O1 - Climate Action: Foster the development and adoption of transformative subnational policies.
- O2 – Sustainable Finance: Catalyze subnational finance flows through diversified sources and innovative project schemes.
- O3 – Sustainable Landscapes: Accelerate restorative bioeconomy approaches at subnational and regional levels.
- O4 – Clean Transport: Accelerate subnational transition to a more inclusive and less carbon intensive mobility.
- O5 - Waste: Catalyze circular economy and waste valorization solutions.





## Outcome 1 - Climate Action: Foster the development and adoption of transformative subnational policies

**Approach** GGGI will foster partnerships with subnational (State) governments to provide technical assistance and develop policy advisory documents (including but not limiting to): green growth strategies, subnational recovery plans, analysis of potential socio-economic co-benefits; design and operationalization of MRV systems to estimate GHG emissions and/or sectoral plans aligned to GGGI's programmatic solutions.

**Regional focus** *None; highly dependent on sectoral solutions.*

### Indicators

**O1.1: Number of Subnational MoUs signed: 6**

**O1.2: Number of policy advisory recommendations and/or knowledge products generated: 20**

**O1.3: Number of recommendations adopted by subnational counterparts: 3**

**O1.4: Number of capacity building workshops/roundtables: 15**

### Potential Workstreams

**W1.1: State of Sonora (IMTES): Green Growth Policy (clean energy, waste, e-mobility)**

**W1.2: State of Chihuahua (SIDE): Green Growth Policy (water, carbon, industrial parks)**

**W1.3: State of Nuevo León (Metrorrey, Economía): Green Growth Policy (SMEs, carbon, e-mobility)**

**W1.4: Multi-state: Advisory products within the sustainable landscape workstream**

**W1.4: Multi-state: Capacity building workshops/roundtables**



## Outcome 2 – Sustainable Finance: Catalyze subnational finance flows through diversified sources and innovative project schemes

**Approach** GGGI will support: the strengthening of subnational treasuries' capacities to issue thematic bonds/debt; the creation of specialized/dedicated subnational financing vehicles (SNFVs) and the financial closing of sectoral initiatives (e.g. waste, transport, sustainable landscapes).

**Regional focus** *None; highly dependent on sectoral solutions.*

### Indicators

**O2.1: Resources mobilized: \$250M USD**

### Potential Workstreams

**W2.1: Mexico City (Metrobús): transactional support for e-fleet (\$38M USD)**

**W2.2: State of Nuevo León (Metrorrey): transactional support for e-fleet (\$65M USD)**

**W2.3: State of Chihuahua (SIDE): FIDEAPECH loan programme (\$20M USD)**

**W2.4: State of Baja California (Hacienda): Thematic bond issuance (\$50M USD)**

**W2.5: State of Sonora (Hacienda): Thematic bond issuance (\$50M USD)**

**W2.6: Multi-state Sustainable Landscapes initiatives: \$15M USD**



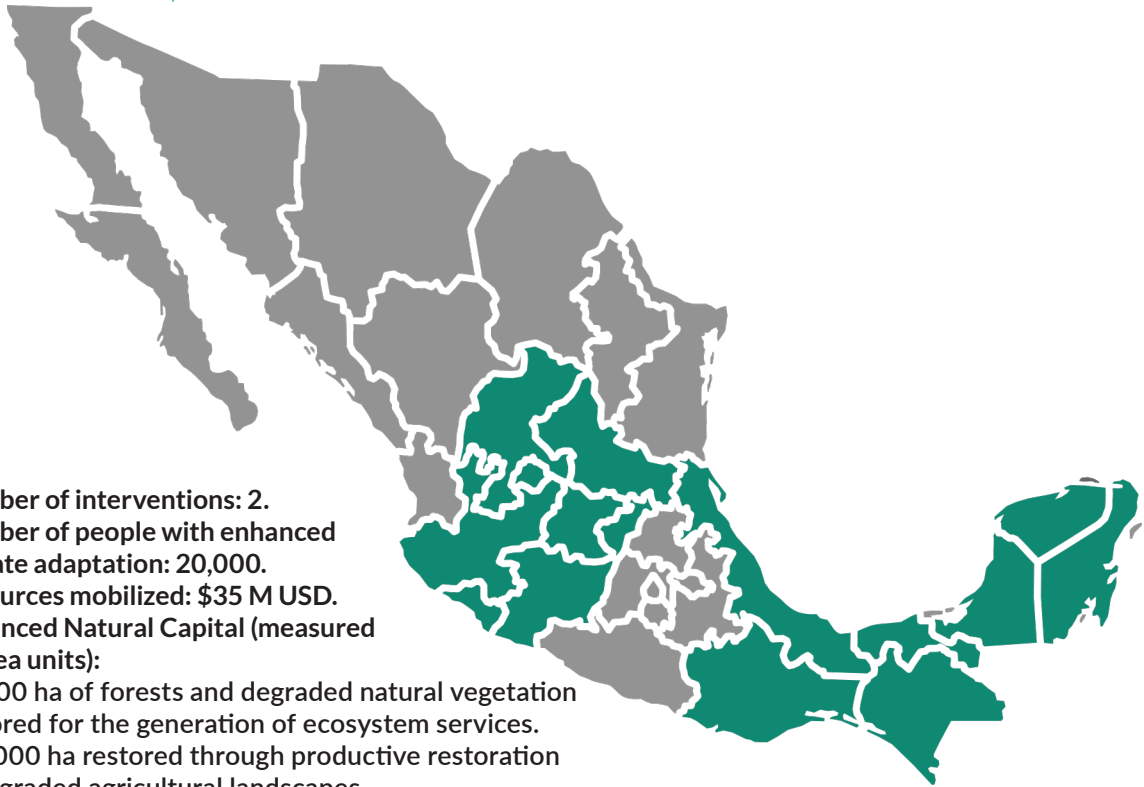
### Outcome 3 – Sustainable Landscapes: Accelerate restorative bioeconomy approaches subnationally

**Approach** GGGI will foster regenerative interventions with relevant stakeholders (emphasizing sub-tropical states of the south and west, given their sectoral contribution and relevance). The aims of this outcome are to increase overall resilience, AFOLU value chains sustainability and results-based payments (RBPs) which will lead to greater economic opportunities at the community level.

Key counterparts to this end are FIRA (Trust Funds related to Agriculture), and existing inter-state alliances such as COBIOCOM and Yucatán Peninsula initiatives.

#### Regional focus

- *Yucatán Peninsula: Campeche, Quintana Roo and Yucatan.*
- *Western states: Aguascalientes, Colima, Guanajuato, Jalisco, Michoacán, Nayarit, San Luis Potosí, and Zacatecas.*
- *Southern states: Chiapas, Oaxaca, Tabasco, Veracruz*



#### Indicators

- **Number of interventions: 2.**
- **Number of people with enhanced climate adaptation: 20,000.**
- **Resources mobilized: \$35 M USD.**
- **Enhanced Natural Capital (measured in area units):**  
 60,000 ha of forests and degraded natural vegetation restored for the generation of ecosystem services.  
 110,000 ha restored through productive restoration in degraded agricultural landscapes.  
 140,000 ha under sustainable management in non-degraded productive landscapes.

#### Potential Workstreams

- W3.1 Multi-state: Zero deforestation value chains Facility (e.g., agave, berries, avocado and livestock).
- W3.2 Multi-state: Governors’ Climate and Forests Task Force (GCF-TF).
- W3.3 SL Bond Facility: Matching FIRA’s thematic bond subnationally.
- W3.4 Financial mobilization and ecosystem restoration strategies for the Biocultural Corridor of the Center-West of Mexico (COBIOCOM).
- W3.5 Sustainable tropical forest management in the Yucatan Peninsula.



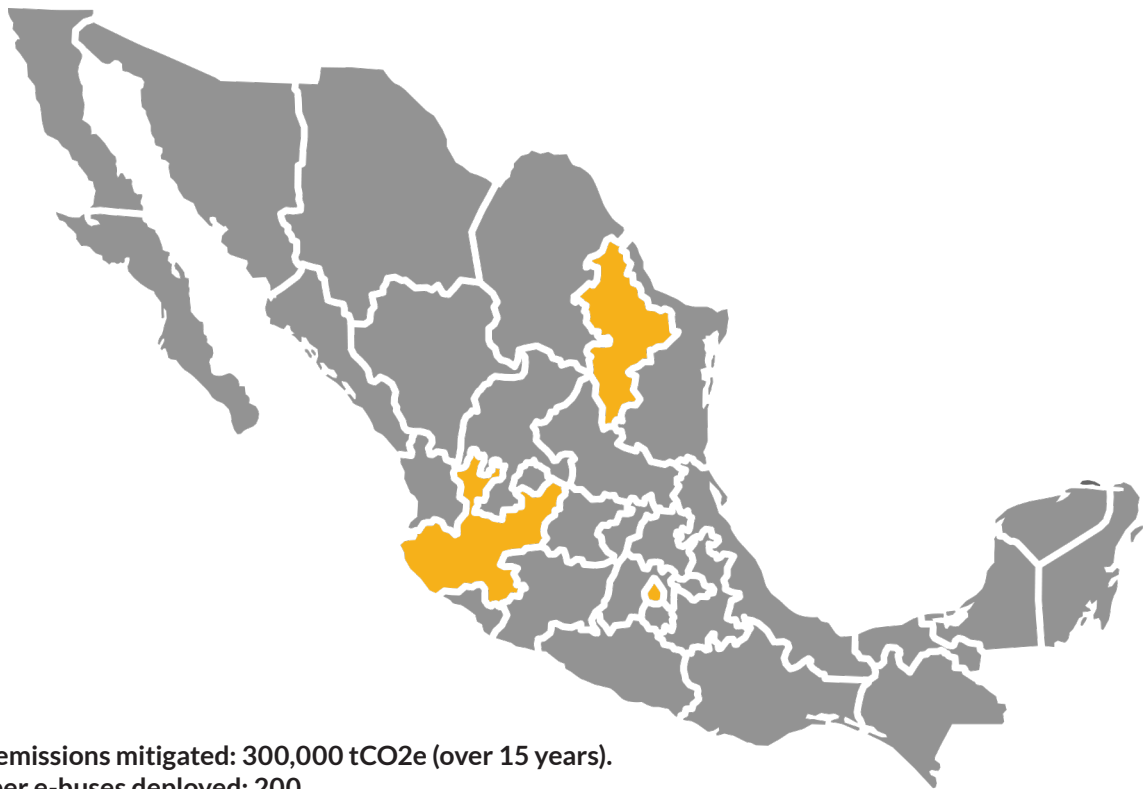


## Outcome 4 – Clean Transport: Accelerate subnational deployment of a more inclusive, less carbon intensive mobility

**Approach** GGGI will provide technical assistance to states (larger metro areas and secondary cities) with a clear mandate to electrify their public transport fleets via public tender, regulatory and financial project structuring, plus transactional support for closing projects. As GGGI position itself as a reliable neutral partner in the shorter term, the longer aim is to develop an e-mobility facility which supports the virtually accredited GCF Direct Access Entities BANOBRAS (PROTRAM) and NAFIN (Fondo Sostenible). This facility would also support synergistic efforts of the Zero Emission Bus Rapid Development Accelerator (ZEBRA) partnership in Mexico.

### Regional focus

- Largest cities in Mexico with existing e-transport projects: Mexico City, Guadalajara and Monterrey
- Secondary cities in States (TBD)



### Indicators

- GHG emissions mitigated: 300,000 tCO<sub>2</sub>e (over 15 years).
- Number e-buses deployed: 200.
- Number of interventions: 3.
- Number of people with enhanced access to services (SO3.4): 300,000.

### Potential Workstreams

W4.1 Mexico City e-bus fleet renewal (Metrobus).

W4.2 State of Nuevo León e-bus fleet renewal (Metrorrey).

W4.3 Multi-state e-Mobility Facility: foster funding for States to roll-out e-mobility projects via PPPs (funding from GCF/BANOBRAS/FONADIN, NADB and/or NAFIN's Sustainable Fund).



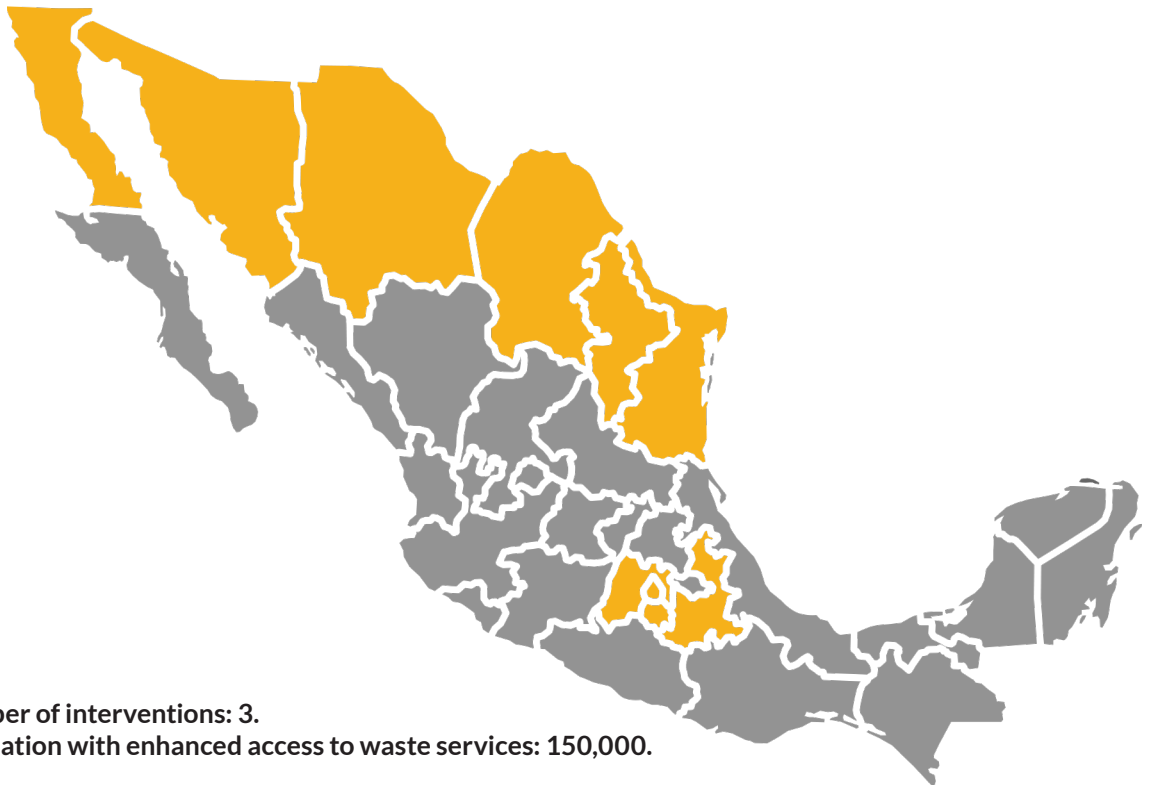
## Outcome 5 - Waste: Catalyze circular economy and waste valorization solutions

**Approach** GGGI will provide comprehensive solutions for states to transition away from linear and towards circular approaches to waste. Different approaches will be considered: from sectoral policies (such as waste management plans for states and municipalities), the deployment of innovative pilots concerning waste collection (e.g., Pay As You Throw, or PAYT), waste to energy and biogas production pilots for wholesale food markets and mid-sized cities to e-waste management.

GGGI's territorial approach is clustered in two regions: northern states (to capitalize on the previous work done with the North American Development Bank, NADB, and further resource mobilization), plus Mexico Valley Metro Zone (ZMVM), given that this zone contributes to the most waste generation in Mexico.

### Regional focus

- Northern Mexican states: Baja California, Sonora, Chihuahua, Coahuila, Nuevo León and Tamaulipas.
- Mexico Valley Metro Zone (ZMVM): Mexico City, Puebla, Morelos, State of Mexico (highly populated).



### Indicators

- Number of interventions: 3.
- Population with enhanced access to waste services: 150,000.

### Potential Workstreams

W5.1 Northern-states: Waste Policy + Pilot Projects Facility (PPP approach).

W5.2 Multi-state: Waste Management Finance Pilot (PAYT).

W5.3 ZMVM-states: support BANOBRAS's to secure funding for States to roll-out projects in through the PRORES window / PPP approach.

W5.4 Northern-states: Circular Economy / e-Waste / Industrial Synergy Roadmaps.

## Subnational Strategy Summary and Implementation Plan

*Vision: GGGI is a recognized enabler of Mexico's policies at the subnational level working from the territory alongside key partners*

### Key Drivers

- A more structured programme-based logic (geographically oriented); bring GGGI closer to the territories (through regional offices)
- Consolidate a coherent narrative bridge with the CPF; coherent framework over time

Outcome	Potential donors	Target 2023	Target 2024	Target 2025
<b>O1 Climate Action</b>	GCF earmarked states	Presence: 1 regional office opened / +2 staff MoUs signed (accum.): 2	Presence: 1 regional office opened / +2 staff MoUs signed (accum.): 3	Presence: 2 regional offices opened / +5 staff MoUs signed (accum.): 6
<b>O2 Sustainable Finance</b>	GCF NADB UKPACT	Resources mobilized: \$60M USD	Resources mobilized: \$100 M USD	Resources mobilized: \$250 M USD
<b>O3 Sustainable Landscapes</b>	GEF GCF UK Norway USA	Intervention: 1	Intervention: 1	Resources mobilized: \$35 M USD Interventions: 2 Number of people with enhanced climate adaptation: 20,000 Enhanced Natural Capital (measured in area units): - 60,000 ha of forests and degraded natural vegetation restored for the generation of ecosystem services. - 110,000 ha restored through productive restoration in degraded agricultural landscapes. - 140,000 ha under sustainable management in non-degraded productive landscapes.
<b>O4 Clean Transport</b>	ZEBRA P4G GCF NADB UKPACT	Interventions (accum.): 2 Number of e-buses deployed: 110 GHG emissions mitigated: 180,000 tCO <sub>2</sub> e Population with enhanced access to services: 150,000	Interventions (accum.): 2 Number of e-buses deployed: 150 GHG emissions mitigated: 225,000 tCO <sub>2</sub> e Population with enhanced access to services: 240,000	Interventions (accum.): 3 Number of e-buses deployed: 200 GHG emissions mitigated: 300,000 tCO <sub>2</sub> e Population with enhanced access to services: 300,000
<b>O5 Waste</b>	CCAC NADB GCF KOSME / MOEF Danish Agency	Interventions (accum.): 1 Population with enhanced access to services: 50,000	Interventions (accum.): 1 Population with enhanced access to services: 50,000	Interventions (accum.): 3 Population with enhanced access to services: 150,000



Subnational Strategy goals (2025)











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