



México towards a fossil fuel-free future



PARLIAMENTARIANS FOR
A FOSSIL-FREE FUTURE

Report
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INTRODUCTION

This report is the result of research carried out by a group of diverse Mexican parliamentarians, members of the Parliamentarians' Network for a Fossil Fuel-Free Future. This initiative is based on a genuine concern for the climate emergency observed in every corner of the earth, caused by human activities, particularly by the burning of fossil fuels which, according to the Intergovernmental Panel for Climate Change (IPCC) represents close to 80% of the historic emissions of Greenhouse Gases (GHG). In response to this context the Parliamentarians' Network has started an inquiry process with a global scope aimed at evaluating the progress of phasing out from carbon, oil, and gas to meet with the international commitments of the Paris Agreement. Likewise, different countries from the five regions of the earth are advancing on national legislative inquiries.

Since COP 27 hosted by Egypt in 2022, the Mexican Parliamentarians members of the Network have set out to lead this process in Latin-American and the Caribbean, seeking to understand how Mexico should advance its energy transition and to what extent it could align to the climate commitments. Thus, this report México towards a fossil-fuel free future examines the advancements but is mainly focused on the strategic routes and concrete proposals to achieve a just energy transition in alignment to the country's current circumstances. Throughout this report, the reader will find suggestions and mitigation measures to make Mexico's Nationally Determined Contributions (NDC) reflect a greater ambition, but at the same time are technically feasible and socially just, in line with the analysis carried out and published by Mexico's Climate Initiative at NDC-SC in 2022.

The development of the research, and thus this report, has been led by seven legislators from five different political parties, demonstrating their concern for contributing to the national debate on a subject that is of common interest but from different viewpoints and sectors. Likewise, a technical team of the highest level has supported the development of the research and the drafting of the report itself. As a milestone in the research process, a day-long session was carried out at the Mexican Congress, through an Open Parliament Forum, in which experts were invited to further the analysis of the information. This report presents key messages that summarize the main elements of the analysis of various public policy, academic and legal documents. It is divided in three chapters corresponding to the three main strategic subjects. Mexico has an incomparable potential for climate leadership and could become an example of a just and equitable energy transition for the rest of the countries to follow.

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KEY MESSAGES

To facilitate the phase-out of fossil fuels in key economic sectors, Mexico's NDCs must be ambitious and their implementation urgent and fast. In response to civil society's pressure, Mexico presented by the end of 2022 new mitigation goals for 2030: 35% unconditional emission reduction and up to 40% reduction conditioned on receiving international support. These more ambitious goals are necessary and reflect progress, but, according to the Mexican Climate Initiative (MCI, 2022) the key is to adopt, with efficacy and urgency, the actions included in the decarbonization paths for each relevant sector. In a study that considered 30% mitigation goals, the MCI estimated the investment needed for the adoption of the unconditioned commitment at USD 105.640 million by 2030, and at USD 255.997 million for the conditioned commitment.

The energy transition in Mexico is feasible and can be effectively carried out with the existing technology and with political support that leverage the large variety of measures for the transport and electric power sectors. As in many countries, the energy system transformation requires political will. This is the determining factor that will push or stop the transition process from an energy system based on oil, gas, and carbon to one based on clean and renewable energies.

Mexico already passed its peak of oil production in 2004 and of gas in 2009. While the internal demand for oil grows, the supply is running out, leaving the country in a critical scenario. To date, 88% of the available oil has been extracted and its purchasing power has risen exponentially. Since 2004, well productivity has been reduced 67% and the extraction costs have quintuplicated. The energy security outcast is critical unless strong actions are undertaken for the energy transition across Mexico.

To comply with climate change mitigation goals provided for in the Paris Agreement, radical changes must be undertaken in the transport sector across the world. In

Mexico, motorized transport is one of the main emitters of Greenhouse Gases (GHG) In 2019, it was the second most important emitter of GHG nationwide, following energy industries, with a total of 148 MtCO_{2e}, 20% of total country emissions. This high emissions' volume is related to the high fossil fuel consumption and represents an important mitigation potential.

The application of vehicular efficiency regulation NOM 163 will have a reduction potential of 19.5 million tons of CO_{2e} annually by 2030. To have a more efficient vehicular fleet and to reduce its emissions, it is essential to update NOM-163. An optimal regulation on GHG emissions and fuel performance in light vehicles is one of the most cost-efficient reducing emissions mechanisms, while it also contributes to the promotion of national energy security by reducing the demand for imported gasolines.

Promoting active and non-motorized activity will contribute to the reduction of private vehicle use. This means a reduction potential of 7.5 million CO₂ tons per year by 2030. Walking and riding bicycles are the cleanest ways to move around a city. In addition to the emission reduction and the improvement of air quality, both mobility options provide co-benefits for health, road safety and equality. To make it an attractive alternative, favourable security, cohabitation, culture and comfort conditions for cyclists and pedestrian must be ensured. This means the adaptation of streets and infrastructure.

Urban planning must favour active and non-motorized mobility and massive public transport. This represents a reduction potential of 14.2 million CO₂ tons per year by 2030. Good urban planning will allow people to live and carry out their activities without the need of long rides or, when needed, to make them possible in safe, fast, and comfortable public transport and other cleaner methods. Compact cities with mixed land use and proper public spaces, planned to include various modes of transport, will have lesser carbon footprint, and promote greater equality.

Actively promoting the “Avoid-Shift-Improve” approach within transport demand. The hierarchy for managing transport demand to reduce emissions begins by AVOIDING the need for transport, then SHIFTING the ride distribution to reduce automobile rides and privilege non-motorized mobility and public transport and, as a last instance, IMPROVING the efficiency of conventional vehicular technologies, fuels, and existing road infrastructure to reduce emissions.

The electric-energy sector is key for global and national decarbonization, given it is historically the second with highest GHG emissions in the country and a high fossil consumer. It will become more relevant, as other sectors such as transport and industrial processes are electrified. Countries with developed economies have pledged to achieve a carbon net-zero electric sector by 2035: Mexico, on the other hand, has a renewables goal of only 50% by 2050.

Investment needed to achieve the electric sector’s decarbonization is significant and the public sector cannot make it alone. An estimated US\$56 billion are required for this purpose by 2030. It is important to promote and include private sector investment and cooperation. The public sector must therefore create the conditions needed to attract investment and get international funding through different cooperation mechanisms.

Mature, accessible, and reliable renewable energy technologies for reducing emissions exist, even with negative implementation costs, and must be deployed rapidly to achieve climate commitments in this decade. Incentive public policy mechanisms and regulations, amongst others, without (or with low) implementation costs will also increase renewables penetration into the system. Certainty must be increased and investments in polluting sectors un-incentivized. It is also necessary to invest in the development and research for new technologies with great potential like hydrogen, batteries and net flexibilization.

The implementation of an ambitious roadmap for renewable energies in Mexico by 2030 (IRENA) will bring about the opportunity for the reduction of the total carbon demand by 62%, natural gas by 21% and oil by 6% with reference to current demand.

It is crucial to develop a planning process for the energy transition at a national level, one that articulates the executive, the legislative and civil society. This process must determine the roadmap to transition in the most concrete manner, as well as the tasks and programs needed to achieve it. Given it is a planning process, it must be subject to periodical monitoring and evaluation to identify advancements and setbacks in the subject.

To build a just energy transition, active and strategic community participation in the territories where new energy projects are to be carried out is essential. Participation of state and municipal governments, communal, neighbourhood and popular counsels and assemblies, both in rural and urban contexts, is pivotal.

The current political class can imagine, design, and set the foundations to achieve a transformation of the predominant energy model that may contribute to tackle the climate emergency, through diversifying energy sources and democratizing local level decision making, so that women, men, indigenous people, rural and urban populations can take decisions regarding their own territories.

The predominant development paradigm, founded on a vision of illimited economic growth and promoted by a model of resource consumerism and wastefulness is unsustainable from an energy standpoint. The planet has finite limits and so a drastic reduction of energy, materials and product consumption is needed, giving way to a greater energy efficiency, sustainable mobility, material economy decreases and a critical, responsible, and just consumption.

BASED ON A JOINT EFFORT FROM DIVERSE PARLIAMENTARY GROUPS, THE SIGNERS OF THIS REPORT PLEDGE TO:



Create legal frameworks focused on developing a just energy transition and not increasing fossil fuel dependence.



Allocate the necessary resources on the Federation's Expenditure Budget in accordance with Paris Agreement.



Work on a periodic system of supervision and evaluation of the Executive's advancements in the issues related to energy transition and achievement of climate commitments.



Reform legal and regulatory frameworks to accelerate the de-fossilization of transport and the energy matrix as stated in this document.



Include the concept of justice in the discussions and projects related to energy transition and climate action.

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