

Mexico's National Actions to Reduce Emissions of Short-Lived Climate Pollutants El Caso de México

Jessica González Instituto Nacional de Ecología y Cambio Climático

CONTENT



I. Regulatory Framework

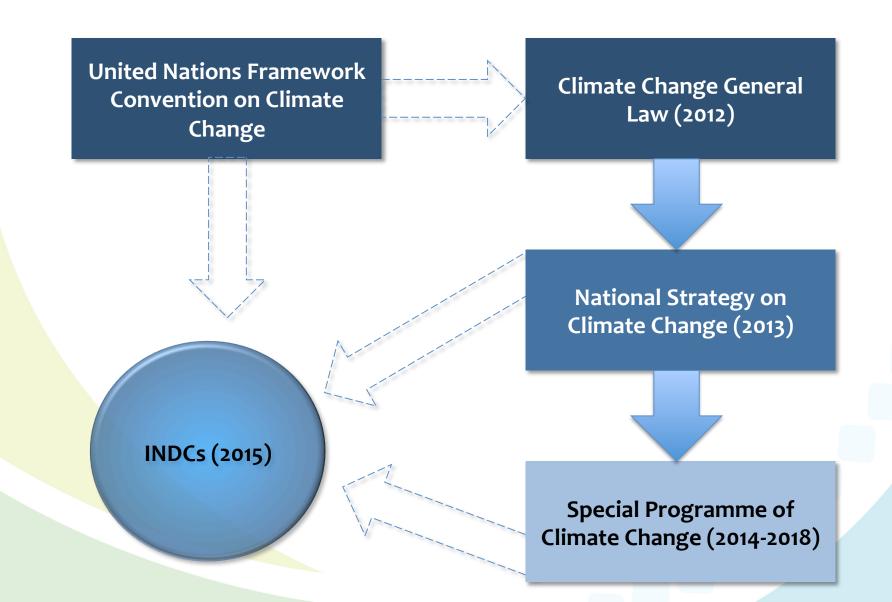
- Climate Change General Law (2012)
- National Strategy of Climate Change (2013)
- Special Programme of Climate Change (2013-2018)
- Mexico's Intended Nationally Determined Contributions (INDCs, 2015)

II. Mexico on the CCAC

Initiatives

I. Regulatory Framework





Climate Change General Law (2012)

Art. 32: Prioritize:

- Foster/Implement Mitigation actions with the **highest potential reduction** at the **lowest cost**.
- Actions with: social, economic and environmental **benefits** (improve quiality of life)
- Mitigation actions must include: gases and compounds (which includes SLCPs)



Institutional Framework (Entities)

Climate Change National System (3 levels +private)

Intersecretarial Comission on Climate Change (13 Ministeries)

SEMARNAT

INECC

Climate Change Council, C3 (Private, Academic, social)



National Strategy on Climate Change (2013)

- Base instrument that establish the guidelines for the climate change national policy. Medium and long-term perspective.
- Move forward to a competitive and sustainable economy of low cabon emissions.
- It has 5 strategic axes for mitigation action.
- The 5th, refers to SLCPs, and has to propitiate health and welfare co-benefits through its 19 action guidelines.



NATIONAL MITIGATION EFFORTS BASED ON THE NATIONAL STRATEGY







Special Programme of Climate Change (2013-2018)



It has action guidelines focused in reducing GHG in strategic emmiting sectors: transport, oil and gas, industry, agriculture and livestock, waste, electricity generation, forestry and residential.

Goal 4 (5 strategies):

Strategy 4.1	To use <u>technologies and fuels</u> that reduce <u>black carbon</u> emissions, improving air quality and public health.
Strategy 4.2	To reduce <u>methane</u> emissions in <u>treatment facilities</u> of residential water, <u>landfills</u> and in oil, agriculture and livestock sectors.
Strategy4.3	To control <u>refrigerants</u> emissions with a hig global warming potential.
Strategy4.4	To develop normative and foster the creation of <u>instruments</u> that regulate SLCPs emissions.
Strategy4.5	To promote National Appropiate Mitigation Actions (<u>NAMAs</u>) to reduce SLCPs*

Intended Nationally Determined Contributions (2015)



UNCONDITIONED COMMITMENTS

March, 2015. Mexico presented its INDCs to de UNFCCC, through which the objectives for emissions reduction between 2020 to 2030 was expressed. The INDCs, include GHG reductions of 22% unconditionally an up to 36% conditionally; It also set reductions of 51% of black carbon unconditionally and up to 70% conditionally.

UNCONDITIONED GOALS TO

REDUCE GHG

Unit: Mtons CO₂e

PERIOD: 2020-2030

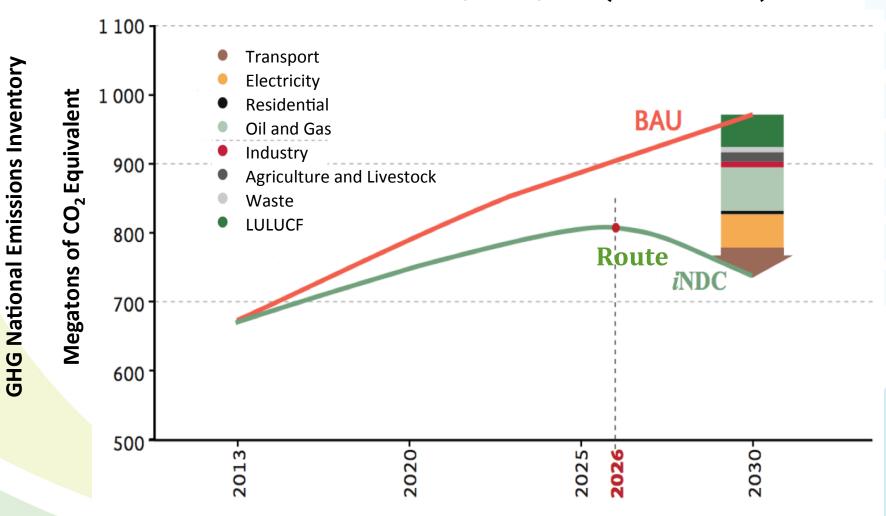


ADITIONAL UNCONDITIONED GOALS

- √ 51%: Black Carbon
- ✓ **Adaptation:** Increase resilience in vulnerable municipalities, in strategic infraestructure and ecosistems.



GHG TRAJECTORY 2013-2030 (TG CO2E)



Peak: 2026

SOCIAL SECTOR

ADAPTACION BASED ON ECOYSTEMS

STRATEGIC INFRASTRUCTURE AND PRODUCTIVE SECTORS

Reduce by 50% the number of vulnerable municipalities or municipios (160 municipios)

- •Include a climate, gender and human rights approach in all of the territorial planning and risk management instruments
- Increase financial resources for Disasters prevention vs. Disasters attention
- Establish regulations for land use in risky areas
- Integrated watershed management to guarantee access to water
- Ensure social participation and training in social adaptation policy

Achieve a 0% deforestation rate in 2030

- Reforestation of upper, mid and lower basins, taking into consideration the areas native species
- Increase ecological connectivity and carbon sequestration through conservation and restoration
- Increase carbon confinement and coastal protection through conservation of these coastal ecosystems
- REDD+ action synergies
- Ensure water management in its different purposes (agricultural, ecological, urban, industrial, domestic)

Install early warning and risk management systems in all three government levels

- Guarantee and monitor industrial and urban wastewater treatments in settlements larger tan 500,000 inhabitants
- Ensure strategic infrastructure security
- Include climate change criteria in agricultural and livestock programs
- Apply the specification norm of environmental protection and adaptation in coastal touristy real estate developments
- Incorporate adaptation criteria in public investment projects that take into consideration construction and maintenance infrastructure



ECONOMIC MEASURES

Acknowledging the necesity to adop economic measures that lead to an eficient change:

A carbon tax has been implemented to favor the use of lower-emissions options

A number of instruments and policies are being created with the view of possible ETS (Emissions Trade Schemes), e.g. RENE, MoU with California.

II. México en la CCAC



- ☐ Mexico's membership since its creation in 2012.
- ☐ Joint efforts and sinergies to national ambitions.
- ☐ This membership has contributed to SLCPs **internalization** in Mexico's environmental Agenda and **national regulations**.
- INITIATIVES
- REGIONAL ASSESSSMENT ON SLCPS FOR LAC
- BRICKS PRODUCTION
- OIL AND GAS
- SUPPORTING NATIONAL ACTIONS PLANNING (SNAP)
- WASTE
- HEAVY DUTY DIESEL VEHICLES AND ENGINES.



REGIONAL ASSESSMENT ON SHORT-LIVED CLIMATE POLLUTANTS

INECC, UNEP-ROLAC, CCAC, Regional and International experts.
Objective : to provide a diagnosis on what actions have been undertaken by LA Countries on SLCPs.
Highlight efficient practices and actions and promote intraregional cooperation.
Foster high level regional cooperation to facilitate the design and build up of publicies, and promote the scaling up in SLCPs emissions mitigation efforts, while obtaining relevant regional information, contributing to the assessment strengthening that can be translated into efficient and coordinated actions
Close coordination among partners.

- → Coordination Meetings.
- → AUTHORS MEETINGS.
- → Policy consultation meeting.



REGIONAL ASSESSMENT STRUCTURE

Chapter 1	• Introduction
Chapter 2	Drivers, emissions and trends in LAC
Chapter 3	• Impacts of emissions on health, agriculture and ecosystems in LAC
Chapter 4	Measures relevant to LAC and their potential impact on emissions and climate and air quality benefit.
Chapter 5	Implementation of identified measures across LAC.
Chapter 6	Strategic priorities and opportunities in LAC.

SUMMARY FOR DECISION MAKERS.

HIGH LEVEL MEETING ON POLICY PERSPECTIVES FOR THE LATIN AMERICA AND CARIBBEAN REGIONAL ASSESSMENT OF SHORT-LIVED CLIMATE POLLUTANTS





- Representation of 13 LAC Countries and Haiti. (Argentina, Belice, Brasil, Chile, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Panama, Peru y Venezuela), Lead Authors, Co-Chairs, Regional and International Academic and Researchin Institutes.
- Immediate Outputs:
 - The link between partner countries in the region was strengthened.
 - Agreements were created to exchange relevant information that will be used in subsequent iterations of the Regional Evaluation (Progress of public policy, emissions data).
 - The Regional Assessment will be presented at the next meeting of the Forum of Environmental Ministers of of Latin America and the Caribbean.

ACTIVIDADES Y PROSPECTIVAS

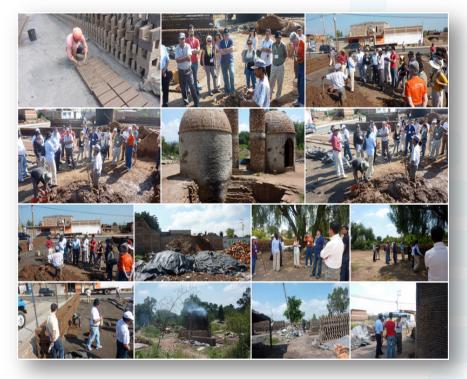


- Lead Partner/Facilitator.
- Meeting organizer.
- Wiki site.
- This effort will be used as a tool for decision makers whithin LAC Region; this will have broader benefits for environmental, public health and agriculture sectores among others.
- Increase the level and number of join efforts between LAC Countires, that share problems or responsabilities; this will lead to a better implementation of measures that contribute in an important way to the reduction of SLCPs emissions.
- Fostering/strengthen regional framework of agreements with a positive impact in the LAC region.

BRICKS INITIATIVE

→ MARKET-BASED STUDY

- ☐ Filling information gaps in the bricks sector in Mexico and to identify policy options to support key actions of governments to develop and implement, to modernize the sector while reducing negative externalities.
 - Brick manufacturers
 - Present and future trends of the construction sector
 - Support development of a public policy and pilot project proposal.
- Sector Reconstructing: Reduce BC, emissions and contribute to improve health and agriculture.



- ☐ Development of a **Bussines Case** was approved and will be part of the 2nd part of the project, though it will be developed in parallel.
 - The Development of a market based pilot project in Mexico
 - Business Cases of the brick kiln sector to be presented to financial institutions



OIL AND GAS

Overall Objective: Support the Coalition's objective of reducing SLCP emissions from oil and gas production in order to support goals for improvements in environmental, health and air quality.
Improve health, air quality and environment.
Project Focus: Reducing venting and flaring of VOC rich methane by recovering readily condensable and valuable natural gas liquids.
Mexico: conducting technology demonstration projects to reduce or eliminate the venting and fugitive leakage of VOC rich natural gas and black carbon emissions.
venting and ragitive realitage of voether natural gas and black carbon emissions.
PEMEX undertook immediate action to address opportunities, and that could result in savings of over \$53 million per year and net emission reductions of more than 318 kt CO2E per year.

SUPPORTING NATIONAL ACTION PLANNING ON SLCPs

In 2013, Mexico has already published its SNAP –Phase I- that introduces and explains the nature of the issue, the national planning process, and describes how the analysis has resulted in the identification of relevant mitigation measures that could be introduced or augmented in Mexico to reduce black carbon and methane emissions, and the relevant pathways for implementation:

- Prepare a first-order National Planning document for Mexico that provides a strategic review of possible options to reduce short lived climate pollutants in Mexico;
- Support the development of a Guidance Document on national planning of SLCPs, drawing on experience from Mexico and other participating countries;
- Support the development of a Rapid Emissions and Scenario Assessment Toolkit, which has been implemented in Mexico for the estimation of current emissions and emission scenarios and application of rapid benefit assessment techniques; and
- Co-organize the Latin America and the Caribbean (LAC) regional meeting to raise awareness of SLCP issues among participating countries and organizations and explore ways to share best practices and facilitate future collaboration among interested partners in the region.

In the 2nd stage, it is expected:

- Creation of a dedicated unit for SLCP mitigation.
- Development of an analysis tool in order to advance and update emissions and impacts methodologies.
- Elaboration of the SNAP II document for Mexico.
- Increase the impact on SLCPs public policies.
- Awareness raising activities and capacity-building actions, within the government and amongst stakeholders in Mexico and with other countries.



GRACIAS

Jessica González

unidad.ccac@inecc.gob.mx