SEMARNAT

SECRETARÍA DE MEDIO AMBIENTE
Y RECURSOS NATURALES

MEXICO´S INDC´S , STRATEGIES AND ETS / NATIONAL EMISSIONS REGISTER

MITIGATION COMPONENT

September, 2015

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CLIMATE CHANGE LAW

MILESTONES

December 1st

January 29
CLIMATE CHANGE INTER-MINISTERIAL COMMISSION
14 Secretariats

June 3
NATIONAL STRATEGY FOR CLIMATE CHANGE
Vision 10-20-40

DIARIO OFICIAL DE LA FEDERACION

April 28
SPECIAL CLIMATE CHANGE PROGRAM 2013-2018

2012 | 2013 | 2014

October 10
LGCC

December 5
CLIMATE CHANGE FUND

May 14
CLIMATE CHANGE COUNCIL

November 14
CARBON TAX
for fossil fuels

December
CONSTITUTIONAL ENERGY REFORM

June
ENERGY REFORM SECONDARY LEGISLATION

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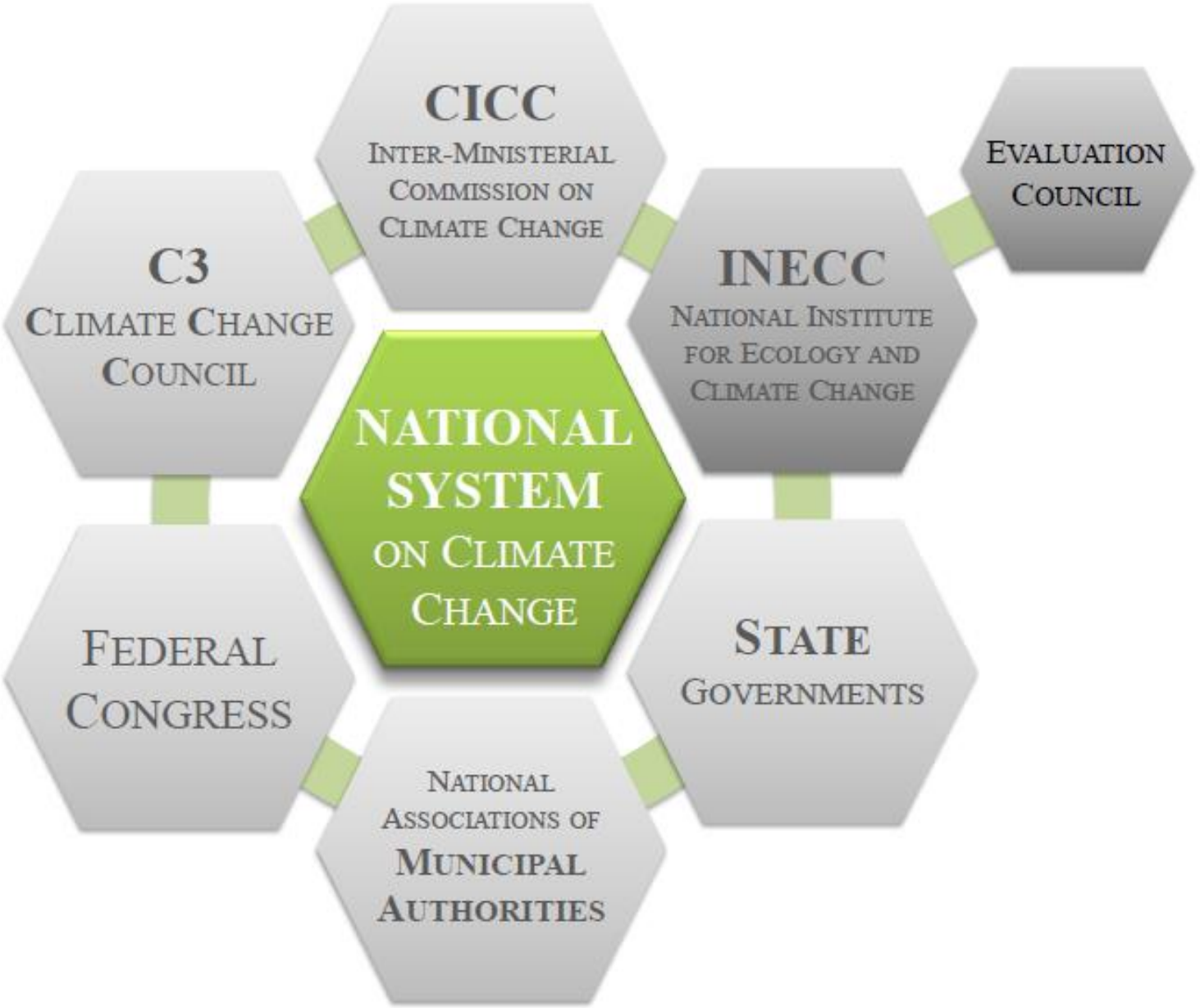
INSTITUTIONAL FRAMEWORK

CLIMATE CHANGE LAW



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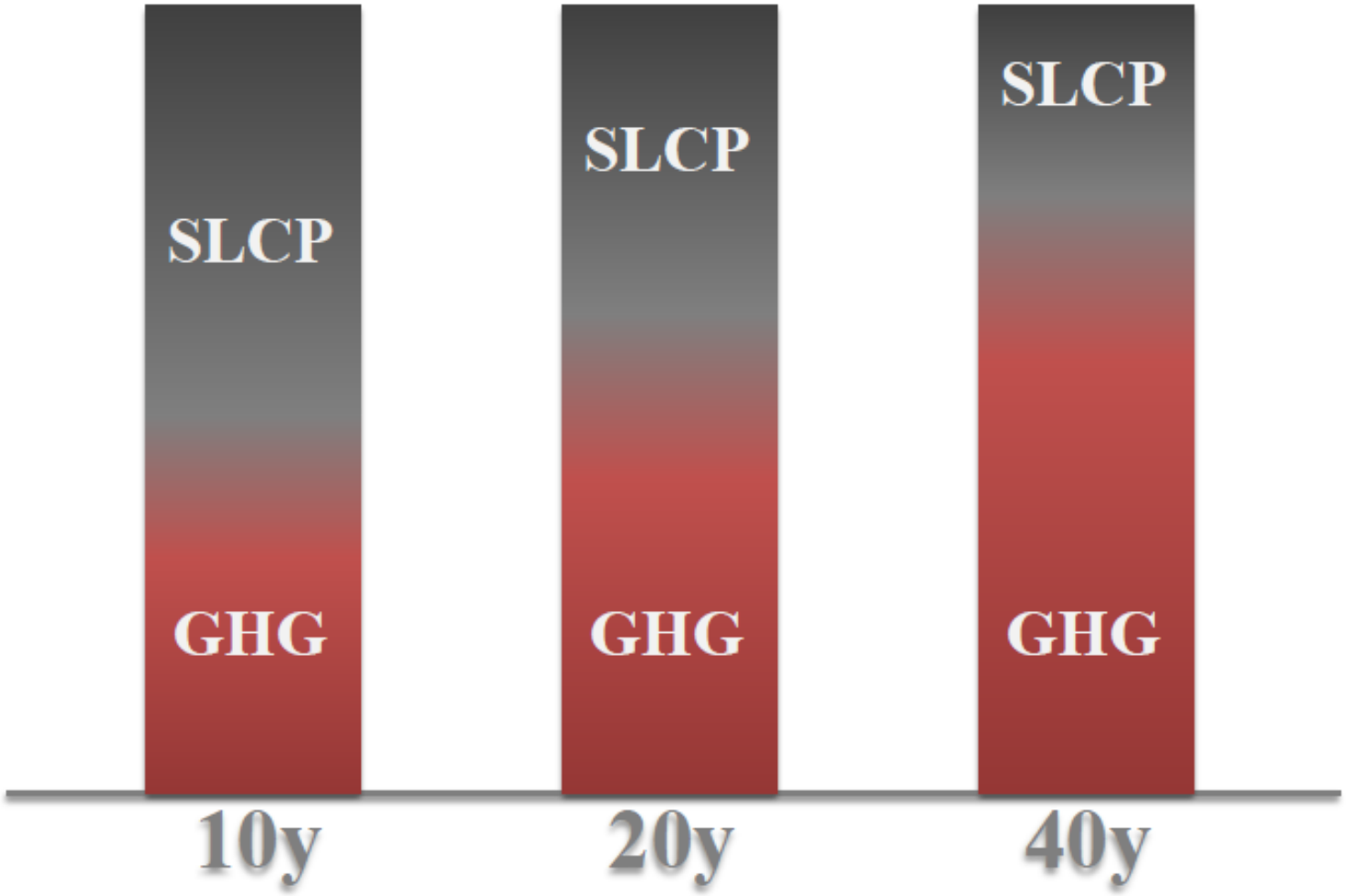
National Strategy on Climate Change

Mitigation Effort



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Emissions Inventory
2013

	Greenhouse gases MtCO2e	Black carbon 1000 tons	Black carbon MtCO2e	TOTAL MtCO2e
TRANSPORTATION	**148**	**42**	**38**	**186**
ELECTRICITY GENERATION	**126**	**9**	**8**	**134**
RESIDENTIAL AND COMMERCIAL	**26**	**19**	**17**	**43**
OIL AND GAS	**87**	**2**	**2**	**89**
INDUSTRIAL	**141**	**35**	**32**	**173**
AGRICULTURE	**80**	**10**	**9**	**89**
RESIDUALS (residual water and urban solids)	**31**	**<1**	**≈0**	**31**
USCUSS (use of land, change in use of land and silviculture)	**33**	**3**	**3**	**36**
DIRECT EMISSIONS	**672**	**121**	**109**	**781**
USCUSS absortions	**-173**			**-173**
TOTAL	**499**	**121**	**109**	**608**

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Black Carbon

Black Carbon Objective: -51%

Emissions in 1000 square tons

	BASE LINE				OBJECTIVE for 2030	
					NON Conditional	
	2013	2020	2025	2030	2030	Δ
TRANSPORTATION	42	29	31	34	10	**-72%**
ELECTRICITY GENERATION	9	4	3	3	<2	**-41%**
RESIDENTIAL AND COMMERCIAL	19	15	16	16	7	**-58%**
OIL AND GAS	2	2	3	>3	3	**-1%**
INDUSTRIAL	35	62	70	80	41	**-49%**
AGRICULTURE	10	11	12	>12	9	**-22%**
RESIDUALS (residual water and urban solids)	<1	<1	<1	<1	0	**-88%**
USCUSS (use of land, change in use of land and silviculture)	3	3	3	3	3	**0%**
DIRECT EMISSIONS	121	127	139	152	75	**-51%**

*CN=900 CO_2

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Green House Gases

GHG Objective: -22%

Emissions in $MtCO_2e$

	BASE LINE				OBJECTIVE for 2030 NON Conditional	
	2013	2020	2025	2030	2030	Δ
TRANSPORTATION	148	185	205	229	181	**-21%**
ELECTRICITY GENERATION	126	143	181	202	139	**-31%**
RESIDENTIAL AND COMMERCIAL	26	27	27	28	23	**-18%**
OIL AND GAS	87	123	132	137	118	**-14%**
INDUSTRIAL	141	154	177	202	194	**-4%**
AGRICULTURE	80	88	90	93	86	**-8%**
RESIDUALS (residual water and urban solids)	31	40	45	49	35	**-28%**
USCUSS (use of land, change in use of land and silviculture)	33	32	32	32	-14	**-144%**
DIRECT EMISSIONS	672	792	888	973	762	**-22%**

*CN=900 CO_2

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Green House Gases and Compounds (GHG + CN*)

Merged Objective: -25%

Emissions in $MtCO_2e$

	BASE LINE				OBJECTIVE for 2030	
					NON Conditional	
	2013	2020	2025	2030	2030	Δ
TRANSPORTATION	186	211	233	260	189	**-27%**
ELECTRICITY GENERATION	134	147	18	205	141	**-31%**
RESIDENTIAL AND COMMERCIAL	43	41	41	41	28	**-31%**
OIL AND GAS	89	125	134	140	120	**-14%**
INDUSTRIAL	173	209	239	274	232	**-15%**
AGRICULTURE	89	98	101	112	95	**-9%**
RESIDUALS (residual water and urban solids)	31	40	45	49	35	**-28%**
USCUSS (use of land, change in use of land and silviculture)	36	36	36	36	-11	**-131%**
DIRECT EMISSIONS	781	906	1,013	1,110	829	**-25%**

*CN=900 CO_2

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Conditional objective 2020-2030

If an agreement is reached at the COP21 in Paris, which accelerates the financial support and technological transfer to developing countries, Mexico reiterates its Law commitment to reduce in 30% its emissions by 2020, which implies a conditional objective to 2030:

CONDITIONAL OBJECTIVES

-40% on baseline

Compound effect of reduction:

-70% black carbon

-36% greenhouse gases

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Scenario 2020 - 2030

With this commitment of climate management, MEXICO will have a peak in maximum emissions by 2026 and will achieve a reduction on carbon´s intensity by 40%

✓Reduction from 40 to 24 kgCO_2 e/1,000 pesos from 2013 to 2030

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National Emissions Register

I. GHG Reporting Program (Mandatory)

- Annual Report
- Verification (every three years)

II. Registration of mitigation activities (voluntary)

- CDM
- VCS, Climate Registry, CAR, Plan Vivo, Mexico's forestry standard (NMX)

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GHG REPORTING PROGRAM (MANDATORY)

IN A NUTSHELL

- **SOURCES:** STATIONARY AND MOBILE
- **TYPE:** DIRECT AND INDIRECT EMISSIONS
- **THRESHOLD**: > 25,000 TONS CO_2e/YEAR, PER FACILITY OR COMPANY
- **MRV:** VERIFICATION EVERY 3 YEARS
- **SECTORS:** ENERGY, INDUSTRY, COMMERCIAL, WASTE, AGRICULTURE, TRANSPORTATION
- **GHG & COMPOUNDS:** CO_2, CH_4, N_20, **BC**, HFCS, HCFCS, PFCS, SF_6, NF_3, HALOCARBONS, HALOGENATED ETHERS
- **FINES**
  - 2,200USD - 13,500 USD (for not submitting the GHG report)
  - 13,500 USD - 45,000 USD (for any forged, counterfeit, altered, or falsely made document)

http://www.gob.mx/tramites/ficha/cedula-de-operacion-anual-coa/SEMARNAT259

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REGISTRATION OF MITIGATION ACTIVITIES (VOLUNTARY)

DEVELOPMENT PHASES

First phase. Voluntary registration

- To act as a database
  - All projects occurring across Mexico
  - Units that have been verified by SEMARNAT-recognized standards
  - Completely independent of any system

Second phase. Certification scheme (scope to be defined)

- To record reductions based on direct-measurement methods
  - All GHG reductions obtained from direct measurement can be accounted as emissions reductions
- Potential link to REDD+ and Forestry Standard
- Link with carbon tax
  - Carbon tax accepts compensations from CDMs. Operation rules are still pending.

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Timeline

Concept	TIme										
	Year 1 (2015)		Year 2 (2016)				Year 3 (2017)				
	III	IV	I	II	III	IV	I	II	III	IV	
A. Regulatory analysis											
i. Comparative analysis of existing regulations (GCCL, INDC, LEI)											
ii. Definition of regulatory framework (what legal instrument?)											
B. Economic analysis											
i. RENE Data analysis (historic data)											
ii. Micro and macro modelling											
iii. Cost-benefit analysis											
C. Institutional analysis											
i. Assessment of institutional capacities (who will run the C&T programme?)											
ii. Proposal for institutional arrangements (who will take part?)											
iii. Assessment of financial capacities (existing and potential)											
D. Design of the cap											
i. Scope definition											
ii. Definition of sectors											
iii. Implementation of the cap (rules published)											
iv. C&T simulation											
E. Design of the web platform											Stakeholder engagement
i. Preparation of TORs (functionalities and necessities of the system)											
ii. Development of the system											
iii. Pilot testing											

NATIONAL EMISSIONS REGISTER

MITIGATION COMPONENT. TIMELINE

Registration Process
1st Phase

The 1st phase involves the registry of projects in Mexico verified by international standards

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Strengths on current actions to develop an ETS in Mexico

- Significant advancements on Mexico´s Institutional architecture and climate policy structure (ENACC, PECC, LAERFTE)
- Mexico´s energy reform – Mexico´s overhaul on the oil and electricity monopolies
- The passage of the new carbon tax => key precursor to a future ETS.
- Clean Energy certificates starting in 2018
- By 2024 - 35 % of electricity sources coming from clean energy

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Areas of opportunity

- Cap & Trade timeline – capacity development
- Goal by 2050 - 50 % GHG emissions reductions - Continuous economic growth – stress on current infrastructure
- Ambitious targets conditional on international support
- REDD+ development challenges

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Challenges

- Achieving timeline objectives
- Forging the base financial structure of the Cap & Trade to foster allowances
- Capacity building on all the stages of the timeline – generating an institutional architecture strong on information analysis, including technical, economical and institutional assessments to support decision-making on the design of specific policies

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Adaptation

Social sector

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

- Incorporate a climatic approach, gender equality and human rights in all the territorial and risk management planning instruments
- Increment the financial resources for the prevention vs the attention to disasters
- Establish the regulation in land use in risk zones
- Integral management of basins to guarantee water supply and access
- Make sure that public participation is part of adaption policies and capacity building strategies

Adaptation based on ecosystems

By 2030 reach a 0% deforestation rate

- Reforestation in low, medium and high basins, considering the areas native species
- Increment ecological connectivity to carbon capture through conservation and restoration
- Increment carbon capture and coasts protection through coastal ecosystem conservation
- Synergies with REDD+ actions
- Guarantee integral management of water through its different uses (agriculture, ecological, urban, industrial, domestic)

Strategic Infrastructure and Productive sectors

Install early alert systems and risk management at the 3 levels of government

- Guarantee and monitor urban and industrial residual water treatment in population areas of more than 500,000 inhabitants
- Guarantee strategic infrastructure security
- Incorporate climate change programs in fish and agriculture programs
- Apply the environmental protection and adaptation norm to the development of coastal touristic real state development
- Incorporate adaptation criteria to public investment projects geared towards construction and infrastructure maintenance.

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GRACIAS