



SEMARNAT

MINISTRY OF THE ENVIRONMENT  
AND NATURAL RESOURCES

# Mexican Climate Change Law and Policy



MEXICAN SENATE



- ✓ Entrance into force October 2012
- ✓ Long Term Vision
- ✓ Systematic
- ✓ Decentralized
- ✓ Mitigation/ Adaptation comprehensive approach

*by consensus of all political parties*



December 1<sup>st</sup>



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**

October 10  
**LGCC**

December 5  
**CLIMATE  
CHANGE  
FUND**

May 14  
**CLIMATE CHANGE  
COUNCIL**



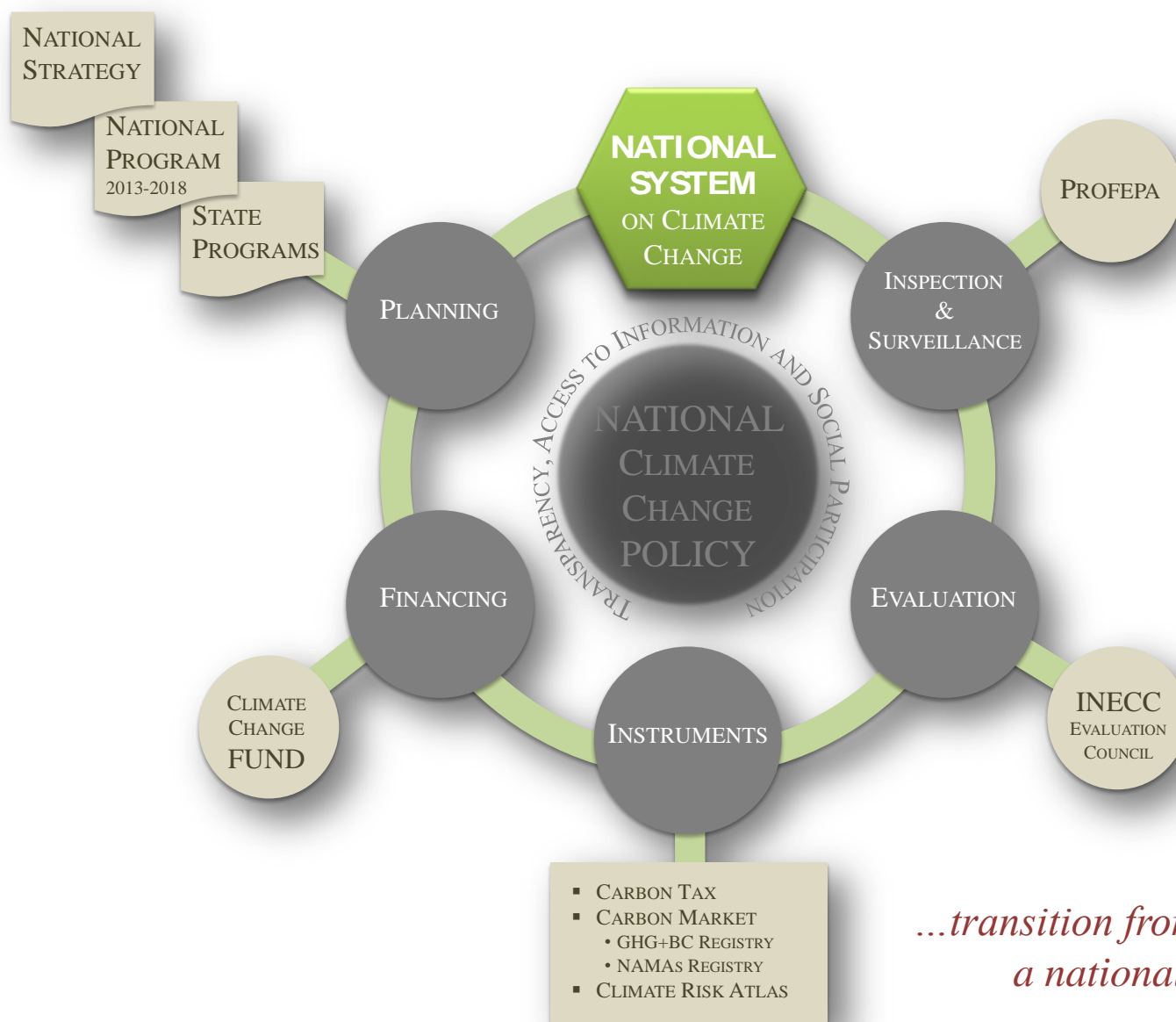
**2013**

November 14  
**CARBON TAX  
for fossil fuels**

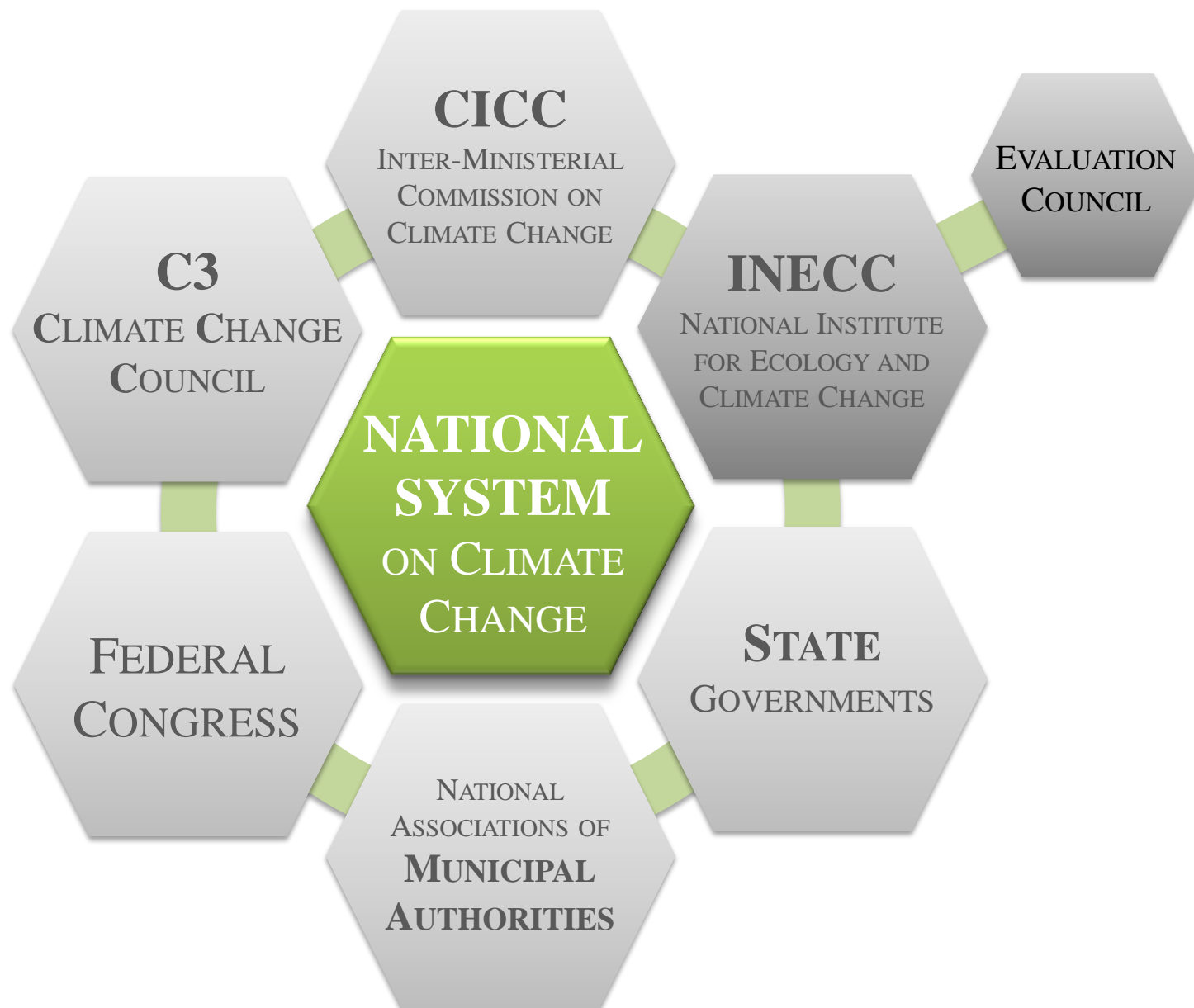
**2014**

December  
**CONSTITUTIONAL  
ENERGY REFORM**

June  
**ENERGY  
REFORM  
SECONDARY  
LEGISLATION**



*...transition from a federal policy to  
a national comprehensive and  
inclusive policy*



## **LOW-CARBON DEVELOPMENT**

*To achieve a competitive, sustainable, and low-carbon emissions economy*

## **RESILIENT MEXICO**

*To reduce vulnerability of people, ecosystems, and infrastructure from adverse effects of climate change*

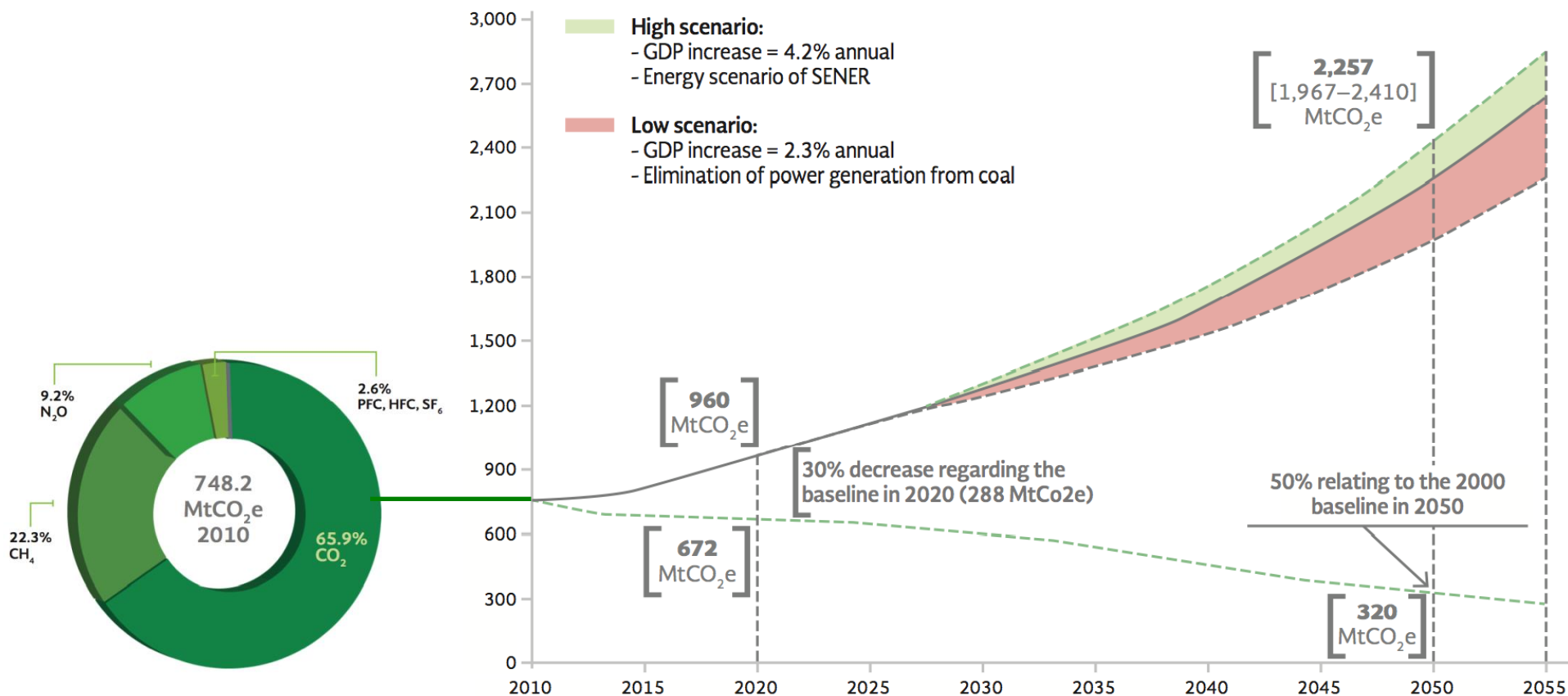
## **INCLUSIVE POLICY**

*To ensure coordination among all levels of government with transparency and participation of all sectors of society*



### GHG emissions (MtCO<sub>2</sub>e)

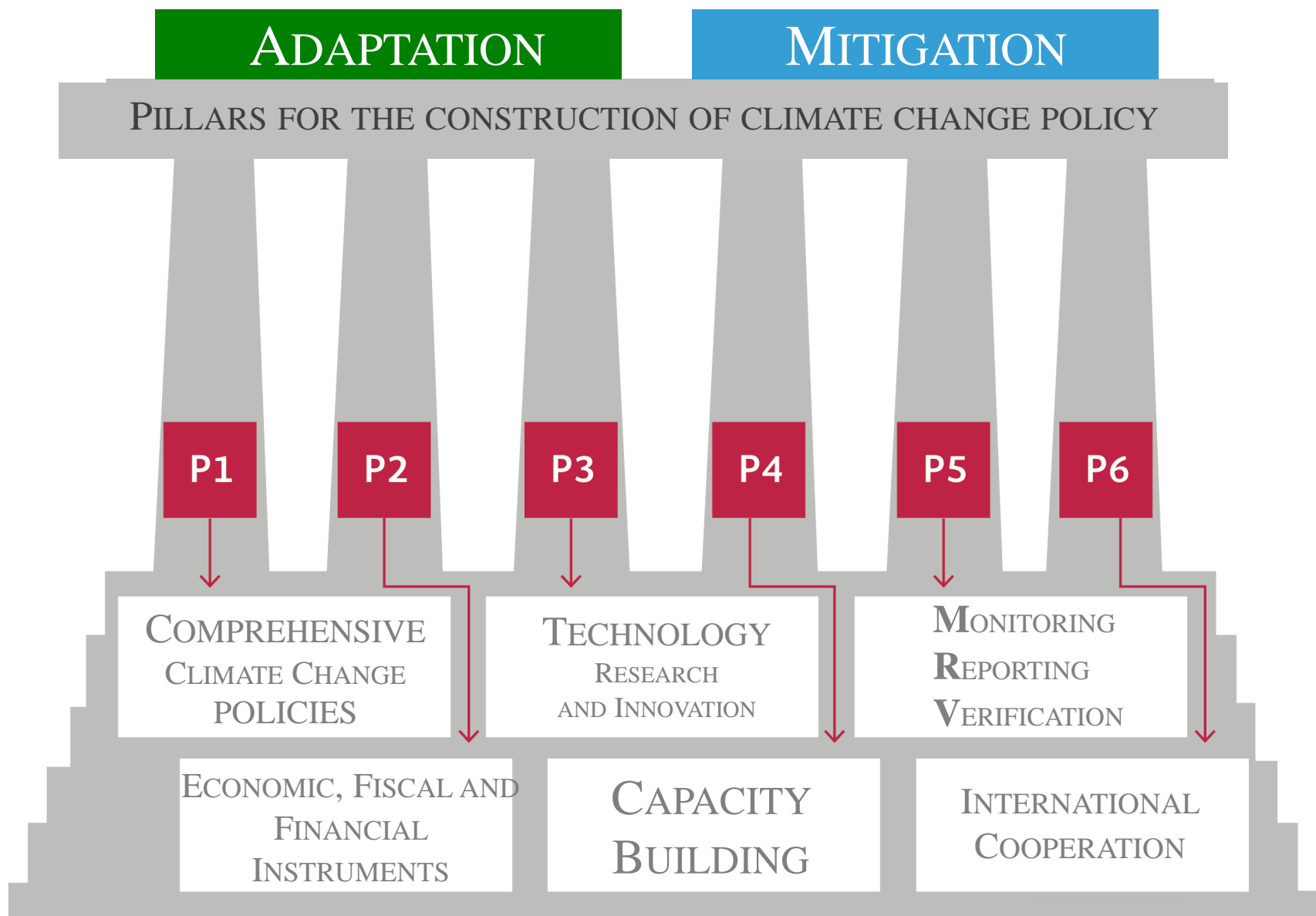
Million metric tons of carbon dioxide equivalent



June 3rd, 2013



The Strategy is the guiding instrument of the National Climate Change Policy both, in the medium and long terms, to face the impact of climate change and to promote a **competitive, sustainable and low carbon emissions economy.**





Acapulco flood, September 2013

**A1**

Reduce the vulnerability and increase the resilience of the social sector to the effects of climate change

**A2**

Reduce the vulnerability and increase the resilience of strategic infrastructure and production systems to the effects of climate change

**A3**

Conserve and use ecosystems sustainably and maintain the ecosystem services they provide



Solar Plant in La Paz,  
Baja California

**M1**

Accelerate the energy transition towards clean energy sources

**M2**

Reduce energy intensity through efficiency and responsible consumption schemes

**M3**

Shift towards models of sustainable cities with mobility systems, integrated waste management, and low-carbon footprint buildings

**M4**

Promote best practices in agriculture and forestry to increase and preserve natural carbon sinks

**M5**

Reduce emissions of Short-Lived Climate Pollutants (SLCPs), and promote co-benefits in health and well-being

## AREA

## 10 YEARS

### SOCIETY/ POPULATION

- ◆ Attention is given to the most vulnerable groups to the effects of climate change.
- ◆ Society is involved and actively participates in the subject of climate change.

### ECOSYSTEMS (WATER, FORESTS, BIODIVERSITY)

- ◆ The most vulnerable ecosystems are protected and receive both attention and capital flow.
- ◆ Ecosystemic management and sustainable management become axes for the conservation strategy.
- ◆ Actions for conservation and sustainable use are implemented across the country.
- ◆ Integrated territorial management schemes are implemented.
- ◆ Appropriate financing schemes to promote sustainable landscapes.
- ◆ Technical and technological tools for local adaptation exist and are used
- ◆ Strategies are implemented for the transition to a zero percent rate of carbon loss in original ecosystems.

### ENERGY

- ◆ Clean technologies are integrated to the national productive development.
- ◆ Socioeconomic schemes encourage the use of clean energy.
- ◆ Incentive system promotes the larger advantages in the use of non-fossil fuels, energy efficiency, power saving, and sustainable public transportation versus the use of fossil fuels.
- ◆ Near to reach 35% of electricity generation from clean sources.

### EMISSIONS

- ◆ 30% emissions reduction compared to baseline
- ◆ Mexico substantially reduces emissions of Short-Lived Climate Pollutants
- ◆ Parastatal industries implement energy efficiency schemes in all its operations and increase the use of renewable energy
- ◆ Urban centers whose population are larger than fifty thousand inhabitants have waste management infrastructure to prevent methane (CH4) emissions to the atmosphere.

### PRODUCTIVE SYSTEMS

- ◆ Environmental impacts in the production sector are understood, acknowledged, monitored and tackled.
- ◆ Production technologies and practices contribute in the diminishment of climate change risks.
- ◆ NAMAs (Nationally Appropriate Mitigation Actions) are implemented in various economic sectors.

### PRIVATE SECTOR / INDUSTRY

- ◆ Enterprises incorporate climate change criteria in their production projects.
- ◆ Main sources of GHG report their emissions component in the National Emissions Registry.
- ◆ Enterprises reduce their gas and compound emissions, and take advantage of opportunities in energy efficiency, power saving, and use of clean and renewable energy.

### MOBILITY

- ◆ Both public and private sectors adopt sustainable mobility systems.
- ◆ Socioeconomic schemes encourage the use of sustainable transportation.
- ◆ Common use of electric vehicles in public transportation.

## 20 YEARS

## 40 YEARS

Society is committed to the task of reducing the effects of climate change. Urban settlements have expanded their capacity to adapt to the strikes of climate change.

Ecosystems and their inhabitant species are conserved and used sustainably. Natural resources are economically valued in a correct and adequate way. Efficient infrastructure exists for a sustainable and efficient management of water. Efficient use of hydric resources helps restoring ecological and physical functions of river bodies. Economic and social development of the country is enhanced by improving its natural capital.

At least 40% of electric power generation comes from clean sources. Power generation through clean sources creates jobs, including vulnerable sectors. Residential, tourism, and industrial sectors use of various clean energy sources, energy efficiency and power saving schemes.

Economic growth decoupled from the dependency on fossil fuels and their environmental impacts. Short-lived Climate Pollutant emissions are minimized.

Productive rate in forest carbon sinks. Sustainable forest management stops deforestation. Sustainable management practices in extractive, agricultural and livestock and forestry sectors increase productivity, reduce vulnerability and conserves land.

Enterprises integrally manage their wastes. Production and sustainable consumption schemes are implemented.

High speed transportation is multimodal, efficient and low emissions. Mass transportation is multimodal, efficient, and low-emission.

◆ Society is culturally and socially integrated to tackling climate change.

◆ Low vulnerable rural society

◆ Hydric balance is ensured through sustainable and efficient use of water.

◆ Conservation and sustainable use of ecosystems help them improve their resilience against climate change.

◆ Local levels of resilience are adequate.

◆ Clean energy generation supports economic development of every production sector in a sustainable and equitable way.

◆ At least 50% of energy generation comes from clean sources.

◆ 50% emissions reduction compared to those of 2000.

◆ Production systems are resilient to the effects of climate change.

◆ Enterprises have sustainable production cycles.

◆ Common use of trains and electric vehicles

## MITIGATION STRATEGY

Immediate actions

Long-term actions

**Higher potential and economic benefits**



**Lesser potential and economic benefits**



**Higher cost**



**Need development or alternatives**

+CO BENEFITS + SLCPS CONTROL

- Win-win actions
- For example: Energy efficiency and cogeneration actions, biogas exploitation from landfills, efficient vehicles and control of imported vehicles, amongst others.
- Despite their cost-efficiency, they might need to be promoted by financial schemes or economic instruments.



- Cost-efficient actions
- For example: wood burning reduction, lighting and refrigeration efficiency, amongst others.
- The long-term mitigation potential is moderate since the trending scenario considers a gradual action implementation due to their cost-efficiency.

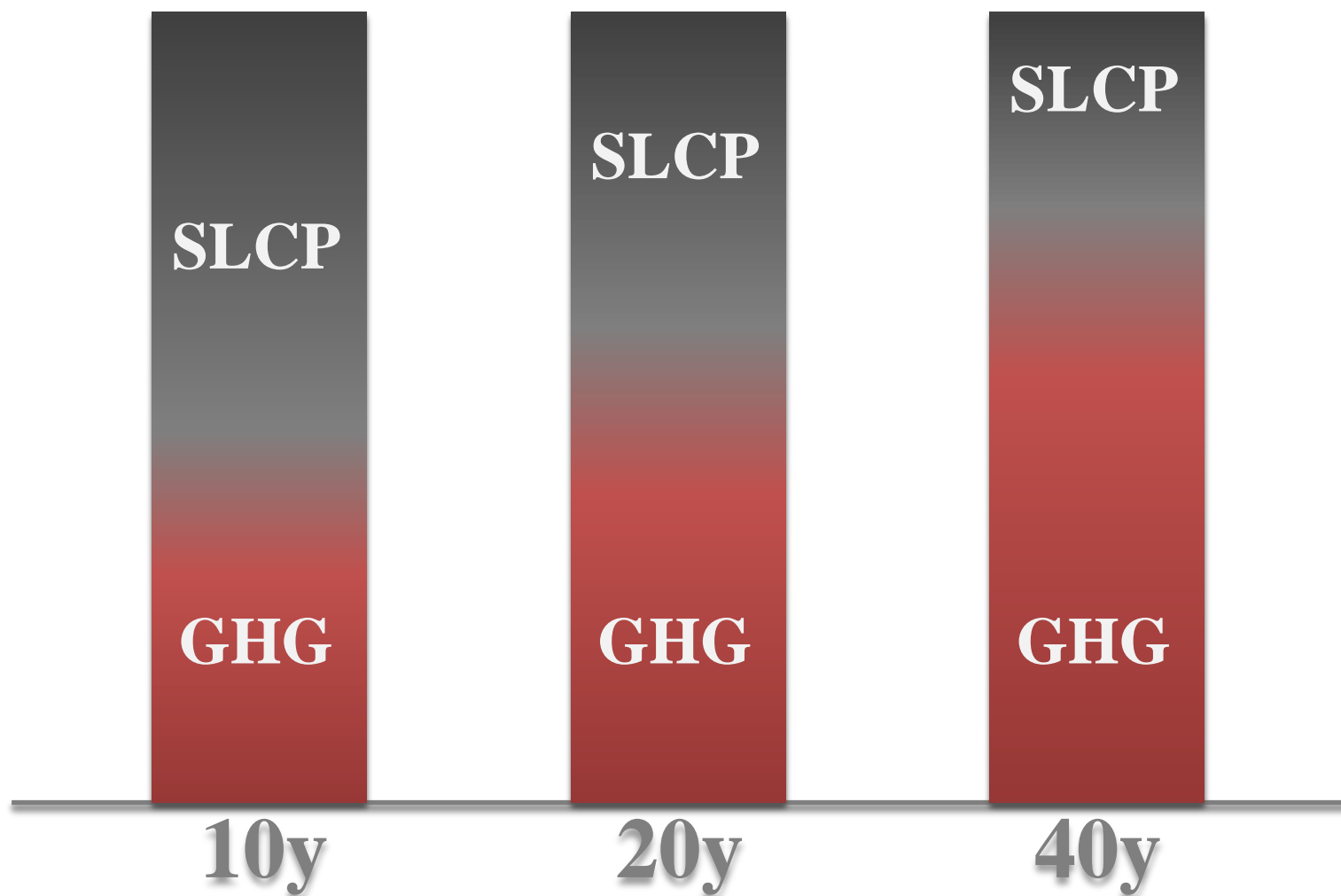


- For example: fuel substitution, carbon capture and sequestration.
- Even if their cost is high, they might be attractive because of their co-benefits.



- Their high implementation cost makes them economically unfeasible under current circumstances. They might become an alternative in the future, when further developed.

## MITIGATION EFFORT

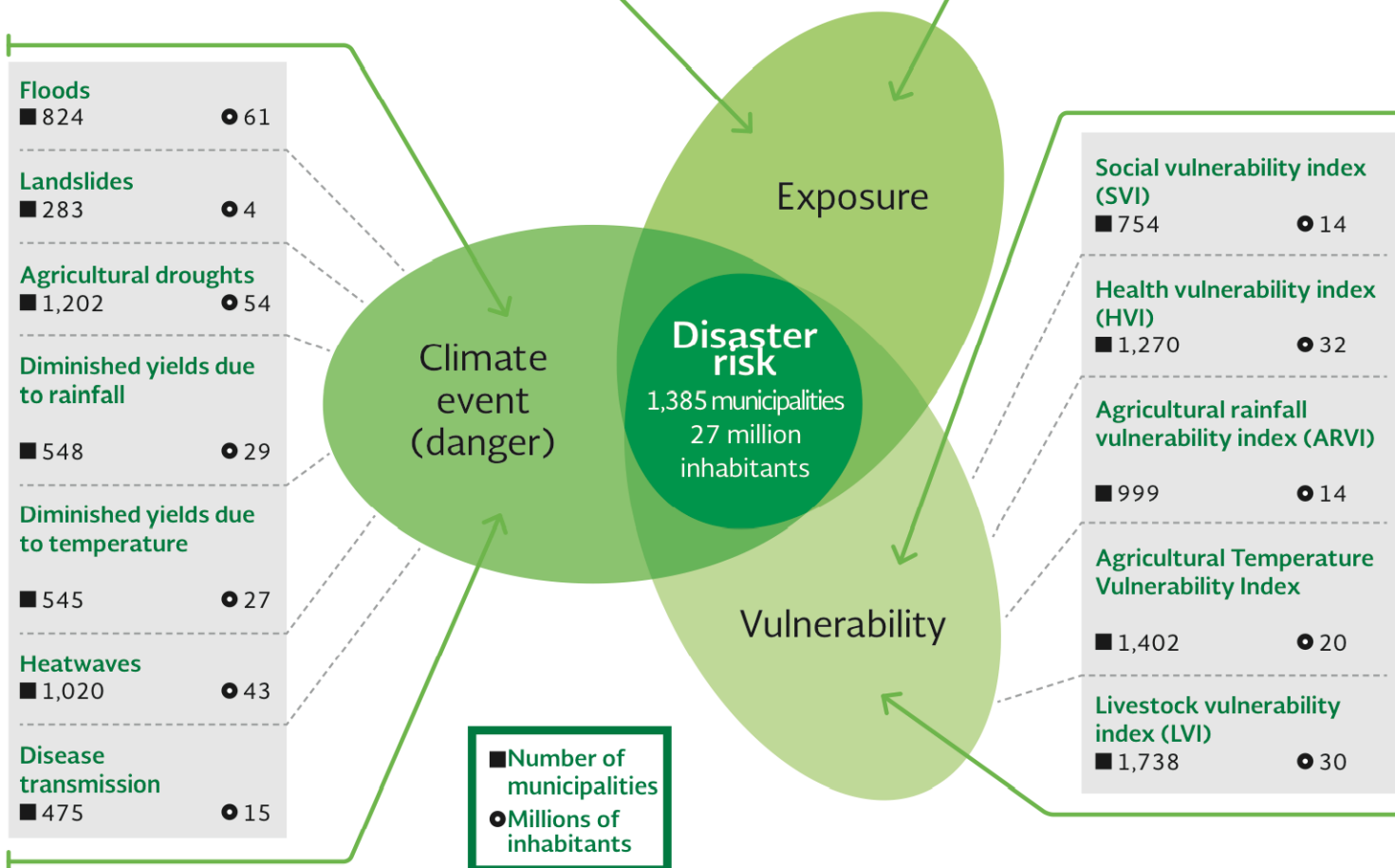


## ADAPTATION

*focus on social and  
ecological needs...*

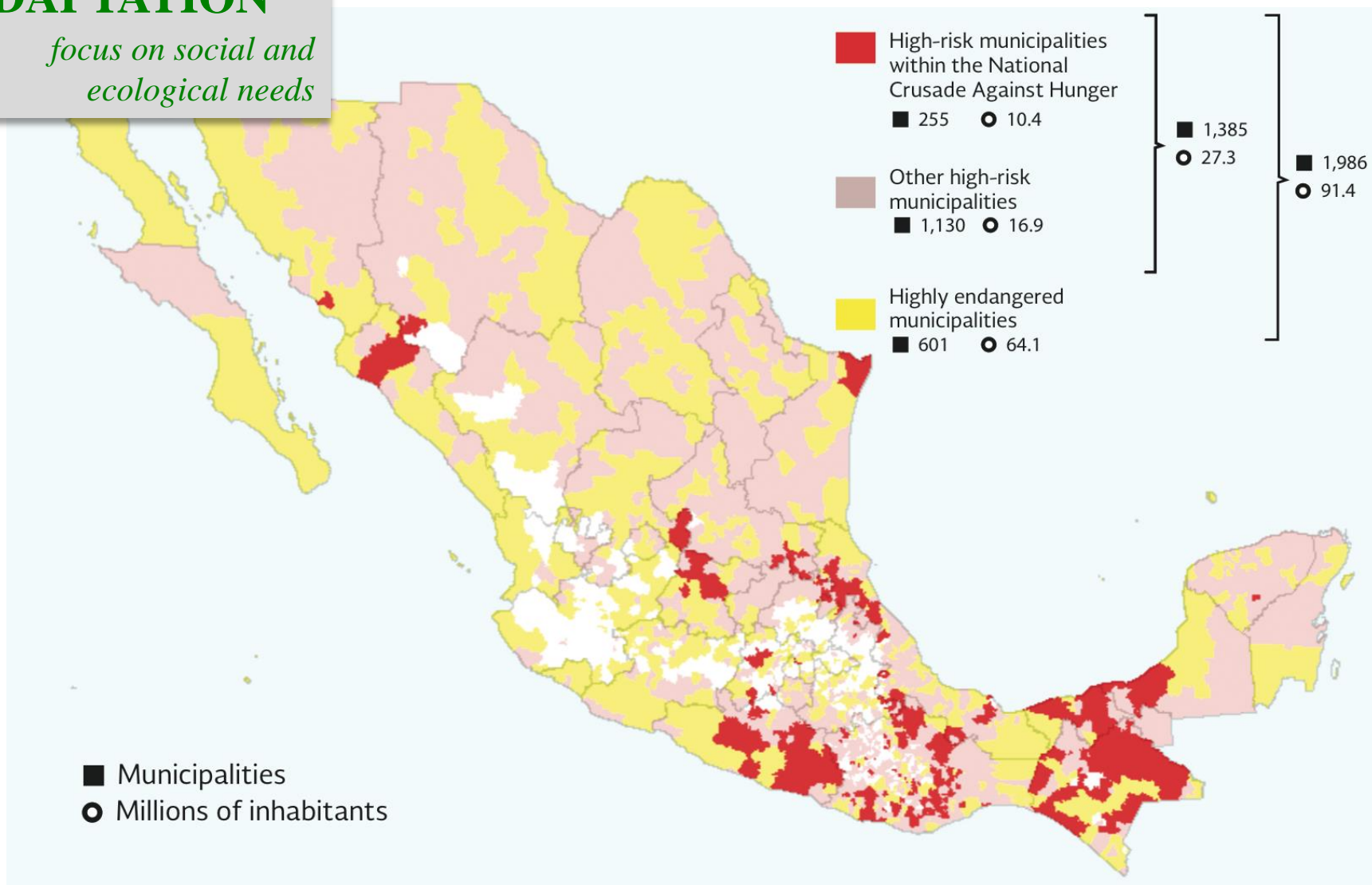
- » 2,456 municipalities
- » 112 million inhabitants
- » 332 billion pesos in value of production from main crops
- » 242 billion pesos in livestock value
- » 73 airports

- » 78 central markets
- » 117 ports and platforms
- » 131,000 school infrastructure
- » 578,390 registered lodging rooms
- » 328,000 kilometers of federal roads



## ADAPTATION

*focus on social and  
ecological needs*



The Mexican Government published in April 28<sup>th</sup> the six year Special Climate Change Program (PECC) for this Administration.

- The PECC contains: a Diagnosis, five Objectives, 26 Strategies and 199 Lines of Action, 77 for adaptation, 81 for mitigation and 41 for policy development.
- Defines 10 **indicators** to assess results.
- **14 Ministries** of the Federal Government participated.
- **Contributes** to achieve the 2020 30% emissions reduction goal.
- Allocates **responsible entities** for the fulfillment of each goal.
- Contains **budgetary commitments** for each Line of Action.
- Has a **MRV** system.
- Will be reviewed every two years by INECC.
- Was elaborated with gender perspective to ensure **equity**.

1

**Reduce vulnerability** in population and productive sectors and increase resilience of strategic infrastructure.

2

Conserve, restore and manage **ecosystems** to guarantee environmental services to mitigate and adapt to climate change.

3

**Reduce GHG** emissions to move towards a competitive economy and a low emissions development.

4

**Reduce** emissions of **short lived climate pollutants**, promoting health and well being co-benefits.

5

**Strengthen climate change national policies** through effective instruments and coordination with local governments, the Mexican Congress and civil society

1

1. Percentage of development progress of instruments to reduce vulnerability of population and productive sectors. Baseline 2014: NA / goal 2018: 100%
2. Percentage of area that has an Ecological Land Use Planning Program (POET) or an Urban Development Program (PDU) that integrate strategies or criteria for climate change mitigation or adaptation. Baseline 2013: 33% / Goal 2018 100%

2

3. Vulnerability Reduction Index through infrastructure and actions for conservation, restoration and sustainable management of natural resources. Baselines 2013: 0.2 / Goal 2018: 0.6

3

4. Millions of Tons of CO<sub>2</sub> equivalent mitigated per year. Baseline 2013: 0 MtCO<sub>2</sub>e / Goal 2018: 83.2 MtCO<sub>2</sub>e (GWP100); 95.97 MtCO<sub>2</sub>e (GWP20);
5. Emissions of CO<sub>2</sub> per Mega Watt hour generated (tCO<sub>2</sub>e/MWh). Baseline 2013: 0.456 tCO<sub>2</sub>e/MWh / Goal 2018: 0.350 tCO<sub>2</sub>e/MWh

4

6. Methane emissions mitigated per year. Baseline 2013: 0 ton / Goal 2018: 161,724 ton
7. Black carbon emissions mitigated per year. Baseline 2013: 0 ton / Goal 2018: 2,157 ton

5

8. Percentage of development progress of the National Climate Change System. Baseline 2013: 0% / Goal 2018: 100%
9. Percentage of development progress of the National Emissions Registry. Baseline 2013: 0% / Goal 2018: 100%
10. Number of signed agreements to support the achievement of national climate change goals. Baseline 2013: 0 / Goal 2018: 32

- ✓ Approved by Congress
- ✓ Emitters may compensate tax through Offsets (i.e. CDM)
- ✓ Effective since January 1<sup>st</sup> 2014



The Mexican Congress approved the Presidential Energy Bill in December, 2013 and the secondary legislation in June, 2014.



## Oil and Gas initiative

- Shared-profit contracts
- PEMEX and private sector shared investments
- PEMEX new Fiscal Regime
- PEMEX new Management Scheme

## Electricity Sector initiative

- Private sector investment
- New *Feed-in* rules and regulations
- Enhancement of the State Utility (CFE) to increase its operational flexibility
- Reinforcement of the Energy Ministry and the Electricity Regulator (CRE)

Creation of the **Safety and Environment Agency** for the Oil industry

Reporting will start in 2015 for 2014 emissions and will include:

**SOURCES:** Stationary and Mobile

**TYPE:** Direct and Indirect emissions

**GREENHOUSE COMPOUNDS:** CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, F<sub>6</sub>S, HFC's, HCFC's, and Black Carbon

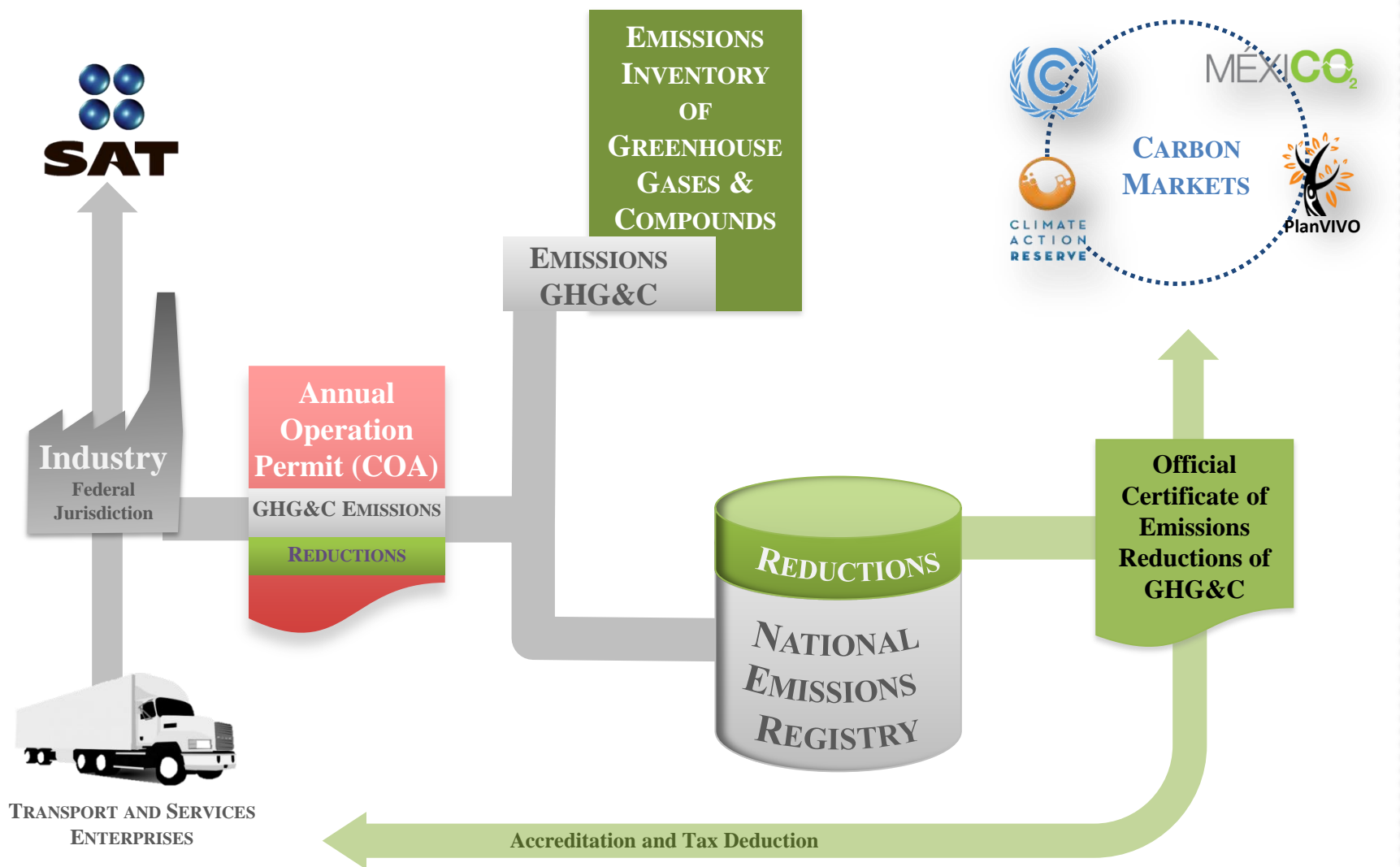
**THRESHOLDS:** > 25,000 ton CO<sub>2</sub>e/year, per source or corporation in some sectors (more than 95% of emitters covered)

**MRV:** Verification every 3 years

**SECTORS:** Industrial, Transport, Waste, Agriculture, and Services



## MRV



The Climate Change Law allows for market instruments (Art. 92) including voluntary emissions trading systems (Art. 94) and its linking with other countries schemes or international systems (Art. 95).

In preparation for an ETS Mexico is developing different tools and policies:

## Tools

- An Emissions Reporting Tool (RENE) that includes an Emissions Reductions Reporting Tool.
- An bottom up built Emissions Baseline (single source information).
- A set of crediting NAMAs that could be used in offsetting mechanisms.
- A domestic crediting norm for forestry projects.
- An exchange platform for carbon credits inset in the Mexican Stock Exchange.
- A Tracking Tool to avoid double counting of Mexican based offsets in different trading systems.

## Policies

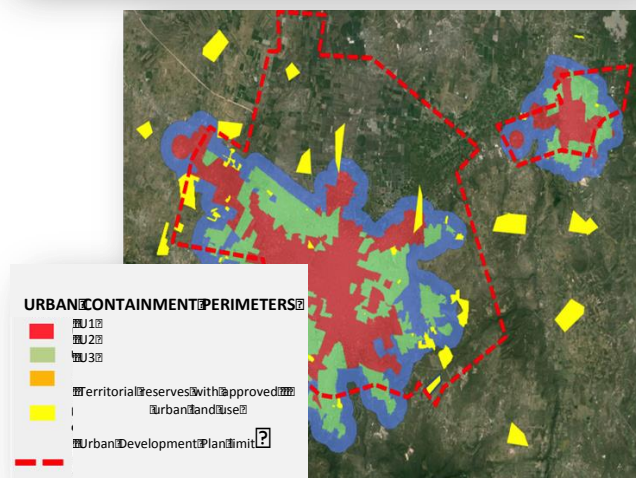
- Major energy reform
- MOU with Japan
- MOU with California to explore possible linking in ETS



## ✓ 23 NAMAs registered and 18 in registration process:



- 2 PEMEX (Cogeneration and Natural Gas leakages control) NAMAs in the UNFCCC NAMA Registry
- 2 Housing and 1 Urban NAMAs with multilateral finance (16 Million euros)
- Private sector NAMAs for Cement industry, transport, electric appliances, etc.



...Web access soon



# MÉXICO

GOBIERNO DE LA REPÚBLICA