

# NATIONAL STRATEGY ON CLIMATE CHANGE

## MEXICO

## 2007

### *Executive Summary*



## INTERSECRETARIAL COMMISSION ON CLIMATE CHANGE

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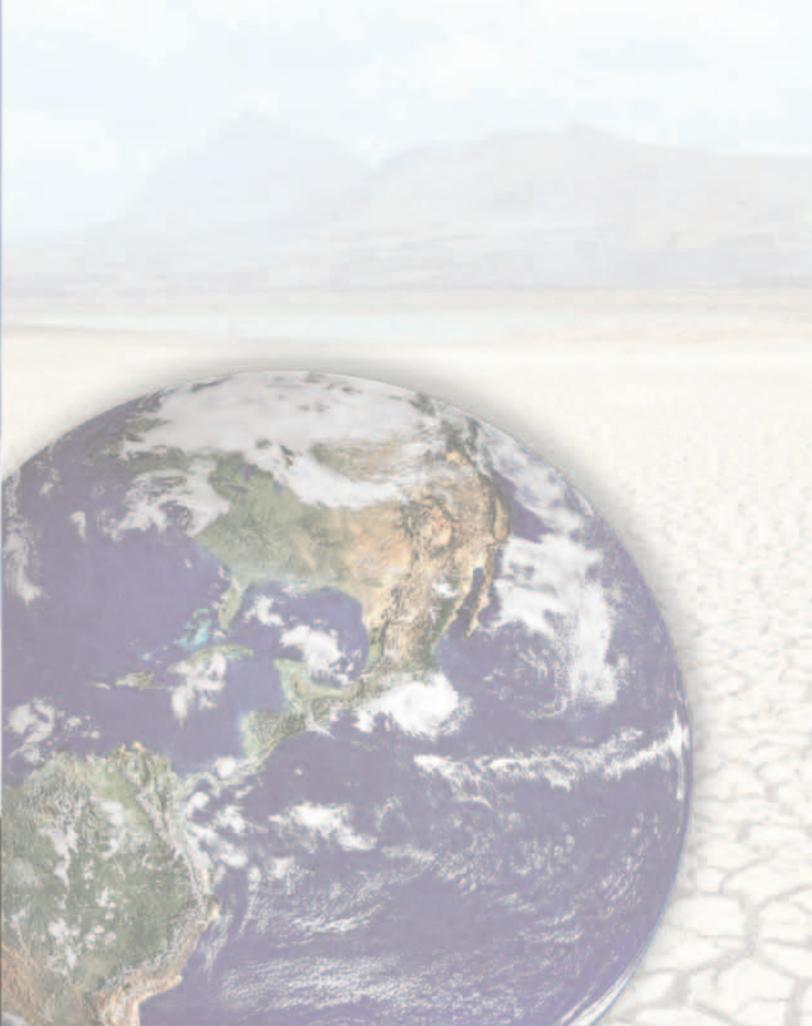
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The present document reflects the Mexican Government's commitment to climate change mitigation and adaptation, and its recognition of climate change as one of the major challenges currently faced by humankind.

The National Strategy on Climate Change ("ENACC", for its acronym in Spanish) identifies specific measures for mitigation, with estimates of their potential for emissions reductions. It also proposes a suite of research objectives as a tool for laying out more precise mitigation targets and outlines national requirements for capacity building for adaptation to climate change. While the scope of the ENACC encompasses only those measures within the competence of the Federal Government, it nevertheless contributes to a nationwide and inclusive process of consensus building which will:

- Identify opportunities for mitigation measures and emissions reductions.
- Acknowledge the vulnerability of diverse economic and social sectors and geographic regions to climate change, and take measures to develop the necessary national and local-level capacity for response and adaptation.
- Contribute to the development of strategies, priorities and policies for the Special Programme on Climate Change ("PECC", for its Spanish acronym), which will become an integral part of the National Development Plan, 2007-2012.

## OPPORTUNITIES FOR GREENHOUSE GAS EMISSIONS MITIGATION

The general objective of greenhouse gas (GHG) emissions mitigation is the progressive decoupling of increased emissions from economic growth. In the present Strategy, sectoral opportunities and specific mitigation targets (within the timeframe of the present Administration) are identified in two major areas: A) Energy Generation and Use, and B) Vegetation and Land Use. All of these opportunities and targets will be further refined in the forthcoming PECC.

### A) ENERGY GENERATION AND USE

The future development of the energy market in Mexico has the potential to generate opportunities for measures which, besides reducing GHG emissions, allow the provision of a cleaner, more sustainable, efficient and competitive energy supply matrix. The following table provides an overview of the principal opportunities for emissions reductions based on a prospective analysis to the year 2014.



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## ENERGY SECTOR OPPORTUNITIES FOR GHG MITIGATION TO 2014

AREA OR ACTIVITY	PROPOSED MEASURES	ESTIMATED REDUCTION (MtCO <sub>2</sub> e)
<b>Energy efficiency</b>		
Standards and programmes of the National Commission for Energy Conservation ("CONAE")	Continue application of current energy efficiency standards and develop and implement new ones.	24.0
Energy efficiency and savings programmes of the Trust Fund for Energy Saving ("FIDE").	Strengthen current FIDE programmes and promote new ones.	3.9
<b>Mexican Oil Company (PEMEX)</b>		
Combined Heat and Power (CHP) <sup>1</sup> in PEMEX	Install CHP plants in the facilities of the National Refining System and in other PEMEX facilities.	7.7
Centralized power supply to offshore platforms	Substitute individual generation plants for a 115 MW combined cycle plant connected to offshore platforms.	1.9
Improvement of energy performance in refineries	Increase PEMEX's energy efficiency target by 5%.	2.7
Fugitive emissions of methane (NH <sub>4</sub> )	Reduce fugitive NH <sub>4</sub> emissions from natural gas production, transportation and distribution; increase efficiency of flares on offshore platforms.	2.4
<b>Power generation and distribution (Federal Electricity Commission and Central Light and Power)</b>		
Power transmission and distribution	Increase the efficiency of transmission and distribution lines by 2%.	6.0
Thermal efficiency in fuel oil-fired thermoelectric plants	Increase thermal efficiency of fuel oil-fired thermoelectric plants by 2%.	0.7
Conversion to natural gas and repowering of thermoelectric plants on the Pacific coast; modernization of the facilities of the National Refining System	This proposal requires simultaneous action: phase out and reorient fuel oil production incentives; install on the Pacific coast a gasification terminal for imported liquefied natural gas, and convert fuel oil-fired thermoelectric plants to combined cycle.	21.0
<b>Industrial sector</b>		
CHP	Develop the CHP potential of the national cement, steel and sugar industries, among others.	>25
<b>Renewable energy</b>		
Power generation from renewable energy sources	Install 7,000 MW of renewable energy capacity to generate 16,000 GWh per year (additional to the El Cajon and La Parota hydroelectric plants).	8.0
Biofuels	Introduce sustainably produced biofuels.	NA
<b>Transport sector</b>		
Vehicle replacement	Replace freight trucks and diesel busses ≥10 years old from 2008 onwards.	2.0
Freight by rail	Increase rail coverage for freight transportation by 10%.	1.5

<sup>1</sup> Combined Heat and Power (CHP) = Cogeneration



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In order to develop these mitigation opportunities, public policies should be guided by the following priorities:

### PRIORITIES ON ENERGY GENERATION AND USE

1. Establish performance standards and GHG emissions' baselines for major activities and emissions sources.
2. Ensure accounting and reporting of GHG emissions and identification of emissions reductions projects in private and public companies under the Clean Development Mechanism (CDM) and other carbon markets.
3. Carry out an economic assessment of the costs of climate change and the benefits of actions to address it, along the lines of the "Stern Review".
4. Establish fiscal and financial incentives for investment in sustainable energy projects.
5. Design and implement measures to ensure that PEMEX has sufficient resources to improve its energy efficiency.
6. Eliminate subsidies for fossil fuel energy consumption and production.
7. Involve new stakeholders and initiatives in government energy efficiency and savings programmes, particularly in thermal efficiency and solar energy use.
8. Implement compulsory and voluntary standardization of equipment, vehicles, power generation systems and consumption in homes, offices and industry.
9. Reduce the use of fuel oil.
10. Promote renewable energy sources and low carbon technology.
11. Repower thermoelectric plants with combined-cycle technology.
12. Facilitate connection of independent suppliers to the national grid.
13. Encourage the regulated participation of private enterprise in low carbon energy generation (particularly in CHP and renewables).
14. Promote research on low carbon technologies and renewables.
15. Amend the proposed Law on the Use of Renewable Energy Sources to increase the share of renewables in overall power generation above the present target of 8%.
16. Increase the performance of the motorized transport fleet by promoting the acquisition of vehicles with low GHG emissions.
17. Implement policies to promote low carbon emissions in public transport and increased use of rail for freight.

### B) VEGETATION AND LAND USE

In order to conserve carbon in forest ecosystems and reduce GHG emissions from land use, land use change, forestry and agriculture, three different categories of actions are considered: conservation of carbon stocks, carbon capture and carbon substitution. The following table presents a resumé of the opportunities identified in the ENACC to implement these actions:



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## OPPORTUNITIES FOR CARBON CONSERVATION IN FORESTS TO 2012

TYPE OF ACTIVITY	PROPOSAL	CARBON CONSERVATION (MTCO <sub>2</sub> e)
Sustainable Forest Development	Increase the area under sustainable forest management by 2.6 million hectares per year.	6,000-12,000
Payment for Environmental Services	Expand coverage of current programmes of payment for environmental services ("PSAH" and "PSA-CABSA", for their Spanish acronyms) to cumulatively reach 2.49 million hectares by 2012.	1,500-3,100
Conservation of forest ecosystems in Protected Areas	Increase coverage of Protected Areas by 500,000 hectares per year to accumulate 3 million hectares in the National Protected Areas System ("SINAP", for the Spanish acronym).	500-1,000
Wildlife Management Areas	Integrate approximately 6 million hectares of tropical, temperate and arid zone ecosystems within Wildlife Management Areas ("UMA").	3,000-4,250
Forest health	Carry out phytosanitary diagnosis and treatment in approximately 640,000 hectares of forest per year.	1,800-3000



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## OPPORTUNITIES FOR MITIGATION OF GHG EMISSIONS IN FORESTRY AND LAND USE TO 2012

TYPE OF ACTIVITY	PROPOSAL	CARBON CAPTURE (MTCO <sub>2</sub> e)
<b>Forestry</b>		
Reforestation and recovery of lands apt for forestry	Reforest 285,000 hectares a year through the "ProÁrbol" Programme, to accumulate 1.71 million hectares by 2012.	10-20
Soil restoration with reforestation	Restore and reforest degraded soils in an area of 115,000 hectares annually, through ProÁrbol, to accumulate 690,000 hectares.	5-15
Commercial forestry plantations	Expand the area in commercial plantations at a rate of 100,000 hectares per year, to accumulate an additional 600,000 hectares.	3-7
Forest CDM	Identify opportunities for carbon capture projects in forest ecosystems under the CDM.	To be instrumented
<b>Forest derived bioenergy</b>		<b>Estimated reductions (MTCO<sub>2</sub>e/year)</b>
Forest derived biofuels	Introduce 500,000 high efficiency wood burning stoves in rural communities.	2.5
<b>Crop production</b>		
Land use reconversion	Promote the reconversion of agricultural land to perennial and mixed crops in 900,000 hectares, through the Programme for Direct Support to Agriculture ("PROCAMPO").	4.2
Efficient use of chemical fertilizer	Develop standards for fertilizer use according to region and crop; produce a Manual of best practices and assess alternative options	NA
Prevention of forest fires from cropland burning	Promote alternatives to slash and burn agriculture in 100,000 hectares, to reduce from 50% to 35% slash and burn related forest fires.	NA
Conservation tillage	Employ conservation tillage and foster cover crops in 200,000 hectares.	0.9
<b>Livestock production</b>		
Rehabilitation of grazing and rangelands	Rehabilitate 450,000 hectares of grazing and rangelands through the Programme for support for cattle production ("PROGAN").	4.6



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Additional measures which contribute to GHG emissions reductions and build capacity for climate change adaptation are incorporated in the Shared Agendas for Mainstreaming Environmental Policy which SEMARNAT is drawing up in conjunction with other Federal Government ministries and agencies.

This Strategy identifies the following priorities for developing mitigation opportunities in public policy related to land use, land use change, forestry and agricultural activities:

## PRIORITIES FOR VEGETATION AND LAND USE

1. Articulate the implementation of the Ecological Land Use Planning Programme with actions for GHG emissions mitigation.
2. Promote and maintain the functional integrity of ecosystems and their environmental goods and services, by:
  - Reducing deforestation to minimize GHG emissions from this source.
  - Conserving the cover of primary ecosystems.
  - Expanding the capacity for gross primary production by capturing carbon through reforestation, afforestation and ecological restoration.
3. Consolidate the Mexican Carbon Programme to foster scientific research into the carbon cycle and the creation of human resources in this field.
4. Promote applied research, innovation and technological development for carbon conservation and GHG emissions reductions in agriculture.

Consolidation of the proposed measures for mitigation and the effective application and scope of the programmes, technological changes and investments set out in this Strategy require considerable resources, which are in turn dependent upon important economic growth and significant changes to national policies and budgeting. Specific goals and the necessary resources to accomplish them, will be clearly set out in the Special Programme on Climate Change.

Implementation of this Strategy will also depend, to a degree, on the implementation of relevant instruments for international cooperation.

## PROGRESSIVE VALUATION OF CARBON IN THE NATIONAL ECONOMY

Mitigation of climate change through actions for reducing GHG emissions will not be sustainable without clear economic signals to promote them. However, the social costs resulting from emissions produced by different economic agents can become economic opportunities through cooperation agreements with external actors having mandatory emissions reductions targets in the context of the international regime on climate change.

For Mexico, the establishment of an integrated national scheme for emissions trading can be aspired to in the medium term, through a realistic, step by step process involving the strengthening of national capacities. The principle of progressive action employed in this Strategy sets out the possibility of increasing by phases both the number of participating sectors and the value of the carbon being traded. The scheme would operate with controlled carbon prices, set low, initially, which would be subject to periodic review until reaching equilibrium with international market prices. The phased deployment of this scheme would allow for its adaptive management to take advantage of opportunities arising from international negotiations on the climate change regime, thereby allowing optimum dividends for promoting cleaner development.



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## POSSIBLE PHASES FOR THE PROGRESSIVE VALUATION OF CARBON IN THE NATIONAL ECONOMY

1. Consolidation of the Mexican Oil Company (PEMEX)'s virtual emissions trading scheme, setting limits on emissions from participating facilities and linking it to the voluntary GHG accounting and reporting system promoted by SEMARNAT. Integration of the Federal Electricity Commission (CFE, Mexico's national utility) and Central Light and Power (LFC, the utility for central Mexico) to the voluntary accounting and reporting system. Sustained promotion of CDM projects in all sectors, particularly energy.
2. Assignment of carbon and real exchange values by PEMEX, with minimum budgetary affectations for participating facilities. Periodic review of emissions caps. Integration of CFE and LFC within a notional emissions capping system.
3. Establishment of a carbon credit exchange system with capped values, between PEMEX, CFE and LFC. Introduction of regulatory measures that allow the consolidation and extension of this system, including any necessary changes to laws, regulations and standards.
4. Promotion of carbon credit trading with other economic sectors, public or private, managed via projects with simplified criteria, based on the CDM.
5. Integration of chosen economic sectors within a national "cap and trade" scheme, with capped carbon prices set by central government, which do not threaten the development of a healthy and competitive economy.
6. Integration of further economic sectors within an increasingly consolidated national scheme, with progressive price liberalization.
7. Coupling of the national cap and trade scheme with existing international schemes, whether derived from the Kyoto Protocol or not.

This progressive strategy, to be initiated under the present Administration, will not only reduce the costs of complying with emissions reductions targets, but will also accelerate the recognition of carbon values within the economy as a whole.

## FOUNDATIONS FOR NATIONAL ADAPTATION

Mexico's geography, climate, topography and hydrology, contribute –along with other factors– to increase the country's vulnerability to hydrometeorological events which can lead to natural disasters. The occurrence and effects of such events will be aggravated by climate change, so vulnerability must be reduced by promoting a culture of disaster prevention in all aspects of economic and social development.

Capacity building for adaptation requires developing the abilities of different stakeholders to adjust to, and cope with, climate change –greater climate variability and extreme weather events–, in order to attenuate potential damage. By building capacity for adaptation to climate change, the vulnerability of the country can be reduced and the sustainability of economic development can be better ensured.

The areas identified in this Strategy for capacity building for adaptation are: hydrometeorological risk and water resource management; biodiversity and environmental services; farming; coasts; human settlements, and energy generation and use. Mexico's principal requirements for adapting to climate change are to:

- Preserve and strengthen natural buffering functions within watersheds.
- Design a programme promoting the natural recharging of aquifers in conjunction with the National Protected Areas System.
- Increase knowledge and deployment of information exchange and early warning systems.
- Adjust water treatment technology in line with changing climatic conditions.
- Review and strengthen the implementation of natural resource management instruments such as seasonal bans, marine and coastal Protected Areas and payment for environmental (hydrological) services, so as to adapt them to changing climatic conditions.



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- Establish biological corridors between Protected Areas, and evaluate the need to adjust the current boundaries of these and of Priority Regions for Conservation, to improve the adaptive capacities of ecosystems and species.
- Evaluate the experience acquired by vulnerable groups in the face of climate variability and design adaptation policies based on these evaluations.
- Preserve Mexican agrobiodiversity in situ through programmes jointly implemented by the Ministry of Environment and Natural Resources (SEMARNAT) and the Ministry of Agriculture, Rural Development, Fisheries and Food (SAGARPA).
- Develop and implement a climate information and monitoring system specifically designed for the farming community.
- Strengthen epidemiological monitoring systems.
- Plan for an increase in mean sea level of 40 cm between now and the end of the century, as a baseline for infrastructure development in coastal zones.
- Articulate the national policy for marine and coastal sustainable development with the strengthening of national capacities for adapting to climate change.
- Promote synergies between the tourism, fishing and water sectors, and with the National System for Civil Protection.
- Include appropriate environmental design criteria in all aspects of urban planning and development.
- Include the watershed management approach in schemes for environmental services protection and disaster prevention in peri-urban and rural areas.
- Design and build decentralised, small-scale, local energy supply systems.

Capacity building for adaptation to climate change requires the integration and coordination of disciplines, institutions and individual expertise, and the implementation of public policies which consider the following priorities:

## PRIORITIES FOR ADAPTATION

1. Review the institutional structures currently in place for hydro-meteorological risk management, to scale up existing capacities.
2. Evaluate current capacity to respond to the impacts of climate variability and use it as a foundation upon which to build greater adaptation capacity.
3. Identify opportunities for the convergence of the activities of different sectors (cross-cutting policies).
4. Design and implement a programme for climate modelling as part of a national climate information system.
5. Enhance the use of ecological land use planning as an instrument to prevent or mitigate certain expected impacts of climate change.
6. Review policies and budgetary allocations to emphasise the importance of prevention planning.
7. Promote actions to reduce vulnerability, minimize risk and generate strategies for adaptation in regional and local development plans.
8. Promote insurance as an aid to reducing vulnerability in different sectors.
9. Design a public information and education strategy that disseminates the results of research, involves society and actively promotes its participation in the design of preventive and adaptive actions.
10. Develop human resources in operational meteorology and climate forecasting.

Implementing these priorities for adaptation is indispensable for strengthening existing capacities to deal with climate variability in different regions of the country, and to help society as a whole to prepare in an opportune way to address climate change.



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## RESEARCH PRIORITIES TO ADDRESS THE PROBLEM

In order to strengthen decision making and policy response planning to tackle climate change, the present Strategy identifies the following priorities for research and knowledge creation in the fields of mitigation and adaptation:

### PRIORITIES FOR RESEARCH AND KNOWLEDGE CREATION ON MITIGATION

#### Energy generation and use

- Potential for energy savings and energy efficiency at national and local level.
- Potential for the implementation of energy efficiency standards in key sectors.
- Economic analysis of energy efficiency programmes and measures with pay-back periods for reducing consumption.
- Feasibility of secondary oil recovery by CO<sub>2</sub> injection into extinct or low pressure oilfields.
- Carbon capture and geological storage.
- Feasibility of developing the CHP potential of the cement, steel and sugar industries.
- Technical, economic and environmental assessment of biofuels production and use.
- Identification of opportunities and feasibility analysis of mitigation measures in maritime and air transport.

#### Forest resources conservation and management

- Identification of opportunities for forest biofuels development.
- Potential of carbon conservation via the application of economic instruments.
- Assessment of the impacts of CDM forestry projects.
- Assessment of the potential feasibility and impacts of afforestation.

#### Crop production

- Genetic improvement of rice varieties for planting in Mexico's humid tropics in order to obtain better yields in drier conditions, and lower methane emissions.
- Creation of mechanisms for articulating crop reconversion with ecological land use planning, at different scales.
- Implement nitrous oxide emissions accounting under different methods of agricultural management.
- Assess the effect of conservation tillage on CO<sub>2</sub> emissions from crop soils.

#### Livestock production

- Identify grazing and rangelands susceptible to rehabilitation using a range of different techniques.
- Identify options for restructuring extensive livestock production, establishing semi-intensive grazing regimes and promoting "holistic management".
- Identify options for converting traditional livestock systems to sylvo-pastoral systems.

### PRIORITIES FOR RESEARCH AND KNOWLEDGE CREATION ON ADAPTATION

#### Hydrometeorological risk and water resource management

- Greater use of climate information in decision making.
- Development of seasonal climate forecasts and regional scenarios.



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- Characterization of vulnerability by type of threat and social sector.
- Evaluation of climate change impacts on different stages of the hydrological cycle.
- Design bioclimatic architecture.

## **Biodiversity and environmental services**

- Systematize information on effects on ecosystems and their components.
- Analyze the response capacity of key species for ecosystem functioning.
- Evaluate climate change impacts on those species in risk categories.
- Develop models of forest development under different climate scenarios.
- Assess functioning of existing biological corridors and propose routes for new ones.
- Implement ecological restoration activities for different ecosystems.
- Identify the potential distribution ranges of ecological “refuge” locations for the most vulnerable ecosystems.
- Conduct an economic valuation of environmental services related to flood prevention and impact mitigation in coastal areas and urban centres.

## **Agriculture**

- Identify possible adverse impacts on production by agro-climatic zone and under different climate change scenarios.
- Assess the possible behaviour of crop pathogens under climate change.
- Identify the options for appropriate crop reconversion regimes under different climate change scenarios.
- Assess changing needs for irrigated crops under different climate scenarios.
- Assess the options for adaptation to climate change in the livestock sector.

## **Coasts**

- Map coastal and marine vulnerability and risks from rising mean sea level.
- Model the potential distribution and abundance of marine and coastal species under different climate scenarios.
- Model the potential adverse impacts of climate change on fisheries.
- Conduct an economic valuation of the potential impacts of extreme weather events and the preventive measures that can be taken to mitigate them.
- Conduct research into the post-disaster rehabilitation of coastal ecosystems.

## **Human settlements**

- Design sustainable cities for different climate change scenarios.
- Identify and establish suitable land banks for future urban growth.
- Assess the development potential of small settlements using the criteria of sustainability, self-sufficiency, CHP, network cooperation and other options that increase the adaptive capacity of urban society.
- Design for sustainable urban transportation.

## **Energy generation and use**

- Damage assessment of energy-related infrastructure.
- Potential for the use of renewable energy under different climate scenarios.
- Assess the impacts of climate change on hydroelectricity generation.



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- Assess the impacts of an increase in water consumption and conduction or transportation, on energy demand.
- Assess the impacts on household and business energy demand arising from the earlier onset and later termination of the hot season.

### Human health

- Assess the effects of climate change on the health of different social groups.
- Use information from epidemiological early warning systems to strengthen action plans on public health.
- Strengthen programmes for monitoring and control of vector-borne diseases.

## OUTLINE OF MEXICO'S OVERALL POSITION IN RELATION TO THE INTERNATIONAL CLIMATE CHANGE REGIME

### *Problem relevance*

- Climate change, caused by an increase in the atmospheric concentrations of GHG represents, along with ecosystem degradation and biodiversity loss, the major environmental problem of the XXI Century and one of the most urgent global challenges faced by humankind.
- Climate change is a problem of strategic security, the solution of which demands unprecedented efforts for mitigation and capacity building for adaptation, in the light of the predictable adverse impacts.
- Adaptation and mitigation are equally important and necessary strategies; neither of them can be employed to the detriment of the other.
- Inaction today will exponentially raise the costs of adaptation in the future, so reducing the potential scope of that adaptation.
- Given their socio-economic, political, and cultural implications, measures for mitigation and adaptation to climate change will increasingly feature in the decision making processes at the highest levels, involving the executive and legislative powers, state and municipal governments, and civil society.

### *International cooperation and national efforts*

- The international regime should be strengthened through political agreements at the highest level that involve major emitter countries.
- The current division between "Annex I" and "Non-Annex I" countries has to move towards a more realistic differentiation.
- Mexico will employ every effort to implement measures to foster mitigation and adaptation in an equitable manner.
- The inaction of others should not be an excuse for one's own inaction.

### *Challenges and opportunities*

- Climate change implies a major threat but also provides a great opportunity to drive the transition towards sustainable development.
- The economic analysis of the "costs of inaction" is of great value in reviewing current public policy both at national and international levels.

### *International legal instruments*

- Mexico fully supports the multilaterally negotiated instruments to address climate change.



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- Mexico is open to the possibility of improving the Kyoto Protocol and agreeing a convenient framework for a second commitment period, and it will also be willing to consider the agreed substitution of the Kyoto Protocol for a more ambitious instrument that could gain wider consensus in the multilateral context.
- Mexico is keen to take part in partial or subregional initiatives as far as they operate in a complementary, rather than substitutional way, with regard to current multilateral agreements.

## ***Towards the adoption of long term commitments***

- Mexico is keen to participate in the joint adoption of one or more long term targets, possibly of an indicative, non-binding nature, attainable through collective action. In particular –and by way of addressing Article 2 of the United Nations Framework Convention on Climate Change– Mexico could agree that GHG concentrations should stabilise at levels below 550 ppm of CO<sub>2</sub> equivalent.

## ***Equity issues***

- Mexico has not and will not acknowledge “differentiated rights” on common goods or on the environmental services associated with the global atmosphere, and believes that all the Earth’s inhabitants have the same right to use those goods and services. In other words, no country has an inherent right to higher per capita emissions than others.
- Our country favours a process of “flexible convergence” of per capita levels of GHG emissions, in accordance with different national circumstances, as a guiding principle for the long term evolution of the climate change regime.

## ***Evolution of climate change mitigation commitments: towards a post 2012 regime***

- Mexico recognises that the structure and scope of agreed commitments under the United Nations Framework Convention on Climate Change and the Kyoto Protocol should evolve, in the sense that developed countries (Annex I) should make deeper commitments while developing countries, such as Mexico, progressively increase their participation.
- The differentiation of responsibilities, as acknowledged by current instruments, should include the differentiation of commitments, in terms of type and timeframe, in accordance with the principle of equity.
- Mexico considers that any voluntary enlargement of the commitments regime should be gradual, based on the progressive strengthening of capacities to measure and monitor GHG emissions from different sectors, identify opportunities for mitigation and develop emissions reduction projects.
- Mexico considers that implementation of effective mitigation measures is crucial, irrespective of whether or not they derive from adopting legally binding commitments.
- In the context of developing the post-2012 regime, reviewing the commitments of advanced developing countries, such as Mexico, could be based on the following parameters:
  1. Within the bounds of their existing capacities, they can undertake mitigation activities by voluntarily adopting policies and measures which, while aimed at achieving sustainable development, result in predictable co-benefits in terms of GHG emissions reductions.
  2. Policies and measures adopted could be subject to review and monitoring by international entities (“pledge & review”).
  3. In adopting said policies and measures, countries could indicatively agree to quantitative emissions targets: either absolute or relative in terms of “emissions intensity” per unit of product; or for a given economic sector or subsector; or for given regions of the country which, when taken together, represent a significant share (at least 25%) of a nation’s total GHG emissions.
  4. Voluntary commitments shall not undermine the right to development or the legitimate aspiration to secure an energy supply commensurate with meeting the essential needs of the population.
  5. The international regime will include mechanisms for cooperation and incentives to increase and complement mitigation efforts undertaken by these countries.
  6. The voluntary adoption of mitigation policies and measures and their associated quantitative targets will not imply the incurrence of any type of penalty for possible non-compliance (“no-lose targets”).



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7. Target over-attainment could allow for the sale of carbon credits on the global market, under agreed conditions.
- The adoption of binding, quantitative emissions reductions targets, relative to total national GHG emissions, would be the final phase of a “step by step” process that comprises several intermediate phases as a prerequisite for the consolidation and strengthening of country commitments.

### ***The Clean Development Mechanism (CDM)***

- Mexico favours the development of a global market for carbon credits and, in general, the intensive use of market mechanisms to foster mitigation activities in a sustained manner and to reduce, globally, the costs of compliance.
- Mexico recognizes the pioneering role that the CDM has performed and, in order to scale-up its benefits, proposes that project processing flow be increased, additionality criteria be reviewed, transaction costs minimized, real facilities be provided for small scale projects, and that the thematic and geo-political distribution of projects attain a better balance -among other factors.
- The CDM should maintain its current environmental integrity, but should also attempt more ambitious, complementary schemes which transcend isolated projects to involve entire programmes or productive sectors, thereby expanding the scale of international cooperation.

### ***New instruments for international cooperation***

- The post-2012 regime should encourage more ambitious international cooperation schemes which transcend the scope of isolated projects to promote mitigation programmes at a national level or which involve entire economic sectors.
- The stabilization of GHG concentrations at an adequate level demands the rapid and progressive decarbonization of all economies, beginning with those industrialized countries having an historically accumulated responsibility.
- Productive processes also need to be transformed in emerging economies with notably high growth rates. In such countries, the gap between the reasonable efforts undertaken and the scale of the transformations actually required, can only be bridged by new, large-scale cooperation instruments backed by appropriate financial mechanisms. As a result, the global mitigation effort will then be shared by industrialized countries and the beneficiaries of these new instruments – which should be linked to the global market in carbon credits through discounting rates and other, similar schemes, which preserve the environmental integrity of the emerging climatic regime.

NOTE: It has yet to be determined which of the policies and measures outlined in this Strategy can be implemented with national public finance, and which require implementation in the context of international cooperation mechanisms that can ensure their feasibility.



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