

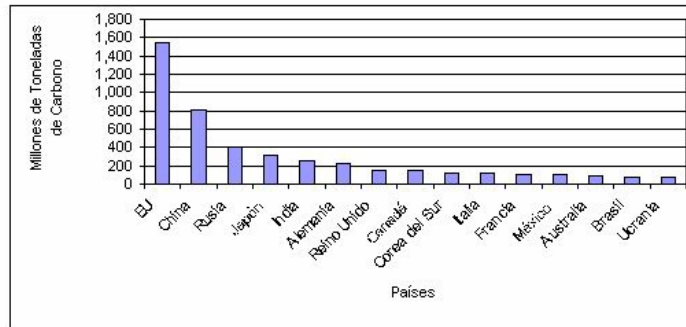
## Country Reaction: Mexico

Mexico is the largest Latin American economy, the 8<sup>th</sup> within the OECD (but the second lowest in per capita income) and according to the World Bank's latest report, continues to be the 10<sup>th</sup> largest world economy (but only 80<sup>th</sup> in per-capita income). As measured by purchasing power parity (PPP), 2006 GDP is estimated at \$1.3 trillion dollars, with a PPP per capita income of over \$10,000 dollars.

The country possesses 12% of the world's biodiversity; its geographical area is just shy of 2 million square kilometers and the population reached 108 million inhabitants last year. Mexico is the 7<sup>th</sup> largest trading power according to the WTO, with exports representing 28% of GDP (manufactured goods 87.3%, oil and derivatives 9.8% and agricultural products 2.5%). Services constitute 68% of the economy, industry 28% and the primary sector 4%. Mexico's national industry is highly competitive in some areas, like oil and gas, cement, auto motors production, soft drinks and beer, as well as the telecommunication services. However, there has been a clear correlation established between the country's overall global competitiveness and the need for sustainable development, especially as regards the environment.

### Mexico and climate change

Mexico is among the top 15 countries in greenhouse gas emissions. When compared against non-Annex I countries of the United Nations Framework Convention on Climate Change, it is only exceeded by China, India, Brazil, and Indonesia. It is among the first 20 with the highest percentage of emissions per capita. However, its global contribution is smaller than 2% of the world's total.



Source: OECD and IEA

Mexico supports the principle of common but differentiated responsibilities stated in the UN Convention. The country has fulfilled its commitments under the Convention and the Kyoto Protocol by submitting three national communications and several country studies on the subject of climate change, encompassing the Anthropogenic Emissions Inventory by source and by sinks; the Greenhouse Gas Emissions Inventory; future emission scenarios; climate scenarios; and studies related to potential vulnerability of the country to climate change in agriculture, forests, hydrology, coastal zones, desertification and drought, human settlements, and the energy and industrial sectors.

Mexico's active participation in the preparation of National Communications is highlighted by the fact that it was the first country to present a Second National Communication to the UNFCCC in 2002, and has just become (November, 2006) the first non-Annex 1 country to present its third National Communication, which includes a complete GHG Emissions Inventory that details those areas of the Mexican economy that most contribute to GHG emissions.

## **Impact of climate change on Mexico**

For Mexico, climate change is a priority for both government and private sector because of the country's vulnerability to the phenomenon. Some of the specific adverse effects of climate change for Mexico are:

- A reduction in the availability of water, both in quantity and quality;
- Shrinkage of available arable land for rainfall agriculture;
- A greater frequency of extreme hydro-meteorological phenomena such as drought, flooding, erosion, landslides, silting and overflowing rivers;
- Sustained increases to average sea levels, with resulting effects on many coastlines, especially in the Gulf of Mexico and Caribbean; and
- Biodiversity deterioration as a result of habitat transformation on a scale beyond its capacity to adapt.

The Ministry of Environment and Natural Resources is the agency responsible for conducting environmental and climate change policy in Mexico. This agency leads the inter-ministerial Commission on Climate Change and the Mexican Committee on GHG emission reduction and sequestration projects. The Commission has the main following responsibilities:

- To develop and propose to the Executive climate change policies and strategies, as well as to incorporate such actions in related sectorial programs.
- To promote and implement climate change actions in the different sectors, as well as to deliver a periodic report to the Executive.
- To promote a continuous update of the actions taken to fulfill the commitments established under the United Nations Framework Convention on Climate Change (UNFCCC) and related instruments.
- To serve as the Designated National Authority with regards to all issues pertaining the UNFCCC and its Kyoto Protocol.
- To conduct, through the Ministry of Foreign Affairs the Mexican position in all related climate change international fora and organizations.
- To propose, develop and integrate the relevant legal framework in Mexico concerning climate change.
- To pursue the development of related climate change research projects.
- To issue, pursuant to the guidelines published by the Ministry of Environment and Natural Resources, the approval certificates for GHG mitigation and sequestration projects.
- To follow up the activities developed by the Clean Development Mechanism Executive Board, as well as relevant resolutions resulting from the Conferences of the Parties of both the UNFCCC and the Kyoto Protocol.
- To promote the participation of the private and social sectors in the development and implementation of GHG mitigation and sequestration projects, within the scope of the Clean Development Mechanism.

The Mexican Committee on GHG emission reduction and sequestration projects was created in 2004 to function as a working group of the Commission, with the objective of promoting and facilitating the development of GHG mitigation and sequestration projects, as well as to develop a record of such projects. Additionally to the mandate the Commission has on climate change issues, the National Institute of Ecology (INE) has the responsibility to carry out some activities on this subject:

- To promote, jointly with the Ministry of Public Education, R&D activities, human resources formation and dissemination programs on climate change through universities and other education institutions.
- To establish cooperation activities with international research centres and to promote technical cooperation projects on climate change.
- To participate in all international fora related to climate change issues, as well as research projects and cooperation agreements.
- To coordinate the elaboration of the National Communications of Mexico to the UNFCCC, as well as climate action strategies.
- To promote and conduct studies on the benefits resulting from the application of mitigation and GHG reduction actions.
- To promote and conduct update and improvement studies on the national inventory of GHG emissions.
- To participate in international cooperation projects and activities related to climate change.
- To promote and conduct assessment studies for GHG mitigation, vulnerability and climate change adaptation.

Mitigation and carbon sequestration policies developed by the Mexican Government consider a number of alternatives and cover several economic sectors. In this sense, the agencies responsible of developing such

policies have maintained a national development policy which has also considered a number of structural reforms in terms of regulations and institutional programs.

### **What can be done**

For a future regime on climate change, Mexico favors the establishment of long-term objectives, including the fixing of a desirable maximum level of GHG emissions in the atmosphere (eg. 450-550 ppm of CO<sup>2</sup>); exploring new international cooperative mechanisms that would facilitate a progressive broadening of the regime to include all countries; and the need to guarantee that there are no gaps between the timeframe for achieving the first set of goals (2012) and future commitments under the Kyoto Protocol. Mexico would like to see progress on constructing the necessary consensus on these goals during the current year, with negotiations concluding by 2009 at the latest.

On other issues in the negotiation, making real progress on policies and measures for adaptation to climate change, including an Adaptation Fund, is essential, as well as identifying effective mechanisms to reduce emissions resulting from deforestation in developing countries.

The Mexican Government has already indicated its willingness to initiate a dialogue with like-minded developing countries with a view to expanding efforts towards mitigation and adaptation through voluntary commitments. These must be based on international cooperation incentives that promote sustainable development for countries that adopt such commitments, be clearly perceived as equitable, and do not result in sanctions for non-fulfillment. In this respect, Mexico would consider national policies and measures, dynamic objectives or quantifiable goals in significant sectors of the economy, among others. Mexico's position on GHG emission mitigation that the country could apply in the future recognizes that there is still work to be done in establishing priorities among available policy and technological alternatives, which options to prefer, and how to determine their economic and political viability, as well as their effectiveness in measuring avoidable CO<sup>2</sup> and other GHG emissions.

Mexico's position in the negotiations undertaken so far in the framework of the UNFCCC and the Kyoto Protocol has been to assume its responsibility for the global climate change problem and to contribute actively to its solution. However, we strongly believe that for developing countries this must be under a voluntary approach, which allows for promoting and rewarding good results through different types of incentives, but without punishment if for any reason a country is unable to comply with its own GHG mitigation goals.

Although we prefer to confront the problem within the United Nations multilateral framework, we also recognize the positive and complementary role that bilateral, sub-regional and regional agreements can play, together with other programs on specific issues that groups of countries can agree on, such as the North American Carbon Program between Mexico, Canada and the United States. Mexico participates in several of these cooperation schemes, for example in the methane to market introduction project, in the Carbon Capture Forum, and in the Gleneagles Dialogue on Climate Change, Clean Energy and Sustainable Development whose second ministerial meeting was recently held in Monterrey.

### **The package deal**

Mexico would be willing to participate in whatever body might be established by the L-14 to evaluate what has been, can, and should be done to add to existing measures adopted by the international community. These, however, should be voluntary, equitable commitments based on international cooperation. We agree that long-term targets (for warming or concentrations of GHGs) are necessary and that these should be progressive and linked to the realistic possibilities of countries achieving them. The overall target should be warming of no more than 2-3° C, and concentrations of between 450-550 ppm of total anthropogenic GHG's. There should be continuity between the existing timeframe of Kyoto commitments (2008-2012) and any further agreed commitments beyond 2012. Negotiations should begin in 2007 and conclude by 2009, at the latest.

We agree that it is unrealistic and unfair to attempt an immediate homogeneous system where every country assumes identical approaches. Instead, coordination of varied autonomous efforts should be encouraged. We prefer working under the aegis of the United Nations –in which all countries have a stake- to using other agencies like the IEA which represent only part of the international community.

Mexico has already taken measures to rationalize policies in its agriculture, industry, energy, development and finance sectors so to have an overall focus on the concept of energy and environmental security. As long as the principle of differentiation is followed, we would agree to task the OECD (of which we are a member) and the World Bank to review policies send credible signals on the need for innovation of new technologies. They could be asked to determine what barriers to clean energy currently exist in our countries and how they might be overcome. They could monitor and review progress and help to focus readjustment of long-term goals. The OECD could design a process of non-binding peer review of country-specific studies for each L14 nation.

Mexico still has not reached an internal consensus on the carbon tax issue because of its potential impact as an obstacle to trade. We have no objection to a “cap & trade” system but consider that the question only applies at the present time to Annex 1 countries. In the second half of last year, the Mexican government and the World Bank signed an MOU aimed at designing a Mexican Carbon Fund (FOMECAR) to support national Clean Development Mechanism projects through carbon credits.

We agree that a new strategy is needed to generate enthusiasm for world wide engagement on the climate change issue. The CDM should be re-energized and re-designed by identifying areas of action that align with countries’ development plans and existing interests, while also allowing for deep reductions in CO<sub>2</sub>. Trading arrangements should not be used punitively, especially with respect to developing countries. Trade Ministers could be instructed to work together in the WTO to replace food production subsidies with incentives for farmers to grow environmentally beneficial bio fuel crops. The WTO could recommend an offset package (loans, guarantees or other assistance from countries whose companies would benefit from improved market access).

Mexico is actively considering expanding its nuclear generating capacity. We agree that an acceptable solution must be found to the nuclear fuel supply issue which fully respects the terms of the NPT and allows non-nuclear States to have ready access to fuel for peaceful uses.

The Mexican Government has identified a significant mitigation potential resulting from the adequate management of natural resources. In this sense, a number of carbon sequestration policies are in place, related to forest and wildlife preservation:

- ***Increase in carbon sequestration***
  - National reforestation program
  - National campaign of ecologic restoration and prevention of land-use change.
  - Commercial forestry plantations
- ***Preservation of sequestered carbon***
  - Forest border defense program
  - Agroecologic improvement program for farming production
  - Natural protected areas program
  - National forest inspection and surveillance program
  - Sustainable management of forests
  - Forest development program
  - National forest fire prevention program
  - Other biodiversity and conservation and prevention programs developed locally

Mexico agrees to promote national adoption of measures to harvest “low hanging fruit”. Energy policy actions and measures in Mexico are closely related to climate change and particularly GHG reduction. The programs currently developed by Mexico’s Ministry of Energy and its subsidiary bodies include

policy guidelines and promotion activities related to innovative energy-use processes, energy-efficiency and renewable-energy programs and project implementation in intensive energy-use sectors. The following actions and programs are in place to reduce GHG emissions:

- Use of natural gas for electricity generation.
- Reduction in the subsidies to energy and the increase of taxes in the price of gasoline.
- The establishment of mandatory standards related to fuel and transportation.
- The application of mandatory energy-efficiency standards for appliances, systems and equipments.
- Programs to reduce energy consumption in households.
- Daylight Savings Time
- Energy-efficiency programs for the federal branches of the Mexican Government and energy-savings campaigns in the state-owned energy industry.

We agree that new technologies are needed and that governments should be asked to establish a forum to catalyze key agreements on R&D strategy, charging international organizations with follow-up. Given the large potential in industry savings, they should advise on establishing mechanisms to fund investment in the most effective technology in polluting industries, in close cooperation with the private sector actors involved.

Knowledge of the carbon cycle in Mexico and its relation to Global Change (GC) is indispensable for the resolution of a number of questions formulated by science and society. Understanding the levels of CO<sup>2</sup> in the country's ecosystems is a priority, not only because of Mexico's contribution to greenhouse gas emissions, but also because one of the consequences of these emissions, climatic change, will specifically and directly affect us. For these reasons it is considered important that we establish a mechanism to coordinate, at the national level, research efforts related to the physical, geochemical, biological and social aspects of the carbon cycle. Mexico's Carbon Program (PMC) aims to coordinate scientific activities related to the study of the carbon cycle in Mexico, serve as the Mexican scientific counterpart to similar programs in other countries, develop and encourage scientific research concerned with the carbon cycle in Mexico, and systematize scientific data about carbon.

### **International cooperation**

The Mexican Government has developed a number of cooperation mechanisms and agreements with other governments and international organizations on climate change related issues. Particularly and since the adoption of both the United Nations Framework Convention on Climate Change and its Kyoto Protocol, the Mexican Government has signed several agreements with other countries, in order to foster the exchange of information and the development of cooperation activities on climate change, as well as to strengthen national strategies and related programs.

Mexico has also maintained an active position in international fora where climate change issues are discussed. In this sense, Mexican participation in these organizations has clearly reflected the importance the issue has for global decision-making processes, as well as the need to increase the number of alternatives to reduce climate change effects, to have sustainable mitigation measures and to ensure climate change concerns are properly met by governments. Among the regional and sub regional efforts underway, the North American Carbon Program is worthy of mention. The central objective of the Program is to measure and understand the sources and sinks of Carbon Dioxide (CO<sup>2</sup>), Methane (CH<sup>4</sup>), and Carbon Monoxide (CO) in North America and in adjacent ocean regions. It has among its goals to develop quantitative scientific knowledge, robust observations, and models to determine the emissions and uptake of CO<sup>2</sup>, CH<sup>4</sup>, and CO changes in carbon stocks, and the factors regulating these processes for North America and adjacent ocean basins; to develop the scientific basis to implement full carbon accounting on regional and continental scales (this is the knowledge base needed to design monitoring programs for natural and managed CO<sup>2</sup> sinks and emissions of CH<sup>4</sup>); and to support long-term quantitative measurements of fluxes, sources, and sinks of atmospheric CO<sup>2</sup> and CH<sup>4</sup>, and develop forecasts for future trends.