

GGBP Case Study Series Development of the Special Climate Change Program in Mexico

Related Chapter: Prioritization of green growth options and pathways

Case developed by: Marlene Vinluan, Hilen G. Meirovich

Country: Mexico

Sector(s): Cross-cutting

Key words: analysis, MACC, planning, modeling, climate change, low-carbon pathway

Mexico undertook a top-down fast paced process to develop its first Special Climate Change Program. A range of analytical tools were used, but overall the emphasis was on developing an initial guiding document and then learning to apply it and improve it through practice.

Context

Mexico is Latin America's largest fuel-consuming country and is vulnerable to climate change, as evidenced by droughts, flooding, elevated sea levels, and more severe tropical storms. It was one of the first developing countries to set national climate change targets.

In 2005, the government established an Inter-Ministerial Climate Change Commission (CICC)to develop a National Strategy for Climate Change with medium-term goals for adaptation and mitigation (Government of Mexico, 2007). Climate change was given greater impetus by President Felipe Calderón's personal conviction regarding environmental concerns, as well as by floods and storms, which highlighted the vulnerability of Mexico.

Approach

In the National Development Plan 2007-2012, the government established that climate change should be a consideration for all sectors, and it was decided that a Special Climate Change Program (PECC) should be developed to achieve this goal.

Leadership

The program was designed from the top-down with the direct involvement of the President. The process took only 12 months, with ministries serving as input providers and the Ministry of Environment and Natural Resources (SEMARNAT) coordinating the final output. The Ministry of Finance was heavily involved in this process because of the budgetary implications of a special program in Mexico. Technical and financial support was provided by the Governments of Germany and the United Kingdom, as well as by multilateral development banks.

Stakeholders

Early on, SEMARNAT highlighted difficulties in mobilizing inputs from agencies which did not view climate change as a priority. This led to the Office of the President stepping up to take a greater role in the planning process. The Office of the President called upon all the ministries to identify targets and actions that could be included in the program. CICC also engaged key ministries and research institutes through regular meetings and stakeholder workshops to gather ideas and verify information.

Evidence and analysis

The aim of the analysis was to assess whether and how Mexico could move to a low-carbon pathway, without jeopardizing the development process and even deriving some economic benefits. One of the main technical challenges was the lack of guidelines on how to calculate potential emission reductions at the beginning of the process. A range of studies were commissioned to develop a common methodology. The Low-Carbon Development for Mexico (Mexico: Estudio sobre la Disminucion de Emisiones de Carbono, MEDEC) study evaluated the potential for reducing the greenhouse gas emissions in Mexico over the next 20 years (Johnson et al., 2010). A baseline scenario was generated using the Long-range Energy Alternatives Planning model, and a computable general equilibrium model was used to assess the macroeconomic impact of the low-carbon scenario.

The Centro Mario Molina (CMM) was also commissioned to assess the mitigation opportunities and costs of reducing emissions. The marginal abatement cost curve tool was used by both MEDEC and the CMM study to assess the cost-effectiveness of potential measures and opportunities. A study on the economics of climate change in Mexico by SEMARNAT (2009) assessed the economic implications of a low-carbon pathway.

The studies found that large emission reductions could be achieved in ways that would not harm overall growth prospects, although there would be distributive effects, with job losses in some sectors. Overall the studies predicted a net positive effect, with a small reduction in consumption due to increased prices in earlier years offset by overall growth in consumption in future years.

Outcomes

In 2009, Mexico published the PECC, containing its long-term climate change agenda, together with medium-term goals for adaptation and mitigation.

The PECC set out to address the impacts of climate change in Mexico and reduce greenhouse gas emissions across all sectors. It established targets to reduce emissions by 51 million tons of carbon dioxide equivalent $(MtCO_2e)$ by 2012 with 36 percent of the reduction in the energy sector; 30 percent in agriculture, forests, and other land uses; and 23 percent in the transport sector. It identified

priorities and financing sources, both domestic and international. A total of 41 mitigation objectives and 95 related targets were established, as well as a phased set of adaptation measures. This was backed by a monitoring system – the Information System for Cross-Cutting Agenda (SIAT-PECC).

At the international level, Mexico committed in 2009 to an indicative target of reducing emissions against a 'business as usual' baseline by 50 percent of 2000 levels by 2050 (SEMARNAT, 2012).

A progress review by SEMARNAT up to 2012 found that 80 percent of the mitigation goals had been met, while 65 percent of adaptation goals and 53 percent of cross-cutting policy elements had been implemented, with a total reduction in emissions of 129 MtCO₂e.

Each special program lasts only for the duration of an administration. To institutionalize the process, the General Law on Climate Change (IDLO, n.d.) was established in 2012, which includes mitigation goals such as a 30 percent reduction in emissions by 2020 in relation to a baseline and the 50 percent reduction by 2050 in relation to 2000 levels. The General Law made climate change a long-term priority, beyond electoral cycles, and established new legal tools and institutions and mandated all parts of government to prepare their own development and sectoral plans and report on climate change budgets and expenditures. In March 2013, the new administration announced the formulation of the new Climate Change National Strategy, and a commitment to formulate a new PECC for the period 2013-2018.

Lessons

Key success factors in developing the PECC:

- Strong analytical foundation of the government experts and specialists – prior to the development of the PECC, the government had already started to estimate its own emissions and prepare for its national inventories.
- Various studies considered in the development of the PECC – different studies contributed to the analyses of the economywide impact of the PECC using various methods and approaches in evaluating and prioritizing options in each sector, in particular.
- 4. Opened windows of opportunities the PECC paved the way to other climate change programs and initiatives for the country. It was also designed to continuously update the process to reflect the dynamic and current circumstances and developments in the domestic and international arena.

Further Information

National Climate Change Strategy: http://www.encc.gob.mx/

References

Centro Mario Molina. 2008. Low Carbon Growth: A Potential Path for Mexico. Discussion Paper.

Government of Mexico. 2007. National Strategy on Climate Change (ENACC)

IDLO. N.d. A Legal Working Brief on the New General Law on Climate Change in Mexico. International Development Law Organization. <u>http://www.idlo.org/Publications/MexicoClimate</u> <u>ChangeLWB.pdf</u>

Johnson, T., Alatorre, C., Romo, Z. and Liu, F. 2010. Low Carbon Development for Mexico.

The World Bank: Washington D.C. http://www.esmap.org/sites/esmap.org/files/P108 304_MX_Low%20Carbon%20Development%20 for%20Mexico_Johnson.pdf

SEMARNAT. 2009. The Economics of Climate Change in Mexico: A Synopsis. Secretariat of Environment and Natural Resources, Mexico.

SEMARNAT. 2012. Advances in Climate Change and Inclusive Green Growth in Mexico, Presentation given by Luis Muñozcano in the context of the Climate Negotiations. https://seors.unfccc.int/seors/attachments/get_at tachment?code=RNTO6X6V3K44KSVCJK9A97 FE6D11OZBN

Disclaimer

This case is a summary of research input to the Green Growth in Practice: Lessons from Country Experiences report published by GGBP in July 2014. The views and information expressed in this case study are not necessarily endorsed by the GGBP sponsors or organizations of the authors.

August 2014

GGBP sponsors:







Ministry of Foreign Affairs of the Netherlands

