



Mexico: Monitoring and Evaluation of the Special Program on Climate Change (PECC)

Context

► Policy context

In June 2012 the Mexican parliament approved the General Law on Climate Change (LGCC) which is one of the most proactive national climate change laws worldwide. The LGCC provides the overall regulatory framework to coordinate adaptation activities in Mexico and defines roles and responsibilities for climate change policy. The National Strategy for Climate Change (ENCC) was updated in June 2013 and determines the short and long-term vision (vision 10-20-40) for combatting climate change by setting national and regional priorities. The Special Program for Climate Change (PECC) operationalizes these priorities within the term of government. Its present version operates from 2014 to 2018 (PECC II, April 2014) and provides mitigation and adaptation goals for particular sectors. The mandate for monitoring and evaluating adaptation policy is given in Article 27 of the LGCC, which defines that monitoring, reporting, verification and evaluation instruments should be an integral part of adaptation policies. In this regard, the development of a national information system on climate change (SICC by its Spanish acronym) incorporating adaptation and mitigation actions is foreseen (LGCC, Article 76; 101, IV). This mandate has been reinforced and specified in the policy document of PECC II.

► Purpose of the M&E System

The information system on climate change (SICC) serves to monitor the progress of implementing the PECC II, as well as its results for both mitigation and adaptation. The latter is intended to be assessed with regard to changes in vulnerability.

► Level of application and aggregation

It is planned that the SICC will operate at the national level. Yet, as Mexico has also introduced climate change programmes at state and municipal levels, it is intended that their progress and results also feed into the national information system. Accordingly, states are encouraged to report annually to the national level on their progress of achieving mitigation and adaptation goals and on the effects of their measures.

► Status as of October 2014

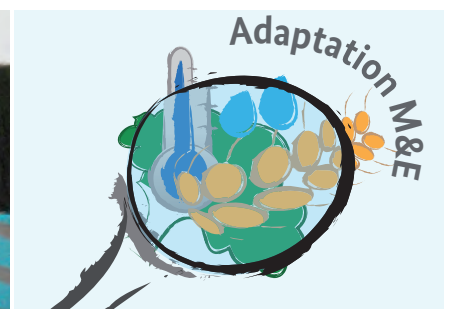
With PECC II the national climate change policy has now moved from assessing national vulnerability and implementing pilot projects (PECC I from 2009 to 2012) to a more comprehensive policy response. The national SICC and its adaptation-specific indicators are currently under development. Initial efforts have been made at national and state level, but a fully elaborated approach for monitoring adaptation and its results does not yet exist.

Process

► Institutional arrangements

The Mexican Government has established a multi-sectoral institutional structure to address climate change adaptation:

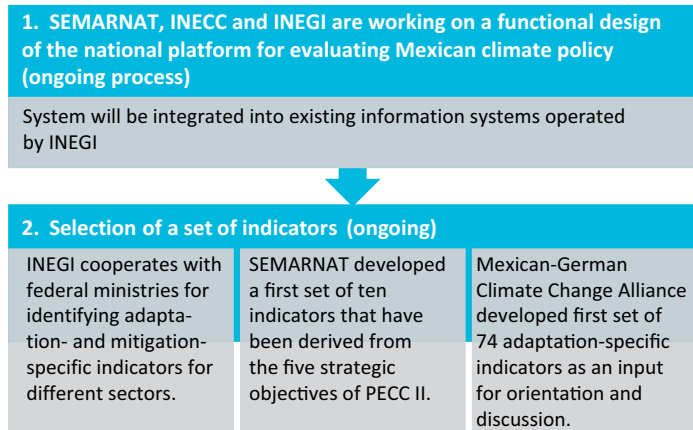
At national level the Ministry of Environment and Natural Resources (SEMARNAT) is responsible for climate change adaptation and mitigation policies. In rotation with the Ministry of Finance it chairs the inter-secretarial Commission on Climate



Change (CICC), which has been established in 2005 and incorporates an adaptation-specific working group, GT ADAPT. The CICC's composition is determined by law and includes 13 ministries as well as the Ministry for Agrarian, Territorial and Urban Development (SEDATU) which was newly established in April 2013. In each ministry a focal point for climate change issues is to be appointed and ten ministries have done so until the end of 2014. The National Institute for Ecology and Climate Change (INECC) advises SEMARNAT on technical and scientific questions related to climate change. All these institutions are part of the National System on Climate Change (compare Figure 1). The National Institute for Statistics, Geography and Information (INEGI) is also involved in developing the national information system, as it is the general directorate for generating and analysing information and statistics at aggregated level in Mexico. A technical committee specialized in information on climate change has been created for this purpose (CTEICC), which is an inter-institutional committee steered by SEMARNAT. According to the General Law on CC, the INECC coordinates the evaluation process of national climate change policies, while INEGI cooperates with federal agencies for developing sector-specific indicators – implying significant coordination efforts.

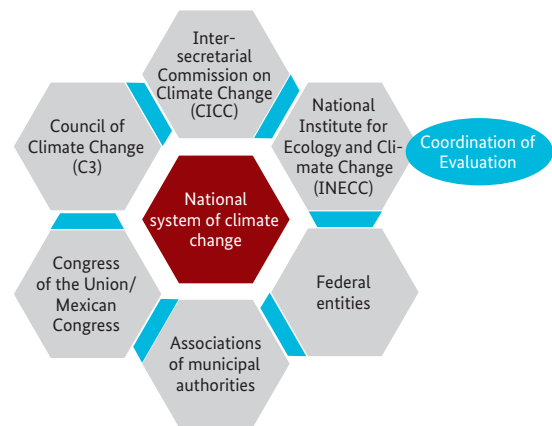
► Establishment process

The initial steps for establishing the national information system on CC – which are still ongoing – are the following:



At national level, SEMARNAT, INECC and INEGI are working together to identify a functional design of the national platform for evaluating Mexican climate policy. The SICC will be incorporated into existing information systems operated by INEGI that cover environmental, social and economic development in general at national level. In order to develop adaptation- and mitigation-specific indicators for the different sectors, INEGI currently cooperates with the federal ministries.

Figure 1 Institutional framework of the National System of Climate Change



Source: INECC, online available at www.adaptacion.inecc.gob.mx/politicas-de-adaptacion/politica-nacional/arreglos-institucionales#sistema-nacional-de-cambio-climatico

In the framework of the Mexican-German Climate Change Alliance – financed by the Federal Environment Ministry (BMUB) – GIZ has contributed to this process. In consultation with INECC and SEMARNAT a first set of 74 adaptation-specific indicators¹ operationalized in 45 indicator factsheets has been developed as an input for the national information system on CC. To increase knowledge and capacities GIZ supports this consultation process with training workshops for government officials.

In parallel, SEMARNAT developed a first set of ten adaptation and mitigation indicators that have been derived from the PECC's five strategic objectives that in turn have been agreed upon in a broad multi-stakeholder process. The ten indicators are already operationalized in PECC II and will be measured annually. SEMARNAT currently works on establishing the reporting platform SIAT-PECC, wherein responsible entities are encouraged to report progress information of their lines of action on mitigation and adaptation to climate change. However, these indicators are all process-based with vague measurement focuses and would have to be complemented by a set of specific indicators, including outcome indicators.

The level of engagement in M&E activities differs among Mexico's 32 federal states. At the forefront is the highly vulnerable state Veracruz. The state Ministry of Environment (SEDEMA) coordinates all policy responses to climate change at state level and has initiated a participatory inter-ministerial consultation process for developing a twofold MRV/M&E system for process- and result-based monitoring of the state's Sectoral Agenda on Climate Change. The M&E/MRV system is currently under development and is expected to be operational in 2015.

¹ The indicator system is online available at https://gc21.giz.de/ibt/var/app/wp342deP/1443/?wpfb_dl=211

► Implementation process

As the SICC has not been fully elaborated; no concrete steps for implementation have yet been undertaken.

Content

► Approach

The approach foreseen for the SICC is an indicator-based one – including process-based indicators tracking the PECC II's implementation process and result-based indicators focusing on the evaluation of adaptation and mitigation actions. Corresponding to the institutional framework for CC, it is planned to design the system in a way which allows for combining and complementing information from different sectors and political levels.

► Indicators

The PECC II contains three adaptation-specific indicators (1-3), two general ones (8, 10) and five mitigation indicators (4-7, 9):

Table 1 Indicators of the Special Programme for Climate Change (PECC II)

No.	Name of the indicator
1	Progress in developing instruments that contribute to the reduction of population's and economic sectors' vulnerability to climate change
2	Percentage of country's surface covered by environmental management (POET) or urban development programs (PDU) that incorporate strategies or criteria for mitigation and adaptation to CC
3	Reduction in vulnerability through infrastructure and nature conservation measures, as well as through nature restoration and sustainable management of natural capital
4	Annual savings of carbon emissions in billions of tons (t) due to implementation PECC II
5	Carbon emissions (t) per kilowatt hour (kWh)
6	Annual methane emissions (t)
7	Black carbon emissions per year (t)
8	Progress in developing the national information system on CC in percentage
9	Progress in developing the national registry for carbon emissions in percentage
10	Number of agreements/contracts that support achieving the national goals on CC

Every two years the PECC II will be revised and, if necessary, modified by INECC's Evaluating Coordination Committee (Articles 98 and 104, LGCC) – hence, adjustments to these rather broad indicators are possible. The statutory regulations in the LGCC and the specifications in PECC II likewise require more

specific, result-based indicators in the following areas (compare Article 76, 77 and 101, LGCC):

- Carbon emissions
- Mitigation actions
- Conditions of the atmosphere
- Short-term and long-term climate projections and characterization of climate variability
- Vulnerability of human settlement and housing, infrastructure, islands, coastal zones and river deltas
- Vulnerability of economic activities and cost estimations attributable to CC including the green gross domestic product
- Damages to the environment attributable to CC
- Sea level rise
- Soil quality including its carbon content
- Protection, adaptation and management of biodiversity

Hence, more progress has to be made in order to fulfil the statutory requirements and to make the national information system operational with a solid indicator basis.

► Data and information requirements

The system will draw on existing data sources that are already collected and reported by the national government. In this context, risk atlases at national, state and municipal level have been compiled, which cover the frequency, intensity and geographical spread of disaster risks and vulnerabilities attributable to CC. Moreover, INEGI's operating monitoring systems on environmental, social and economic development will be another relevant source of input. Both form a good information basis for developing the system further. In order to document information requirements for calculating indicators, the indicator set² developed by the Mexican-German Climate Change Alliance proposes so-called indicator factsheets building on the format used in the framework of Germany's monitoring system.

► Output and reporting

The information generated by the national information system on CC will feed into different reporting channels:

- National Communications to the UNFCCC
- Yearly progress estimation reports on implementing PECC II based information from SIAT-PECC
- Reports of the National Emissions Registry RENE
- PECC Reports to the Ministry of Finance (SHCP) and to the CICC
- Annual work reports by every federal Ministry to the Presidency

² The repository of adaptation indicators developed by the Mexican-German Climate Change Alliance is online available at https://gc21.giz.de/ibt/var/app/wp342deP/1443/?wpfb_dl=211



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► Resources needed

The LGCC determines the establishment of a national Climate Change Fund, which attracts and channels public and private resources for combatting climate change and is planned to have a strong focus on adaptation. The fund's design is partly still under development, but existing operational rules foresee it to finance monitoring activities of adaptation and mitigation.

Lessons to date

As the Mexican information system on CC is at an initial development stage, it is difficult to already identify lessons learned. However, its approach to combine monitoring activities of mitigation and adaptation actions in one single system is relatively new and offers potential for replication. Such a system facilitates the consideration of relevant synergies between adaptation and mitigation actions and corresponding monitoring efforts. Furthermore, it is planned to integrate the national information system on CC into existing monitoring structures that are operated by INEGI, which will lower transaction costs and resource requirements.

In addition, the LGCC provides a robust mandate for monitoring climate change actions at national level. The established multi-sectoral design of the institutional framework further reflects strong political support for tackling adaptation as a cross-sectoral issue and allows for continuous institutional cooperation. However, in practice, the relevant actors involved in the national system for CC do not fully utilize the potential of these favourable regulatory and institutional (pre-) conditions. Especially with regard to inter-sectoral and multi-level coordination needed for undertaking monitoring activities – institutional efforts and competencies need to be further improved and clarified. However, this need for action has been recognized by the national government: In order to achieve an inclusive and consistent approach for monitoring of adaptation, actions for improving the alignment of climate change policies and evaluation efforts at

national and state level are already undertaken by SEMARNAT and INEGI. Accordingly, a checklist called 'Minimum Elements for the elaboration of Climate Change State Programs' was compiled and regional and state level workshops are currently planned to facilitate multi-level exchange in the near future.

For further information

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► References

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