In 2014 Mexico was ranked 13th amongst the most carbon emitting countries in the world, producing 1.37 per cent of the global share of emissions. When the Low Emission Capacity Building (LECB) project started implementation a year earlier, the largest contributors were the transport (26 per cent) and power generation (19 per cent) sectors, according to the National Inventory of Greenhouse Gas Emissions. This made the government recognize the importance of carrying out mitigation actions to reduce greenhouse gas (GHG) emissions in both sectors.

Mexico became one of the first developing countries to have comprehensive and legally binding legislation on climate change, with the entry into force of the 2012 General Law on Climate Change. Through this law, the national government adopted new functions and responsibilities; developed a National GHG Emissions Registry Platform; and set new obligations for the private sector. For instance, it became mandatory for all facilities with annual GHG emissions over 25,000 tCO₂e to report their direct and indirect emissions. In addition, the Energy Transition Law of 2015 required Mexican industries to increasingly use clean energy.

In fact, looking ahead, Mexico’s intended nationally determined contributions (INDC) commits the country to reducing GHG emissions by 22 per cent and generating 43 per cent of clean energy by 2030. Reaching both targets will require that the private sector meets its obligations under the LGCC and the Energy Transition Law.

With this as its context, LECB Mexico helped design instruments to support the country in achieving its mitigation targets in addition to providing technical expertise and assistance to the private sector for reporting and verifying their GHG emissions. In doing so, LECB Mexico aligned its implementation activities with the Special Program on Climate Change (PECC), the National Development Plan (PND) and Mexico’s INDC.
**LECB LATIN AMERICA**

**RESULTS**

**Total financing**
US $936,520

**Timeframe**
5 years (2012-2017)

**Sectors**
Industry

**Counterparts**
Ministry of Environment and Natural Resources (SEMARNAT), National Institute of Ecology and Climate Change (INECC)

**Thematic areas**
- Institutional frameworks
- GHG inventory systems
- NAMAs
- LEDS
- INDC support
- MRV systems
- Private sector involvement
- Climate finance

**LECB MEXICO at a glance**

**Implemented a national GHG emissions registry system**

LECB supported SEMARNAT in the development of rules of operation for the National Emission Registry (RENE) system. This involved public consultations with actors from the mining and chemical industries, specifically through the National Chemical Industry Association (ANIQ) and the Mexican Mining Chamber (CAMIMEX), among others. The registry rules were officially launched by the government in October 2014 and an online reporting platform (COA-web) was designed by LECB to support the mandatory reporting for direct and indirect GHG emissions for all facilities with annual GHG emissions over 25,000 tCO2e in the energy, industrial, transport, agricultural, commercial services, and waste sectors.

**Strengthened capacity in the private sector to report and verify GHG emissions**

Thirty companies from the chemical and mining industries were trained by LECB on how to report and verify their emissions using the GHG protocol and Intergovernmental Panel on Climate Change (IPCC) methodologies. Additionally, once the RENE system and its reporting platform (COA-web) were finally launched, by request of SEMARNAT, LECB organized a further series of one-day courses where companies from all sectors learned how to use the online reporting platform. This had an impact on how well companies were able to respond to their legal obligations.

**Development of a proposed national monitoring, reporting and verification (MRV) system**

LECB supported the NAMA-Net consortium in the preparation of the study “A Mapping of Instruments, Actors and Recommendations for the General Structure of the MRV System in Mexico”. This study includes recommendations on the general structure of the proposed national MRV system for Mexico.

**Formulated a NAMA on Combined Heat and Power (CHP) technologies and feasibility studies for industries**

A NAMA focused on combined heat and power (CHP) technologies for mid-sized selected industries in the chemical and mining sectors was designed by LECB based on 10 feasibility studies that were carried out at different industrial plants to evaluate the viability of installing cogeneration systems to achieve greater energy efficiency in their processes and reduce GHG emissions. These studies involved the participation of key actors from the private sector, and also the National Commission for Efficient Energy Use (CONUEE).

**Strengthened capacity in the private sector to report and verify GHG emissions**

**+1000 Trainees**
representing around 400 different companies attended the 35 one-day courses on reporting GHG emissions throughout the country

**23 Companies**
complied with GHG emissions reporting requirements in line with the methodologies presented during training

**16% reduction in GHG emissions**
and 23% internal rate of return by average from installing cogeneration systems according to the feasibility studies

**Development of a chemical sector low emission development strategy (LEDS)**

Formulating this LEDS involved the private sector (through ANIQ) and included an analysis of GHG mitigation opportunities and best practices. It sets a mitigation scenario in line with the goals and strategy of the General Law on Climate Change, and Mexico’s NDC.
**IMPACTS**

**Future capacity in the private sector to comply with Mexican legal requirements on GHG reporting**

This is supported by the design of a training framework and guidelines created by LECB specifically for this sector.

**Adjusted GHG emissions baseline for the chemical sector, which allows the industry to have more certainty for implementing mitigation actions and to enter a (future) voluntary carbon market. This emission baseline is now reflected in the latest National Inventory presented in Mexico's Sixth National Communication.**

**Adoption of clean energy technology as a result of awareness raising**

This was evidenced by Dow Chemicals (a Forbes 500 company) changing its mindset through the results of the feasibility studies by considering installing cogeneration systems in two of their three plants in Mexico.

**Climate-based science used for decision-making in the chemical sector to set corporate emission reduction targets in line with the LEDS**

The use of which allowed these targets to focus the mitigation actions on increased use of renewable energy, improved energy efficiency, and reduced energy consumption.

**General overview of the UNDP Low Emission Capacity Building Programme**

Since its inception, the UNDP LECB programme has paved the way for effective and lasting climate action by building capacities of government staff to develop policies, strategies and tools that help implement their climate change goals. Focusing specifically on essential building blocks such as strengthening GHG inventory data and systems; formalization of institutional arrangement for climate actions; development and alignment of low emission development strategies (LEDS); and the creation of Nationally Appropriate Mitigation Actions (NAMAs), LECB provided much of the enabling environment necessary for countries to respond quickly to emerging needs, such as the submission of Intended Nationally Determined Contributions (INDCs) and socialization of the Paris Agreement. Given its flexible nature and strong country ownership, often the originally-envisioned and measurable LECB outputs have been exceeded, leading to some unplanned but highly welcomed additional impacts.
Capacity building in the private sector to comply with the new climate-related legal requirements was the main objective achieved by LECB Mexico. Its strategy was to involve the private sector from the outset, while maintaining a close dialogue with the government throughout implementation. The chemical sector, through the National Chemical Industry Association (ANIQ), became one of the key stakeholders for the implementation of LECB in Mexico.

ANIQ, involved since the inception workshop, is a very important player in the sector. It brings together almost all chemical industries in the country (around 250 companies) and represents 95 per cent of the production and distribution of private chemical products. This close relationship supported cohesion, ownership, information sharing and proactivity over the years of implementation, and, foreseeably, beyond the end of the project.

After a four-year engagement with the government and LECB, results are visible and sustainable:

» Companies - from the chemical industry and the industrial sector in general - are able to comply with national regulations.

» The chemical industry has trained personnel, reports its GHG emissions, and understands the importance of climate change.

» The sector has certainty regarding its level of emissions and its starting point when designing NAMAs, LEDS and other mitigation actions.

» Mexico has a comprehensive, long-term low emission development strategy to address the projected growth in GHG emissions of the chemical industry.

Thanks to LECB we have more certainty about the level of emissions in the chemical sector and were able to draw a baseline of economic growth that considers these emissions. The project had a real impact in our complying with the legislation in the sector.

Ulises Arce
Deputy Director of Climate Change, Energy and Sections.
National Chemical Industry Association (ANIQ)