

The Executive Orders established by the Regulation to the General Law of Climate Change in Matters Related to the National Emissions Registry

In April 2012, the Mexican Congress unanimously approved the General Law on Climate Change (LGCC in Spanish), which entered into force in October of that year and made Mexico the first developing country to have a comprehensive law on this subject. As result of this new law, the President signed the Regulation to the General Law of Climate Change in Matters Related to the National Emissions Registry (Reglamento de la Ley General de Cambio Climático en Materia del Registro Nacional de Emisiones or GHG Regulation).

The National Emissions Registry is a key step forward in the implementation of the country's General Law on Climate Change, to gather the greenhouse gases and compounds emissions related information from the main economic sectors in Mexico.

The Regulation to the General Law of Climate Change in Matters Relating to the National Emissions Registry stipulates that Semarnat, shall by Secretarial Agreement, establish 1) the technical details and formulas for the greenhouse gases or compounds emission calculation methodologies application; 2) specific emission factors to calculate or estimate greenhouse gases or compounds emissions; 3) group of greenhouse gases or compounds and their global warming potential (GWP) for reporting emissions and 4) methodologies for direct measurement of carbon dioxide emissions.

The GHG regulation establishes the economic sectors that must report their direct and indirect greenhouse gases or compounds emissions for all their facilities with annual emissions over 25,000 tCO₂e. The reporting sectors are: energy, industrial, transport, agricultural, waste, commerce and services. The specific greenhouse gases or compounds to report are: carbon dioxide, methane, nitrous oxide, black carbon, sulfur hexafluoride, nitrogen trifluoride, halogenated ethers, halocarbons, mixtures of these GHGs and any additional GHGs identified by the IPCC and designated by Semarnat.

Thus, these Executive Orders provide the basis for the successful implementation of the National Emissions Registry established in the Regulation to the General Law of Climate Change in Matters Relating to the National Emissions Registry, are important elements for the subject required to report and elaborate their respective report.

1. Executive Order that establishes the technical details and formulas for the greenhouse gases or compounds emission calculation methodologies application

This regulation establishes the technical details and formulas for the greenhouse gases or compounds emission calculation and their methodologies application, consisting of standardized methodologies developed by the Intergovernmental Panel on Climate Change (IPCC) to the national inventories actualization. Through this regulation, the emissions reports presented by reporting facilities are standardized and homologated to compare them both nationally and internationally.

It contains a group of formulas for those processes or activities that the United Nations Framework Convention on Climate Change has identified as the main emitter of greenhouse gases and compounds, and that have been designated by Semarnat.

2. Executive Order that establishes group of greenhouse gases or compounds for reporting emissions and their global warming potential (GWP)

The Regulation to the General Law of Climate Change in Matters Relating to the National Emissions Registry stipulates that Semarnat, shall by Executive Order published in the Official Journal of the Federation, determine the group of greenhouse gases or compounds and their global warming potential (GWP) for reporting emissions, noting in all cases the chemical formula concerned or any other technical information to facilitate their identification. In the same regulation, Semarnat must also set the Global Warming Potential that should be considered in calculating equivalent emissions to those greenhouse gases or compounds different to carbon dioxide.

To consolidate the National Emissions Registry, it is necessary to establish the elements and characteristics that must be fulfilled in the estimation and calculation of greenhouse gases or compounds, to conduct monitoring and verification.

The scientific data on climate change indicate a number greenhouse gases or compounds that possess the property of modifying the thermal properties of the atmosphere. The Agreement establishes the group of greenhouse gases or compounds and their global warming potential (GWP) for reporting emissions, aim to define which families of greenhouse gases or compounds must be declared to the Registry under its importance in the country.

This regulation has the identification of each of the chemicals under a numeric identifier that is internationally accepted and defined by associations of specialists in the field. Additionally, it contains the chemical formula of the substance, the chemical family to which it belongs and its global warming potential (GWP), according to those published in the Fifth Assessment Report of the IPCC.

3. Executive Order that establishes the methodology for direct measurement of carbon dioxide emissions

Recognizing that there are processes and activities that emit greenhouse gases or compounds, which have singularities in their operation and consumption patterns that make them different and therefore it is not possible to apply methodologies and standardized formulas. This regulation establishes the alternative through direct measurement, either of their own emissions, or well, of the raw materials and products or their processes in order to do a materials balance. These techniques are already being applied for other purposes, but require the setting of minimum conditions for achieving uncertainty reduction of their values.

It establishes the mandate to direct measure the carbon dioxide emissions as a mandate to the subjects required to report that meet the conditions above-mentioned.