

# **ANALYSIS OF THE MEXICAN LEGISLATION FOR THE REGULATION OF HYDRAULIC FRACTURING: LESSONS LEARNED FOR THE COLOMBIAN AND BRAZILIAN CASE AND THEIR IMPACTS IN THE NATIONAL ECONOMY**

## **Overview**

The demand for hydrocarbons is increasingly growing. On the other hand, the reserves of crude oil from sandstone fields are being depleted. For this reason the resources from unconventional reservoirs have become attractive for the oil and gas industry. An operation of such magnitude requires a critical and technical analysis, as well as a regulatory framework that seeks to preserve the environment, to maximize the production and social welfare. In this way, the objective of this study is to analyze the Mexican legal framework for the exploitation of unconventional resources, focused in the hydraulic fracturing techniques and the programmatic key-drivers that can be used as guidelines to improve the legal framework, including the environmental laws in Colombia and Brazil. The implications in the domestic economy were also evaluated, the behavior of indicators such as unemployment and per capita income were predicted by statistical analysis.

## **Methods**

The methodology extracted the most critical points of the Mexican laws and was adequated to the Colombian and Brazilian legal framework and reservoir conditions. It was used the keep existing Michigan policy for public engagement, based on parameters of the hydraulic fracturing strengths and weaknesses in environmental, economic, health, governance and technical terms.

## **Results**

Among the most outstanding results are: (1) The fundamental and scientific bases for the drafting of public and external policies that aim to regulate the hydraulic fracturing in Colombia and Brazil. (2) given the income of foreign currency and the need for labor forces for the installation and adaptation of operations, employment and per capita income, in the regions benefiting from the projects, it will increase.