SUSTAINABILITY LESSONS FROM THE UNITED STATES TO MEXICO’S SHALE GAS FRONTIER

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ABSTRACT

The Mexican energy reform of December 2013 laid the foundations for an increase of private participation in its energy sector, in an attempt to revert the decline in energy production that has Mexico on the verge of becoming a net importer of energy by 2020. Diversification of the country’s energy mix through innovation and development of locally owned resources such as hydrocarbons has become a priority for the Mexican government. One of the strategies being pursued is the development of this country’s shale resources. Thus, evaluating the inherent risks associated with hydraulic fracturing should be a crucial element in Mexico’s decision-making process.

Mexico has a lot to learn from the advent of hydraulic fracturing in the United States, keeping in mind that although this industry reversed the decline of hydrocarbon production in this country, it has also subjected many communities to great environmental and public health damage. Mexico then, has a privileged opportunity to learn from the mistakes made in the U.S, which occurred mainly, due to the unpreparedness of the regulators and the public who fell victims of a savvy industry motivated by short-term profit, with little consideration for societal impacts.

This paper draws lessons from the United States regarding the issues of land clearing, volumetric consumption of water, increased seismicity, local community impacts, and significant emissions of green house gases and volatile organic compounds. While presenting a summary of best practices, recommendations, and early warnings for Mexico’s nascent shale gas.
industry. We provide detailed information that can inform Mexican policymakers, academics, non governmental organizations, and the community in general, about the main concerns regarding hydraulic fracturing activities; the importance of transparency, enforcement, and community engagement to advance sustainability; and the ways Mexico can address these issues as it moves towards the exploitation of its unconventional resources.