

## **Paper abstract**

This paper will discuss transport energy policies in Mexico, focussing on the outcomes of the hypothetical introduction of natural gas as a transport fuel.

For the past 3 decades, Mexico's economic development has stimulated the rapid grow of the road transport sector. Nowadays the transport sector accounts for nearly 40% of the total consumption of oil derived products in the country. Similarly, the combustion of road transport fuels is an important contributor to the deterioration of the global and urban environment. In Mexico, it is responsible for the emission of nearly a quarter of CO<sub>2</sub> and for more than 70% of NO<sub>x</sub> in large urban areas such as Mexico City, Guadalajara, Monterrey and Ciudad Juarez.

The first section will briefly introduce the consequences of transport energy demand in the economy and in the global and urban environment within the Mexico context. The second section will review the main road transport fuel policies that have been proposed in past programmes such as Picca and Proaire. This section will concentrate on the fuel reformulation programme that PEMEX has undertaken and on an analysis of the market uptake of LPG and CNG in the country.

- ***Petrol and diesel reformulation***

PEMEX has recently completed the first phases of a 12 year investment plan involving the revamping of its 6 refineries. It is nowadays in the position to supply the Mexican market with most of the reformulated gasoline and ultra low sulphur diesel that the country requires.

- ***LPG use***

Over the last few years, an important number of motor vehicles in the country have been converted to run on liquefied petroleum gas (LPG or propane), although LPG has been used as road fuel for several years. Currently, Mexico holds nearly 300 thousand LPG vehicles. LPG accounts for nearly 4% of road transport fuels. More than 10% of LPG in the country is used in transport.

- ***CNG market potential***

On the other hand, compressed natural gas (CNG) has been relatively slow to emerge in the Mexican market. Today Mexico has only 3 CNG filling stations and fewer than 2500 CNG vehicles that run on this fuel, despite three important facts: CNG offers important environmental advantages, the natural gas distribution industry has been deregulated and there are several international cases that illustrate the successful market penetration of compressed natural gas as road fuel.

A final section will review the main economic and institutional barriers faced by CNG and discuss the effects of 3 future scenarios of CNG market penetration to the 2015 horizon.