



25th world gas conference
"Gas: Sustaining Future Global Growth"

Gas Market Developments in Mexico

25th World Gas Conference

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Venue: Level 4 - Room 406/7



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Introduction - Mexico

- **Mexico** ranks as the 13th largest economy in the world and it is expected to become the 8th economy in the world by 2050.
- With a well diversified economy and a population of over 112.3 million people, the hydrocarbon's sector still remains an important component for growth:
 - The oil sector generated 14 % of the country's export earnings in 2010
 - 32% of total government revenues come from the oil industry
 - In 2010 Mexico was the 11th country in terms of natural gas consumption



- With a fast growing population that demands services and opportunities, the challenges when it comes to natural gas are:
 - **Ensure access to sufficient and timely natural gas supply.**
 - **Expanding the natural gas grid**
 - **Attracting sufficient private investments in to the sector**

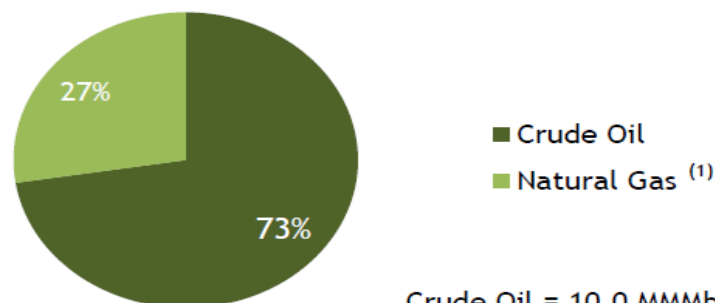
2. Current State of Play



Current State of Play: Natural Gas Reserves

- As of January 1, 2012, Mexico's proven reserves stood at 13.81 billion barrels of oil equivalent (BBOE)

Crude Oil and Natural Gas Proved Reserves



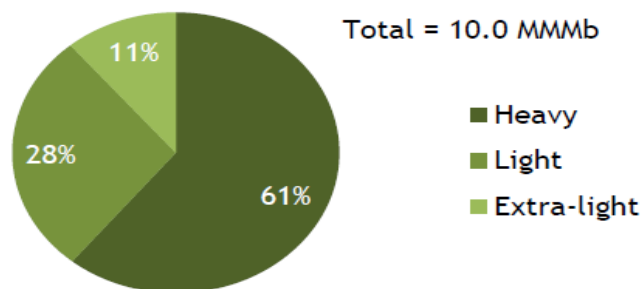
Crude Oil = 10.0 MMMb
Natural Gas = 3.8 MMMboe

(1) Includes condensates and plant liquids.

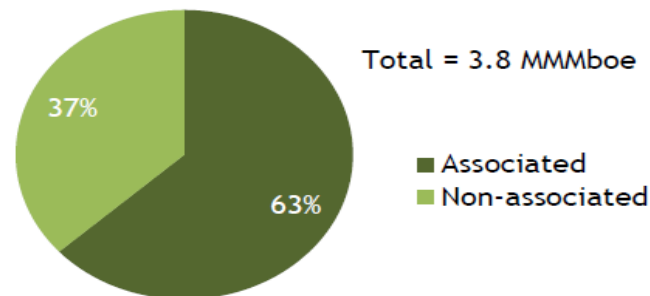
Proved Reserves Composition

The majority of proved reserves consist of crude oil. Therefore, an important amount of gas reserves consist of associated gas.

1P Reserves by Type of Oil



1P Reserves by Type of Gas



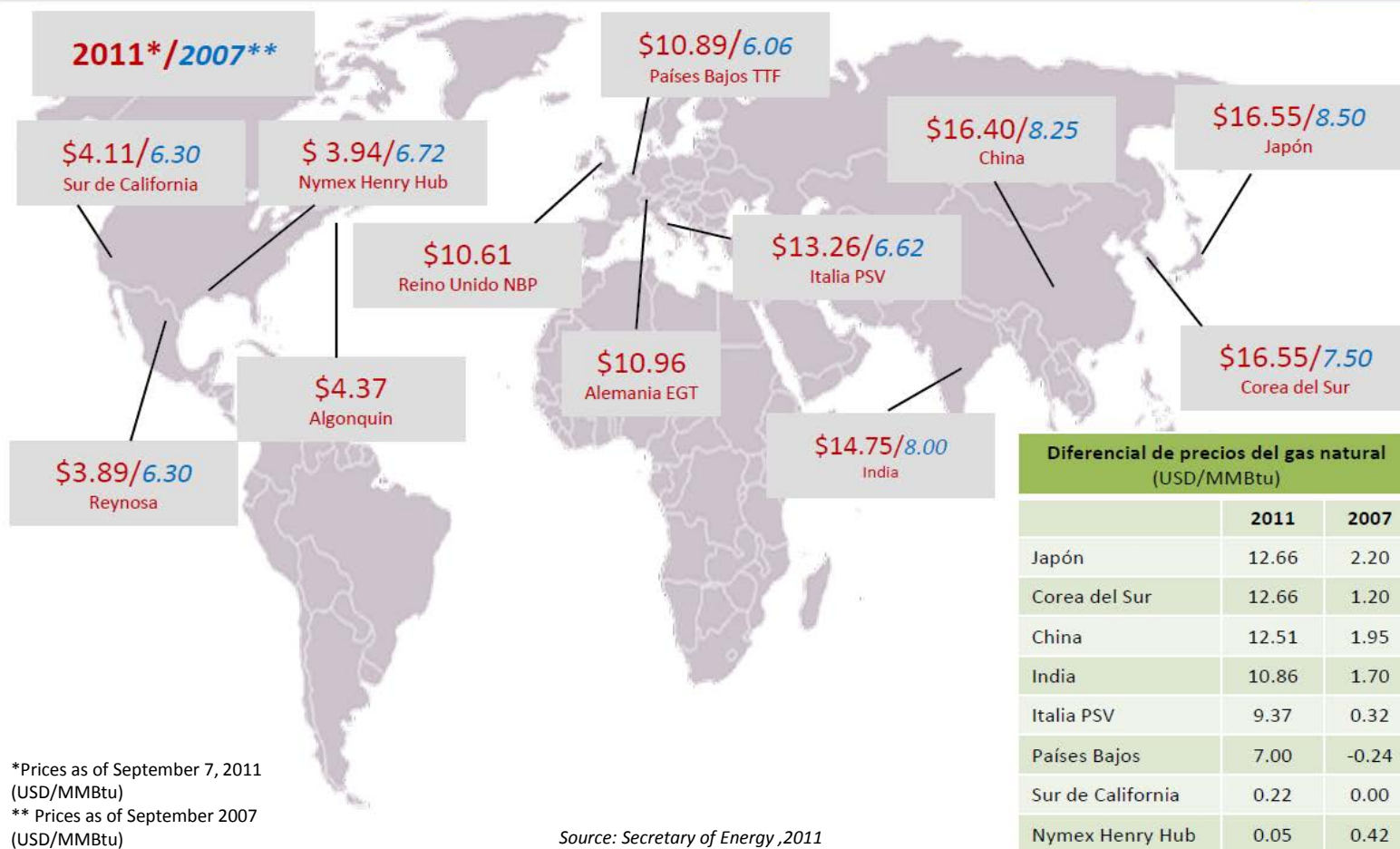
Current State of Play: Natural Gas Reserves

- Mexico Ranks 4th Place in Shale Gas Potential According to the IEA: A special report published by the International Energy Agency titled “Are We Entering a New Age of Gas?” ranks Mexico in the fourth place worldwide in terms of potential shale gas technically recoverable reserves.



Current State of Play: Natural Gas Price Dynamics

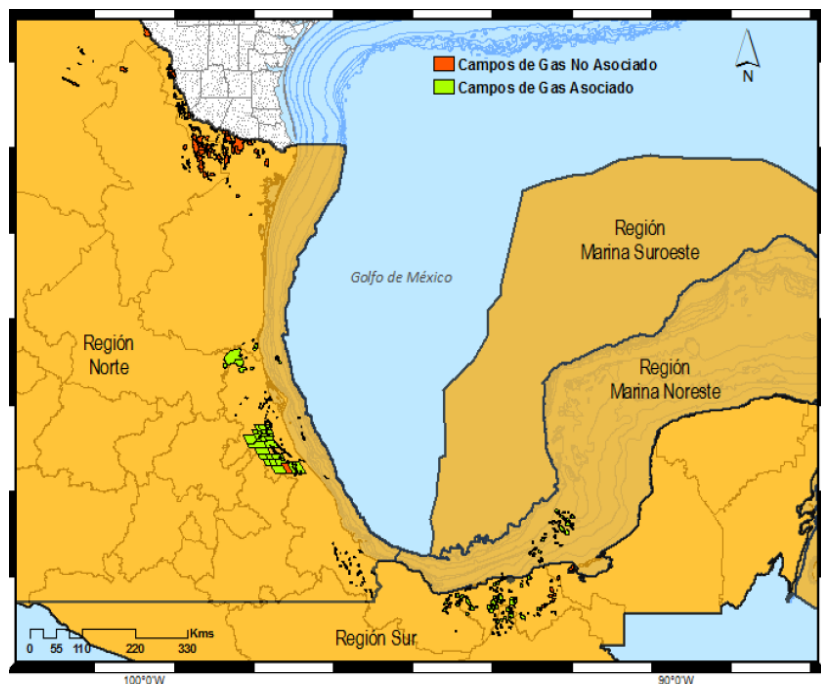
- Mexico's Natural Gas Prices are referenced to Henry Hub.
- With the lowest prices in history, economics for E&P are not there



*Prices as of September 7, 2011 (USD/MMBtu)
 ** Prices as of September 2007 (USD/MMBtu)

Current State of Play: Natural Gas Supply

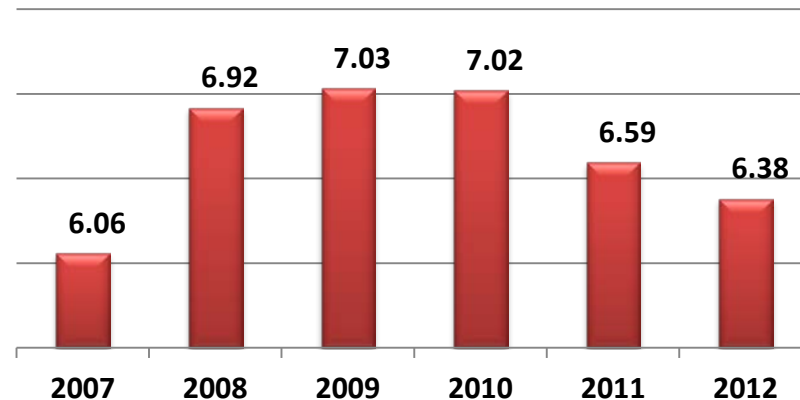
- Mexico's natural gas production is spread throughout the country.
- Onshore fields in the northern part amount for 36% of production, south fields 25%, and offshore fields in the Gulf of Campeche for the remainder.



Fuente: CNH

- Natural Gas production has been declining since 2010.

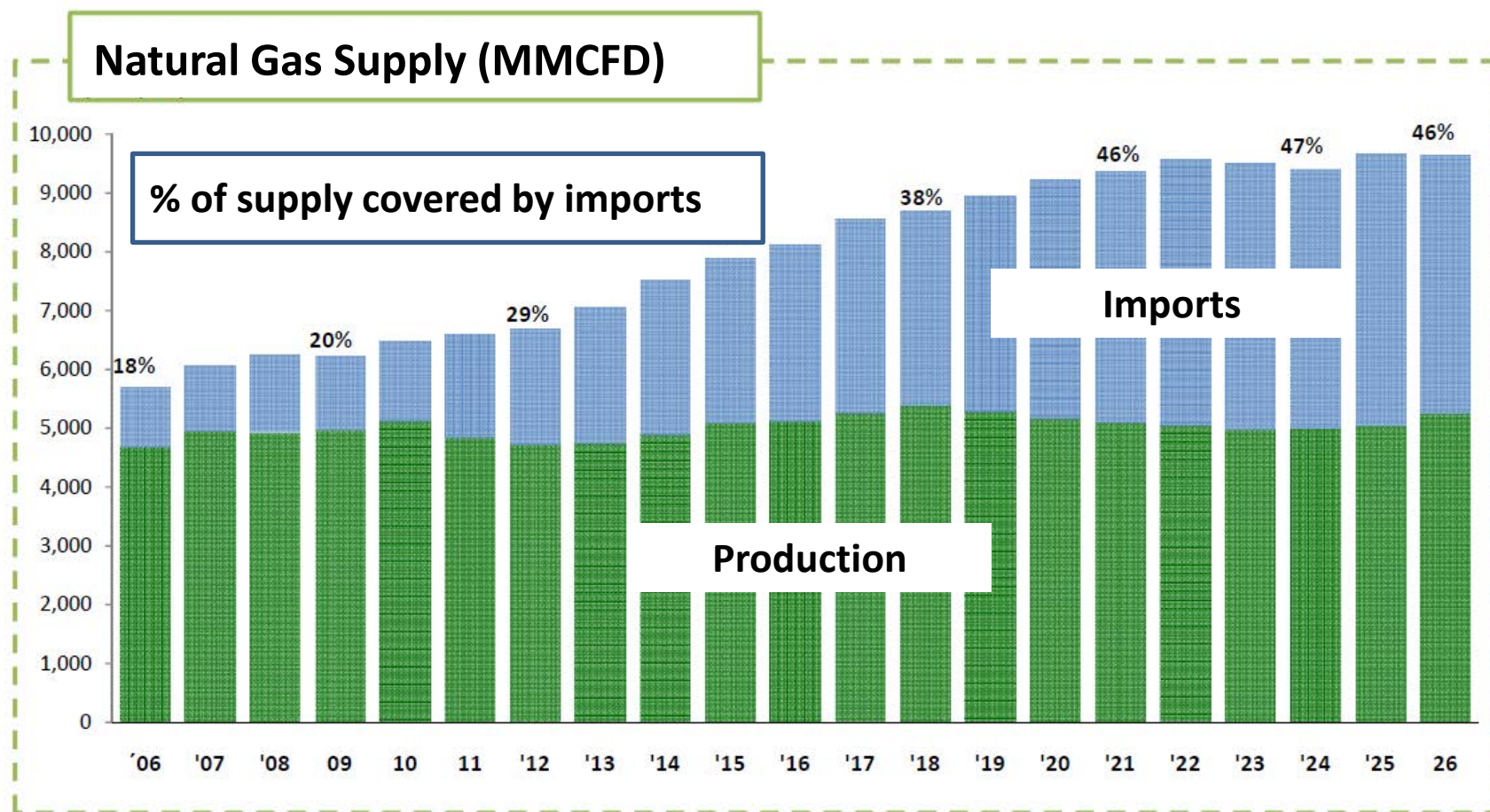
Natural Gas Production (BCFD)



- **PROBLEM:** Natural Gas in Mexico has always been second best to oil.
- Insufficient E&P efforts and investments have translated in a declining production.

Current State of Play: Natural Gas Demand

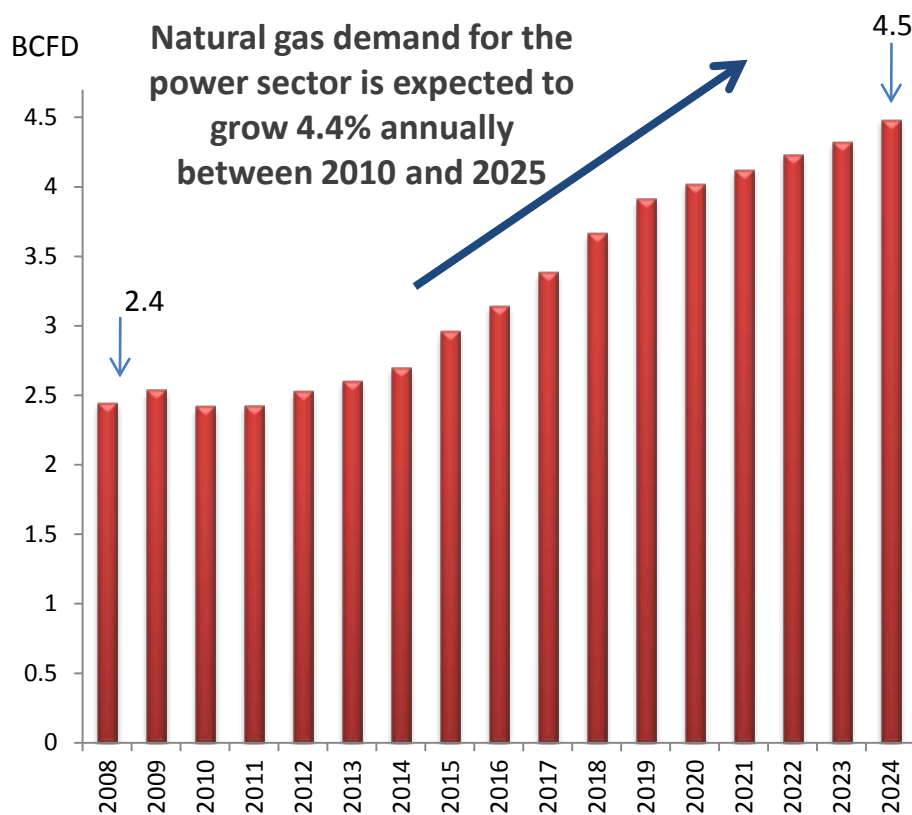
- Based on official estimates, natural gas demand will grow 2.4% between 2009-2025. Domestic production will be insufficient to meet demand, and imports will cover approximately 46% of domestic demand (both from pipelines and from the LNG import terminals).



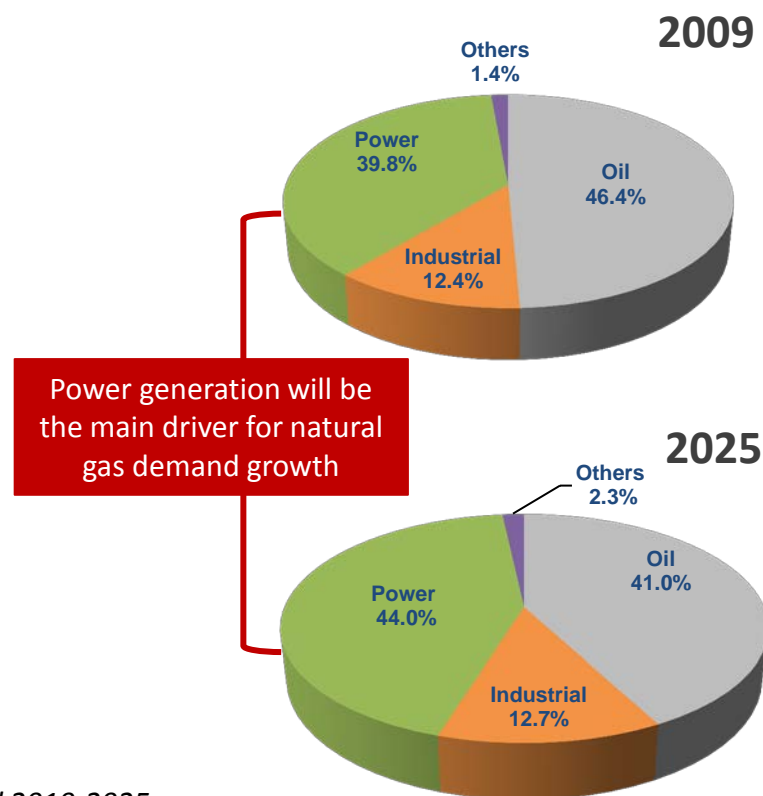
Source: Secretary of Energy, 2011

Current State of Play: Natural Gas Demand

- The Power Sector will be the main driver for electricity demand in the years to come. Over 60% of total power generation in Mexico comes from natural gas fueled plants, and approximately 40% of the new capacity required by CFE by 2025 will be natural gas fueled projects.



Natural Gas Demand by Sector

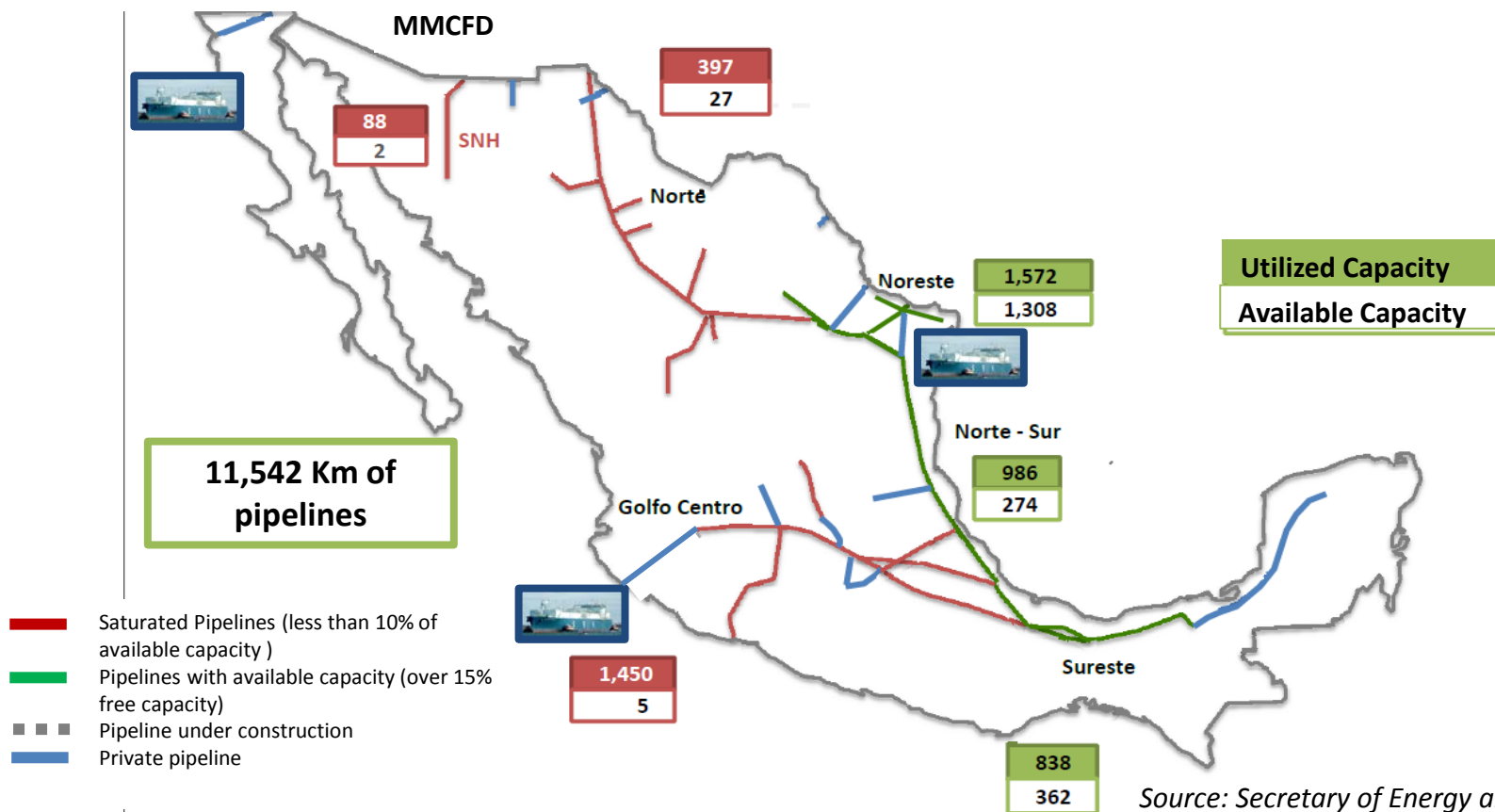


Source: Secretary of Energy, *Prospectivas de Gas Natural y Electricidad 2010-2025*

Current State of Play: Natural Gas Infrastructure

Current Status of the Pipeline System:

- Over the last 10 years, PEMEX has not built additional infrastructure and has remained absent of LNG developments (basically lead by CFE). The operational flexibility of the system is at its most critical level, with important capacity constrains.



Current State of Play: Natural Gas Infrastructure

- Responding to this situation, in November 2011, President Calderón announced the most ambitious plan in the last 17 years for the natural gas sector in Mexico. The project considers the construction of 8 pipelines, representing a 38% net increase in natural gas transmission capacity and investments in the order to of US\$ 10.5 billion(public & private funding).



3. Conclusion: Challenges and Road Ahead



Conclusion: Challenges and Opportunities

Challenges

- Sustaining and increasing domestic production
 - Role pipeline imports and LNG
 - Role of Shale Gas
- Building sufficient infrastructure to deliver

Opportunities

- Mexico's geographic location
- Natural gas pricing dynamics
- Sustainable growth of demand

■ Conclusion:

- Mexico's natural gas sector offers great opportunities and areas for improvement.
- If these areas were to be exploited, the country could benefit from a flow of new investments that would detonate the construction of new gas infrastructure, sources of employment and options for final users.
- Additional transportation infrastructure and redundancy in the system is urgently needed.
- Considering the investment requirements of the energy sector as a whole, private participation will be essential to meet these needs.

Muchas gracias!

