



**United States-Mexico
Chamber of Commerce
30th Anniversary**

Regulatory Framework in Mexico's Natural Gas Industry

**Mexico City, Mexico
December 3, 2003**

**Dionisio Pérez-Jácome
Comisión Reguladora de Energía**

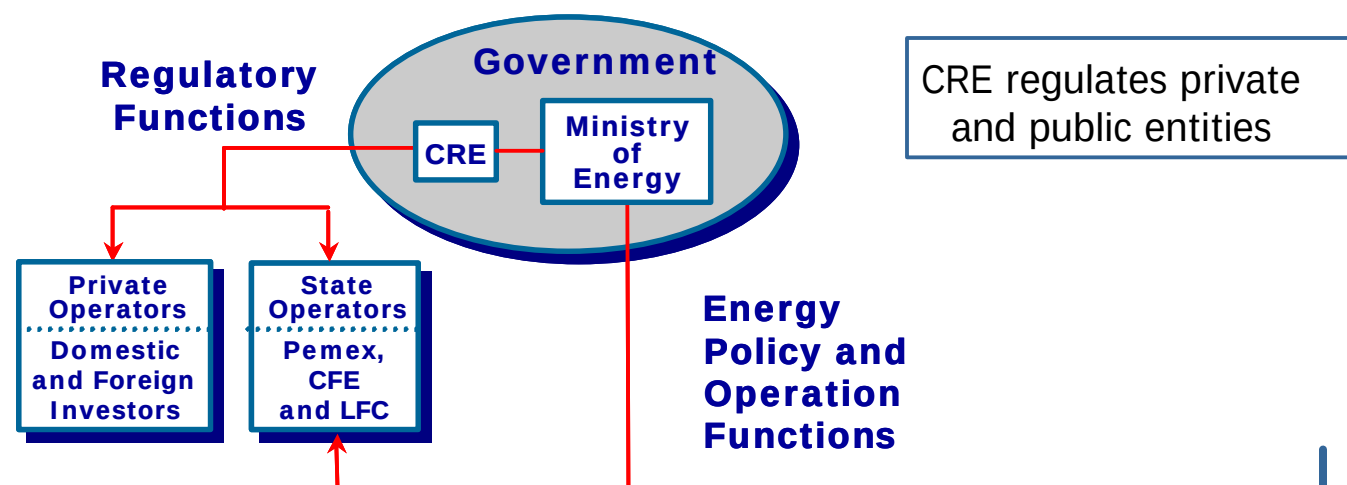
- I. Regulatory Framework**
- II. Natural Gas Achievements (1995-2003)**
- III. Challenges**
- IV. LNG Projects in Mexico**
- V. Final Remarks**

I. Regulatory Framework

CRE Scope

In 1995, Congress enacted the CRE Act to:

- ↓ Establish CRE as an independent authority responsible for natural gas and electricity regulation
- ↓ Provide technical and operational autonomy to render the regulatory framework operative
- ↓ Enhance its jurisdiction and legal standing
- ↓ Concentrate regulatory instruments previously scattered among several agencies



...CRE Scope

The objective of CRE is to promote and enforce the efficient development of the following regulated activities:



Main elements of Energy Regulation in Mexico

Natural gas and Electricity Regulation is a Federal Jurisdiction

Economic Regulation seeks to simulate market conditions in non-competitive activities

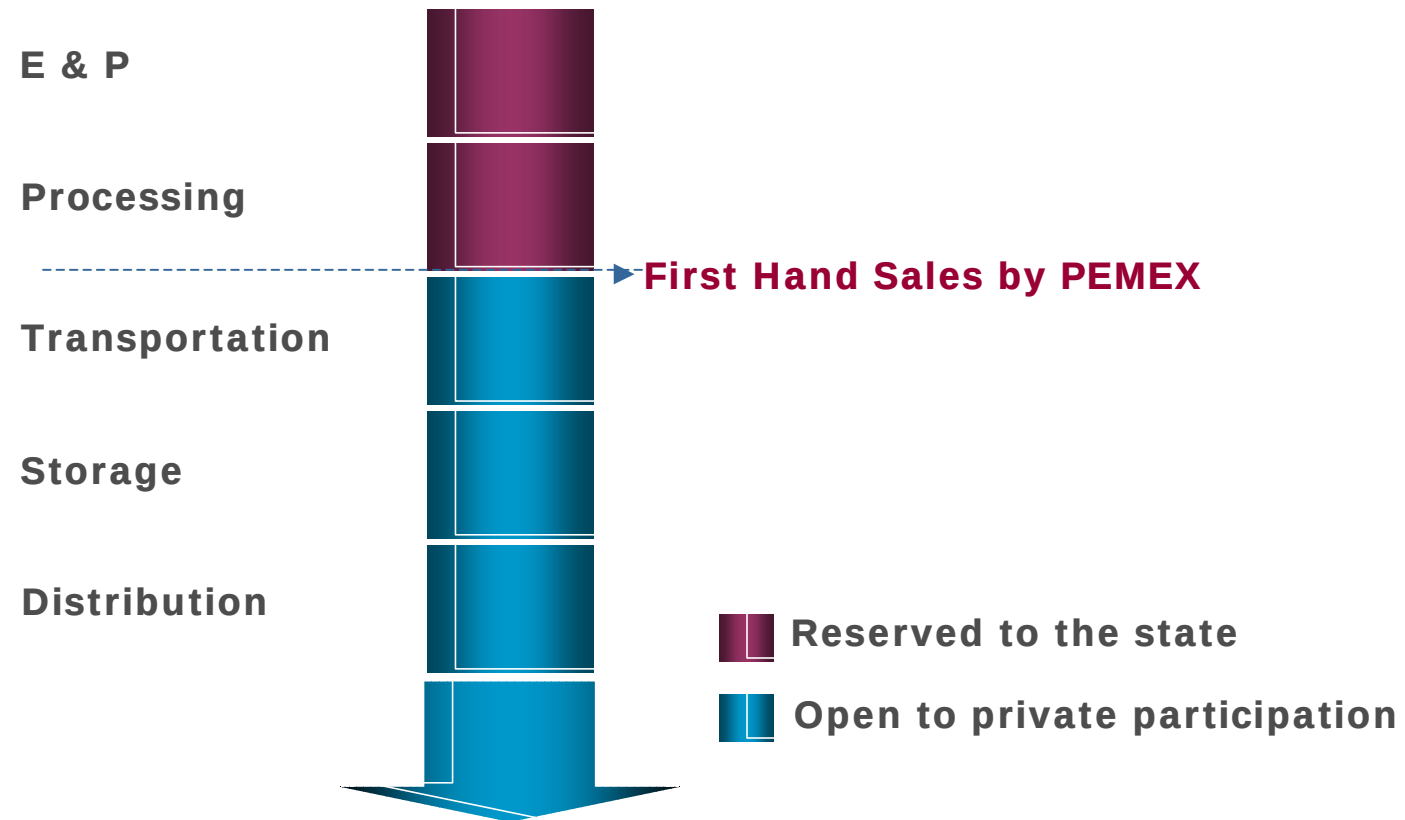
Transparency, Fairness, Agility and Autonomy are the guiding principles of CRE, and are reflected in a clear, stable and predictable regulatory framework

II. Natural Gas Achievements (1995-2003)

Activities Open to Private Participation



Since 1995, natural gas downstream activities are open to private participation



Permits granted by CRE

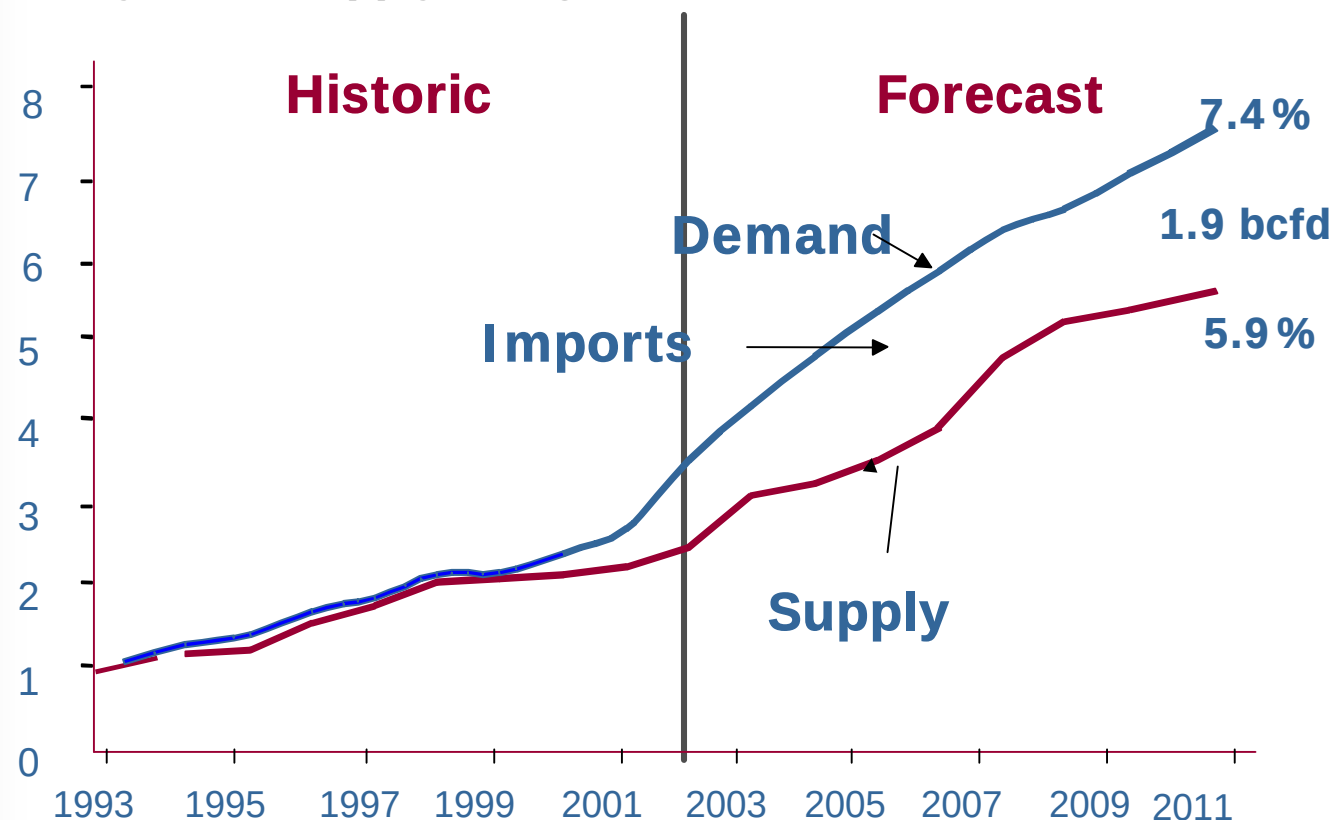
- The CRE has granted 132 permits that represent more than USD 5 billion in investment commitments in the Natural Gas Industry

Type	Permits	Length (miles)	Estimated Investment (million USD)
Transport	107	7,149	1,589
Open Access	16	6,751	1,385
Self-use	91	398	205
Distribution	21	16,217	988
Storage	4	n.a. *	2,336
TOTAL	132	23,366	4,913

* Correspond to four LNG projects with a total storage capacity of 1,250,000 cubic meters of LNG

Natural Gas Challenges in Mexico

In the next ten years demand for Natural Gas will increase 7.4 % annually while supply will grow at a rate of 5.9 %



*Source: Natural Gas Prospective, Ministry of Energy, Mexico 2002

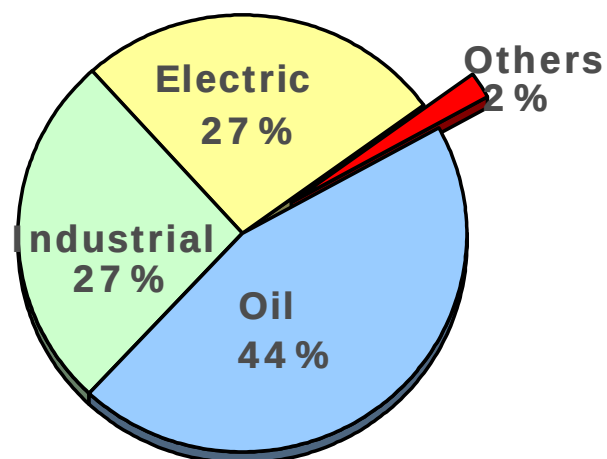
To meet growing demand Mexico needs to increase production and further diversify imports

Natural Gas Demand Drivers

Natural Gas Demand by Sector

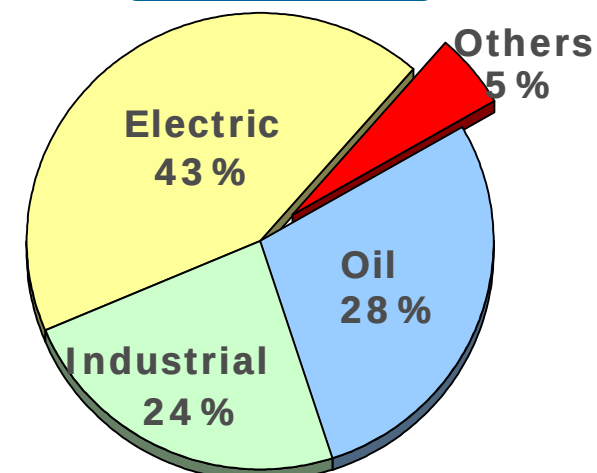
(MMCFD)

2001



4,358

2011

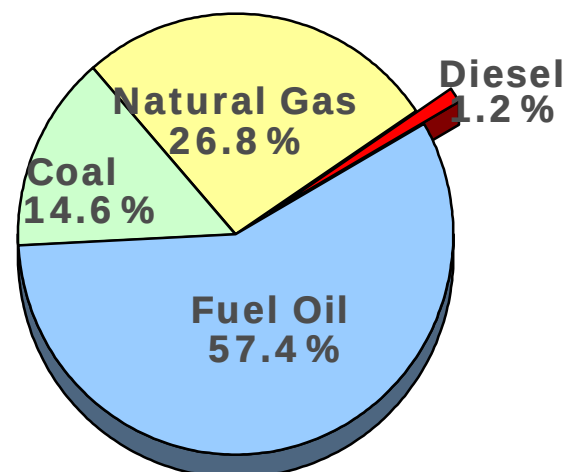


8,884

Fuel Consumption in Electricity Generation

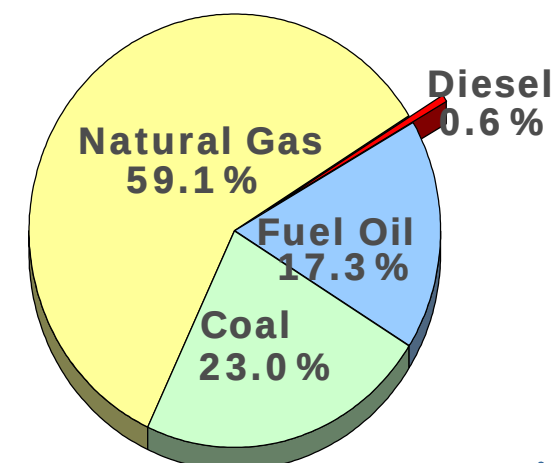
(Terajoules/día)

Diesel 1.2 %



4,369

Diesel 0.6 %

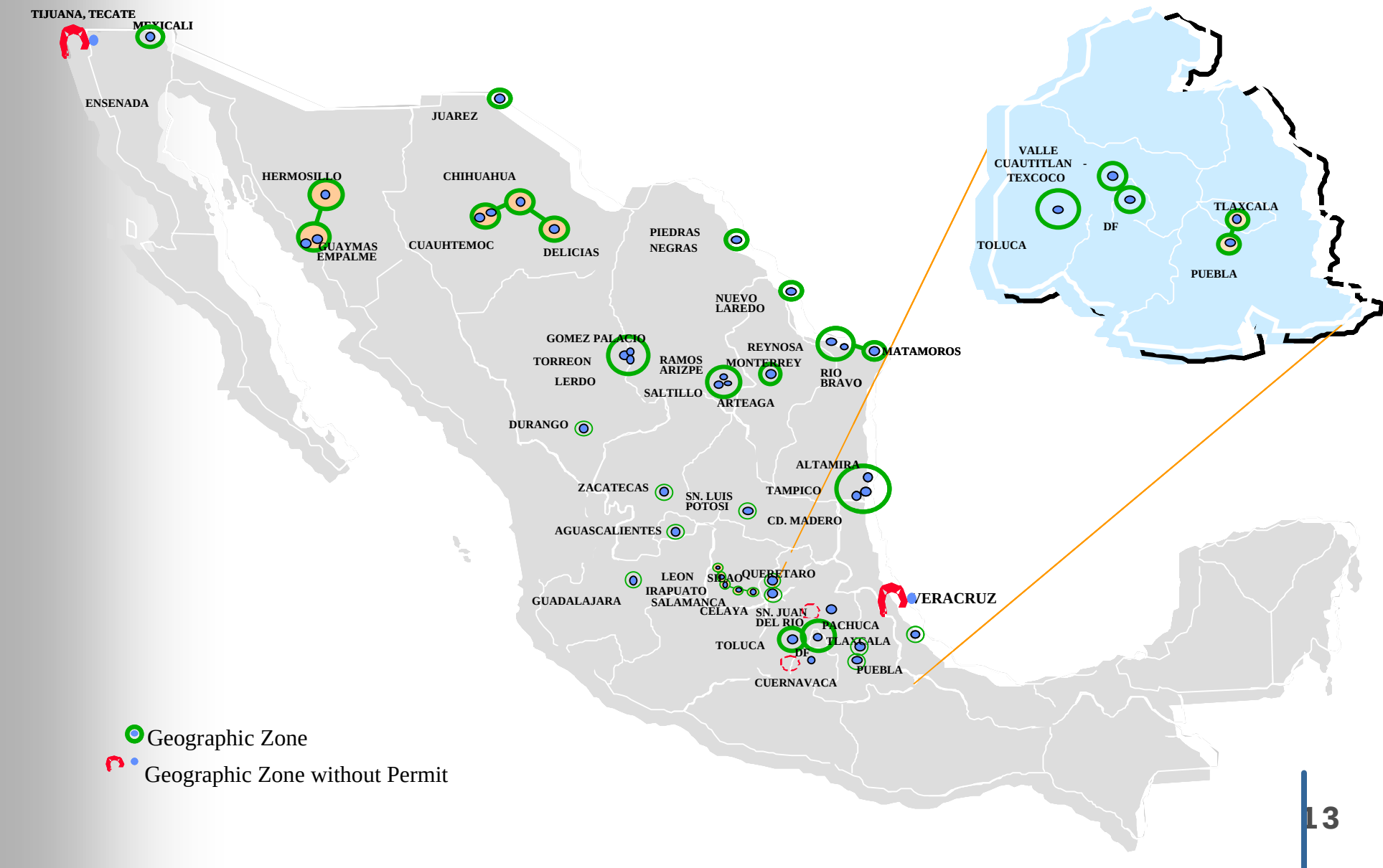


6,184

Main Transportation Permits

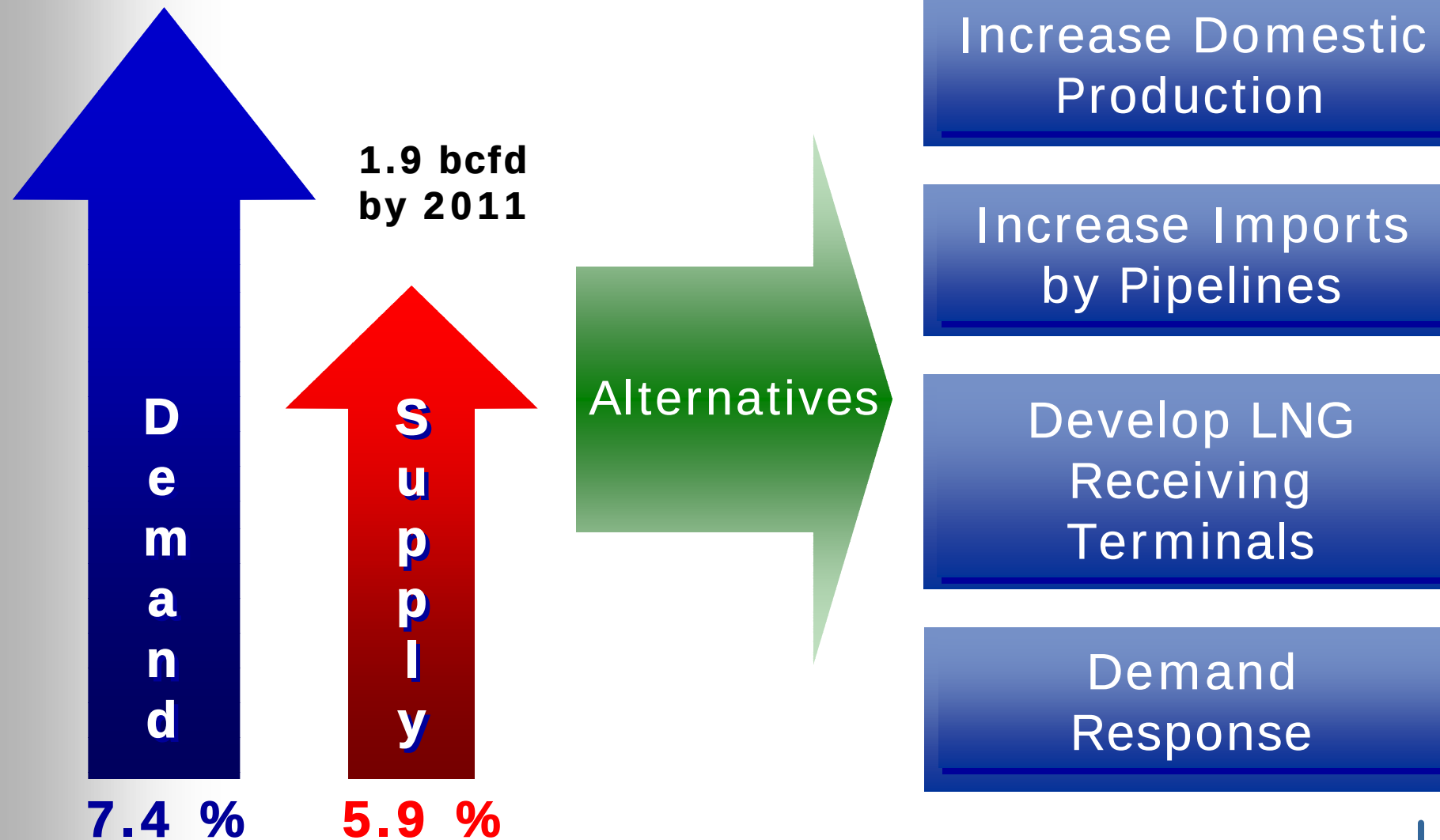


Distribution Geographic Zones

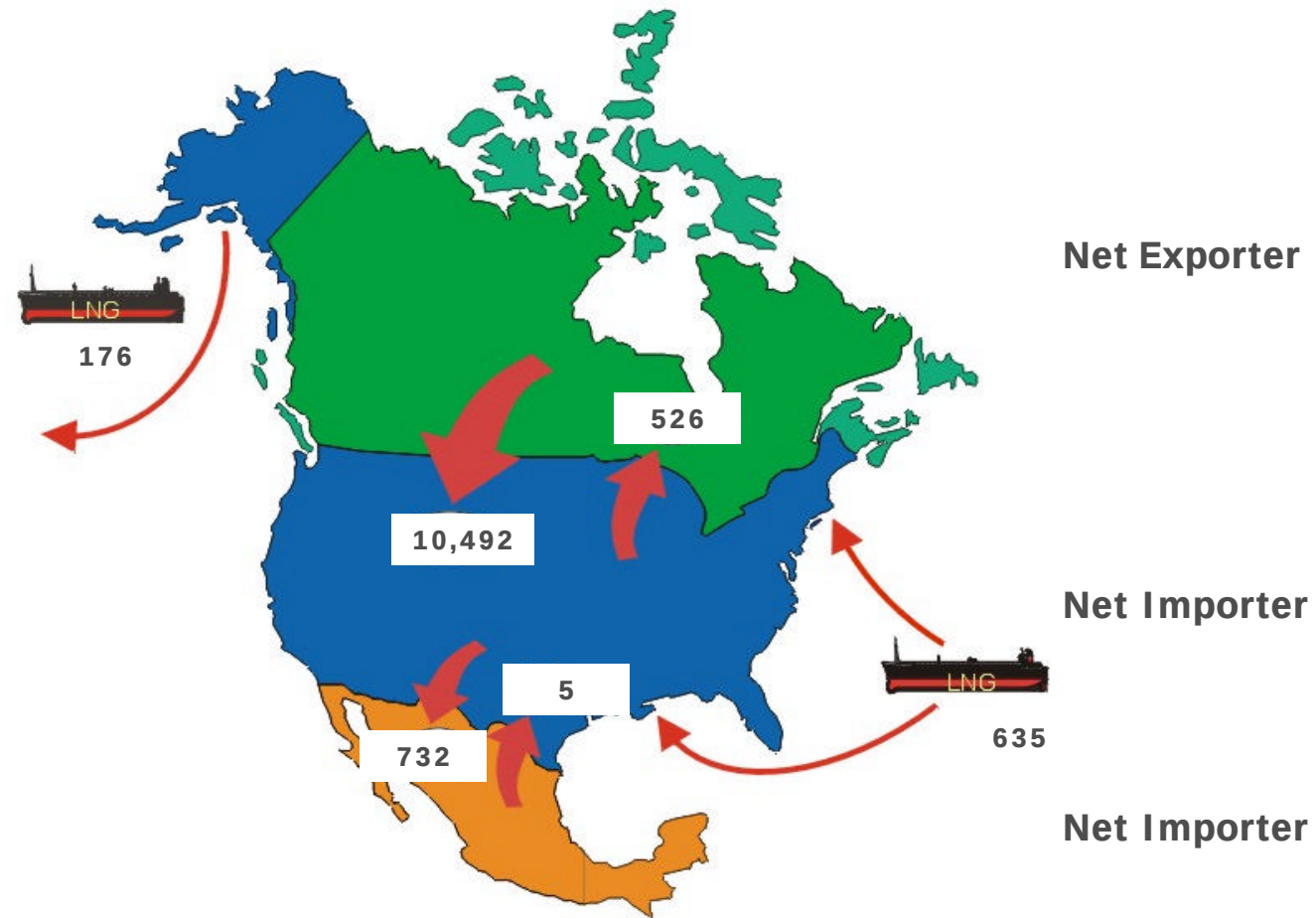


III. Challenges

Alternatives to Balance Natural Gas Supply and Demand



Natural Gas Trade in North America



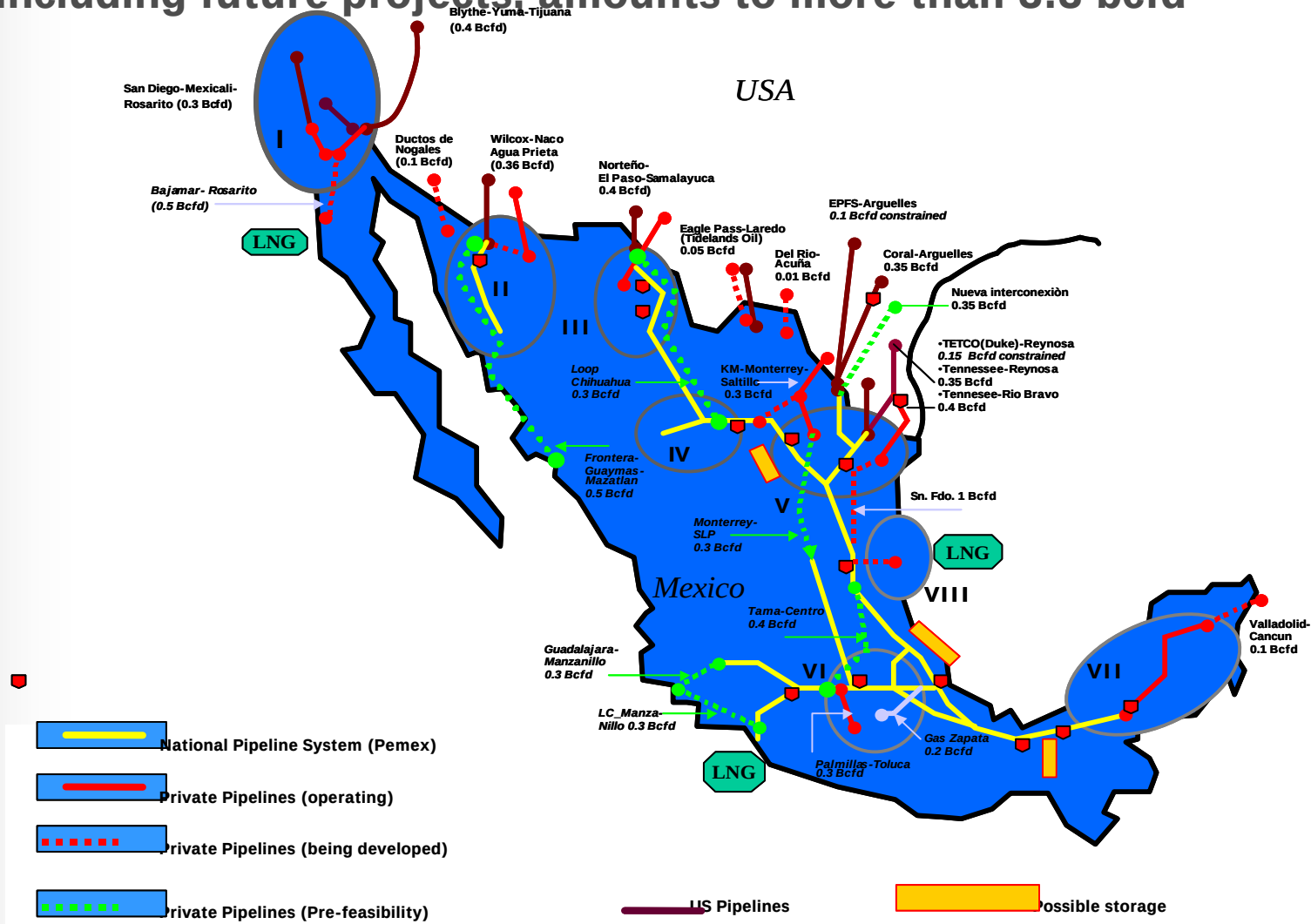
Natural gas imports and exports
(2002, mcf)

Source: U.S. DOE-EIA, Annual Energy Review 2002

Natural Gas Interconnection Infrastructure



✍ Natural gas infrastructure capacity between Mexico and US, including future projects, amounts to more than 3.3 bcfd



*Source: Natural Gas Prospective, Ministry of Energy, Mexico 2002-2011

IV. LNG Projects in Mexico

Development of LNG Projects in Mexico



Time Framework

Key Permits	Project Development	Construction of LNG Terminal	Plant Start-up
<u>Local:</u> • Construction • Land Use <u>State:</u> • Urban Development Regional Program <u>Federal:</u> • Environmental • Technical & Economical • Maritime Infrastructure • Water	• Commercial Agreements • FEED • Financing • Procurement		
2003	2004-06	2007	

LNG permits in Mexico

Over the last 6 months, the CRE granted 4 permits to build and operate LNG receiving facilities in Mexico

- ✍ Three are located in Baja California and one in the Gulf of Mexico
- ✍ Total firm regasification capacity of 3.6 bcfd and peak regasification capacity of 4.3 bcfd
- ✍ Projects could begin operations in 2006 and 2007
- ✍ Open access requirement on non-contracted capacity
- ✍ Storage and regasification tariffs based on cost of providing service
- ✍ Projects will diversify sources of gas and help stabilize prices
- ✍ Full containment tanks

Main Characteristics of the LNG Storage Permits



	Firms			
	Marathon ^{/1}	Shell	Shell	Sempra
Company	Gas Natural Baja California, S. de R.L. de C.V.	Terminal de LNG de Altamira, S. de R.L. de C.V.	Terminal LNG de Baja California, S. de R.L. de C.V.	Energía Costa Azul, S. de R.L. de C.V.
Location	Tijuana, B.C.	Altamira, Tamps.	Costa Azul, Ensenada, B.C.	Costa Azul, Ensenada, B.C.
Permit Granted	30-Abr-03	31-Jul-03	31-Jul-03	7-Ago-03
Estimated Investment (USD million) ^{/2}	558	370	747	669
Number of Storage Tanks	2	2	2	2
Storage Capacity (m³)	280,000	300,000	340,000	330,000
Throughput (MMpcd)	750-850	860 ^{/3}	1 000-1 300	1 000-1 300
Operations Beginning ^{/4}	2007	End of 2006	2007	2007
Possible Supply Sources	Indonesia, Malaysia	Nigeria, Trinidad and Tobago, Algeria, Qatar	Australia, Russia	Bolivia, Australia, Indonesia, Malaysia
Environmental Impact	No	Yes	Yes	Yes
Land Use Permit	No	Yes	No	Yes
CRE's Storage Permit	Yes	Yes	Yes	Yes

^{/1} The project includes the construction of a new wastewater treatment plant, a desalination plant and a power generation central with a capacity of 1,000 MW

^{/2} Preliminary figures provided by companies

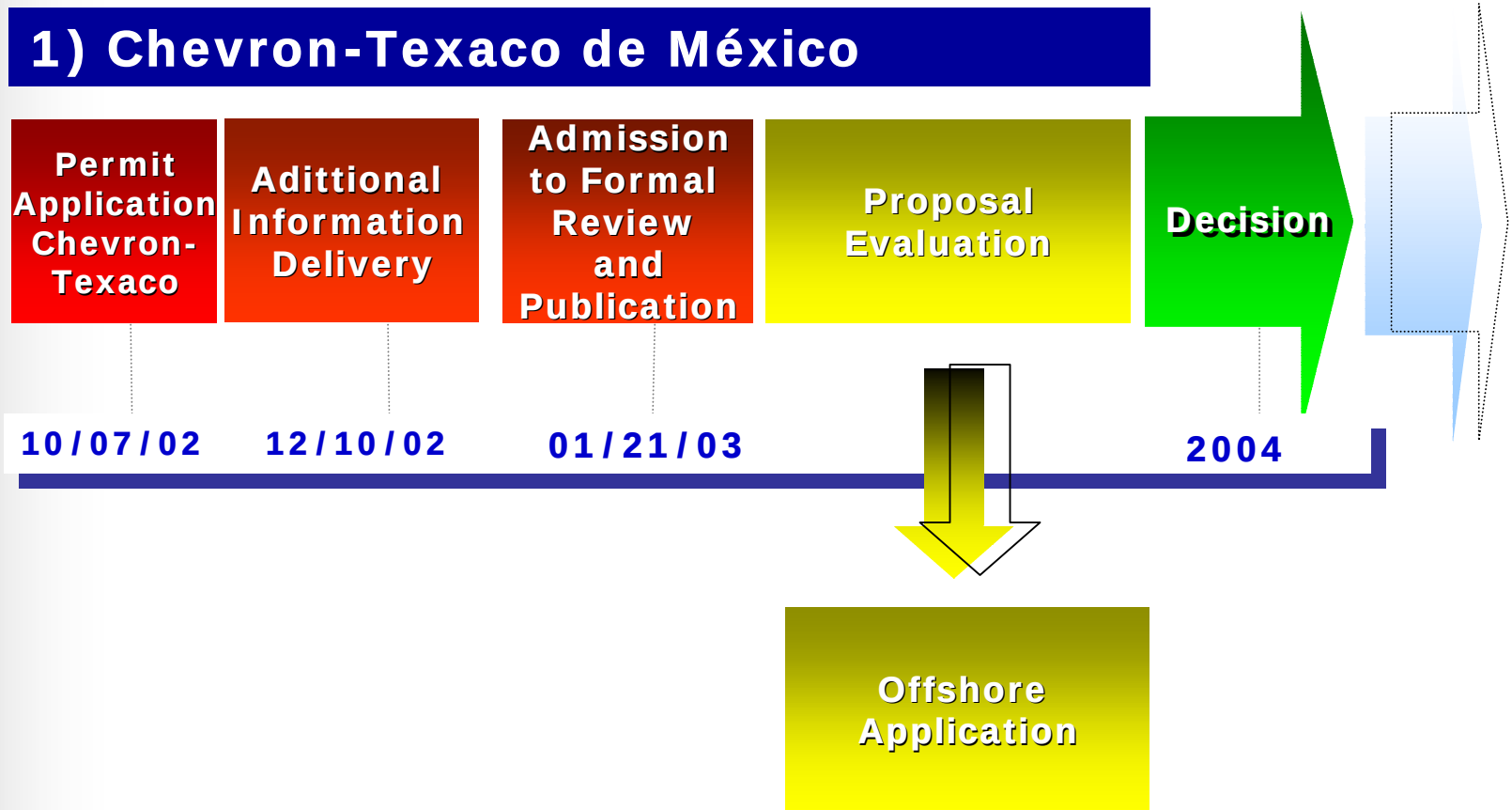
^{/3} Peak capacity of the system

^{/4} Estimated dates provided by companies

Additional Applications for LNG Permits



1) Chevron-Texaco de México



Other Possible LNG Storage Terminals



CRE Challenges in Natural Gas

-  **Conclude evaluation of an offshore LNG application**
-  **Continue Fifth Year D&T Review Processes**
-  **Publication of First Hand Sales permanent regulation**
-  **Review of Natural Gas Tariff Directive**
-  **Define and tender new Geographical Zones for NG Distribution**
-  **Simplify regulations and expedite processes**

www.cre.gob.mx