## New York State Public Service Commission (NYS PSC) & Croatian Energy Regulatory Agency (CERA)

Zagreb, Croatia, June 26-29,2007



# Overview of natural gas market development in Croatia

Nikola Vištica, BSc
Head of the Department for Gas and Oil
Goran Babić, BSc
Independent Associate in Department
for Gas and Oil

## **Republic of Croatia - Key Facts**



Capital: Zagreb

Position: South- Eastern

**Europe** 

Population: 4.5 million

Area: 56 600 km²



## **Content Overview**

- Development, current status and expected changes of legal framework in Croatian natural gas sector
- Natural gas in Croatia market players, supply and consumption of natural gas; structure of consumption
- Gas transmission system
- Gas distribution companies
- Planned and potential infrastructure development
- Tariff system principle
- Gas market opening in Croatia



### **Natural Gas in Croatia**

- Natural Gas production in Croatia commenced in 1959
- Nowadays, natural gas is produced from 17 gas fields
- Gas production from Northern Adriatic fields started in 1999 (gas field Ivana); quantity of gas produced in 2006 was 681 million m<sup>3</sup>
- In 2006 total domestic gas production for the Croatian market was 2.032 billion m<sup>3</sup>
- Natural Gas import from Russia started in 1978 and today's quantity of imported gas is 1.126 billion m³ (2006.)
- Underground Gas Storage facility in Okoli was built in 1987 and today's capacity is 558 million m<sup>3</sup>



## Legal framework 2001 - 2006

#### 2001

#### First package of energy laws

- The Energy Act
- The Act on the Regulation of Energy Activities
- The Act on the Gas Market

#### 2002

- The Rulebook on the Gas Distribution
- Tariff System for Provision of Natural Gas for Tariff Customers
- Tariff System for Transportation of Natural Gas for Gas Suppliers and Eligible Gas Customers

#### 2003

 Grid Code for Access to the Gas Pipeline Transportation System

#### 2004

- The Energy Act Amendments
- The Act on the Regulation of Energy Activities new

#### 2005

The Act on the Gas Market – Amendments

#### 2006

- The Act on the Oil and Oil Derivatives Market new
- Tariff system for Natural Gas Transportation

#### 2007

- Tariff system for Natural Gas Transportation Amendments
- Tariff system for Natural Gas Distribution
- Tariff system for Natural Gas Supply for Tariff Customers
- The Act on the Gas Market new (fully harmonized with the Directives 2003/55/EC and 2004/67 and with the Regulation 1775/2005)



## **Expected changes of the legislation**

### 2007+

- The Rulebook on the Natural Gas Market Organisation first adoption
- General Conditions for Gas Supply first adoption
- Grid Code for Natural Gas Transportation amendments
- Grid Code for Natural Gas Distribution first adoption
- The Decree on Security of Natural Gas Supply first adoption
- Tariff systems amendments

## Structure of natural gas market in Croatia

wholesale/supply company

38
distribution
companies

direct industrial customers

production company

NATURAL GAS MARKET

**546.000** gas users

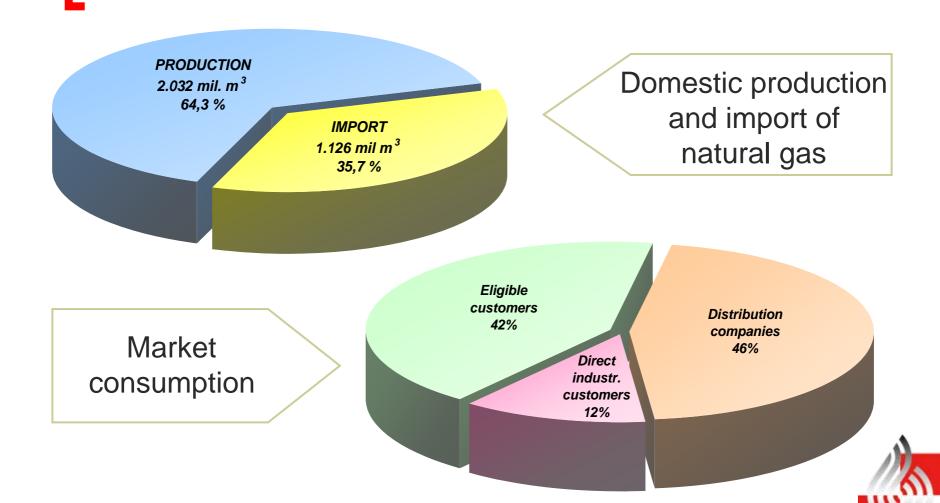
storage company

transport company

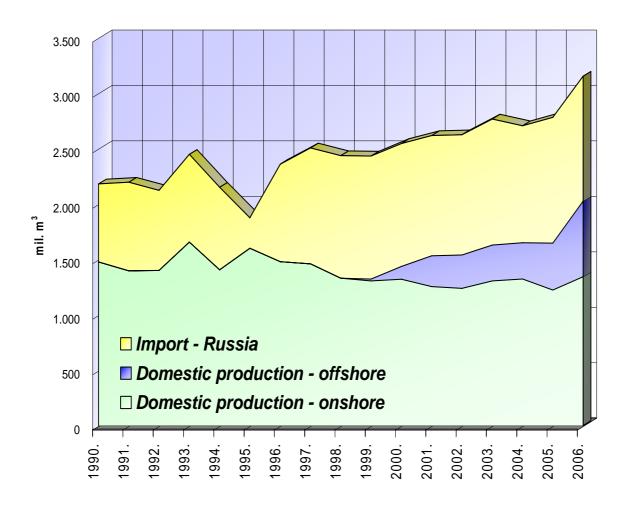
eligible customers



# Natural gas supply and market consumption (2006)



## **Structure of Natural Gas Supply in Croatia (1990 - 2006)**

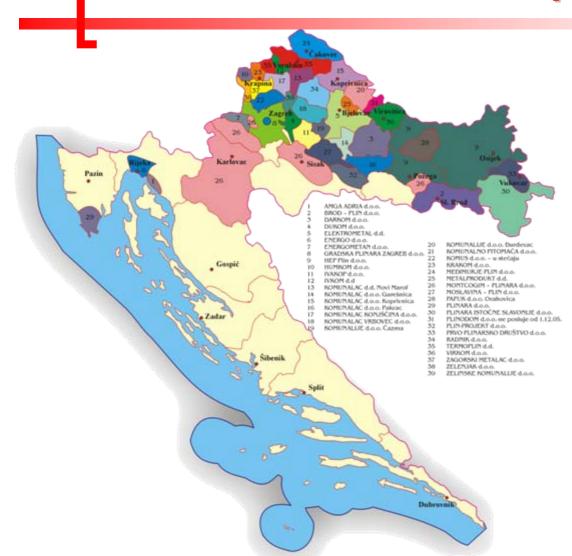




## **Gas Transmission System**



### **Gas Distribution Companies**



- Gas distribution is carried out by 38 companies – three of them distribute town/mixed gas, and the rest distribute natural gas.
- The largest distributors are The Zagreb Municipal Gasworks (219.736 consumers, 423.492 m³ delivered in 2006) and HEP – Gasworks Osijek (61.191 consumers, 166.677 m³ delivered in 2006).
- The distributive gas prices for end consumers ranging from 1,88 to 2,30 kn/m<sup>3</sup> for households and 1,84 -2,53 kn/m<sup>3</sup> for industrial customers



## **Planned and Potential Development**



### Underground gas storage Beničanci

- Possible storage capacity
   400 million 2 billion m<sup>3</sup>
- Storage volume provides a possibility for a regional storage

#### **LNG** terminal

- Development of projects in 5 to 7 years.
- Finishing project in two phases,
  - first phase 5-6 billion m<sup>3</sup>,
  - second phase 14 billion m<sup>3</sup>. LNG
- new supply of natural gas for CROATIA at the amount of up to 2,0 bill. m³/year

## Natural Gas Market Opening - new Act on the Gas Market

The status of the eligible customer, pursuant to the new Act on the Gas Market has been granted to the following gas customers:

- Consumer that uses gas for electricity generation in own facility, regardless of the annual consumption quantities and within limits of gas quantities for such purposes
- Consumer that uses gas for synchronous generation of electricity and heat energy, regardless of the annual consumption quantities and within limits of gas quantities for such purposes
- Consumer with the consumption of more than 25 million m³ of gas in the previous calendar year
- Consumer that uses gas for carrying out the activity of production of crude cast iron, steel and ferroalloy, with annual production of at least 50,000 tons of crude steel

According to new Act on the Gas Market:

from August 1, 2007 the status of eligible customer is granted to all consumers except households

from August 1, 2008 the status of eligible customer is granted to all consumers, including households.





## THANK YOU FOR YOUR ATTENTION!

CROATIAN ENERGY REGULATORY AGENCY

Koturaška 51, Zagreb

Tel: ++385 1 6115 410

Fax: ++385 1 6115 344

Web: www.hera.hr