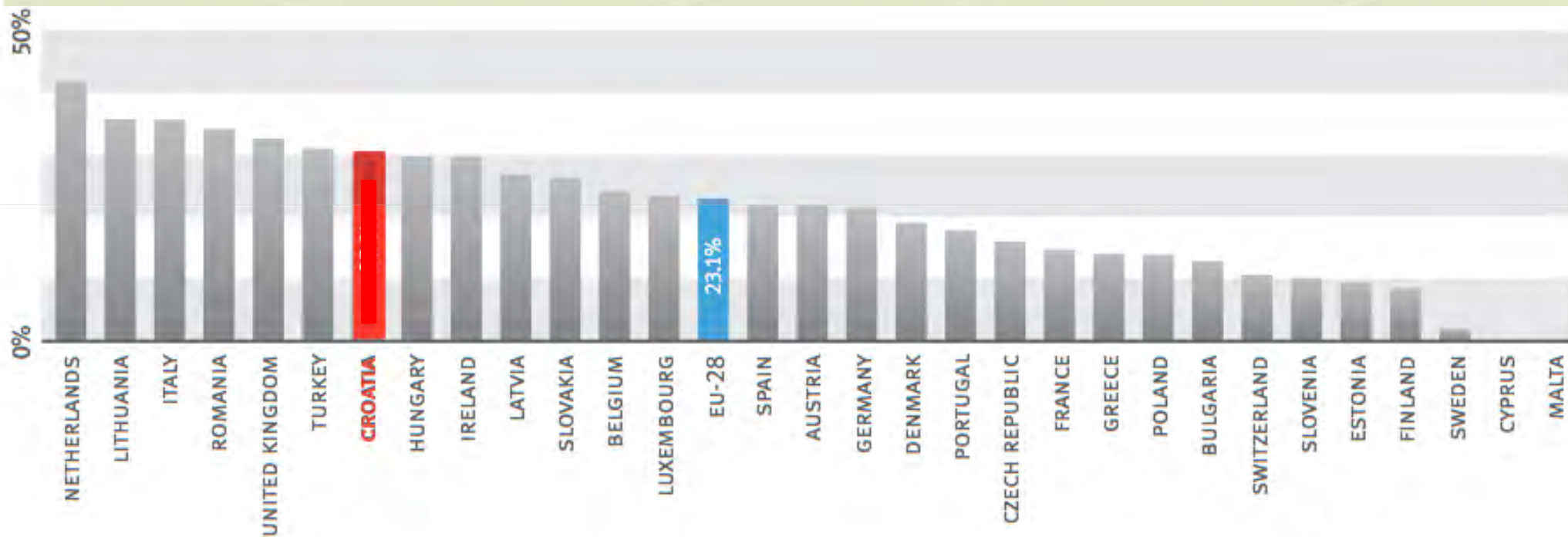


DEVELOPMENT OF THE CROATIAN GAS SYSTEM – INCORPORATION IN THE EUROPEAN FLOWS AND GAS MARKET

Vladimir Đurović

Croatia and the SE European Energy Bridge
10 October 2014, Zagreb

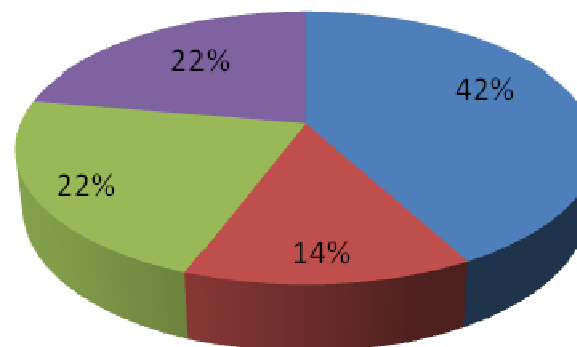


Source: EUROGAS

NATURAL GAS CONSUMPTION 2013	TWh
Distribution companies	10,91
Direct industrial consumers	3,51
Transformation	5,73
Petrochemistry	5,76
UKUPNO	25,91

NATURAL GAS CONSUMPTION 2013

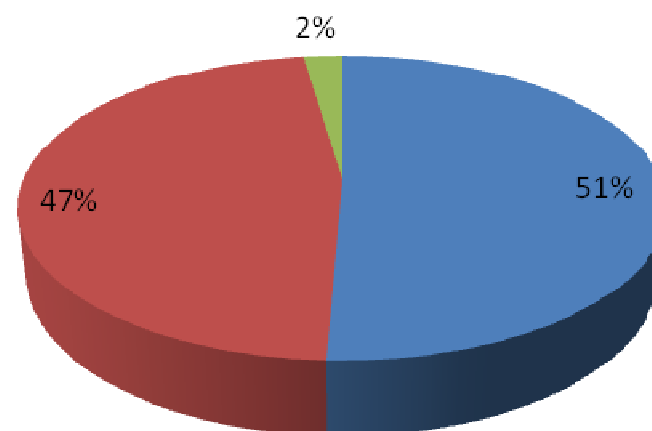
- Distribution companies
- Direct industrial consumers
- Transformation
- Petrochemistry



NATURAL GAS SUPPLY 2013	TWh
DOMESTIC PRODUCTION	13,12
IMPORT	12,2
UGS	0,59
MARKET TOTAL	25,91

NATURAL GAS SUPPLY 2013

■ DOMESTIC PRODUCTION ■ IMPORT ■ UGS





**HIGHLY DEVELOPED NATIONAL GAS TRANSMISSION
SYSTEM**

+

UGS POTENTIALS

+

INTERCONNECTIONS

+

NEW SUPPLY PROJECTS

+

NEW PRODUCTION POTENTIAL



**INCORPORATION IN REGIONAL AND EUROPEAN GAS
FLOWS**



INTEGRATION IN REGIONAL AND EUROPEAN GAS MARKET



TAP + IAP
LNG (LNGRV, Adria ...)
SOUTH STREAM
NABUCCO, ITGI ???

CRUCIAL FOR THE SEE NATURAL GAS SECTOR DEVELOPMENT, SINCE BY PASSING OVER THE TERRITORIES OF THESE COUNTRIES THESE GAS PIPELINES WILL:

- Expand existing gas transmission systems and interconnect them
- Be a backbone of development of the gas transmission systems in the countries where those systems are still underdeveloped
- Connect gas transmission systems of SEE countries and integrate them into the comprehensive European gas transmission system
- Provide natural gas supply from new Middle East, Caspian and other sources
- Provide integration of SEE gas market with the European gas market

Interconnections:

- Interconnections Croatia/BiH
- Interconnections Croatia/Slovenia
- Interconnection Croatia/Serbia
- Interconnection Croatia/Italy

Regional projects:

- Ionian-Adriatic Pipeline (IAP)
- LNG Project
- South Stream
- North – South Gas Corridor



Connection of gas transmission system of Lika and Dalmatia with TAP Project (Trans – Adriatic-Pipeline)

MP Split (CRO) – Fieri (ALB) DN800 / 85-75 bar, L= 511 km

Supply with natural gas - **Albania, Montenegro, Bosnia and Herzegovina and Croatia**

Max capacity: **5 bcm/y**

Possibility of **transit** of natural gas to Central and Western Europe

Possibility of **reverse flow**

September 2007- Albania, Montenegro and Croatia signed Ministerial Declaration. December 2008 - Bosnia and Herzegovina signed Ministerial Declaration.

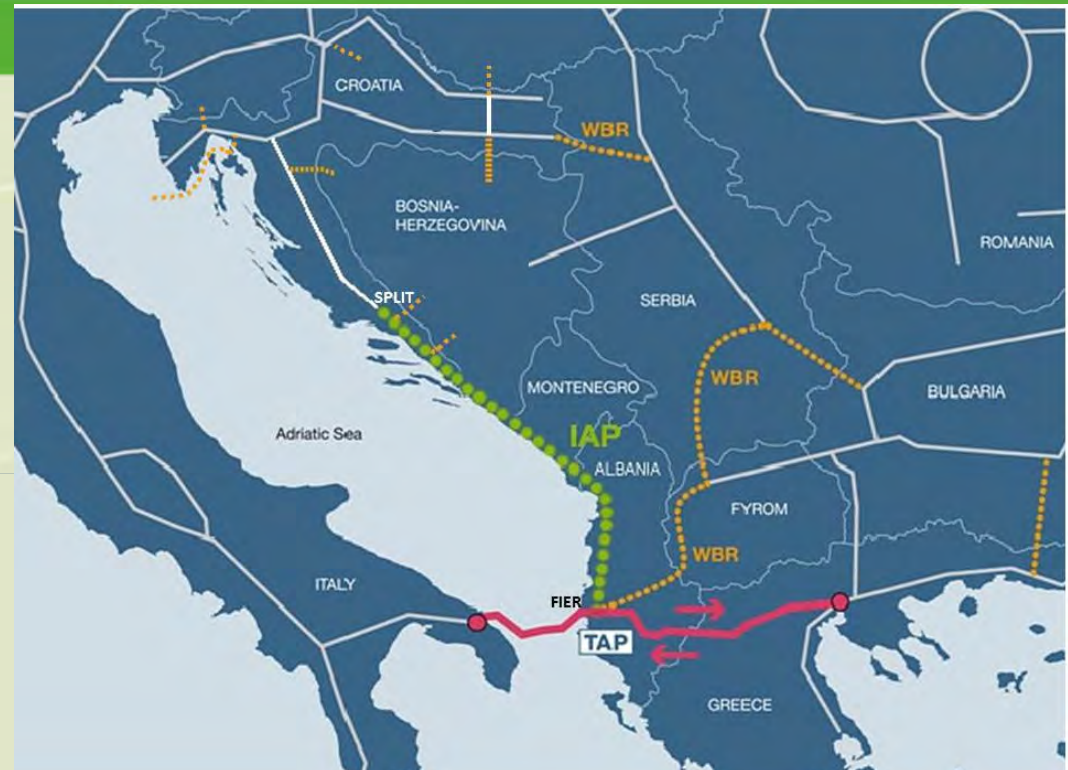
EGL and Plinacro signed MOU

June 2010 – Interstate Committee established, led by Croatia

February 2011 – Plinacro and TAP signed MORIS

March 2013 – SOCAR/Plinacro signed MOUC

Request for financing from **WBIF** for **comprehensive feasibility study** for the entire IAP led by Croatia i.e. Plinacro; granted EUR 3,5 million – ***STUDY COMPLETED***



Source IAP – Feasibility Study

28 June 2013 - Shah Deniz Consortium took decision on the selection of the TRANS ADRIATIC PIPELINE (TAP) for the transmission of gas from Shah Deniz II field

➤ **Decision – additional impetus and encouragement for the Ionian Adriatic Pipeline**

the implementation of this project:

- introduces an environmentally sound energy source in the region (replacement for wood, coal, fuel oil...)
- facilitates gasification of Albania
- creates precondition for gasification of Montenegro
- facilitates gasification of significant part of Bosnia and Herzegovina
- provides diversified supply for the entire region
- provides access to future LNG terminals in Croatia and Albania
- provides access to Croatian and Albanian storage capacities
- provides significant transit and income thereof to Albania, Montenegro and Croatia
- provides access to new potential gas reserves in Montenegro, Croatia and Albania**
- fits into the idea of south European (EEC) gas ring making one of its key basis
- creates precondition for completing the Adriatic gas ring and the connection with the Italian gas transmission system and the systems of Slovenia and Hungary – wide regional importance – transregional connecting
- significantly activates the entire region in an economic aspect

LNG Croatia:

Founded in 2010 - Plinacro 50%
(leaving the project), HEP 50%

Capacity: 4-6 bcm/y

Request for financing from WBIF for
CS, FS and CD; approved EUR 1
million

Study - completed







- Under the umbrella of the European Commission the North – South European Corridor more specifically the North-South Gas Connections has been established

- Working groups-established, Plinacro an active member

- TSOs of the countries involved in the work of the Group presented projects, tariffs, regulations, etc of the infrastructure that enables establishment of Gas Corridor

- 13 September 2012 PLINACRO and GAZ-SYSTEM signed **DECLARATION OF CEE GAS MARKET DEVELOPMENT SUPPORT** with an emphasis on the key role of LNG terminal in Poland and Croatia

- 10 September 2013 CROATIA, HUNGARY and UKRAINE signed **DECLARATION OF THE ADRIATIC GAS CORRIDOR**

GREAT DEVELOPMENT POTENTIALS

**SINERGY OF REGIONAL AS WELL AS
TRANSREGIONAL
APPROACH AND ACTIVITY**

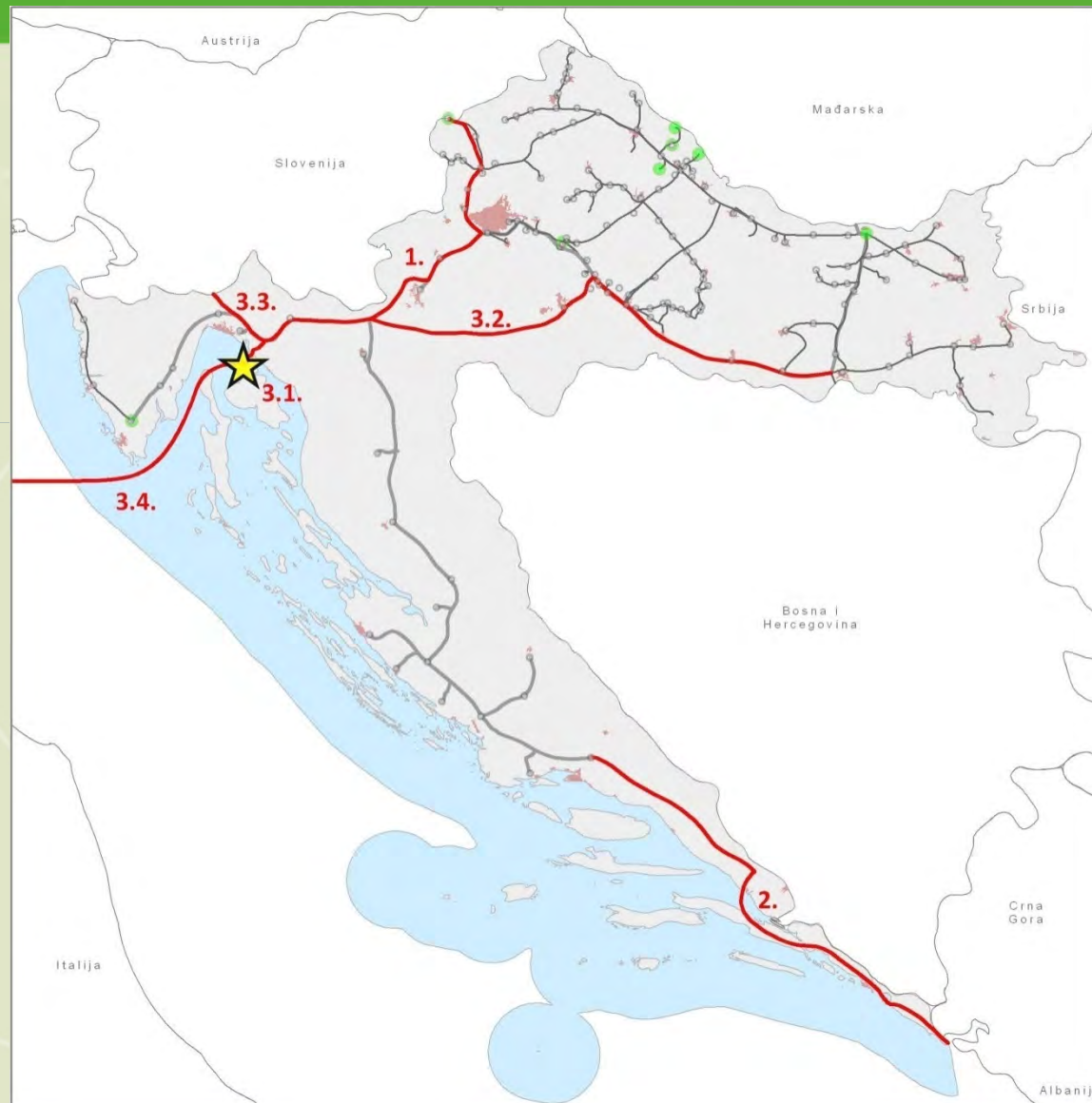


**MARKET DEVELOPMENT
AND
SECURITY OF SUPPLY**



PROJECTS OF COMMON INTEREST- PCI

- **1. Interconnection HR/SLO (Bosiljevo-Karlovac-Lučko-Zabok-Rogatec)**
- **2. IAP**
- **3. Cluster Krk LNG**
 - **LNG Project**
 - **Zlobin-Bosiljevo-Sisak-Kozarac-Slobodnica**
 - **Omišalj-Zlobin Rupa – connected with Jelšane-Kalce**
 - **Omišalj-Casal Borsetti**





PROJECTS OF ENERGY COMMUNITY INTEREST - PECEI

- **1. IAP**
- **2. Interconnection HR/BiH (Slobođnica-B. Brod-Zenica)**
- **3. Interconnection HR/BiH (southern interconnection)**
- **4. Interconnection HR/BiH (western interconnection)**
- **5. LNG Project + Zlobin-Bosiljevo-Sisak-Kozarac-Slobođnica**
- **6. Interconnection HR/SRB (Slobođnica – Sotin – Bačko Novo Selo)**

- 1. COMPRESSOR STATIONS**
- 2. INTERCONNECTION HR/SLO Bosiljevo-Karlovac-Lučko-Zabok-Rogatec**
- 3. IONIAN – ADRIATIC PIPELINE (IAP)**

MEETING DOMESTIC MARKET REQUIREMENTS

+

**INTEGRATION INTO NEW SUPPLY PROJECTS AND
REGIONAL AND EUROPEAN NATURAL GAS
ROUTES**



GAS TRANSMISSION SYSTEM DEVELOPMENT

+

MARKET DEVELOPMENT

+

SECURITY OF SUPPLY

plinacro

**Thank you for
your attention!**