

THE REGIONAL GAS MARKET OUTLOOK

SERBIA PERSPECTIVE

JP SRBIJAGAS

Milan Zdravković

IENE: 6th SEE Energy Dialogue
Thessaloniki, 30.-31.05.2012

Key issues

- **Gas supply projects to Europe – New routes & New sources**
- **Need for Regional Infrastructure development**
- **Sustainable Consumption increase / Market development**

SEE Gas Market

Gas Supply Projects

- South Stream
- SEEP, TAP, NABUCCO WEST
- InterConnectors

SEE Gas Market - Serbia

South Stream



SEE Gas Market - Serbia

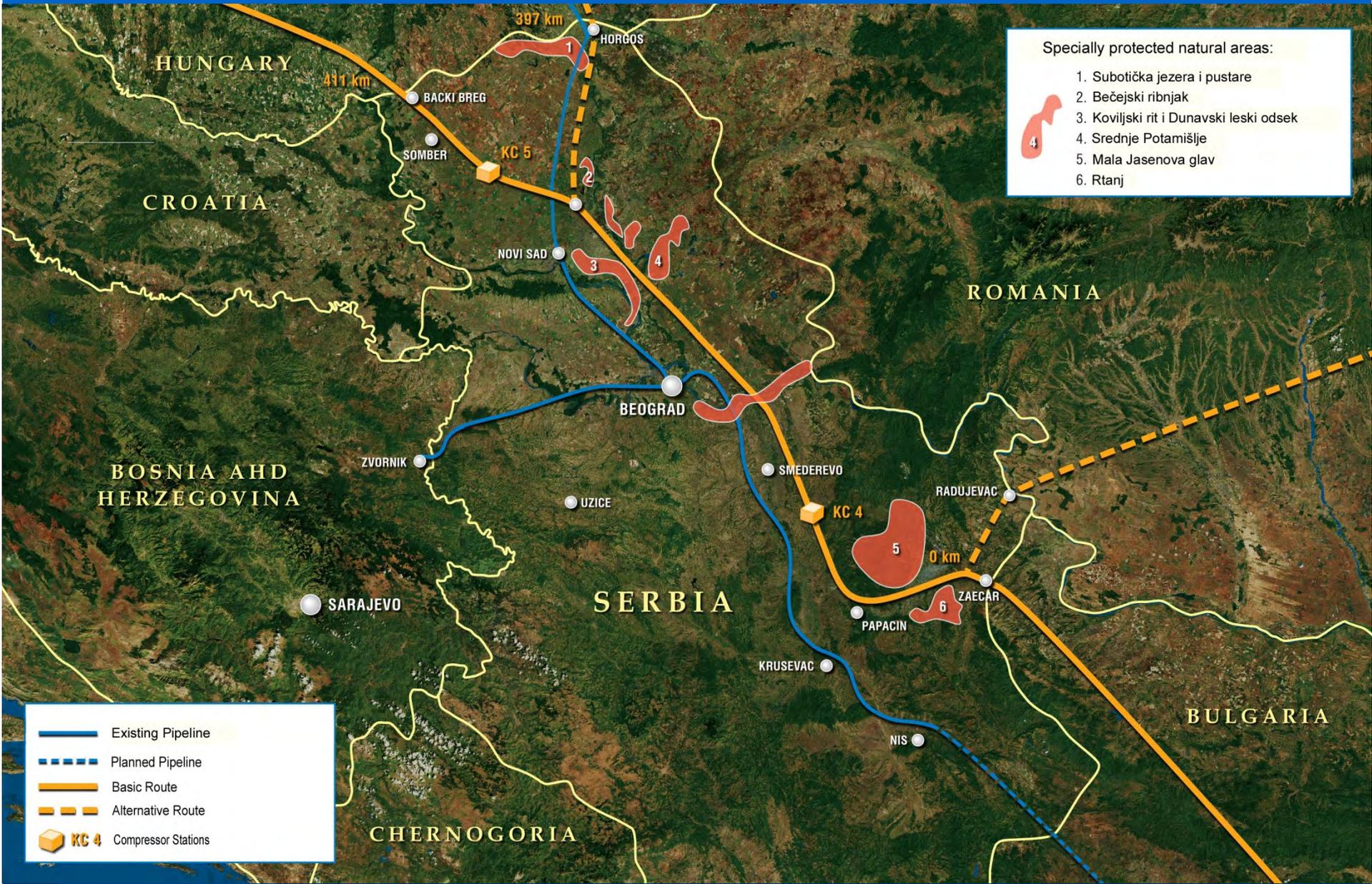


South Stream Serbia

Pipeline Route

The visible route of the future gas pipeline would spread from the border of the Republic of Serbia and the Republic of Bulgaria to the border of Republic of Serbia and the Republic of Hungary with the two branches spreading to the borders of the Republic of Serbia with the Republic of Croatia as well as the Republic of Srpska.

South Stream Serbia



- Specially protected natural areas:
1. Subotička jezera i pustare
 2. Bečejski ribnjak
 3. Koviljski rit i Dunavski leski odsek
 4. Srednje Potamišlje
 5. Mala Jasenova glav
 6. Rtanj

- Existing Pipeline
- Planned Pipeline
- Basic Route
- Alternative Route
- KC 4 Compressor Stations

South Stream Serbia

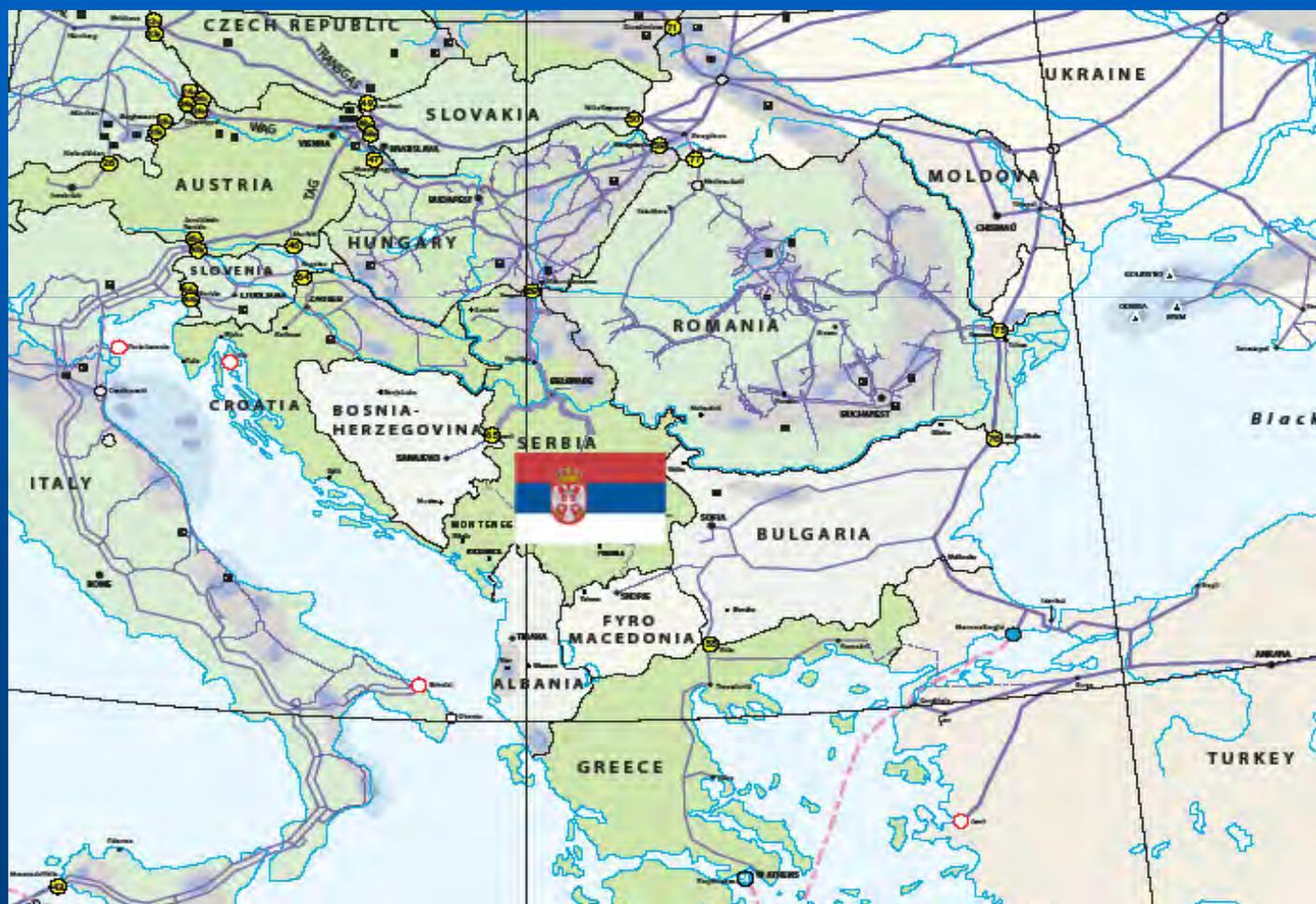
South Stream Serbia

Project Status

- The Feasibility Study has been implemented with the General Project design.
- A Spatial Plan of Special Purpose is in the phase of implementation
- Designed route includes app. 400 km of the main high pressure pipeline crossing the territory of Serbia.
- Construction to start in the 4Q 2012.

South Stream Serbia

Regional Infrastructure Development



Regional Infrastructure Development

- **Current Status**

- Poor interconnectivity in the Region
- Low dynamics of implementation of the Interconnection projects
- Western Balkans Energy Gas Ring concept still beyond implementation

WB Regional Infrastructure

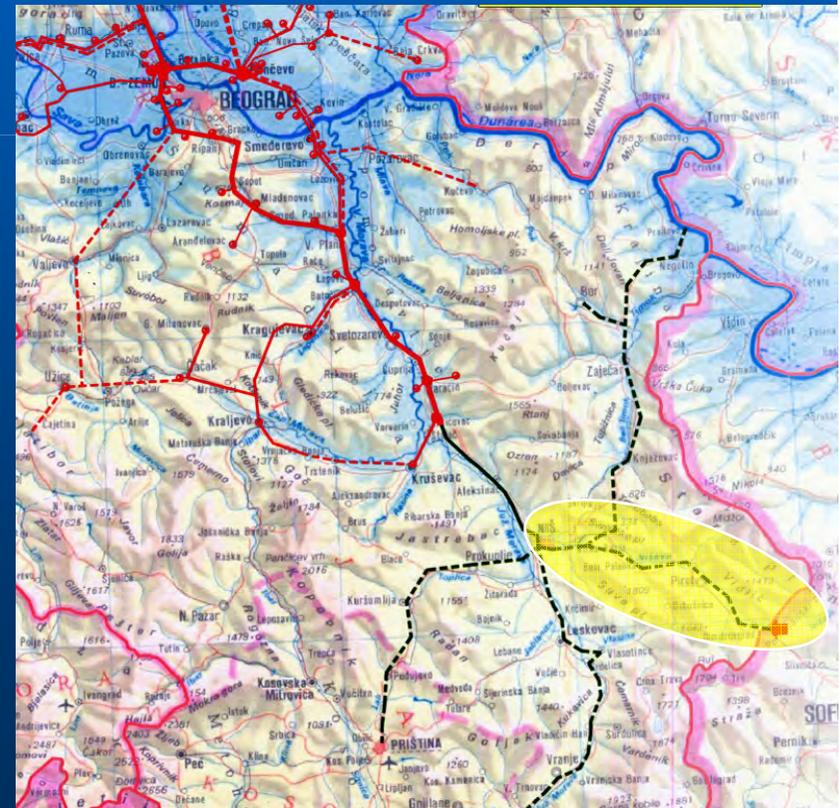


Regional Infrastructure Development

● Interconnector Bulgaria – Serbia

- Interconnection location: *Niš - Dimitrovgrad (Serbia) – Sofia (Bulgaria)*
- *Technical parameters (Serbian part):*
 - Pipeline Capacity 1.8 bcm/y
 - Pipeline length 108 km
 - Pipeline Diameter 600 mm
 - Input Pressure 55 bar
- Investment cost 60m €
- *Project Status:* FS with ESIA brought to the final adjustments
- Financial structure open

Regional Infrastructure - Serbia



Regional Infrastructure Development

● Interconnector Bulgaria – Serbia

Project background:

- Memorandum of Understanding signed between Bulgaria and Serbia in 2005
- EC DG Energy initiative for the project implementation in 2009
- Joint Statement signed by Ministers and EC in 2010 mandating SRBIJAGAS and BULGARTRANS GAS to set up formal Working Group which would take the ownership of the timely preparation and implementation of the interconnector project.
- In 2010 Western Balkans infrastructure Projects Facility approved the funding of the Feasibility Study, including an Environmental and Social Impact Assessment, for the Serbian part of interconnector.
- FS finalized required for additional elaboration from some Stakeholders.

Regional Infrastructure - Serbia

- Financial concept of project implementation still open.

Infrastructure Development vs. Market Development

● Brainstorming:

- Natural gas Market development requires Infrastructure.
- Natural gas Infrastructure development requires sustainable market development.
- If the individual markets are seen and even obliged to integrate into the integrated regional market, should the responsibility to build the missing infrastructure be shared between local TSOs or with the Concept promoter as well?

Natural Gas Market in WB

Market Development: Synergy of Natural Gas and Renewables

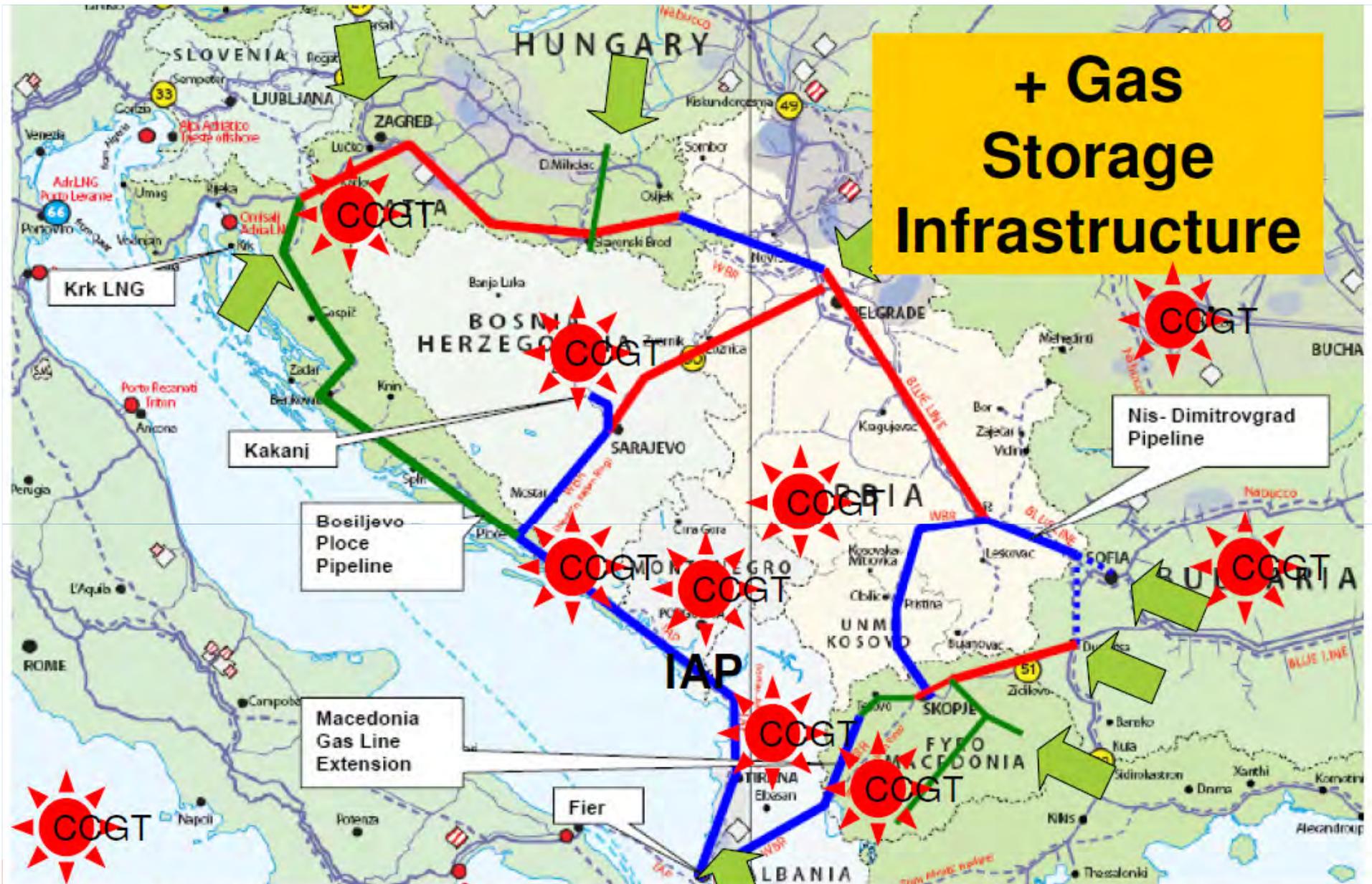
Natural Gas - Wind - Solar

Natural gas can
produce clean base
load support for
intermittent renewables



An ideal combination

CCGT perspective in Serbia



+ Gas Storage Infrastructure

- Existing Infrastructure
- Planned or under construction
- Existing Infrastructure

Energy Community Gas Ring

Market Development

According to the preliminary analyze within Republic of Serbia longterm Energetics Development Strategy, potential locations for the CCGT are:

- city of Subotica (30 MWe electric power + 40 MW basic thermal load)
- city of Novi Sad (300 MWe + 200 MWt),
- city of Zrenjanin (60 MWe + 30 MWt),
- city of Sremska Mitrovica (60 MWe + 90 MWt),
- city of Belgrade – Novi Beograd (400 MWe + 260 MWt),
- city of Kragujevac (100 MWe + 60 MWt) and
- city of Niš (100 MWe + 60 MWt).

Total: 850 MWe + 740 MWt

CCGT perspective in Serbia



Conclusions

- European Commission recognized SEE Region as a primary strategic corridor for future natural gas supply to Europe.
- SEE Region is faced with poor interconnectivity between national pipeline systems.
- Individual energy markets in the Region are relatively small, which results in commercial unprofitable character of interconnection projects.
- Missing interconnection infrastructure is a basic precondition for the Regional natural gas market implementation.
- Aspects of security of supply for the Region and criteria of diversified routes and sources of supply spread the responsibility and interest for implementation beyond the limited capability of local TSOs.

Natural Gas Market in WB

**Thank you
for your attention**



Milan Zdravković
Development Sector Director