

Energy Security and Energy Transition in SE Europe

Energy Institute

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FOR SOUTH EAST EUROPE

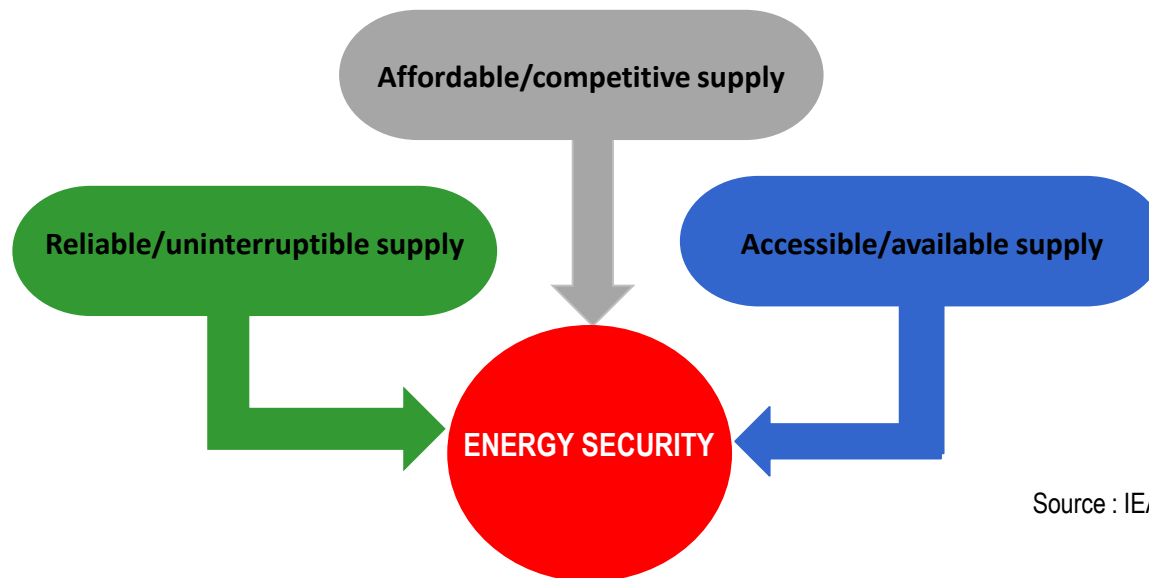


Presentation Outline

- Energy Security
- Legal and Institutional Framework
- The implementation by ENTSOG of the “Risk Assessment” under article 7 of the New Security Gas Supply Regulation (EU) No 1938/2017
- The “solidarity” mechanism under article 13 of the New Security Gas Supply Regulation (EU) No 1938/2017
- Stress tests performed back in 2014
- CESEC
- Key points of the main drives towards the Gas liberalization in SE Europe
- Conclusion

Energy Security- Definition

- The International Energy Agency (IEA; 2014) defines energy security as “the uninterrupted availability of energy sources at an affordable price”.



Source : IEA, 2014

- Under Article 2 of point 32 of Directive 2009/73/EC “Security” means

Legal and Institutional Framework for Energy Security

Legal and institutional Framework (I)

- Third Energy Package (TEP) - contains three Regulations and Two Directives :
 - ❑ Directive 2009/72/EC concerning **common rules for the internal market in electricity** and repealing Directive 2003/54/EC (the “Third Electricity Directive”)
 - ❑ Directive 2009/73/EC concerning **common rules for the internal market in natural gas** and repealing Directive 2003/55/ECA Gas Directive amending and completing the existing Gas Directive 2003/55 (the “Third Gas Directive”)
 - ❑ Regulation (EC) No 713/2009 establishing an **Agency for the Cooperation of Energy Regulators** (the “ACER Regulation”)
 - ❑ Regulation (EC) No 714/2009 **on conditions for access to the network** for cross border exchanges in electricity and repealing Regulation (EC) No 1228/2003 (the “New Electricity Regulation”)
 - ❑ Regulation (EC) No 715/2009 **on conditions for access to the natural gas transmission networks** and repealing Regulation (EC) No 1775/2005 1775/05 (the “New Gas Regulation”)
- Directive 2004/67/EC was repealed by Regulation (EU) No 994/2010
- Regulation (EU) No 994/2010 was repealed by the New Security Gas Supply Regulation (EU) No 1938/2017 entered into force on November 1st, 2017

Legal and Institutional Framework for Energy Security

Legal and institutional Framework (II)

- EU Gas Coordination Group
- Energy Community Treaty
- Central and South Eastern Europe High Level Working Group (CESEC)
- **In November 2017 the new Security of Gas Supply Regulation (EU) No 1938/2017 was introduced, which:**
 - **requires the European Network for Transmission System Operators for Gas (ENTSOG) to perform an EU-wide gas supply and infrastructure disruption simulation in order to provide a high level overview of the major supply risks for the EU (*a paradigm will follow*);**
 - **requires EU countries: to cooperate with each other in regional groups to assess common supply risks together (common Risk Assessments) and to develop and agree on joint preventive and emergency measures (to be reflected in their Preventive Action Plans and Emergency Plans);**
 - **introduces the solidarity principle: EU countries must help each other to always guarantee gas supply to the most vulnerable consumers even in severe gas crisis situations (*brief analysis will follow*);**
 - **improves transparency: natural gas companies must officially notify to their national authority their major long-term supply contracts that may be relevant to security of supply (if the contract exceeds 28% of the annual gas consumption in the Member State); and**
 - **ensures that decisions on whether pipelines should have permanent bi-directional capacity (reverse flow) take into consideration the views of all EU countries that could potentially benefit.**

Legal and Institutional Framework for Energy Security

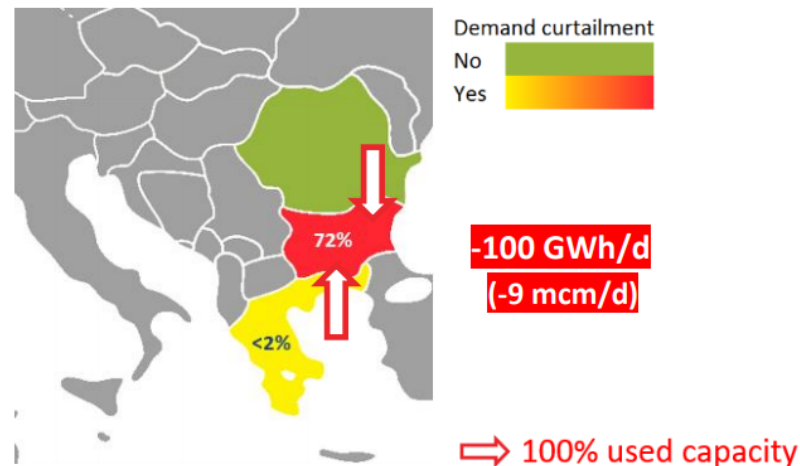
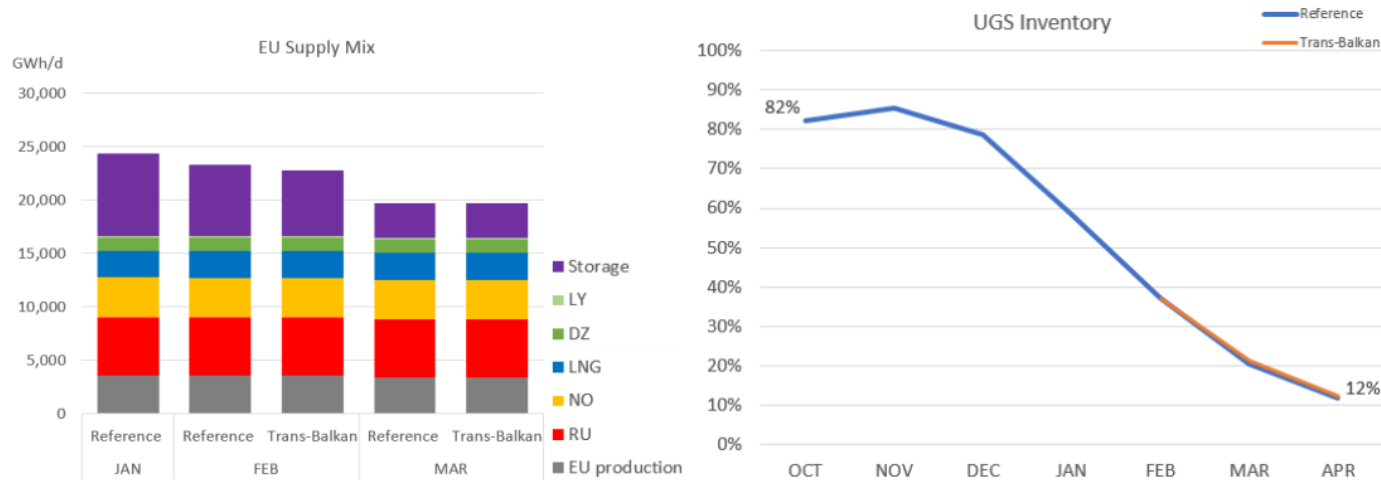
Legal and institutional Framework (III)

➤ **Article 7 “Risk Assessment” of Regulation (EU) No 1938/2017 introduces EU- Wide Security of Supply Simulation Report by ENTSOG**

In November 2017 ENTSOG completed a Union-wide simulation of gas supply and infrastructure disruption scenarios. The methodology and assumptions used have been defined by ENTSOG in cooperation with the Gas Coordination Group. This obligation was stipulated in **Article 7 “Risk Assessment” of Regulation (EU) No 1938/2017**. A set of 19 supply and infrastructure disruption scenarios were proposed by the Gas Coordination Group on March 2017. 21 Member States and 4 organizations provided feedback. On June 28, 2017 the methodology and assumptions for the simulation were agreed at the meeting of the Gas Coordination Group. Two scenarios (No 18 and 19) were not simulated because no infrastructure existed (i.e. Southern Gas Corridor and East Med).

Disruption of the Largest Infrastructure to the Balkan Region (Romania-Bulgaria-Greece) (I)

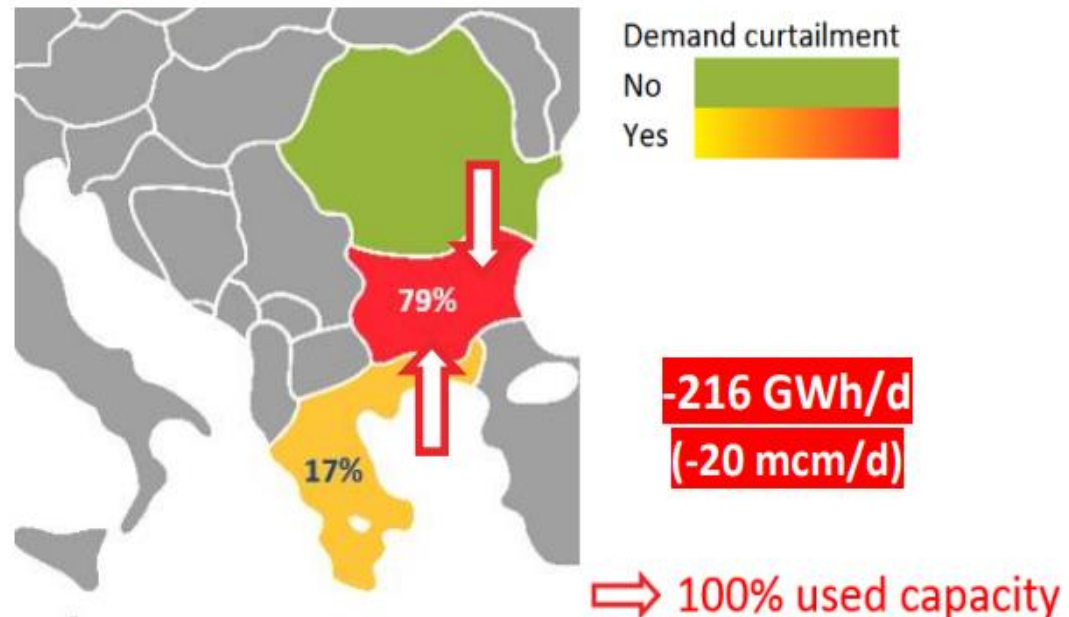
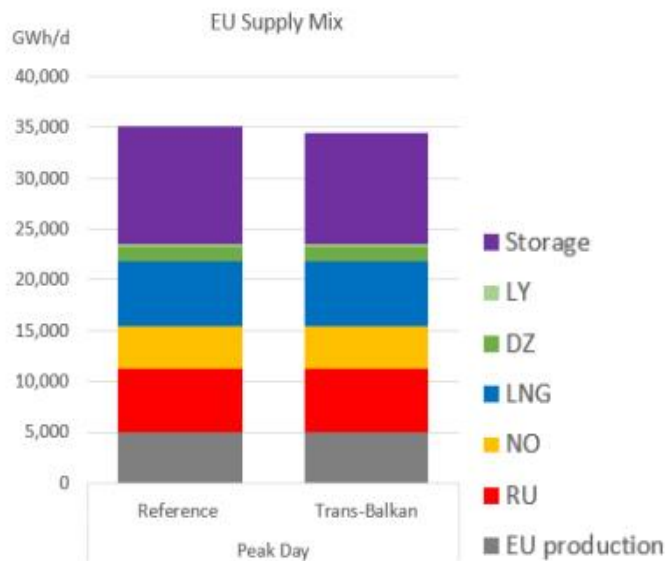
- ❑ ENTSOG's gas supply and infrastructure disruption **scenario #6 (February 15 – February 28)** out of 17 scenarios
- ❑ In case of a 2-month disruption of all gas imports to the EU via Ukraine, infrastructure limitations would result in the need to curtail gas demand in **Romania by 9%**, in **Greece by around 2%** and in **Bulgaria by 72%** of gas demand



Disruption of the Largest Infrastructure to the Balkan Region (Romania-Bulgaria-Greece) (II)

- ❑ These figures look **even worse** when modelled for a disruption via the same route during a **peak day** of exceptionally high gas demand, arising with a statistical probability of once in 20 years
- ❑ Figures for **Bulgaria** are looking **similarly bleak**

Peak day / 20 years – simulated on 15 February



Legal and Institutional Framework for Energy Security

Legal and institutional Framework (IV)

- **Article 13 of Regulation (EU) No 1938/2017** introduces the principle of “SOLIDARITY” and a solidarity mechanism.
 - This Regulation introduces, for the first time, such **a solidarity mechanism** between Member States as an instrument to mitigate the effects of a severe emergency within the Union including a burden-sharing mechanism. The Commission should therefore review the burden-sharing mechanism and the solidarity mechanism in general in the light of future experience with their functioning, and propose, where appropriate, modifications thereto.
 - Member States should adopt the necessary measures for the implementation of the provisions concerning the solidarity mechanism, including by the Member States concerned agreeing on technical, legal and financial arrangements. Member States should describe the details of those arrangements in their emergency plans.
 - The **Commission issued its recommendation (EU) 2018/177 on February 2, 2018** on the elements to be included in the technical, legal and financial arrangements between the Member States for the application of the solidarity mechanism.
 - **By December 1st 2018 the Member States must adopt the necessary measures** in particular, the technical, legal and financial arrangements for the implementation of the solidarity mechanism.

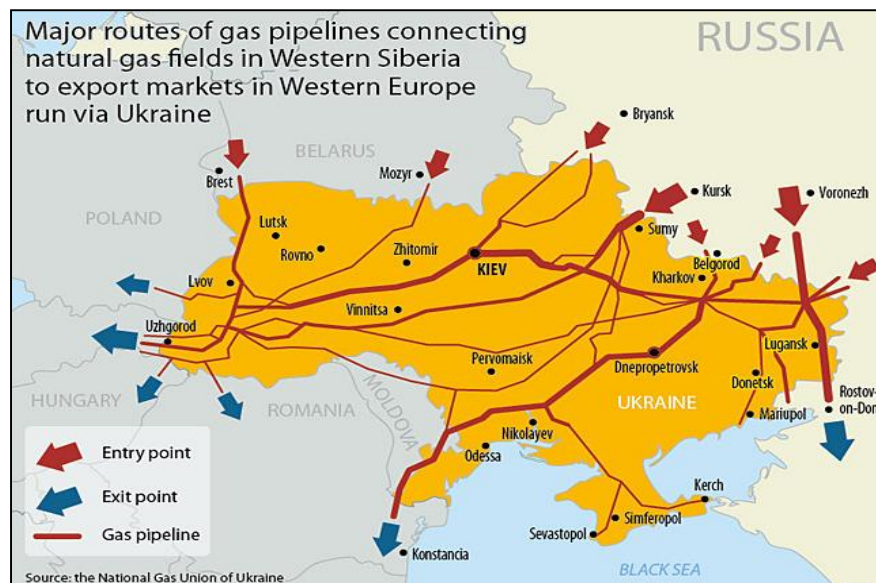
Legal and Institutional Framework for Energy Security

Energy Security Strategy (May 2014)

- 38 European countries, including all EU countries, carried out energy security stress tests in 2014. They simulated two energy supply disruption scenarios for a period of one or six months:
 - a complete halt of Russian gas imports to the EU; and
 - a disruption of Russian gas imports through the Ukrainian transit route

Results:

- ❖ A prolonged supply disruption would have a **substantial impact on the EU**.
- ❖ Eastern EU and Energy Community countries would be particularly affected.
- ❖ If all countries cooperate each other, consumers would remain supplied even in the event of a six month gas disruption.



EU Initiated CESEC to Strengthen Energy Security

- The **Central and South Eastern Europe High Level Working Group** was set up by Austria, Bulgaria, Croatia, Greece, Hungary, Italy, Romania, Slovakia and Slovenia and the EU in February 2015.
 - ❑ They were joined later by eight Energy Community Contracting Parties: Ukraine, Moldova, Serbia, FYROM, Albania, Bosnia and Herzegovina, Kosovo and Montenegro.

- The **initial aim of the group** was to:
 - ❑ coordinate efforts to facilitate the swift completion of cross-border and trans-European projects that diversify gas supplies to the region
 - ❑ develop regional gas markets and implement harmonised EU rules to ensure the optimal functioning of infrastructure.

- At the **4th CESEC ministerial meeting** in Bucharest in September 2017, energy ministers signed a MoU extending the scope of CESEC cooperation. It now also includes:
 - ❑ a joint approach on electricity markets, energy efficiency and renewable development
 - ❑ a list of priority projects to build an interconnected regional electricity market
 - ❑ specific actions to boost renewables and investment in energy efficiency in a region with vast growth potential in these areas.

Members to the MoU of the CESEC High Level Group

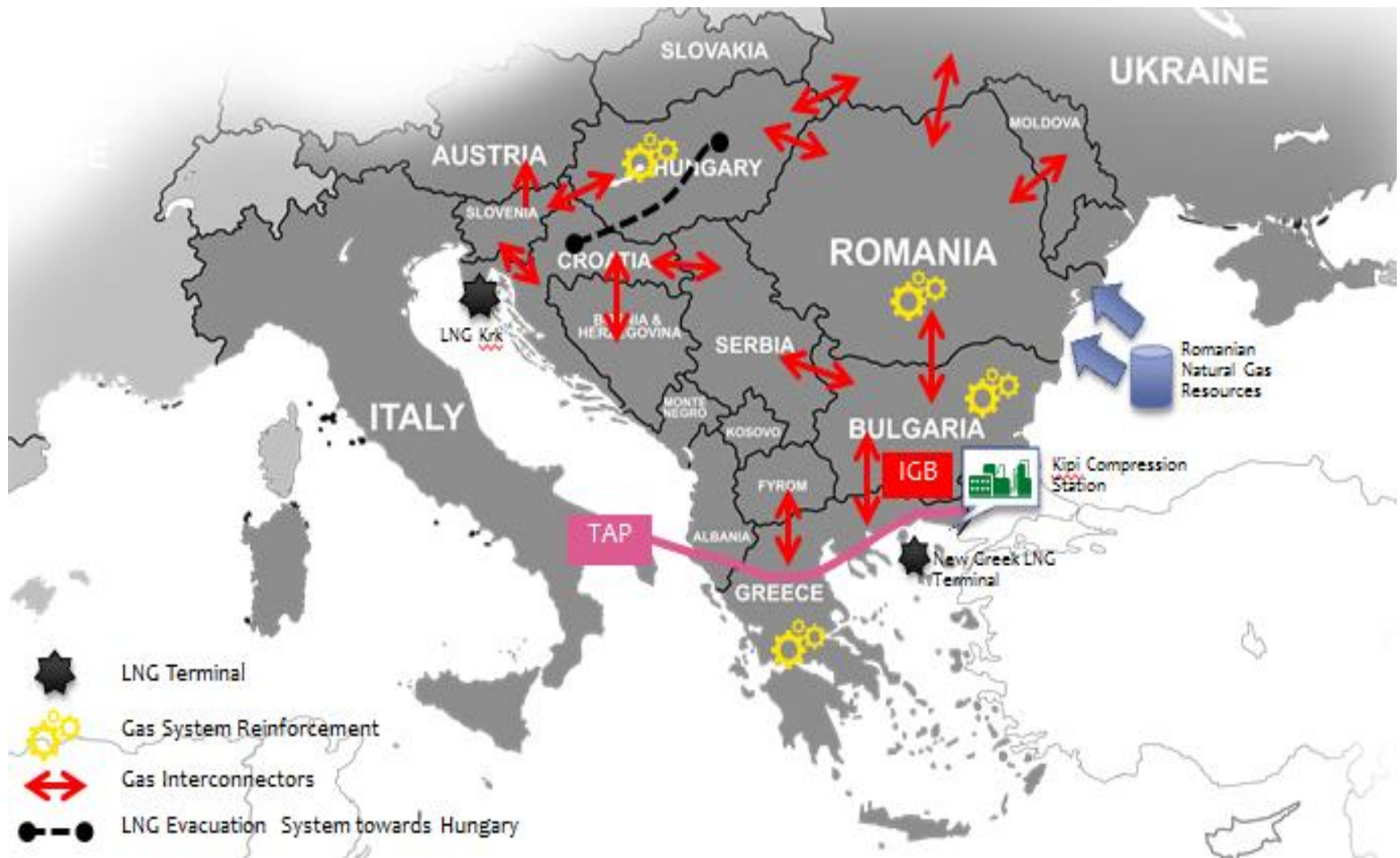
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- Republic of Bulgaria
- Republic of Croatia
- Hellenic Republic
- Hungary
- Italian Republic
- Romania
- Slovak Republic
- Republic of Slovenia
- Republic of Albania
- Bosnia and Herzegovina
- Former Yugoslav Republic of Macedonia
- Republic of Moldova
- Republic of Serbia
- Ukraine



Indicative List of CESEC Priority Projects in SE Europe

- ❑ Trans-Adriatic Pipeline (TAP)
- ❑ Interconnector Greece-Bulgaria (IGB)
- ❑ Interconnector Bulgaria-Serbia (IBS)
- ❑ Phased Bulgarian system reinforcement
- ❑ Phased Romanian system reinforcement
- ❑ Krk LNG Terminal
- ❑ Alexandroupolis FSRU Terminal

Energy Security - List of CESEC Priority Projects



Expanded South Corridor



Gas Market Liberalization in SE Europe (I)

- During the past five years, evolutions regarding the long-term development of the natural gas market in SE Europe have been unprecedented.
- The most important of those developments can be summarized as follows:
 - In October 2011, the Ministerial Council of the Energy Community adopted the so-called **Third Energy Package (TEP) for electricity and gas**, with a general implementation deadline of 1 January 2015, for all the Contracting Parties of the Energy Community Treaty.
 - In April 2013, the **Regulation EU 347/2013** was published, setting the rules for the development of the so-called Union-wide list of energy **Projects of Common Interest (PCI)**, which was almost immediately followed by the establishment of the list of the **Projects of the Energy Community Interest (PECI)**.
 - In June 2013, the selection of the Trans-Adriatic-Pipeline (TAP) as the **preferred option for the transportation of the gas produced in that field to Europe**, which signaled the initiation of the Southern Gas Corridor project.
 - In February 2015, the EC launched the **Central East South Connectivity (CESEC) initiative** to enhance political support for the identification and implementation of crucial gas infrastructure projects in CS European region.

Gas Market Liberalization in SE Europe (II)

- There is a **highly fragmented landscape** for the gas market development in the SEE region:
 - no cross-border trading. Gas trading hubs are either non existent in the majority of the countries, or even where they exist (Slovenia and Romania) their liquidity is extremely low.
 - There are elements of the national gas market legislation and regulation that would **allow the development of gas trading** in the way performed in the more mature gas hubs of Europe and the US.

- The **only way forward** for the appropriate development of the regional gas market is the consistent and rapid implementation of the provisions of the Third Energy Package, at least to the extent that the countries have committed to implement it in a legally binding way, i.e. the EU Member States and the Energy Community Contracting Parties.

Conclusion

- ❑ **The Legal and Institutional framework of the EU addresses the risks associated to the “Energy Security”;**
- ❑ **EU legislation has created common standards and indicators to measure serious threats and define how to mitigate such risks;**
- ❑ **The Institutions in exercising their roles contribute significantly to support the “Energy Security” dogma;**
- ❑ **The entire policies and implementation mechanisms though are still meant to be tested in the next gas and/or infrastructure disruption event.**



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**Thank you for
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