

“Introductory Remarks”

Croatia and the SE European Energy Bridge

A one day Workshop, Organized by IENE in cooperation with EIHP

10 October 2014, Zagreb

A Presentation by Costis Stambolis, A.A. Dip. Grad., MIE,
Executive Director
Institute of Energy for S.E. Europe (IENE), Athens

INSTITUTE OF ENERGY
FOR SOUTH EAST EUROPE





“Redefining SE Europe’s Energy Map”

- A number of significant developments in terms of policy and infrastructure are currently taking place in SE Europe which when completed, by the end of this decade, will have helped reshape the energy landscape of the region.
- These developments concern both market operation and energy production/ transmission capabilities.
- At the same time we have some major geopolitical developments in the broader region (read North Africa, Syria, Ukraine, Crimea, Global Jihad)
- There appears to be some important geopolitical and policy implications



Major Infrastructure Projects Under Way

- i. A confluence of geopolitical factors and a unique alignment of economic and political forces in SE Europe has taken place over the last 18 months which has enabled a number of decisions to be taken on key infrastructure projects
- ii. As a result, SE Europe's energy landscape is rapidly changing with some major cross border projects now under way, and key infrastructure works, especially in power generation and in the refining sector scheduled for completion over the next five years
- iii. At the same we are witnessing a significant penetration of Renewable Energy Sources (RES) in the energy mix of several countries in SE Europe
- iv. Consequently there are profound positive implications for energy security but also for investment and finance

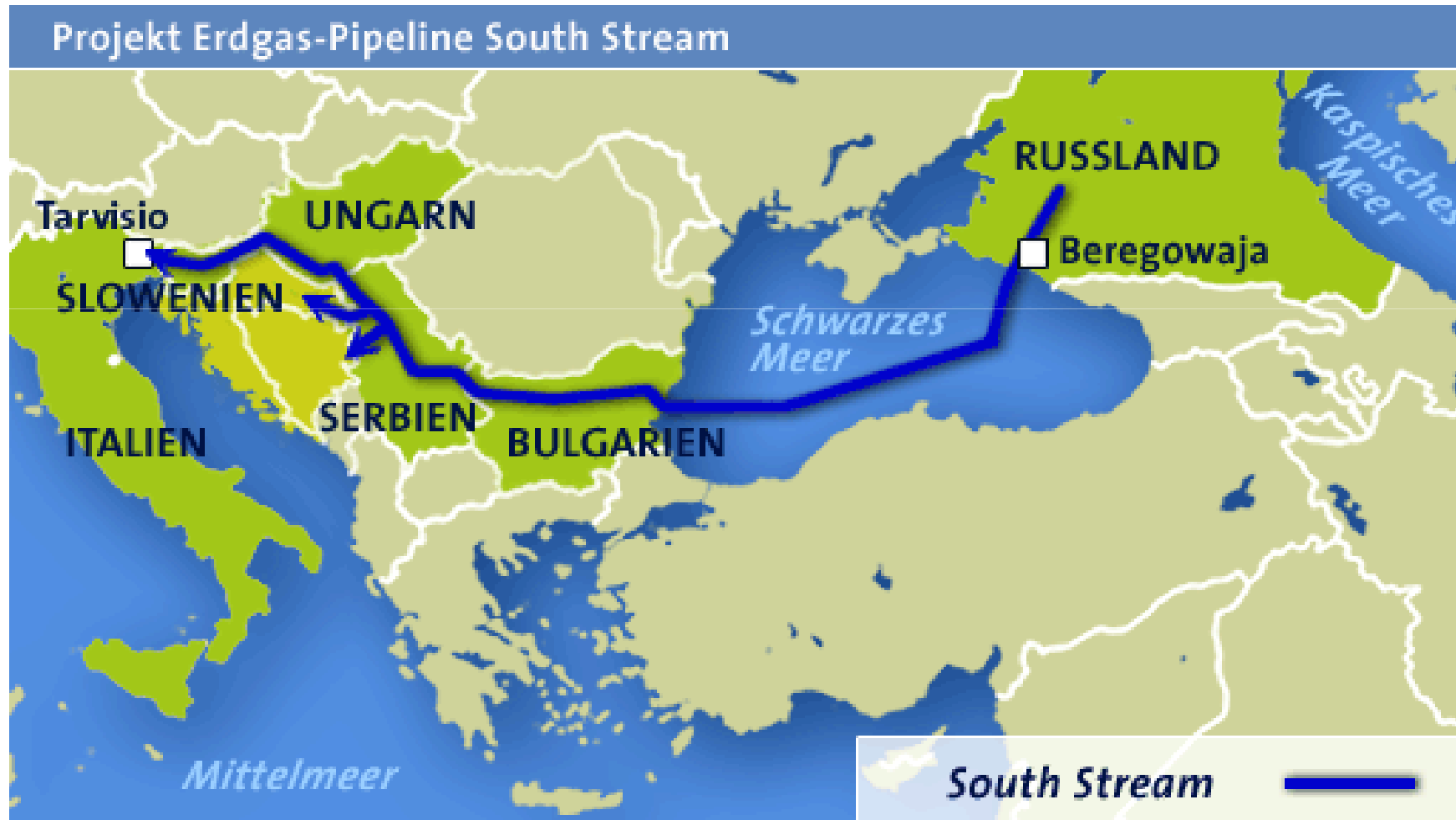
Mega Projects in SE Europe and the East Mediterranean Region



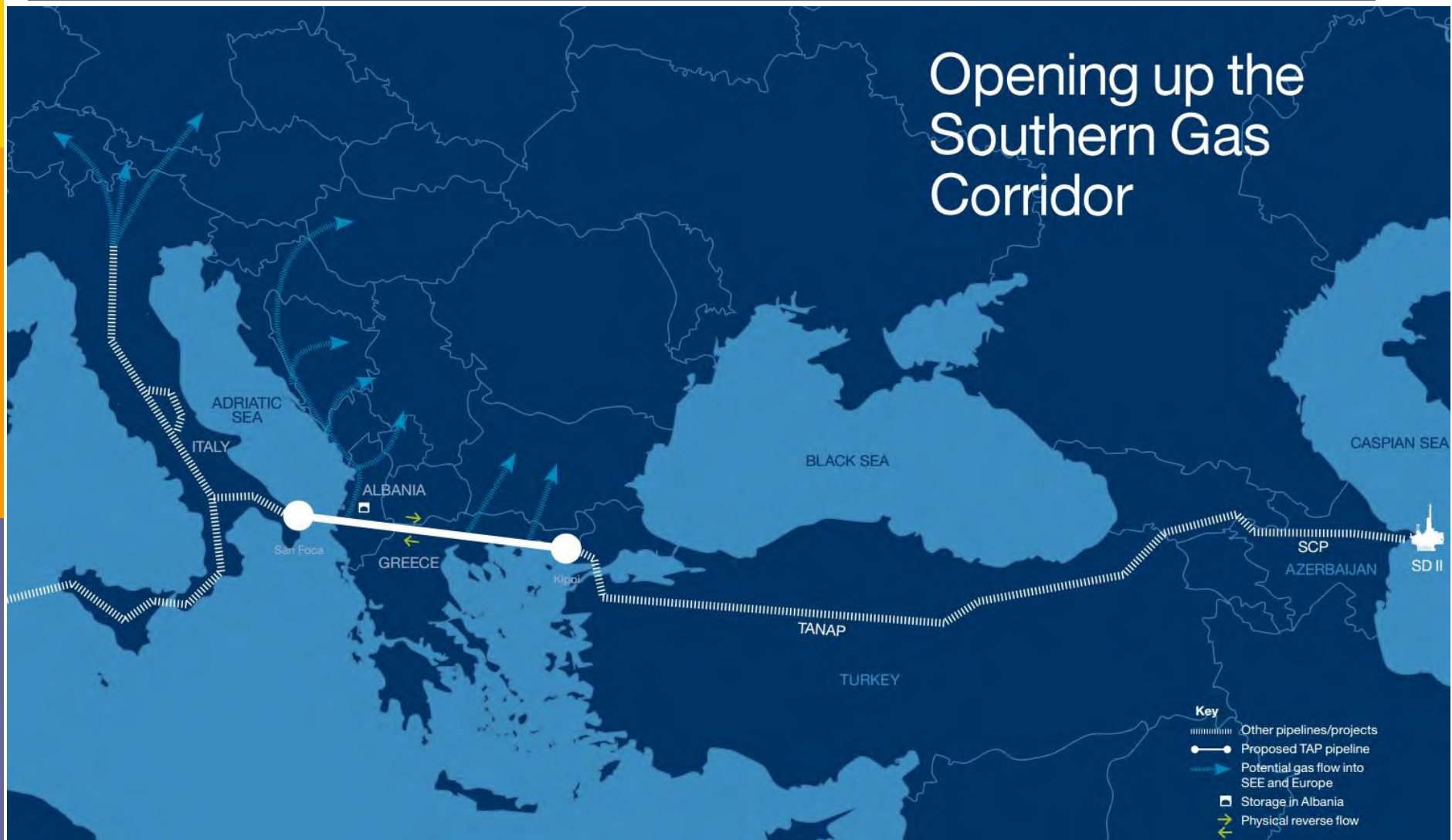
Project	Capacity (bcm/y)	Distance (kms)	Estimated Project Cost (in Billion Euro)	Sponsors	Anticipated Start Up Date	Project Status
TAP	10 – 20	791	1.70	EGL, STATOIL, E.ON	2017	Selected by SDC on June 27,2013
TANAP	16 - 24	2.000	8.0	SOCAR (80%) BOTAS (20%)	2018	Construction to start in 2014
South Stream	63	2.950	26.0	Gazprom, ENI, Wintershall, EDF	2016	Construction commenced December 2012
NPP in Sinope, Turkey	4 – 5 GW	-	17	AREVA, Mitsubishi Heavy Industries (MHI)	2023	Intergovernmental agreements signed
NPP in Akkuyu	4.8 GW	-	20	ROSATOM, Akkuyu NGS Elektrik Uretim Corp	2023	Engineering and survey work started at the site. Construction of the first unit to begin in 2014
Aphrodite Block (Cyprus)	5 Trillion Cubic Feet	-		Noble Energy, Delek Group	2018	Second confirmatory drilling Completed
Liquefaction Plant (Cyprus)	8 – 12 Bcm	-	12	Noble Energy, Avner, Delek Drilling	2019	MoU between Cypriot government and companies
EurAsia Interconnector (Submarine Cable)	2.000 MW	1,000 Km	1.5	DEH-Quantum Energy joint venture	2019	Intergovernmental agreement, feasibilities studies completed
Tamar, Leviathan (Israel)	24 Trillion cubic feet	-			2014	



South Stream Gas Pipeline



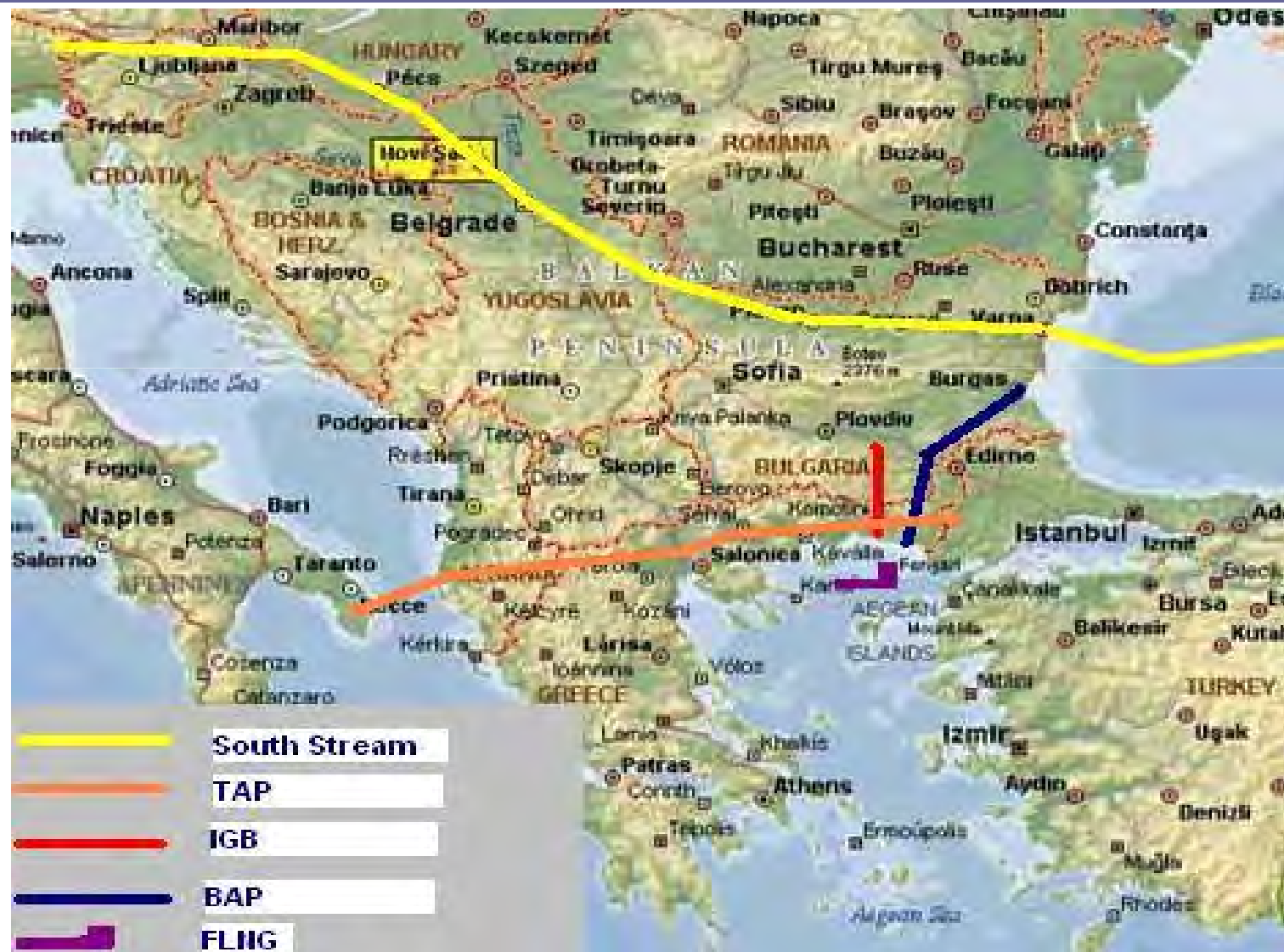
Trans Adriatic Gas Pipeline (TAP)



The TAP – IAP Pipeline System



The New Energy Lanes of SE Europe and the Vital Bulgaria – Greece Link



The New Energy Lanes of SE Europe



Gas Interconnections in SE Europe

■ Projected (planned) interconnectors

■ Existing interconnectors





Investments Implications

1. Following latest positive developments and final investment decisions on major oil, gas and electricity projects the total investment potential in the region has been revised upwards to 280 billion Euro in the current decade for the 12 country SEE region
2. As several other energy projects are progressing at the same time on thermal power generation, electricity grids, gas interconnectors and town grid expansion, upstream and downstream oil projects, RES and Energy Efficiency an increase of energy related financial turnover is foreseen
3. Consequently we are likely to see strong demand for the financing and for financial services related to small and mid scale energy projects in most countries of the region



Concluding Remarks

- ❑ In conclusion the West Balkan Countries could if they work even more closer together develop a joint energy corridor, an energy bridge from which they could both benefit enormously, financially and politically, while at the same time help contribute towards the betterment of European energy supply by providing right now the extra security dimension which is currently lacking.
- ❑ Croatia's position in this process is crucial both in terms of market operation and infrastructure. Croatia being at the end of the East – West corridor and at the start of a proposed West – East energy supply route is pivotal in the operation of the overall regional energy system.





INSTITUTE OF ENERGY
FOR SOUTH-EAST EUROPE

**Thank you for
your attention**

www.iene.eu

cstambolis@iene.gr