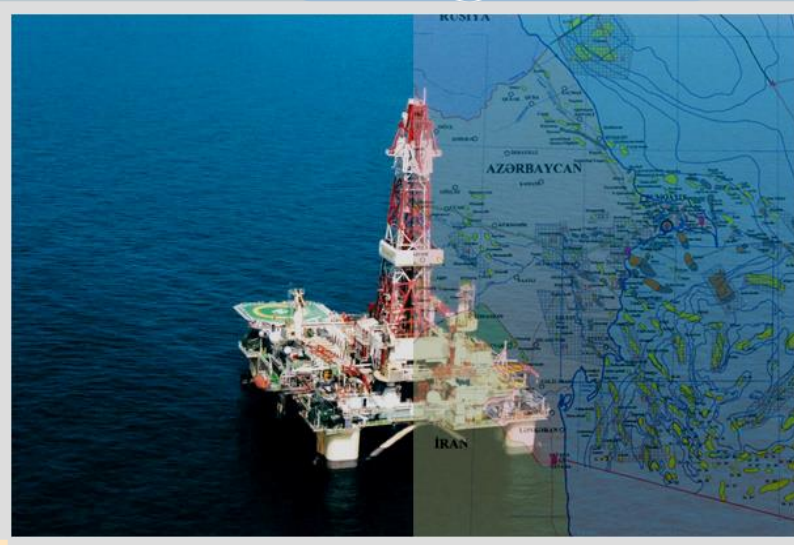


State Oil Company of the Republic of Azerbaijan

23 September, Sofia



MR. Ilkin Aslanov

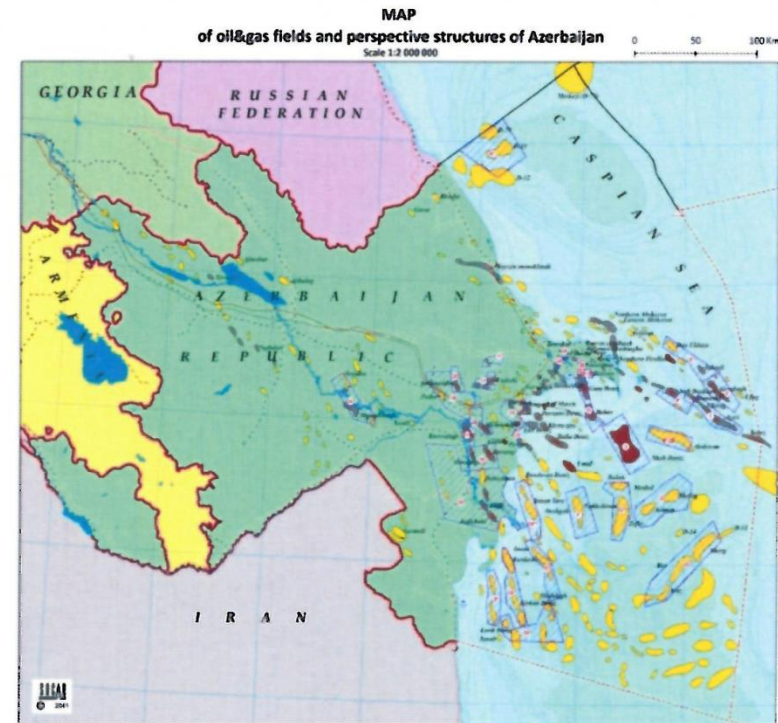
Executive Assistant to SOCAR President
Advisor, SOCAR

***“The Role of Southern Gas
Corridor for Energy Security of
Europe”***

Azerbaijan – Oil and Gas Sector

Exploration

- Azerbaijan's onshore has been producing hydrocarbons starting from the late 19th century
- Due to onshore fields near depletion, the exploration is now focused on offshore
- The first offshore drilling platforms were installed in the 1970s – led to the discovery of the Guneshli field, followed by a series of large discoveries at Chirag, Azeri and Kapaz in the late 1980s
- Two major gas/condensate discoveries, Umid and Absheron, were made in 2010 and 2011 respectively
- Involved in **all aspects of the hydrocarbons industry**, representing the interest **of the Republic of Azerbaijan**
- 33 PSAs were signed with 54 oil and gas companies from 21 states since 1994
- Oil and condensates reserves:
proven 2 billion tons + forecasted 2 billion tons = 4 billion tons
- Gas reserves:
proven 2.55 trillion m³ + forecasted 3.45 trillion m³ = 6 trillion m³
- Total hydrocarbon reserves of the Republic of Azerbaijan
10 billion tons (oil equivalent)
proven 4.6 billion tons + forecasted 5.4 billion tons

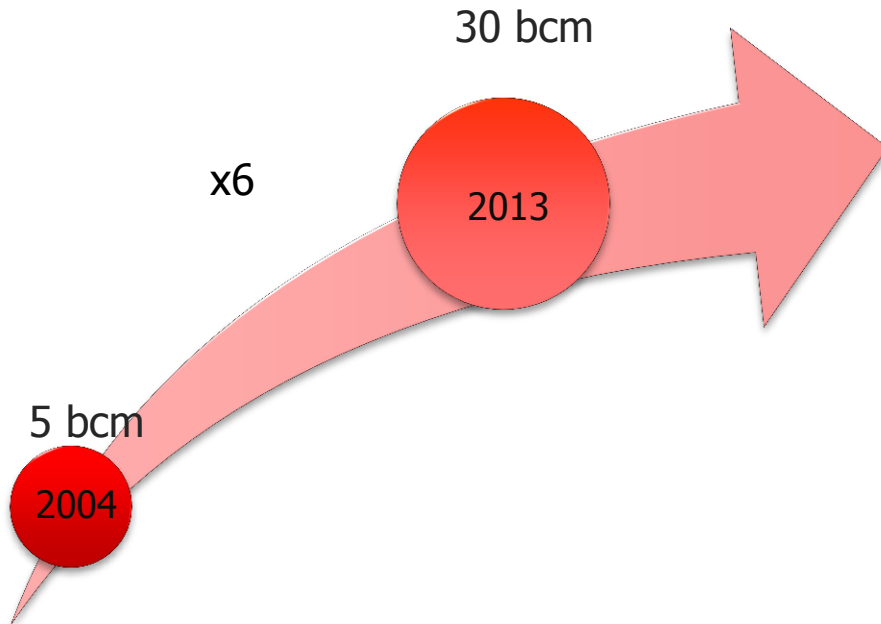


Azerbaijan's Gas Strategy: Views and Perspectives



- Secure energy stability and sustainability
- Strategic cooperation with leading energy companies
- New infrastructure development and upgrade, modernization and efficient use of existing infrastructure
- Optimization of management
- Oil/Gas revenues management
- Expansion of SOCAR's investment portfolio and geography of operations
- Diversification of consumer markets and export transportation routes
- Contribution to the development of Southern Energy Corridor

Azerbaijan's Gas Production



Shah Deniz Field

1,2 trillion cubic meters gas
240 million tons condensate

Annual production from Stage 2 will start by the beginning of 2018 and reach more than 16 bcm at plateau



Azerbaijan Gas Exports



- *Main natural gas volumes come from Shahdeniz and ACG fields
- *Gas from Shah Deniz field has been exported via the SCP gas pipeline since 2006 (Azerbaijan and Georgia) and now reaches 1.9 bcm per annum
- *Signed agreement to supply Turkey with 89.2 of gas from Shahdeniz over a 15-year period starting 2007 (Shahdeniz stage 1 volume)
- *To satisfy the gas demand of Nakhchivan AR, SOCAR swaps gas with National Iranian Gas Export Company
- *In 2013,-1.4 bcm of natural gas was exported to Russia

Shahdeniz Stage 2 Gas Sales



Total 16bcma Stage 2 future sales volumes were negotiated and agreed;

- *BOTAS GSA was signed in 2011 for 6bcma.

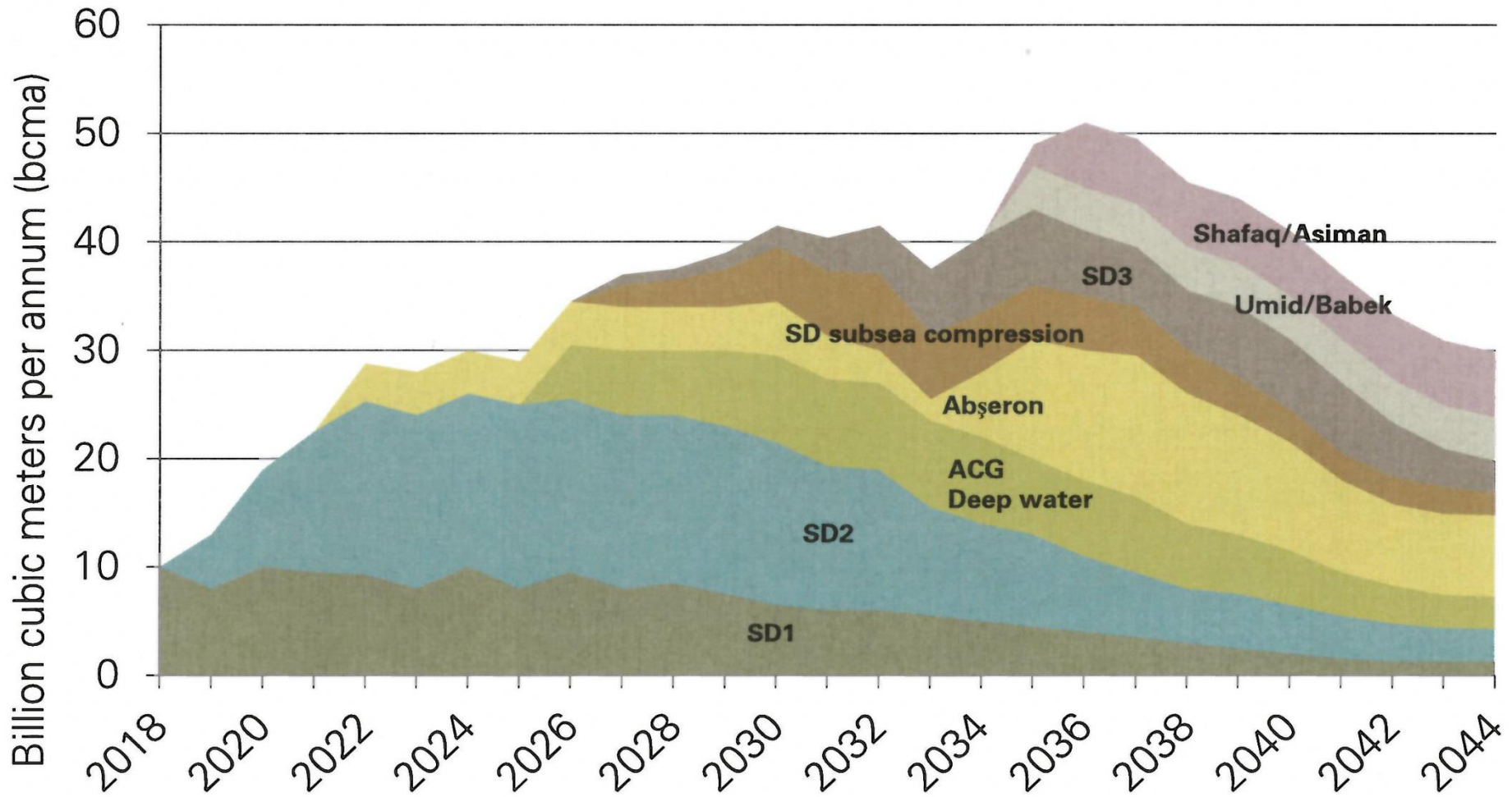
- *For remaining 10bcma GSAs were signed with 9 European buyers in September 19, 2013; Axpo Trading AG, Bulgargaz EAD, DEPA Public Gas Corporation of Greece S.A., Enel Trade SpA, E.ON Global Commodities SE, Gas Natural Aprovevisionamientos SDG SA, GDF SUEZ S.A., Hera Trading srl and Shell Energy Europe Limited

Prospective Fields and Structures



- Absheron
 - Total/GdF PSA
 - 340 bcm gas
 - 45 mln tons of condensate
- Nakhchivan
 - HoA RWE
- Shafag-Asiman
 - BP PSA
- ACG Deep
 - ACG Consortium
- Umid
 - SOCAR
 - 200 bcm gas
 - 40 mln tons condensate
- Babek
 - 400 bcm gas
 - 80 mln tons condensate

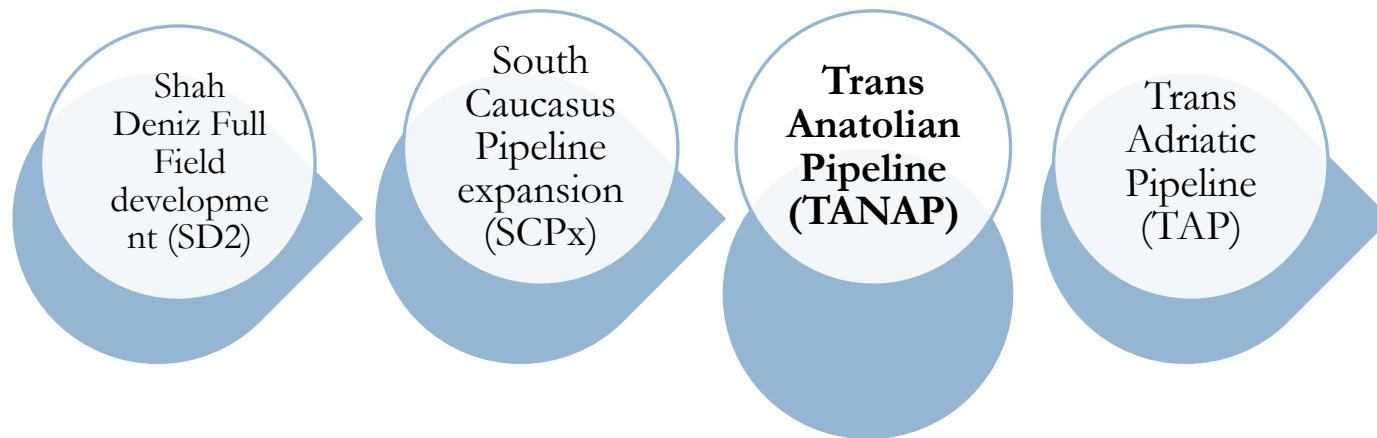
Gas Export Potential



Southern Gas Corridor Projects

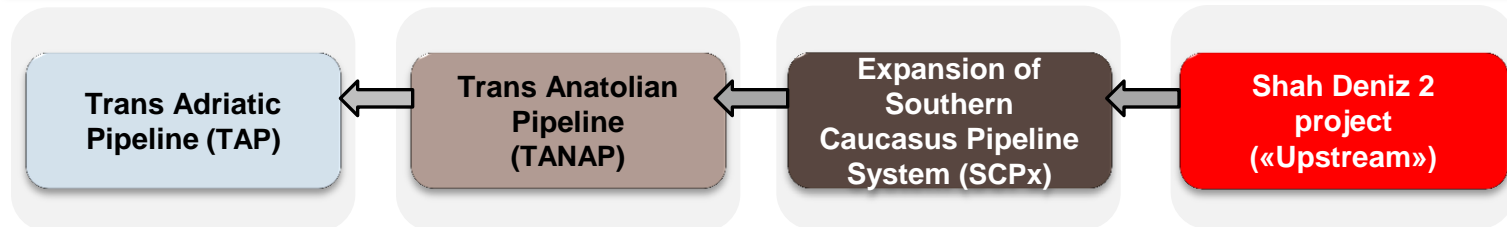


- **The EU initiative is to enhance energy security by connecting to new natural gas sources in the Caspian basin**
- **One gas field development, one pipeline expansion and two new pipeline construction, one of which is TANAP**
- **Projects will be able to supply 7 million households in South Eastern and Western Europe with natural gas**

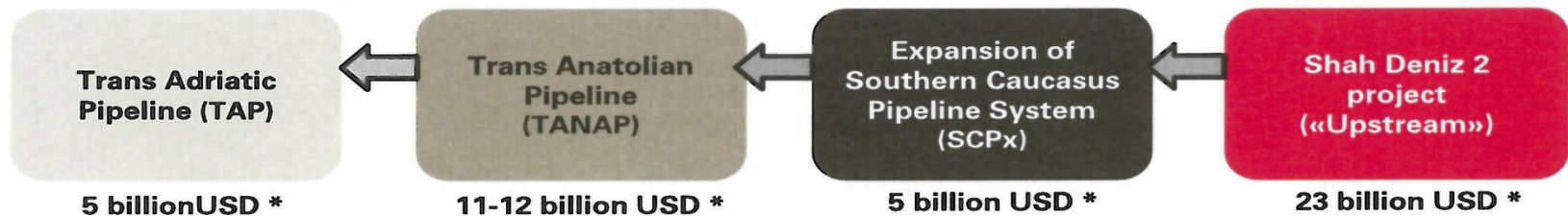


Diversity and security of energy supply for Europe

* Proposed Southern Gas Corridor Pipelines



Southern Gas Corridor – Key Information about Project Costs



* Forecasted capital costs

South Caucasus Pipeline(SCP)

- * The 692km South Caucasus Pipeline has been designed to transport gas from the Shah Deniz field in the Azerbaijan sector of the Caspian Sea, through Georgia and on to the Georgia-Turkey border. The SCP Project was sanctioned on 27 February 2003.
- *
- * The physical construction of SCP pipeline commenced in 2004 and the pipeline was ready for commercial operation in September 2006. This is a 42-inch diameter pipeline. The SCP pipeline is capable of carrying up to 7,4 billion cubic meters of gas annually.

South Caucasus Pipeline Expansion (SPCX)

- * The expansion of the South Caucasus Pipeline is part of the Shah Deniz Full Field Development project. The construction has started in 2014 and is planned to be completed by 4Q 2018.
- * SCPX is one of the major projects within the Shah Deniz (SD) Stage 2 (SD2) Program. SCPX is also a component of the Southern Gas Corridor, which will allow for the transportation of gas from Azerbaijan, through Turkey and into Europe.

Project Details



- * SCPX will expand the existing SCP system with a new 48-inch pipeline loop with the capacity to export an additional 16bcma of gas sales to the Georgia-Turkey border. This is to be accomplished by building a new pipeline loop in parallel with the existing SCP. In Georgia two new intermediate compressor stations will be constructed.

Project Status



- * The project has four phases: **Study, Select, Define** and **Execution**.
- * “Select” stage started on January 1, 2010 and has been completed on April 1, 2012.
- * The “Define” stage followed right after, and the transition from Define to Execution Stage has been achieved on December 17, 2013. Currently project is on “Execution” Stage and after completion of construction it will enter to “Operation” Stage.
- * The Final Investment Decision with respect to SCPX Project was taken on December 17, 2013 and SCPX Project was sanctioned.

Shareholders of SCP/SCPX

- * **SOCAR/AzSCP – 10%**
- * • **SGCM – 6,67%**
- * • **BP – 28,83%**
- * • **TPAO – 19%**
- * • **STATOIL – 15,5%**
- * • **LUKOIL – 10%**
- * • **NICO – 10%**

TRANS ANATOLIAN NATURAL GAS PIPELINE (TANAP) PROJECT



Project No: 1577
Date: 5/29/2012



Present status of TANAP and its potential role in the European gas transit route

Azerbaijan EU Joint Declaration

- Signed in January 2011 during the visit of President Barroso to Azerbaijan
- Framework document
- Strategic principles for the supply of Azerbaijan and Caspian gas to Europe



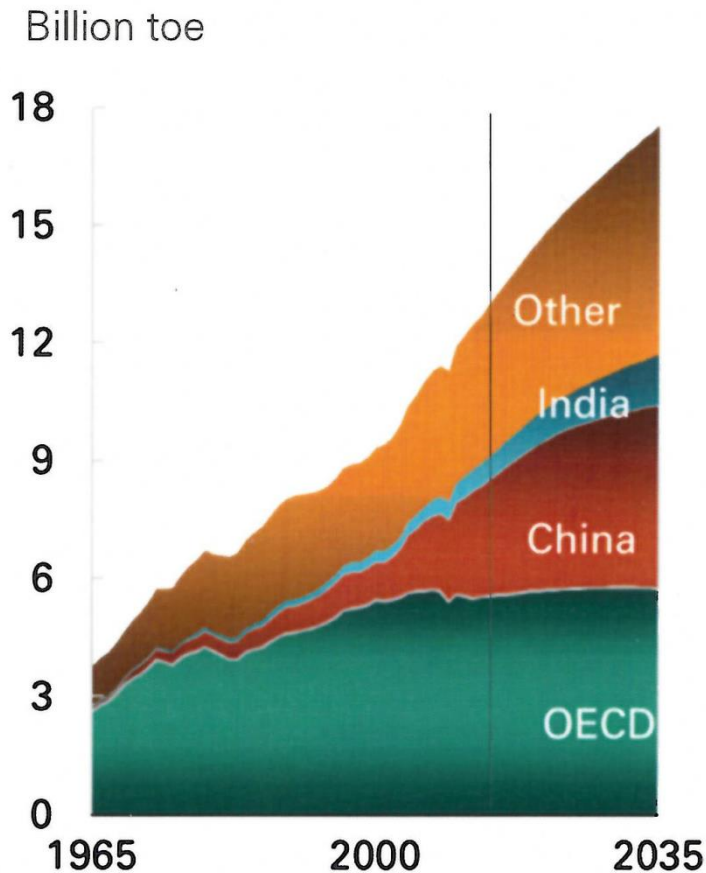
Gas Arrangements with Turkey

- * October 25, 2011
 - * Landmark gas sales and transportation between Azerbaijan and Turkey
 - * IGA on gas sales to Turkey
- * June 26, 2012
 - * TANAP IGA and HGA
- * October 15, 2012
 - * TANAP Shareholders Agreement signed by SOCAR, BOTAS and TPAO
- * January 2013
 - * TANAP IGA and HGA ratified by Azerbaijan and Turkey Parliaments

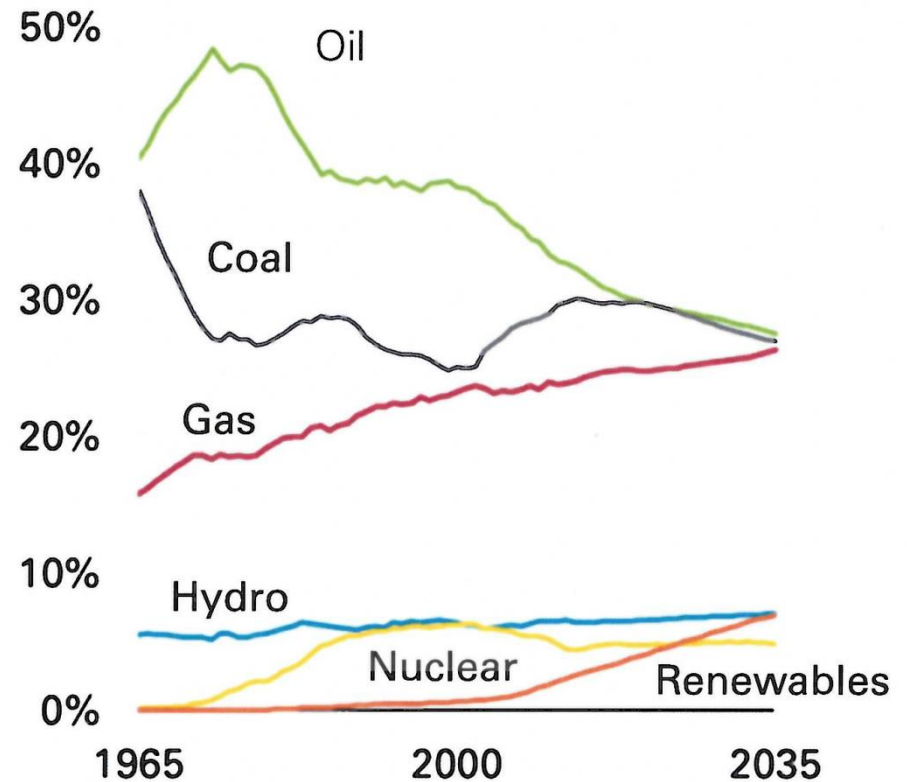


Growing demand for gas

Consumption by region



Shares of primary energy



Energy security



- * Europe needs reliable suppliers
- * Azerbaijan has proved to be a trusted partner;
- * SGC appears prominently in the European Commission's latest “Energy Security Strategy” report
- * TANAP constitutes an integral part of the Southern Gas Corridor
- * TANAP section of SGC will bring gas from a massive field off the coast of Azerbaijan called Shah Deniz 2 into the heart of Europe

Project Details



- * Shareholders:
 - * SOCAR (Azerbaijan) - 58% (operational 30%), BP (UK) – 12%
- * Project cost: \$11.8 billion USD
- * Total pipeline length and width:
 - * Georgia-Turkey – 1,333km – 56”;
 - * Turkey-Greece – 477 km – 48”;
 - * **Total length: 1,810**
- * Connecting directly to TAP on the Turkish-Greek border

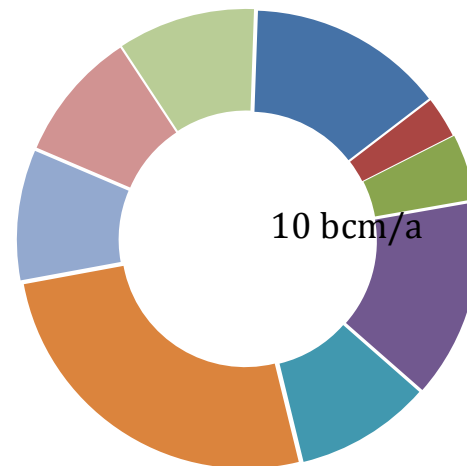


Project Details



- * Initial capacity: 16 bcm/a:
 - * 6 bcm to Turkey
 - * 10 bcm to Europe;
- * Potential capacity: 31 bcm/a by 2026.
- * Buyers: contracts with 9 European countries have already been signed

Supply Contracts Signed



- Axpo (Switzerland)
- Hera (Italy)
- Enel (Italy)
- E.ON
- Gas Natural (Germany)
- GDF (Spain)
- Shell (England/Netherlands)
- Bulgargaz (Bulgaria)
- DEPA (Greece)

Project Status



- * A Memorandum of Understanding has been signed between Azerbaijan and Turkey
- * Gas Transportation Agreement has been signed between BOTAŞ and TANAP to transport the gas along Turkey territories
- * The use of funds allocated for TANAP project has already been started
 - * Note: the project is 100% equity-financed

Project Status



- * A significant five year contract for the supply of Engineering, Procurement and Construction Management (EPCM) is awarded to WorleyParsons on May, 2014
- * EIA Positive Decision was taken from the competent authority Turkish Ministry of the Environment & Urbanization (MoEU) to be effective as of 24th of July
- * Land Acquisition process is ongoing

Project Potential



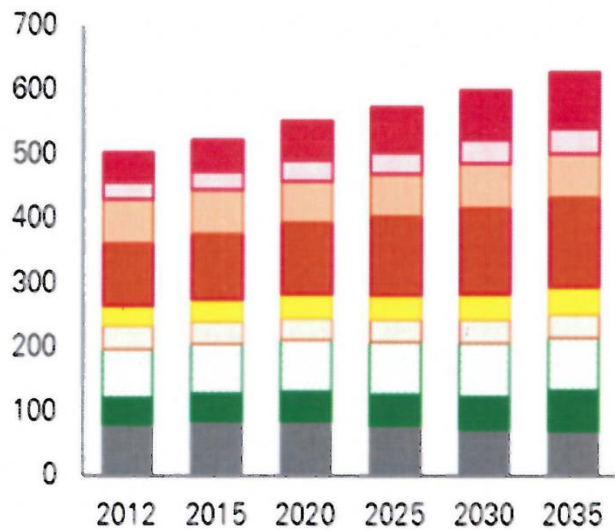
- * A second wave of gas from Azerbaijan can be anticipated with several additional gas opportunities in Azerbaijan including Shah Deniz Deep, Shafag-Asiman and ACG Deep that are being evaluated by BP and its co-venturers. With continued progress these projects can follow on after Shah Deniz, and therefore provide additional gas to Europe
- * Absheron field could be exporting gas in the early 2020s.
- * The Middle East and East Mediterranean have the potential to supply the Southern Corridor through the Trans-Anatolian Pipeline in the future.

The role of TAP in the energy security of the Balkans

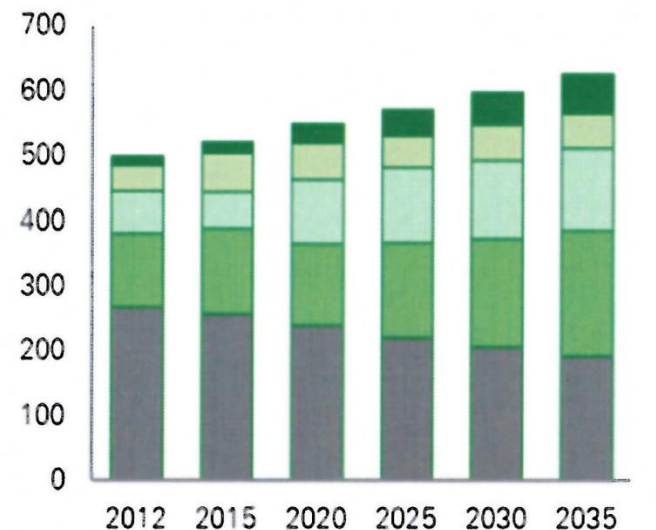
Baku 2014

Europe – Dependence on gas imports

European gas demand (bcma)



European gas suppliers (bcma)



- Turkey
- Netherlands
- SE Europe
- Germany
- Italy
- France
- Other Europe
- UK
- Spain

- Southern Corridor
- Russia
- Other pipeline
- Domestic production
- LNG

bcma: billion cubic meters per annum

Source: BP Energy Outlook 2035, January 2014

Southern Corridor provides diversity of supply

What is TAP?



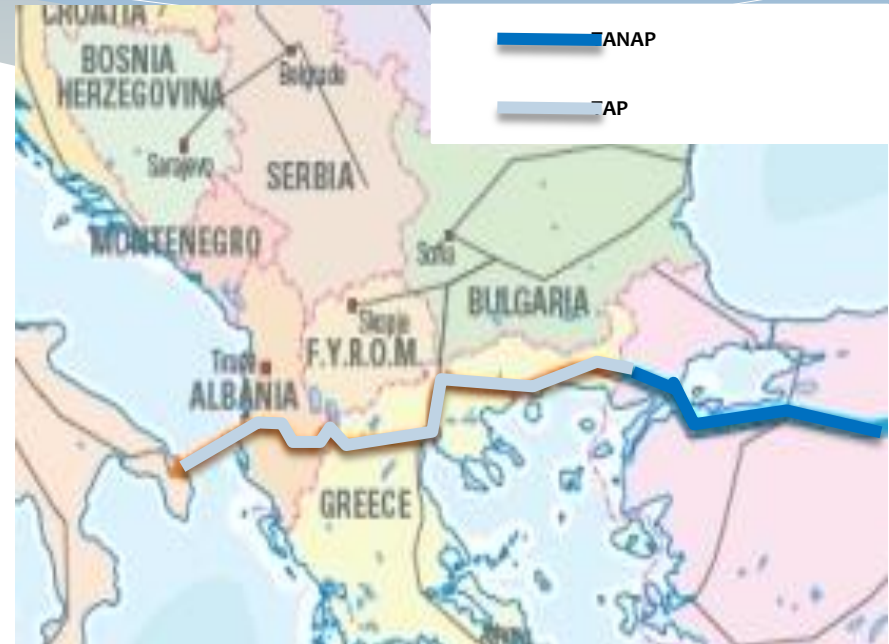
- Tap is an integral part of the Southern Gas Corridor.
- Trans Adriatic Pipeline (TAP) is a pipeline project to transport natural gas from the Caspian sea (Azerbaijan) to the European buyers.



TAP's Key Features



- * Start of operation: 2019
- * Length – 867km (Greece - 547km, Albania - 211km, Adriatic Sea - 104km and Italy - 5km)
- * Diameter: 48 inch (subsea– 36 inch)
- * Project cost: \approx \$ 5.2 billion USD
- * Initial throughput capacity: 10 bcma (expandable to 20 bcma)



The shareholders are: BP (UK) (20%), SOCAR (20%), Statoil (Norway) (20%), Fluxys (Belgium) (16%), Total (France) (10%), E.ON (Germany) (9%) and Axpo (Switzerland) (5%)

TAP's Key Features (2)



Aligned with EU's energy policy objectives

- * Designed to **expand from 10 to 20 bcm** (plus) per year
- * Up to 80% of **physical reverse flow** and potential **gas storage**
- * Connecting **directly** to TANAP on the Turkish-Greek border
- * Interconnection with various existing and proposed pipelines providing energy security in South Eastern Europe
- * Providing **Bulgaria** with a new source of gas through IGB or Kula-Sidirokastro Interconnector
- * Although TAP will be initially designed to transport available volumes of Shah Deniz gas to Europe, TAP is scaleable.



TAP is a PCI and PECEI



- * TAP has been designated as a Project of Common Interest (PCI) and Europe's Energy Community has named it a Project of Energy Community Interest (PECEI).
- * TAP is just the beginning for the opening of the Caspian basin producing countries into the EU, which would constitute a great step ahead in terms of diversification and gas security supply.
- * TAP continues to develop the framework that will enable increased security of supply and diversification of gas resources in the SEE region.

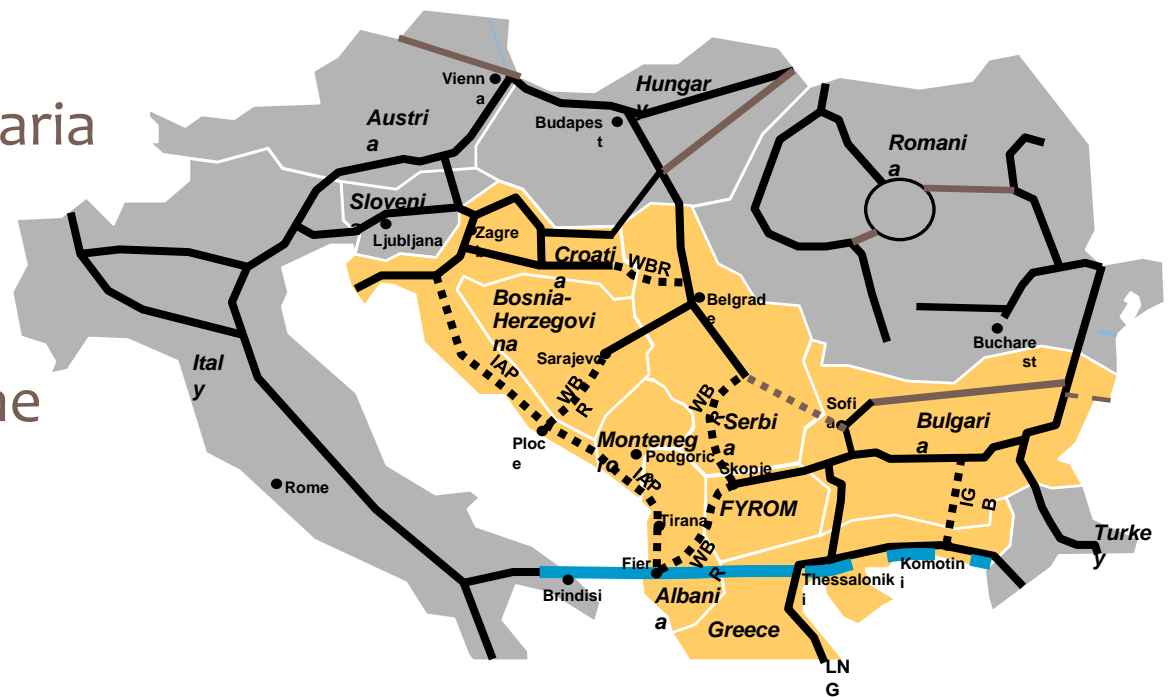


TAP will be connected to European Network

- * The EC is already prioritizing support for interconnecting pipelines to assist in the development of the gas networks in Southern and South Eastern Europe.

- * Connection to Bulgaria

- * Connection to Ionian Adriatic Pipeline



Connection to Bulgaria

Caspian gas could also be transported to Bulgaria through interconnection with planned and existing gas networks. TAP is currently exploring options of cooperation with developers - Interconnector Greece-Bulgaria (IGB) and Kula-Sidirokastro Interconnector.

- * Developers of the planned Interconnector Greece-Bulgaria (IGB) signed a technical MoUC with TAP in January 2014. The IGB could enable Caspian gas to flow into the Bulgarian gas network and further into South East Europe.



Reverse flow on Kula/Sidirokastro Interconnection point exporting Russian gas from Bulgaria into Greece.

Existing capacity (Bulgaria-to-Greece direction): 4.3 bcm/y

at a minimum pressure at Sidirokastro MS of 47,74 barg.

Reverse Flow capacity: up to 4.3 bcm/y

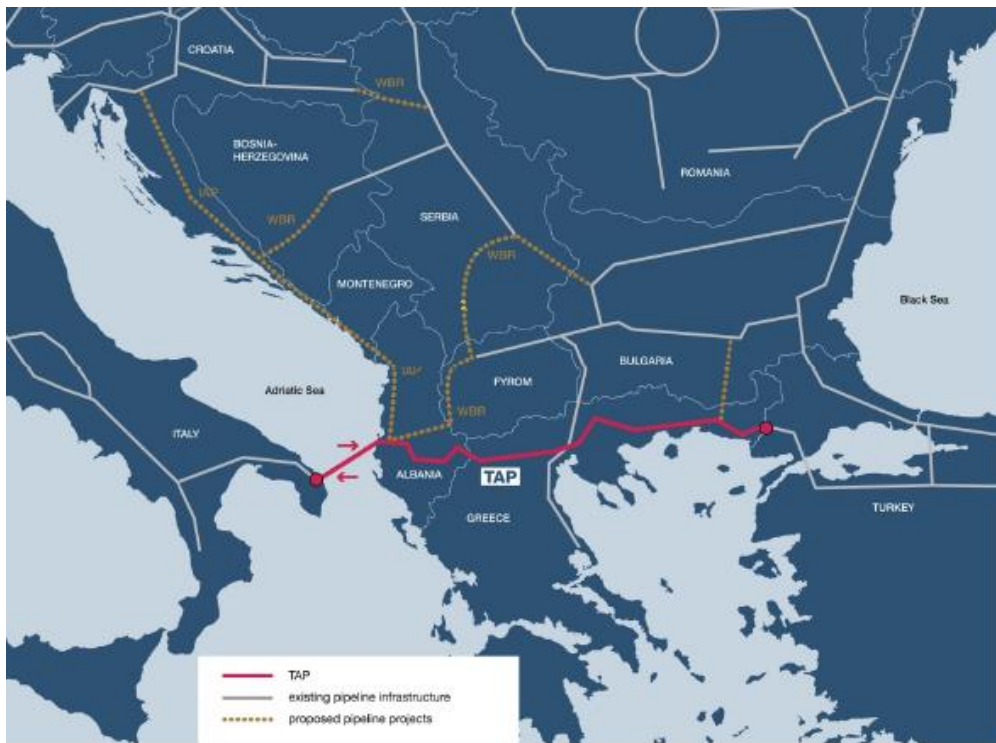
IGB

IGB – is designed to connect Greece (Komotini) to Bulgaria (Stara Zagora).

Planned Capacity: up to 3 bcm/y (option for capacity increase to 5 bcm/y)

Connection to Ionian Adriatic Pipeline

TAP has entered into multiple Memorandum of Understanding and Cooperation (MoUC) with the Ionian Adriatic Pipeline (IAP) which can be connected to TAP, so that such countries as Albania, Croatia, Bosnia and Herzegovina, Montenegro, Slovenia, can all benefit from Shah Deniz gas.



Bilateral Agreements on IAP with TAP:

- Plinacro (Croatia) *Feb 2011*
- BH-Gas (Bosnia-Herzegovina) *April 2011*
- MoE Montenegro *May 2011*
- METE Albania *July 2011*
- Plinovodi (Slovenia) *Sept 2011*

Cooperation goals:

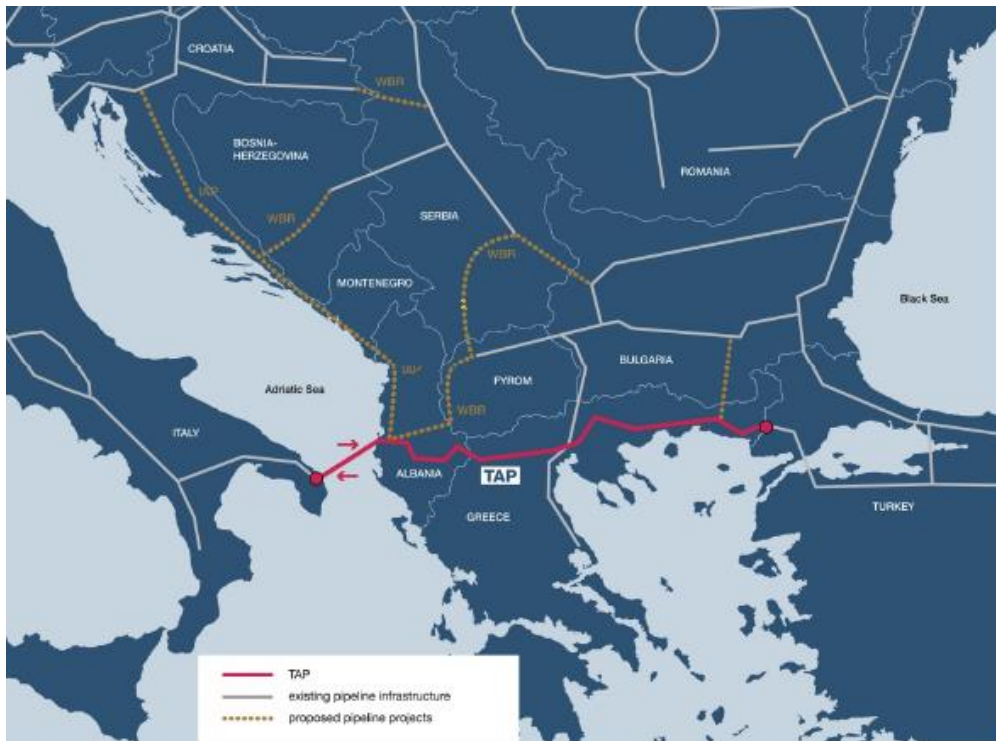
- Align project schedules
 - Understand technical requirements
 - Identify and manage technical interfaces
 - Exchange views on best practice
 - Enhance regional visibility
 - Gain political support within the host governments, the EU and the region
- Seven TAP-IAP Joint Working Group meetings have been held to date

IAP throughput scenarios:

- 1 bcm to Albania
- 0.5 bcm to Montenegro
- 1 bcm to Bosnia and Herzegovina
- 2.5 bcm to Northern Croatia or 0.2 bcm to Southern Croatia

Securing Supply for SEE region

TAP will contribute to Market Integration and Diversification of Gas Supply to South Eastern Europe



IAP: Ionic Adriatic Pipeline
IGB: Interconnector Greece-Bulgaria
WBR: Western Balkan Ring

- **Physical reverse flow: up to 80 % of capacity**
- **Secures supply in emergency situations and flexibility: connects SEE to North African and other gas resources (i.e. LNG in Greece and Turkey)**
- **Cross-border interconnector between the Italian and South East Europe**
- **Market development and integration through other planned pipelines (IAP, WBR, IGB)**

Securing Supply for SEE region (2)

TAP reverse flow significantly contributes to security of supply in SEE region



TAP - strategic partners



During the past few years, TAP has successfully established several strategic partnerships with various governments and companies:

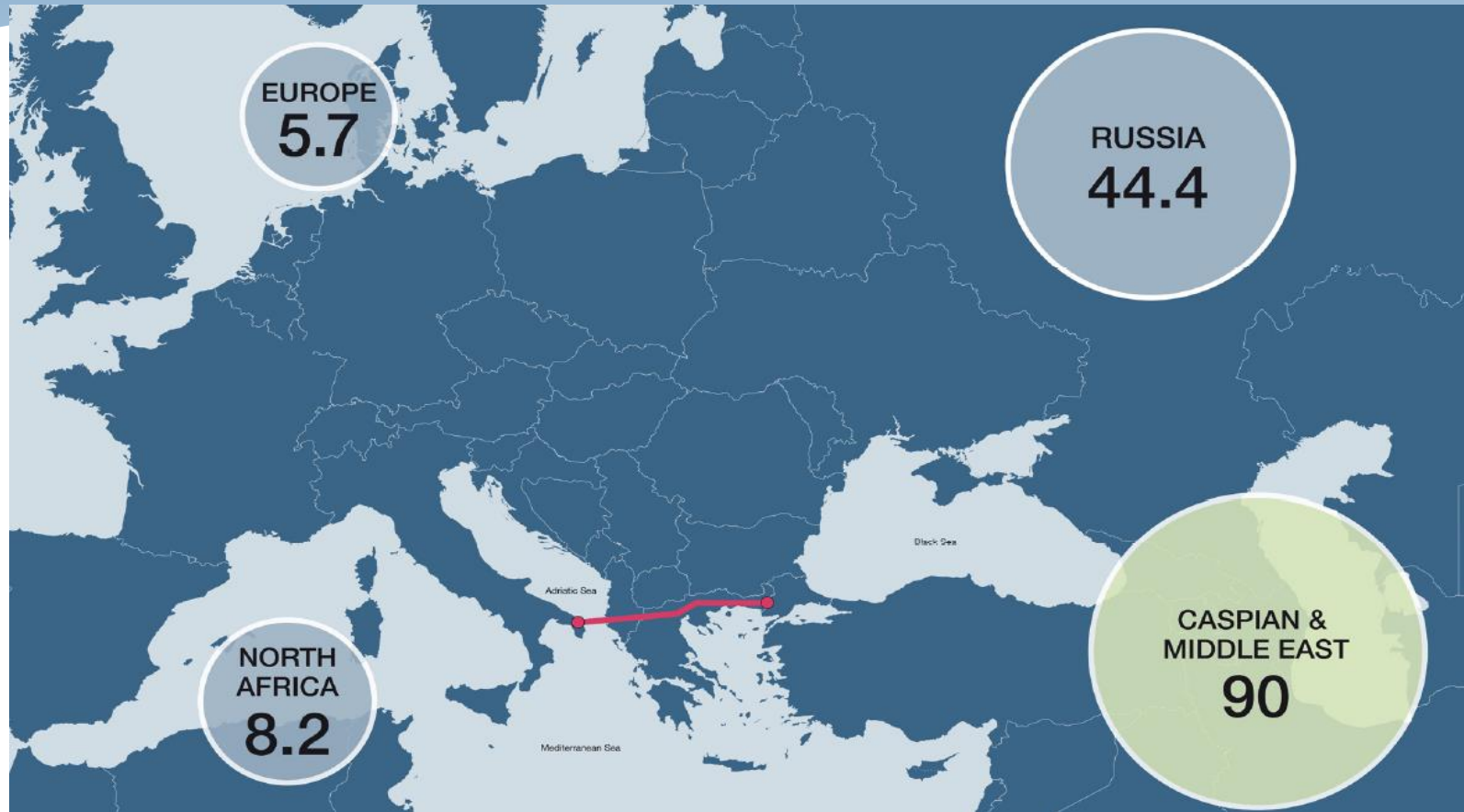
- * TAP has entered into multiple Memoranda of Understanding and Cooperation (MoUC) with the developers of the proposed Ionian Adriatic Pipeline (IAP).
- * The Croatian gas system operator Plinacro, Bosnian-Herzegovinian gas company BH-Gas, Slovenian Geoplin Plinovodi and the energy ministries of Albania and Montenegro are working with TAP on the interconnection and alignment of the two projects.
- * Further support for the TAP-IAP connection came in May 2013 when the governments of Albania, Bosnia and Herzegovina, Croatia and Montenegro signed an MoU in support of both pipelines, as well as a declaration of support in facilitating the supply of gas from Azerbaijan in South Eastern Europe..
- * Additionally, in June 2013 the foreign ministers of six countries – Albania, Bosnia and Herzegovina, Croatia, Greece, Italy and Montenegro – met in Dubrovnik, Croatia, to once again confirm high level political support for TAP.
- * In Bulgaria, the developers of the planned Interconnector Greece-Bulgaria (IGB) signed a technical MoUC with TAP in January 2014. The IGB could enable Caspian gas to flow into the Bulgarian gas network and further into South East Europe.
- * In Greece, the natural gas transmission system operator DESFA entered into a Cooperation Agreement with TAP in July 2013 on the operation and maintenance of TAP’s Greek section (the pipeline’s longest).
- * In Turkey, following the signing of an MoUC in November 2012, TAP continues to cooperate closely on technical and commercial matters with the Trans Anatolian Gas Pipeline (TANAP), which will connect with TAP on the border with Greece.
- * In Italy, TAP holds regular meetings with Snam Rete Gas (SRG), the Italian gas transmission system operator, on technical and commercial issues. Planned expansion of the system will ensure that Shah Deniz gas can be transported further into Central and Western Europe.

Additional Supply Sources of Gas

- * A second wave of gas from Azerbaijan can be anticipated with several additional gas opportunities in Azerbaijan including Shah Deniz Deep, Shafag-Asiman and ACG Deep that are being evaluated by BP and its co-venturers. With continued progress these projects can follow on after Shah Deniz, and therefore provide additional gas to Europe
- * Absheron field could be exporting gas in the early 2020s.
- **The Middle East and East Mediterranean have the potential to supply the Southern Corridor through the Trans-Anatolian Pipeline in the future.**



Natural Gas Reserves *(figures in tcm)*



Source: BP World Energy Statistical Review

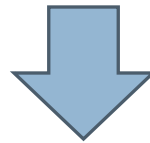
Connecting Europe to new gas reserves

(figures in tcm)



Conclusion

- * TAP's capacity is **expandable** to 20 bcm/yr
- * **Additional supply sources of gas:** second wave of gas from Azerbaijan (Azerbaijan including Shah Deniz Deep, Shafag-Asiman and ACG Deep) + potential to supply from Middle East and East Mediterranean
- * TAP will in its initial setup have significant physical reverse flow capacity to provide **Security of Supply** for Greece and the SEE countries in cases of supply disruptions
- * TAP will offer commercial reverse flow products if this is requested by the market. This will connect SEE to new **gas sources previously not accessible** such as **northern Africa** or the partially liquid gas market in Italy



**TAP contributes to diversification of gas supplies
and Security of Supply in SEE!**



Thank you for your attention