

Azerbaijan and the Southern Gas Corridor to Europe

Implications for U.S. and European Energy Security

Conference Report
September 13, 2013

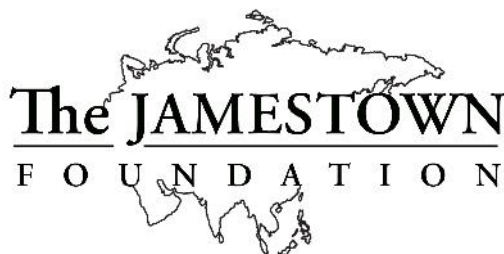

The JAMESTOWN
FOUNDATION

Conference Report

**Azerbaijan and the
Southern Gas Corridor to Europe
Implications for U.S. and European Energy Security**

Friday, September 13, 2013

Carnegie Endowment for International Peace
1779 Massachusetts Avenue, NW
Washington, DC



THE JAMESTOWN FOUNDATION

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The views expressed in this report are those of the contributing author and not necessarily those of The Jamestown Foundation. The report was edited by Margarita Assenova, Director of Programs for the Balkans, Caucasus and Central Asia at the Jamestown Foundation. The conference transcript was prepared by Leyla Aslanova, who completed an internship with the Jamestown Foundation while earning her Masters' Degree in Public Policy at the University of New York.

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Jamestown's Mission

The Jamestown Foundation's mission is to inform and educate policymakers and the broader policy community about events and trends in those societies which are strategically or tactically important to the United States and which frequently restrict access to such information. Utilizing indigenous and primary sources, Jamestown's material is delivered without political bias, filter or agenda. It is often the only source of information which should be, but is not always, available through official or intelligence channels, especially in regard to Eurasia and terrorism.

Origins

Launched in 1984 after Jamestown's late president and founder William Geimer's work with Arkady Shevchenko, the highest-ranking Soviet official ever to defect when he left his position as undersecretary general of the United Nations, the Jamestown Foundation rapidly became the leading source of information about the inner workings of closed totalitarian societies.

Over the past two decades, Jamestown has developed an extensive global network of such experts—from the Black Sea to Siberia, from the Persian Gulf to the Asia-Pacific. This core of intellectual talent includes former high-ranking government officials and military officers, political scientists, journalists, scholars and economists. Their insight contributes significantly to policymakers engaged in addressing today's new and emerging global threats, including that from international terrorists.

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Conference Agenda

9:00 A.M. **Opening Remarks:** Glen E. Howard, President, The Jamestown Foundation

9:10 A.M. – 10:30 A.M. **Panel One – Azerbaijan, the EU and the Gas Corridor to Europe**

“Azerbaijan’s TANAP Project: Foundation of the Southern Corridor & New Developments”

Vladimir Socor, Senior Fellow, The Jamestown Foundation

“Southern Gas Corridor from SOCAR’s Perspective”

Rauf Mammadov, Director, U.S. Representative Office of State Oil Company of Azerbaijan

“Azerbaijan’s Expanding Role in the Southern Gas Corridor”

Gulmira Rzayeva, Principal Research Fellow, Center for Strategic Studies under the President of the Republic of Azerbaijan

Moderator: Alexandros Petersen, Advisor, European Energy Security Initiative (EESI) at the Woodrow Wilson Center for International Scholars

10:45 A.M. – 11:45 A.M. **Panel Two – The Trans-Adriatic Pipeline: Implications for Southeastern Europe and the Eastern Mediterranean**

“Shah Deniz and the Southern Corridor: New Developments and Timelines”

Greg Saunders, Senior Director, International Affairs, BP

“The Southern Gas Corridor After the Trans-Adriatic Pipeline: Implications for the Eastern Mediterranean”

Anthony Livanios, CEO, Energy Stream CMG GmbH

“Bulgaria’s Political Upheaval and the Energy Politics in Southeastern Europe”

Margarita Assenova, Director of Programs for the Balkans, Caucasus & Central Asia, The Jamestown Foundation

Moderator: Margarita Assenova, The Jamestown Foundation

11:45 A.M. – 12:30 P.M. **Panel Three – Closing Remarks**

“EU Energy Security and the Southern Gas Corridor”

Christian Burgsmüller, Head of the Energy, Transport and Environment Section, European Union Delegation to the United States

“U.S. Perspectives on the Southern Corridor”

Amos Hochstein, Deputy Assistant Secretary for Energy Diplomacy, U.S. State Department, Bureau of Energy Resources

“TAP and the Southern Corridor: A Passive U.S. Policy Victory?”

Ambassador Matthew Bryza, Former U.S. Ambassador to Azerbaijan, Director, International Centre for Defense Studies, Tallinn, Estonia



Executive Summary

Two major developments in June 2013 signified that the Southern Gas Corridor is rapidly taking shape and getting closer to bringing Azerbaijani gas to the European market. On June 21, Azerbaijan's State Oil Company (SOCAR) won a tender to take control of Greece's public natural gas transmission system operator DESFA, outbidding Gazprom in the process. A week later, Azerbaijan and the Shah Deniz Consortium selected the Trans-Adriatic Pipeline (TAP) over its rival Nabucco-West for the transportation of Caspian gas to Europe.

These two developments laid the ground for creating a gas distribution network for Caspian gas in Southeastern Europe. For the first time, Azerbaijani gas will go straight into EU markets and EU territory. And for the first time, the State Oil Company of Azerbaijan will be directly entering the European downstream gas business, starting with Greece, traversing through Albania, and continuing to Italy under the Adriatic Sea. Caspian gas deliveries to Turkey will start in the second quarter of 2018 and will extend to the European market in early 2019.¹

Europe is one of the major energy consumers in the world and forecasts show that it will be the largest natural gas market in 2035. The EU countries need inexpensive gas to maintain the competitiveness of their products. But they face several challenges, including competition from emerging markets, rising global demands, fragmented markets, and unstable suppliers, especially from the Middle East.

According to SOCAR, Azerbaijan's national gas reserves are almost 28 billion cubic meters (bcm) per year, but they will be increased to 30 bcm in 2015 and 55 bcm in 2020, as the Shah Deniz gas field is further developed and several other gas fields come online. Compared to other supplies of gas to Europe, the volumes of gas that will be flowing through the Southern Gas Corridor cannot compete in size, but it will certainly contribute to diversifying energy sources, boost competition in Europe, and give end-buyers leverage to negotiate gas prices with other suppliers.

Energy experts are emphasizing that Azerbaijan stands at the fault line of a more fundamental competition—the competition for resources between East and West. For Europe, it is important to secure strategic interests by ensuring that natural gas from Azerbaijan can flow to the continent as promptly and efficiently as possible. The practical realization of this strategic objective is the Southern Gas Corridor and the Shah Deniz gas field will kick start the entire process of bringing Caspian gas to Europe.

The Pipelines

The Trans-Adriatic Pipeline is the third major part of the Southern Gas Corridor. The other two are the expansion of the South Caucasus Pipeline from the Caspian shore in Azerbaijan through Georgia to Turkey, and the Trans-Anatolian Pipeline (TANAP) across Turkey to the border with Greece. Azerbaijan

¹ On December 17, 2013, the Shah Deniz Consortium announced the final investment decision (FID) for the Phase 2 development of the Shah Deniz gas field in the Caspian Sea, offshore Azerbaijan. This decision affirmed the plans to create a new Southern Gas Corridor to Europe (BP Press release, December 17, 2013).

and its state oil company SOCAR have initiated the construction of TANAP and undertaken most of the cost in order to provide a bridge through Turkey. Azerbaijan is the main shareholder in TANAP (80 percent) and will remain the main investor proportionately to its ownership stake after a pending purchase is completed in 2014.²

The Trans-Anatolian Pipeline project (TANAP) is the foundation of the Southern Gas Corridor to Europe, since there would have been no Southern Gas Corridor without TANAP. One can even say that the Trans-Adriatic Pipeline—the continuation route of TANAP into Europe—is the child of TANAP, which in turn is the brainchild of Azerbaijan. Azerbaijan succeeded in terms of strategic planning where the Shah Deniz Consortium partners and the EU had failed. The Shah Deniz Consortium partners were unable or unwilling to build a dedicated pipeline across Turkey for Shah Deniz gas and potential gas from other Caspian sources. The EU, for its part, was unable to mobilize the political and financial support, necessary for building the Nabucco project.

The volumes flowing through TANAP will increase from 16 billion cubic meters (bcm) annually, planned for 2020, to 23 bcm by 2023 and 31 bcm by 2026. There is also discussion about more ambitious capacities beyond 31 bcm. Some observers are speaking about up to 50 bcm, depending on the availability of Caspian gas volumes, not only from Azerbaijan but also from Turkmenistan in the future.

In the view of the European Commission, Turkmenistan is an integral component of the planned Southern Corridor and potentially it might become the main supplier of gas into the Southern Corridor. The EU Commission is active in negotiating with Turkmenistan regarding deliveries of Turkmen gas into a projected Trans-Caspian Pipeline (TCP) to be connected via TANAP to Europe. Turkmenistan offers up to 40 bcm per year of gas to be fed into the Southern Corridor. The Turkmen leadership is interested in selling larger volumes on the European market and identifying a collective buyer for these quantities. Russia and Iran are opposed to the TCP pipeline.

Why TAP and Not Nabucco?

From Azerbaijan's national perspective as a gas producer, it would prefer:

- To have buyers located as close as possible to the production side in the Caspian Sea to limit transportation costs;
- To find limited market niches in as many countries as possible to avoid direct confrontation with Russia and ensure a diversity of buyers for Azerbaijani gas. The Balkan markets seem to be suited for this purpose.

Azerbaijani experts point out that the Nabucco-West pipeline faced numerous difficulties, not only commercial and financial, but also the lack of political support by Brussels and Washington. For the last two years, the two capitals were expressing equal support for both pipelines and this is what Baku did not

² The TANAP partners are expected to be: SOCAR (operator, 68 percent), BOTAS (20 percent) and BP (12 percent) after a purchase is completed in 2014.

expect. There was clearly a lack of strategic focus and geo-political leadership in both Washington and Brussels.

Concerned that Nabucco-West may be chosen over TAP, Gazprom challenged Azerbaijan and the Southern Gas Corridor. The selection of TAP over Nabucco was not only a commercial, but also a political decision as Russia put Azerbaijan under immense pressure to withdraw from Nabucco in order to allow its competitor South Stream to be built. Baku faced both political and commercial challenges because Gazprom gave a significant discount to its European customers in 2013. This was a significant bargaining chip for potential customers of the Shah Deniz Consortium.

The selection of TAP over Nabucco was a disappointment for the Central and East European countries of Romania, Bulgaria, Hungary, Slovakia and Moldova. While Bulgaria has been included in the Southern Gas Corridor through an interconnector with Greece, the rest of the countries will remain dependent on Gazprom supplies.

The EU and U.S. were neutral regarding the choice between TAP and Nabucco, because in their view it was important to build the Southern Corridor—the precise route, once the pipeline reaches the EU, was secondary. Therefore the choice between TAP and Nabucco-West was not of critical importance to Brussels and Washington. According to energy experts, the Nabucco project did not succeed, because of the way the project was structured. There was not enough gas available at the right time to finance Nabucco. The commercially viable option was TAP, since Nabucco could be financed only if Turkmen gas was secured. However, the question about the energy independence of Central and Eastern Europe remains open. One option for diversification could be the Ionian–Adriatic Pipeline from Albania to Croatia; another is building an interconnected European gas network, so that there are no more “energy islands.”

Why the Italian Market?

The selection of Italy as the final destination of the Southern Gas Corridor was surprising, because the Italian market is oversupplied and well diversified. The Shah Deniz Consortium justifies its decision by pointing at the high gas prices in Italy and a strong commercially viable market. Moreover, Italy needs to import additional volumes of 7.7 bcm annually, due to the declining production of its own natural gas. It is estimated that every year Italy's gas production will be declining by 10 percent. From supply security reasons, Italy is also trying to replace some volumes of gas coming from Algeria and Libya. In addition, most of Italy's prospective LNG projects and pipeline projects are presently on hold.

Azerbaijani experts claim that the situation of oversupply in the Italian market is an asset for the Shah Deniz Consortium and Azerbaijan, because the Shah Deniz gas can be easily delivered to neighboring countries through the gas pipeline from the Southern part of Italy northwards. In addition, the Italian Snam and the Belgian Fluxys plan to invest in the reverse flows from the South to the North of Italy. This will enable all the shippers to transport gas from the Mediterranean to the North Sea, including the countries along the pipeline. Italy's National Investment Strategy plans to exploit the country's geographic position to turn it into one of Europe's main transit countries by 2020.

Independent experts point out, however, that if Caspian gas is transported from Southern Italy northwards, it will reach the well-diversified markets in Western and Northern Europe, but will bypass the countries in Central and Eastern Europe, which remain heavily dependent on Russian gas. The Trans-Adriatic Pipeline Consortium changed its rhetoric only recently, when describing Italy not as the main destination market but as a transit corridor to markets in Europe, reaching up all the way to the North Sea.

Direct Economic Benefits From the Southern Gas Corridor

- In Georgia, the expansion of the South Caucasus Pipeline will be the largest single investment amounting to \$2.2 billion.
- In Turkey, direct investment will be almost \$8 billion and contribute to the Turkish economy.
- In Italy, the pipeline will bring temporary construction projects and, together with the receiving terminal, it will also create permanent employment for the lifetime of the pipeline. TAP will provide 10–12 percent of Italy's gas supplies and, similarly to Albania, will contribute to diversifying supplies and improving energy security. TAP will also help Italy become a transit point to additional markets in Europe.
- In Albania, TAP will be the largest direct investment, in fact the largest ever investment in the Albanian economy. It will also help Albania become a transit country, especially to other Balkan countries, through the Ionian-Adriatic Pipeline.
- In Greece, there will be a 1.5 billion euro (\$2.04 billion) investment, which will create 2,000 jobs directly and 10,000 indirectly, bringing almost 450 million euros (\$612 million) of added value to the Greek economy.

Risks to the Southern Gas Corridor

South Stream: The main risk to the Southern Gas Corridor comes from its competitor—the prospective Russian-led South Stream Gas Pipeline. Analysts and government officials agree that South Stream is a political project with little economic sense. Experts expect that Russia will try to do whatever it can to undermine both TAP and TANAP in order to maintain its markets in Southeastern Europe. Russia fought hard to block the Southern Gas Corridor, whether through disinformation campaigns, plans to build a competing gas pipeline (South Stream), or attempts to purchase the Greek natural gas transmission system operator DESFA. It was only when the European Commission made clear to Moscow that it would not be allowed to operate DEPA and DESFA as a monopoly that Russian competitors quit the tender and left the field to SOCAR. Russian officials are worried, as they are gradually losing their ability to set prices using oil indexation and monopoly pressures.

Natural gas not only has commercial value but also geopolitical interest. Russia will try to exploit the economically vulnerable Greece and energy-thirsty Turkey, whose economy is booming. Among the supporters of South Stream are several countries in Central-Eastern Europe—Bulgaria, Serbia, Croatia, Slovenia, Hungary and Austria. Bulgaria is vital for the construction of South Stream, since Romania chose not to participate in the project.

Romania, which has been the staunchest supporter of the Southern Corridor, is suffering because of Nabucco's demise, mainly because Bulgaria has been ambivalent in choosing either Nabucco or South Stream. Different Bulgarian governments have sided with one or the other, with the previous center-right government delaying a decision on South Stream for a long time. The current Socialist-led government in Sofia, which traditionally has had close, historically motivated, and economically profitable relations with Russian energy interests, is rapidly advancing South Stream. But political turmoil in the country may delay the construction of the pipeline if early elections take place in 2014.³

Since the first proposal in 2007 by President Vladimir Putin, South Stream's objective has evolved.

- First, it failed in its initial objective to capture Turkmen gas.
- The second objective was to discourage Nabucco. The prospect of South Stream being possibly built contributed to discouraging financing for Nabucco.
- Third, the main goal of Gazprom and South Stream today is to enlist transit countries, such as Bulgaria, to undermine the EU's legislation, because Gazprom wants to extend co-ownership of the pipeline into countries on EU territory, contrary to the specifications of the Third Energy Package. Gazprom would like to create a precedent in the South Stream transit countries and use it to protect Gazprom's existing holdings in Germany and the Baltic states. Washington and Brussels should put Bulgaria on the spot, not to become an accomplice of Gazprom in violating EU legislation.

Iran: Another risk to the Southern Gas Corridor comes from Iran, which is currently under sanctions. Iran aspires to trade its gas from South Pars via the Southern Corridor. The daughter company of the National Iranian Oil Company (NIOC) is a shareholder of Shah Deniz and this creates a politically uncomfortable situation. Iran has made clear that it opposes the Trans-Caspian Pipeline, which would transport gas from Turkmenistan to the Southern Gas Corridor. Indeed, both Russia and Iran oppose the development of the Trans-Caspian Pipeline.

When the U.S. Congress passed the sanctions legislation in the National Defense Authorization Act of 2013 and also in 2012 and 2011, it included language to ensure that the Shah Deniz Consortium can continue operating. That has been reaffirmed in all legislation concerning Iranian sanctions. The U.S. will continue to be vigilant, but the companies involved in the Consortium are well aware of the restrictions and the U.S. administration is confident that they will be followed.

³ The construction of South Stream was further delayed by the decision of the European Commission on December 4, 2013, that all agreements with Russia signed by six European countries are illegal and need to be renegotiated.

EU Perspective

Russia will remain a major part of the European natural gas equation, but the EU is committed to diversification. The Southern Corridor has been a priority project for the EU for years. It has always been both an economic project and a geo-political project. Most important for the EU is to get the gas flowing because within five years much higher quantities will be coming through the Southern Corridor. The Europeans have been working hard on building bidirectional interconnectors because, as illustrated by the TANAP-TAP scenario, the Bulgaria-Greece Interconnector working with reverse flow will deliver gas into Southeastern Europe.

The European Connector Facility program that helped with the financing of interconnectors is probably the biggest European infrastructure program on energy, and its goal is to eliminate all energy islands by 2015. The key dates for Europe are 2014 for the completion of the internal European energy market and 2015 for the elimination of the last energy island in the EU.

U.S. Perspective

The energy security of the European Union is a U.S. national security imperative. From that perspective, the Southern Corridor is an extremely important development. It is a victory for U.S. policy, as it continues what President Bill Clinton started—an initiative to connect Azerbaijan with the West through a strategic energy infrastructure project.

U.S. strategic objectives have included helping Azerbaijan and Georgia secure their sovereignty and independence, as well as making sure that new supplies of energy from the Caspian Sea reach global markets—first and foremost the European market. The U.S. has promoted that goal with the Baku-Tbilisi-Ceyhan (BTC) Oil Pipeline in the past and the current evolution of the Southern Gas Corridor.

Azerbaijan is the enabler of the Southern Corridor, but it also, along with the BTC pipeline, provides Azerbaijan with the oxygen of independence. It is the decision that Heydar Aliyev made in 1994—to connect Azerbaijan physically with Turkey, with the Euro-Atlantic community and now to the European markets—that is critical to Azerbaijan's survival as an independent state.

The other major strategic objective of the U.S. is the economic wellbeing and efficiency of its European allies' economy. The underlying strategic goal is to enable the purely market-based trading of natural gas everywhere in Europe. Once hub-based natural gas trading is developed within the EU, it will be impossible for monopolists to dominate the market. The U.S. needs to focus on the nuts and bolts of what the EU is doing, which is developing genuine hub-based trading and market-based trading of natural gas.

Although the U.S. remained neutral regarding the choice between TAP and Nabucco, once the commercial decision was made, the U.S. administration must make sure that Bulgaria obtains gas from Greece and will look into the potential of a new pipeline stretching northward to Croatia. The Ionian-Adriatic Pipeline and the Interconnectors would provide gas not only to Albania as a new natural gas consumer, but also to Croatia, Serbia and Montenegro, and then allow gas to feed into the Central

European market. It is a setback that the EU and U.S. were unable to attract Turkmen gas, which would have enabled the Nabucco pipeline to be financed. But this will not happen until the Southern Corridor has physically materialized.

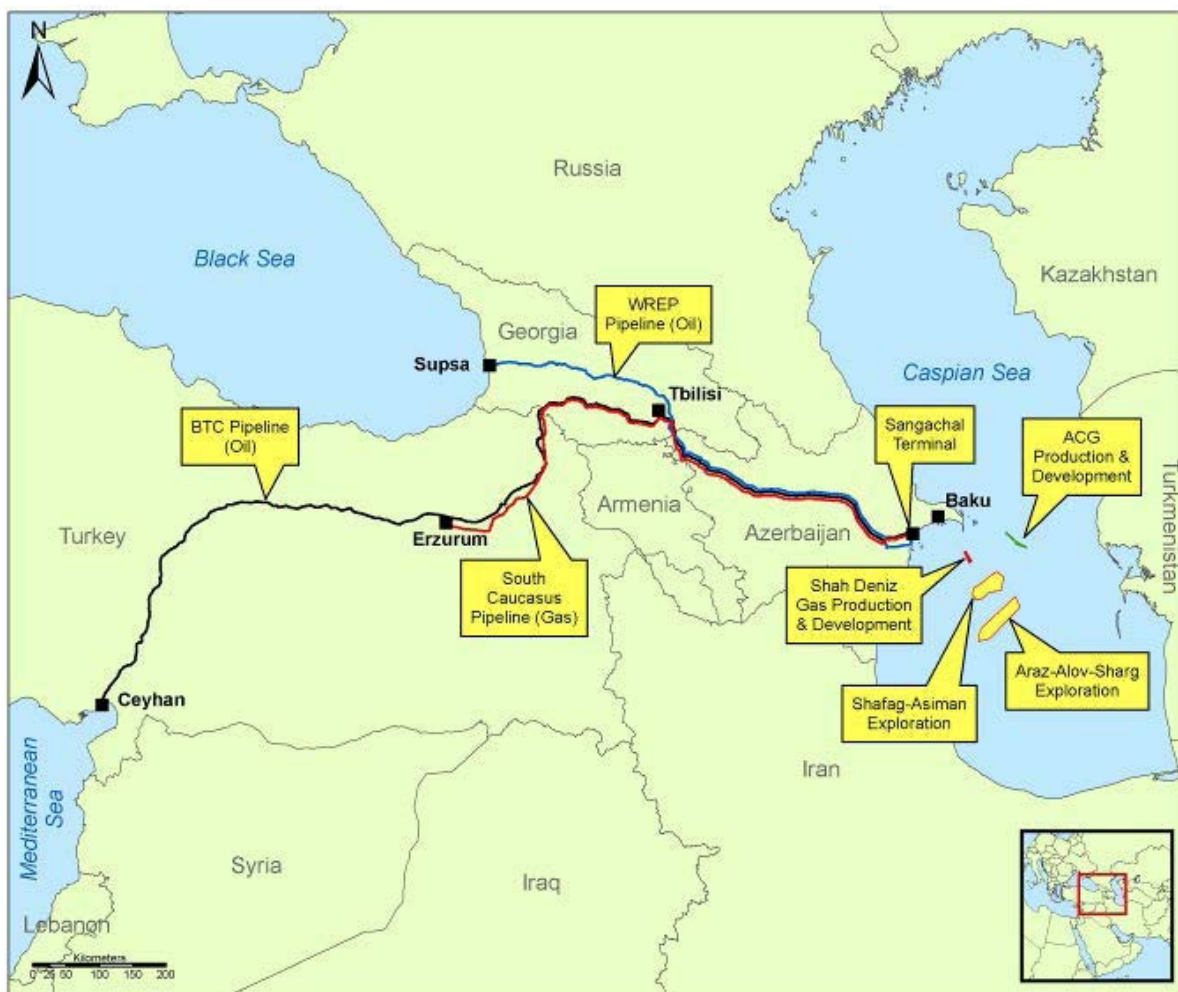
The EU's demand for gas is currently for over 500 bcm per year. The Southern Gas Corridor will deliver only 10 bcm to Europe in the first few years; therefore, according to U.S. officials, it will not be the silver bullet to energy security. Washington and Brussels need to continue working together on EU diversification by seeking other options, which may not be multibillion-dollar infrastructure projects. They may include a combination of renewable energy sources and LNG along with developing an integrated gas infrastructure in Europe.

However, current developments in the Southern Gas Corridor are only the beginning of substantial diversification of gas supplies to Southeastern Europe. TANAP is a large pipeline designed to absorb and transit more quantities of gas from Azerbaijan and other sources in the future. Hopefully, Turkmenistan will decide that it is ready to export gas through the Western route once the Southern Corridor is in place. There is also the potential for gas deliveries from Cyprus, Israel and Northern Iraq, which may find its way to TANAP and then to Europe, providing further diversification opportunities.

Conclusions and Next Steps

- Once the agreement between the TANAP partners and the final investment decision for Shah Deniz Phase 2 are in place, construction work will intensify until 2018 when the first gas is expected to start flowing to Turkey and reach the European market in 2019. (Note: These decisions were made in December 2013.)
- As the Southern Gas Corridor progresses, parts of the Balkans will remain under a Gazprom monopoly for at least the next decade.
- Once the compromise on selecting TAP vs. Nabucco was made, Azerbaijan expects to improve relations with Russia on energy issues and there can be joint projects in Europe.
- From Azerbaijan's point of view, Europe has clearly failed in delivering a bigger-scale solution to establish a direct link between the Caspian region and countries in Central and Southern Europe, which are dependent on a single gas source. This resulted in more cautious actions of nations to the east of the Caspian Sea in dealing with Brussels-supported energy infrastructure projects.
- The U.S. government has supported the Southern Gas Corridor through several consecutive administrations, while remaining neutral when it came to the selection between TAP and Nabucco-West. However, Azerbaijani experts consider that the U.S. policy for establishing the East–West Energy Corridor did not succeed either because the biggest natural gas reserves owner, Turkmenistan, is left without a direct link to Europe and this might have resulted in Turkmenistan turning toward China instead.

- Although the U.S. administration evaluates the Southern Gas Corridor as a victory of its policy in the Caspian region, it also realizes that more work is needed to ensure Turkmen gas supplies for the Southern Gas Corridor as well as gas supplies from other potential sources such as Cyprus, Israel, Iraq.
- The EU, for its part, continues to work with Turkmenistan to secure larger volumes of Caspian gas for the Southern Gas Corridor.
- At the same time, the EU is implementing a comprehensive strategy for energy security that involves increases in renewable energy sources and LNG, along with developing an infrastructure for an interconnected European energy market and integrated gas market. The U.S. fully supports these developments, in which the Southern Gas Corridor will play a critical role.



Oil and Gas Export Routes — Azerbaijan (Source: BP presentation)

Conference Report

Opening Remarks by Glen Howard, President of the Jamestown Foundation

We are delighted to have these wonderful speakers here today, probably some of the best experts in energy security in the Eurasian region, which is rapidly expanding its reach to Eastern Europe. The title of today's conference is *Azerbaijan and the Southern Gas Corridor to Europe: Implications for U.S. and European Energy Security*. We have handed out something that we call the *Caspian Energy Fact Sheet*, compiled by Margarita Assenova, Director of Programs for the Balkans, Caucasus and Central Asia at the Jamestown Foundation. You will be hearing today about many different aspects of the energy developments and plans in the region and this factsheet should be very helpful as you are trying to look for some of the acronyms used by the speakers.

The reason we are having this event is the landmark agreement of June 21st of this year when Azerbaijan won a tender to take control of Greece's public gas transmission system operator DESFA, bidding out Gazprom. This development and the start of the Trans-Adriatic Pipeline project (TAP) are changing the energy landscape of Southeastern Europe. They signify a series of steps in the process of creating a gas distribution network for Caspian gas in Southeastern Europe. Azerbaijan and its state oil company SOCAR provide a bridge through Turkey by building the Trans-Anatolian Pipeline (TANAP), which will connect with TAP in Southeastern Europe.

After the deal was signed last summer, many friends of mine in Baku have told me that Baku is being inundated with Greeks flying from Athens and looking for different aspects of cooperation in the energy sector and also for business investment cooperation. Azerbaijan's entry into the Greek gas market is of vast importance, because it is rapidly changing the dynamics of the region, which are very important to analyze and understand.

Later today you will be hearing from Matthew Bryza, we are very delighted to have him speaking. And no event could be better without having Vlad Socor, who came all the way from Munich—he is our Senior Fellow who writes for the Eurasia Daily Monitor. But this panel is in the very capable hands of moderator Alexandros Petersen. Alexandros is a noted expert on the region and we are delighted he is able to handle this panel. Thank you, Alexandros.

Panel One – Azerbaijan, the EU and the Gas Corridor to Europe

Moderator Alexandros Petersen: Thank you so much, Glen, for the kind introduction and a very good overview of the strategic importance of the topic that we are covering today. Frankly, I don't think we could have gotten more of an all-star cast on this topic, so I am very happy to be part of it as a facilitator. I just want to briefly underscore that anyone who has been looking at the topic of the Southern Energy Corridor for the past decade and a half will know that the decision made in June was of immense strategic importance, not just for the region, but also for European energy security and for U.S. policy across the region. A testament to that importance is a great crowd that we have assembled here. I see all kinds of experts in the audience today and that's fantastic. So, the topic of this panel is *Azerbaijan, the EU and the Gas Corridor to Europe*. Our first speaker, I think many of you will know very well, he is the prominent expert on the topic of Caspian gas to Europe and that's Vladimir Socor, who is a Senior Fellow at The Jamestown Foundation and the anchor of its *Eurasia Daily Monitor* publication.

Vladimir Socor, Senior Fellow, The Jamestown Foundation

“Azerbaijan’s TANAP Project: Foundation of the Southern Corridor & New Developments”

Thank you, Alex, for those kind words. The Trans-Anatolian Pipeline project (TANAP) is the foundation of the Southern Gas Corridor to Europe in a very real and concrete sense. There would have been no Southern Gas Corridor without TANAP. Everything else that you will hear about the Southern Gas Corridor in this panel will all be the consequence of TANAP. One can even say that the Trans-Adriatic Pipeline (TAP)—the continuation route of TANAP into Europe—is the child of TANAP. The derivations that follow further downstream from the TAP project stretch all the way to northwestern Europe in the North Sea. They could be seen as grandchildren of the TANAP project, which, in turn, is a brainchild of Azerbaijan.

The very fact that this project emerged, was formulated and planned in Baku, testifies to the rapid growth in maturity of Azerbaijan as a state. It also reflects the maturity of Azerbaijan's leadership, the strategic vision of President Ilham Aliyev, who has been personally involved in the strategic planning for the TANAP project and other Azerbaijani projects all along. It testifies as well to the successful model of governance in Azerbaijan, which is centered on the executive presidency, guaranteeing stability, continuity of planning and strategic vision for the long term. And finally, this project testifies to the growth of the State Oil Company of Azerbaijan (SOCAR) from a local company to a national one and then becoming major international oil and gas producer—a growth that SOCAR has accomplished in less than one decade. Azerbaijan is the main shareholder in the TANAP and will be its main investor proportionately to its ownership stake. Ownership stakes at the moment are 80 percent for Azerbaijan's State Oil Company and a combined 20 percent for the Turkish Petroleum Pipeline Corporation (BOTAS) and Turkish Petroleum. From its 80-percent majority stakes, Azerbaijan intends to sell minority stakes to BP, Statoil and Total: 12 percent and 5 percent respectively, with SOCAR retaining a 58-percent majority ownership and the operating rights. This is the planning at the moment.

Had it not been for TANAP, the rivalry between the Nabucco Gas Pipeline project (or its shorter version Nabucco-West) and the Trans-Adriatic Pipeline project would have remained an academic matter.

Azerbaijan succeeded in terms of strategic planning where the Shah Deniz Consortium partners and the EU had failed. The Shah Deniz Consortium partners were unable or unwilling to build a dedicated pipeline across Turkey for Shah Deniz gas and, beyond Shah Deniz, other Caspian gas. They could not or would not finance a construction for larger volumes of Caspian gas.

The EU, for its part, was unable to mobilize the political and financial support necessary for building the Nabucco project. Therefore, Azerbaijan succeeded where the major international oil companies and the European Union collectively had failed. TANAP, in effect, replaces the Turkish section of the former Nabucco project. The emergence of TANAP on Turkish territory relieved Nabucco of a major portion of its construction costs and could have made possible the survival of Nabucco. The Nabucco-West gas pipeline was only one third of the length of the original Nabucco project. But, as we all know, the Shah Deniz Consortium partners selected the Trans-Adriatic Pipeline project instead.

With this choice, Azerbaijani gas will for the first time go straight into EU markets and EU territory. For the first time, the State Oil Company of Azerbaijan will be entering the European downstream gas business, directly in its own right, starting with Greece and continuing onto Italy and beyond. The Trans-Anatolian Gas Pipeline project, which was conceived in Baku, answers to the EU's main criteria for such a pipeline project. It is scalable, it is dedicated and it will be operating under EU-compatible legal and regulatory regimes. It is scalable from 16 billion cubic meters (bcm) annually planned for 2020, to 23 bcm planned for 2023 and 31 bcm planned for 2026. There is a discussion about more ambitious capacities beyond 31 bcm. Some observers and some people in Baku and in Ankara are speaking about up to 50 bcm, depending on the availability of Caspian gas volumes not only from Azerbaijan, but also from Turkmenistan. Turkey is certainly in favor.

There is a discussion about the cost of TANAP. Initially, it was estimated to cost \$6 billion, by now some estimates have reached from \$11 billion to \$14 billion. Some considerations behind such estimates can be the surge to downscale the volume, the capacity of the pipeline, in the process of planning it. This is why there is a discussion whether the pipeline should have a 56-inch diameter or a 48-inch diameter. In August, the TANAP Consortium led by SOCAR announced prequalification tenders for construction works. It is a bold step and it is timed to precede the final investment decision on the Shah Deniz Phase 2 extraction project, which the Shah Deniz Consortium is expected to make by October of this year.

TANAP's capacity and its planned expansion will necessarily be reflected into the expansion of the capacity of the South Caucasus Pipeline on Georgian territory. The pipeline is inaccurately referred to as the Baku-Tbilisi-Erzurum Pipeline; in fact it stops on the Georgia-Turkey border. The South Caucasus Pipeline, currently with the capacity of 8 bcm per year, is chronically underutilized. It will be expanded to reflect the capacity of TANAP, because the Georgian section of the pipeline would have to transport at least 16 bcm per year from Shah Deniz, plus, in the years ahead, additional volumes from non-Shah Deniz gas in Azerbaijan.

It is important to keep these non-Shah Deniz projects in mind because they will come on line after Shah Deniz, which include:

- The Azeri-Chirag-Guneshli Deep—the gas deposit that lies deep underneath the oil field Azeri-Chirag-Guneshli (ACG)—with BP, Statoil and other companies involved in that multinational consortium;
- The Absheron project in Azerbaijan where Total is the majority shareholder and operator alongside SOCAR; and
- The Shafag–Asiman project, where BP is involved as the lead company. So, these are volumes that will come on stream after Shah Deniz and will certainly necessitate a corresponding expansion of the capacity of the Trans-Anatolia Pipeline.

While some of the Western companies involved, including BP, take a rather narrow corporate-oriented view of the capacity of the Trans-Anatolian Pipeline, Azerbaijan takes a more strategic long-term view. Azerbaijan sees its future as an exporter not only of oil, but also of gas and not only an exporter of gas, but also as a transit country for major volumes of gas. That's where Azerbaijan's future as a nation lies and this is why Azerbaijan is interested that a strategic pipeline with maximum scalability be achieved by adding parallel strings and compressor power.

And this is where Turkmenistan comes into play. In the view of the European Commission, Turkmenistan is an integral component of the planned Southern Corridor and in fact, potentially, it might become quantitatively the main supplier of gas into the Southern Corridor. Some of you undoubtedly know the EU Commission is active in negotiating with Turkmenistan regarding deliveries of Turkmen gas volumes into a projected Trans-Caspian Pipeline—to be fed directly at Sangachal into Azerbaijan's pipeline system and eventually to find its way via TANAP to Europe. There are daunting obstacles to this on both sides. This merits a detailed discussion, because the European Union is very keen to achieve the inclusion of Turkmenistan into the Southern Gas Corridor. The Turkmen side offers up to 40 bcm per year of gas to be fed into the corridor, including 30 bcm from onshore deposits in Eastern Turkmenistan. These volumes are going to be transported to the Caspian littoral in the Western part of the country by the so-called East-West Pipeline, which Turkmenistan is building through its own funding at a capacity of 30 bcm per year. The construction is much behind schedule, but the idea exists. Another 10 bcm of Turkmen gas will be added from offshore production for a total of 40 bcm.

Turkmenistan would not risk antagonizing Russia, would not risk possible retaliation from Russia for just a few bcm to be fed into the Southern Corridor—it wants big volumes. But at the same time Ashgabat is very reluctant, practically unwilling to admit major Western companies into onshore projects in Turkmenistan. It admits Chinese and Korean companies into a consortium, but not major Western companies in production-sharing agreements. Moreover, Turkmenistan has difficulty identifying a buyer in Western Europe for Turkmen gas. Ashgabat would like to see the EU as a collective buyer of Turkmen gas through some sort of a Western European agency. Europe, of course, does not work that way. The EU Commission is trying to explain to Turkmenistan that individual private or state companies acquire gas for Europe on a company basis, not as a consortium of buyers. So, these are the dilemmas regarding Turkmenistan, which in turn influence the debate about the ideal and commercially viable capacity of TANAP, with the discussion now being whether the pipeline and the continuation in Georgia should be 48 inches or 56 inches in diameter.

From Azerbaijan's national perspective as a gas exporter, it would prefer, mainly, two things. The first is to have buyers of Azerbaijani gas located as close as possible to the production side in the Caspian Sea to limit transportation costs. Secondly, due to the limited volumes of available gas from its project, Azerbaijan wants to avoid head-to-head competition with Gazprom with its huge volumes of gas, but would rather find limited market niches in as many countries as possible to have a diversity of buyers of Azerbaijani gas. And the Balkan markets seem to be suited for that. This partly explains Azerbaijan's earlier preference for Nabucco, but Azerbaijan can now achieve a similar result through TAP: in Greece, following the purchase of two thirds of the Greek Natural Gas System Operator (DESFA) and in Albania, which Azerbaijan plans to gasify. Albania currently does not use any gas and is not connected to any gas grid. Therefore, SOCAR plans to gasify Albania. At the same time by acquiring DESFA, SOCAR is thereby acquiring a minority stake in the Greece-Bulgaria Gas Interconnector. DESFA itself used to be a 50-percent partner in that interconnector on Greek territory alongside the Italian Edison. Now DESFA's share is reverting to SOCAR. That interconnector opens the way for Azerbaijan to export 1.5 bcm of gas per year to Bulgaria. Thus, Azerbaijan has found that the selection of the TAP project corresponds with its needs.

But the debate regarding the proper capacity of TANAP could still lead to unexpected results. In the event that BP and perhaps other companies succeed in limiting the capacity they are willing to finance in TANAP, then according to some assessments Nabucco-West would have a second chance. This is because potential additional volumes, which would or could come on stream in the Caspian basin or in the Kurdish autonomy of Iraq in the future, will need an outlet. And if TAP cannot be that outlet, then there would be a second chance for a Nabucco-like route. The EU Energy Commissioner Günther Oettinger has in several recent statements used the term "the route toward Austria"—he did not say the Nabucco route or the Nabucco-West route after Nabucco's demise, but he said "the route toward Austria". This is the route to the Baumgarten Terminal and Distribution Center, the original destination of Nabucco, which could become viable as Oettinger said, if additional Caspian and Northern Iraqi gas volumes become available. And if that happens, then that route, the post-Nabucco route into Central Europe, would also be a child of TANAP. Because only TANAP would make it possible, just as TANAP, the Azerbaijani-planned and conceived project, has made everything else in the Southern Gas Corridor possible.

Alexandros Petersen: Thank you so much, Vlad. I think there is only one thing to say, which is that the only thing better than reading Vlad Socor's *Eurasia Daily Monitor* articles is actually hearing him in person synthesizing them all together. Fantastic! I am going to move to our next speaker Rauf Mammadov, who is the Director of SOCAR Representative Office in the United States. Rauf has deep experience in some of the issues we have been speaking about because previously he spent six years as a Senior Assistant to the CEO of SOCAR as that company was transforming from a smaller national oil company into a truly international firm. So, over to you, Rauf.

Rauf Mammadov, Director, U.S. Representative Office of State Oil Company of Azerbaijan
"The Southern Gas Corridor from SOCAR's Perspective"

In my speech I would like to give a general overview of the efforts currently being taken to diversify the energy supplies to Europe and also to talk a little bit about the Southern Gas Corridor, the current status

of the pipeline and the economic benefits these pipelines will yield to the countries they will go through. As you know, Europe is one of the major energy consumers in the world and is also among the major gas consumers in the world. And as a major energy consumer Europe faces several challenges, including competition with emerging markets and rising global demands, fragmented markets and unstable suppliers, especially from the Middle East. In this context, there is another competition that comes from coal supplies. Despite the great environmental benefits of gas as an energy source, right now gas is losing to coal with the major coal exporters to Europe being the U.S. and Russia. In this context it is really important to have alternative options for diversified gas supplies to Europe and the Southern Gas Corridor is the real option.

As Mr. Socor explained, the Southern Gas Corridor consists of the expanded South Caucasus Pipeline, TANAP and TAP. The total length of the corridor is almost the same as the Keystone Pipeline, it is almost 3,500 km, but the difference is that it passes through many countries, starting from Azerbaijan, through Georgia, Turkey, Greece, Albania and ending in Italy. This will be the first direct energy link from the Caspian basin to Europe and this will be the first non-Middle East and non-Russian gas to be supplied to Europe.

Currently Azerbaijan's national gas [production volumes] are almost 28 bcm per year, but they will be increased to 30 bcm in 2015 and the expected forecast is 55 bcm in 2020. Compared to other suppliers of gas to Europe, the volumes of the Southern Gas Corridor cannot compete in size, but they will deliberately contribute to diversification of energy sources, boost competition in Europe and give end-buyers leverage to negotiate gas prices with other suppliers. In this context, it is very important to have the new pipelines in place.

From the point of view of transit countries and end-buyers, it is very important to have these pipelines constructed from both short-term and long-term perspectives. For example, in Turkey, the direct investment will be almost \$8 billion, which will contribute to the Turkish economy. In Italy, the pipeline will bring temporary construction projects and, together with the receiving terminal, it will also create permanent employment for the lifetime of the pipeline. TAP will provide 10–12 percent of Italy's gas supplies and, similar to Albania, will contribute to diversifying supplies and improving energy security. TAP will also help Italy become a transit point to additional markets in Europe. In Albania, TAP will be the largest direct investment, actually the largest ever investment in the Albanian economy. It will also help Albania become a transit country, especially to other Balkan countries, through the Ionian-Adriatic Pipeline. In Greece, there will be a 1.5 billion euro (\$2.04 billion) investment, which will create 2,000 jobs directly and 10,000 indirectly, bringing almost 450 million euros (\$612 million) of added value to the Greek economy.

In sum, TAP will not only diversify energy supplies, but will also make a short-term and long-term contribution to the economies of the countries involved in the project. As Mr. Socor mentioned, the Southern Gas Corridor might also encourage several other suppliers, such as Caspian littoral states on the East side of the Caspian Sea, Northern Iraq and possibly Israel to supply their gas volumes into the pipeline when it comes online in 2018 or 2019. I think we have previously seen this kind of success with the Baku-Tbilisi-Ceyhan Oil Pipeline (BTC). Initially, many had concerns that BTC would not take place,

but it happened and now we have Kazakhstan and Turkmenistan supplying oil through the pipeline. So, I think it is a very good story to tell, it is a very good success story to show that actually these projects are possible and they will help provide energy security in Europe and also contribute to the energy security of the U.S. The U.S. government has supported the Southern Gas Corridor through several consecutive administrations, while remaining neutral when it came to the selection between TAP and Nabucco-West.

Alexandros Petersen: Thank you, Rauf. It is good to hear the message from Baku and also underscore the importance of U.S. energy diplomacy in this acquisition—both in terms of the former Special Envoy for Eurasian Energy Richard Morningstar, who is now Ambassador in Baku, but continues to work with the ENR Bureau at the State Department, and Amos Hochstein, who will be with us later today. I am going to move on to Gulmira Rzaeva. I often describe Gulmira as an encyclopedia of information on the topic of the Southern Corridor, so we are very lucky to have her today. Gulmira is the Principal Research Fellow at the Center for Strategic Studies (SAM) under the President of the Republic of Azerbaijan and just completed a visiting research fellowship at the Oxford Institute for Energy Studies.

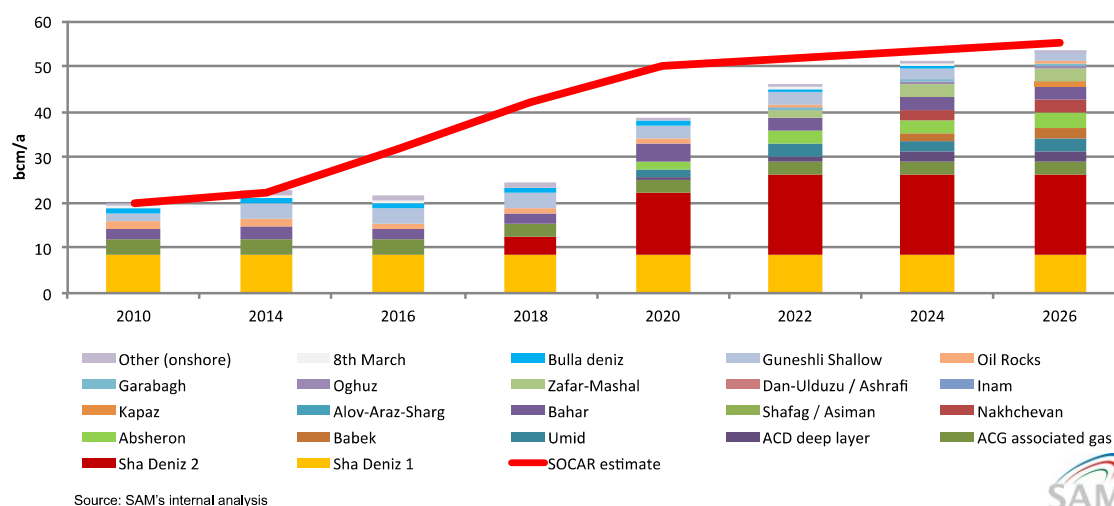
Gulmira Rzaeva, Principal Research Fellow, Center for Strategic Studies under the President of the Republic of Azerbaijan

“Azerbaijan’s Expanding Role in the Southern Gas Corridor”

Today I am planning to speak about the natural gas production potential of Azerbaijan, to explain why the Italian market was chosen, look at the commercial and political backgrounds of this decision and see what will be the next stage of this megaproject.

Existing and new field/structure developments: field by field assessment

- Shah Deniz is the dominant single contributor to Azeri gas production. SD1 share to date is already ~50%
- The remainder is from various offshore fields and associated gas from offshore oil production (e.g. Guneshli Shallow, Bulla Deniz, 8th March, Bahar and ACG).
- New fields and structures like Umid, Absheron, ACG Deep, Babek, Shafag-Asiman, Nakchyvan have the potential to provide significant additional gas volumes - but production ramp up will most likely be beyond 2020 due to the development lead times and mainly drilling rigs availability



My first slide shows the various gas fields in Azerbaijan apart from the Shah Deniz Phase 2. There are the so-called Future Generation Fields that are at various stages of development and will contribute significantly to the gas production of Azerbaijan—they are expected to start production in 2020–2025 at the latest. The gas production in Azerbaijan will reach some 45–50 bcm per annum and the exported volume to Europe will be doubled by 2025 when these gas fields will come online. However, I should mention that this will depend on the availability of drilling rigs, because this is currently a problem in Azerbaijan—investment is needed in these kinds of rigs. Gas production also depends on the development of those fields, but as I said they are expected to start coming online from 2020 to 2025.

I think everyone is interested in the question of why the Italian market was chosen and whether this is the best market from a commercial point of view. It is not a secret to anyone sitting in this room that the Italian market is oversupplied, a situation that started in mid-2000 when there was a rapid rise in supply followed by a decline in gas consumption in the country. However, paradoxically, during the winter time the country is at risk of facing periodic supply shortages. Italy is very much dependent on gas-fired power plants and the residential sector is also pretty much dependent on gas. Also, the country is 90-percent dependent on foreign gas supplies, half of them coming from two countries: Russia and Algeria.

With regard to the price of gas, Italy is one of the best commercially viable markets in Europe. Italy is among the European countries where hub prices are the highest, but apart from that the pipeline price is

also one of the highest. As you know, in January 2013 Gazprom gave a significant discount to all of its European customers, including Italy. Before the discount, the gas price in Italy was \$440 per thousand cubic meters, which is one of the most expensive and the discount price now stands at \$404 per thousand cubic meters. Italy needs to replace some volumes of gas, approximately 7.7 bcm annually, due to declining production of its own gas. It is estimated that every year Italy's gas production will be declining by 10 percent. In addition, from supply security reasons, Italy is trying to replace some volumes of gas coming from Algeria and Libya. Some long-term contracts, especially with Russia, Libya and Algeria are expiring in the next decade and this is another reason for going to this market: because there can be volume substitutions. Italy can decrease imported volumes from those countries and substitute them with gas coming from Shah Deniz.

As I said in the beginning, Italy's contracted supply commitments exceed current gas consumption, but these tend to be assets for the suppliers—for the Shah Deniz Consortium as well as for Azerbaijan as a gas producer—and I will explain how. With regard to prices, when negotiations started with potential gas buyers, the Shah Deniz Consortium was quite flexible and faced this challenge pretty normally. As a result, the gas hub price was included in the long-term contracts.

There is a debate about many upcoming energy projects in Italy that can rival Shah Deniz gas in the market. For a decade Italy has been trying to materialize several LNG projects to import more gas and also other pipeline projects, but you can see from my next slide that almost all of them are presently on hold for various reasons—due to commercial difficulties that Italy currently faces or due to the fact that the Italian government is not authorizing or approving those projects. For example the GALSI project that would link Italy with Algeria—this is another additional pipeline via Sardinia with a final throughput of 60 bcm—is currently on hold. Algeria and the project operator Algerian Sonatrach postponed their final investment decision because they are awaiting better commercial and technical conditions. However, the fate of this project may depend on the production in Algeria and the state of Algeria's stability to allow development of sufficient future production in excess of its domestic conception—and this, I think, appears to be questionable.

Italy's new LNG projects are also currently on hold because it has never been an easy task for Italy to materialize such projects, due to of financial difficulties. A few years ago all of Italy's gasification projects were on standby or at best delayed, even if the government had already authorized some of them. For example, BG Group's LNG project, the so-called Brindisi project in the Southern region of Puglia, failed to obtain all the necessary permits for 11 years and was shelved in March 2012.

There is also a debate that Nord Stream (delivering Russian gas to Germany) can extend to the Northern Italian market as well. Technically it is possible. As you see in the map, Italy is the best market, because it is best connected with the Northern European markets and other markets. On the map you can see how Italy is connected with Switzerland with transit gas, with Germany with the Tauern pipeline, with Austria with the TAG pipeline and it can go all the way to France with reverse flow to Norway, even to the UK. So, the Nord Stream gas can technically be transported to the Italian market, but it would be illogical for Russia to deliver Nord Stream gas to the Italian market, because Russian gas is already present on the Italian market. The second reason is that Nord Stream was designed to transport gas to the German

market and then it would not be commercially viable to bring that gas all the way South to the Italian market. Therefore, this project is also not a rival of Shah Deniz gas in the market.

Map 4: The Italian gas network (2011)



Source: Oxford Institute of Energy Research

I said previously that the situation of oversupply in the Italian market is an asset for the Shah Deniz Consortium and Azerbaijan. Thanks to Azerbaijan's energy strategy, Shah Deniz gas can easily go to the neighboring countries. Italy is actually providing this opportunity to Azerbaijan through projects such as the pipeline transporting gas from the Southern part of Italy up north. The project Gas Regional Investment Plan for Southern Corridor for the period 2012–2021, implemented by the Italian gas infrastructure company Snam, is designed for transporting gas to the Northern part of Italy and from there to the neighboring countries. Another plan is the grid for the South-North Corridor for the same period of time. It includes enhancing the infrastructure of the national gas networks and increasing

market integration, which can be achieved through cross-border bidirectional interconnectors. This can increase the flexibility of the European grid and also ensure security of supply in Europe.

Another important document in that context is the National Investment Strategy of Italy. This document plans to exploit Italy's geographic position to turn the country into a transit hub and one of the main transit countries by 2020. In order to reach this objective, Snam is planning to construct a new pipeline up to the Adriatic coast, which will add some extra 9.7 bcm of gas flow by 2014 as well as 8 bcm of reverse flow to the Northern Pipeline by TAG (connecting Italy with Austria) and TENP (connecting Italy with Germany) by 2016. One can imagine how many possibilities there are with the Italian market to go to all those countries, especially when necessary strategic plans and projects are underway, that can give these opportunities to the Shah Deniz Consortium.

In addition, there is a Memorandum of Understanding between the Italian Snam and the Belgian Fluxsys and this project is envisaged to invest in the reverse flows from the South to the North of Italy. This will enable all the shippers to transport gas from the Mediterranean to the North Sea, to all those countries along the pipeline. This will enable Turkey to export by 2016 some 40 million cubic meters of gas per day, so this is a great opportunity for the Shah Deniz Consortium.

That was the commercial background of the decision. But what was the political aspect of such a decision? The Nabucco-West pipeline fought with many difficulties, not only commercial and financial, but also the lack of political support by Brussels and Washington. For the last two years they both kept expressing equal support for both pipelines and I think this is what Baku did not expect. In addition, there was the lack of strategic focus and ability for leadership, which mainly came from Brussels. Last year actually, we also saw how Gazprom was challenging the Southern Gas Corridor. Baku faced not only a political challenge, but also a commercial one, because last year Gazprom gave a significant discount to its customers in Europe and that was a great bargaining chip. When potential gas buyers were negotiating prices with the Shah Deniz Consortium, they had this bargaining chip and this is why the Consortium had to agree to lower gas prices. Also, Italy's national energy strategy states that the first increase in gas import capacity is needed for two main reasons: to diversify gas supplies from Russian and Algerian sources and to increase participation of different suppliers in order to become an exporter to Northern Europe.

What is next? This year (2013) was indeed a very important year for the Southern Gas Corridor's development. We had a very important decision in June, followed by the signing of a gas supply and gas transit agreement with buyers in September. All terms are agreed, just the agreement is due to be signed. Then the final investment decision for TAP will follow. The negotiations with TANAP potential shareholders—partners of the Shah Deniz Consortium—are currently being conducted and I hope that this agreement will be reached soon, because the final investment decision for Shah Deniz Phase 2 depends on this agreement. If the agreement is not reached soon, it can negatively affect the final investment decision for Shah Deniz. And then the first gas will flow to Turkey, starting from the second quarter of 2018 and will reach the European market starting from the first quarter of 2019.

On the political ground, I think cooperation between Azerbaijan and Russia will be further improving in the energy sector and we will see some joint projects between SOCAR and Rosneft. That can be

investment of Rosneft in some upstream projects in Azerbaijan and probably Rosneft, if everything goes smoothly, will do a capacity booking of the infrastructure SCPX or TANAP and transport this gas from, let's say, Absheron—because it was mentioned that this upstream project can be Absheron—all the way to the European market.

To conclude, I think Italy's overcapacity and over-contracted gas supply provide an excellent opportunity to achieve the Shah Deniz Consortium's objective to enter other markets in Europe and also the Italian government's objective to become a gas hub for Southern Europe. That was the goal with Nabucco as well—by going to Baumgarten, the Shah Deniz Consortium was planning to reach other markets in Europe. So Italy gives us this opportunity. I think from a commercial point of view, for Azerbaijan and the Shah Deniz Consortium it would be much better to go to nearby markets, namely Turkey, Greece, Bulgaria and Italy, because the distances are shorter and the netback margin obviously will be higher.

If SOCAR wants to go as far as the UK, because the infrastructure is there, then it would probably be a swap operation and for that SOCAR needs to create gas trading companies to swap the gas. As I said, after the decision Azerbaijan most likely will improve close relations with Russia on energy issues, and there can be some joint projects in Europe as well. The Southern European markets and the Balkans will remain under Gazprom monopoly for at least the next decade. With regard to Europe, it clearly failed in delivering a bigger-scale solution to establish a direct link between the Caspian region and countries in Central and Southern Europe, which are dependent on a single gas source. This resulted in more cautious actions of nations to the east of the Caspian Sea, in dealing with Brussels-supported energy infrastructure projects. The U.S. policy toward further expanding its influence in the so-called “backyard” of Russia and establishing the East-West Energy Corridor did not succeed either: the fourth-biggest natural gas reserves owner Turkmenistan left without a direct link to Europe and, I think, this resulted in Turkmenistan turning toward China instead.

Summary of Q & A Discussion:

Alexandros Petersen: Thank you Gulmira. I very much appreciate that you have included a “next steps” slide, because I think this is one of the key questions we can start teasing out today—finally to start talking about what the next steps are for the Southern Corridor after the June decision. With that, I will open it up for questions and discussion from the audience. Please state your name and affiliation and make sure you get your microphone. Any first takers? If you don't go for it, I am going to abuse my position as the moderator and ask my own question. This is to all three panelists, but building on this “next steps” slide that Gulmira just had up. This is specifically about the role of SOCAR in the European market. The company established itself as a major player, purchased a majority stake in DESFA and now has major downstream interests; it also has retail interests in Europe, in Switzerland and potentially elsewhere in the EU in the future. What does this mean for SOCAR as a global player, as a player that is reaching far beyond its Caspian regional curve? What do you think we should expect to see from SOCAR in the coming decade or so?

Rauf Mammadov: In the past 5–6 years, SOCAR has been acquiring downstream and retail businesses in Europe, which started with Georgia—SOCAR now provides 92–93 percent of Georgia's energy supplies.

Then the company turned to Romania and Ukraine and bought Exxon's retail business in Switzerland—the Exxon brand gas stations. For an oil and gas producer, it is very important to have its downstream business ready for when production comes online and to have the infrastructure ready to supply those products to the market. From this perspective, I think SOCAR's strategy to expand in Europe is legitimate and I believe that there will be many other developments as well. We were the winners of the DESFA bidding and when the transaction is completed, we will own 66 percent of DESFA, which is the gas infrastructure of Greece.

Vladimir Socor: I would add a couple of thoughts to what Rauf very accurately presented. Regarding grand strategy, I think SOCAR will be very careful not to be seen as competing head-to-head with Gazprom in Gazprom's own market. SOCAR will look for market niches in as many countries as possible, small market niches, corresponding with the overall volume of Azerbaijani gas as it becomes available over time. I think, Azerbaijan has settled on a national strategy of advancing from oil exporter to oil and gas exporter and from gas exporter to gas transit country, which in turn creates a dilemma for Azerbaijan with regards to Turkmen gas. On one side of the dilemma, Azerbaijan would be very wise strategically to increase its importance to Europe by maximizing the transit volumes of gas route to Europe via Azerbaijan and this could not fail to have political impact in terms of a resolution of the Karabakh conflict potentially. But on the other hand of the same dilemma, large volumes of Turkmen or other gas transiting via Azerbaijan to Europe, if they exceed the volumes that Azerbaijan itself delivers, could undercut the price of Azerbaijani gas. So, from this point of view, Azerbaijan might limit the gas volumes in transit to Europe to a level that would not undercut the price of Azerbaijani gas given the disparity in volume. This is the dilemma that Azerbaijan faces and we do not know yet how it will be resolved.

With regards to Italy, I agree with Gulmira and I have written for the last few years that it was not credible for Italy to be the main destination market of the Trans-Adriatic Pipeline project. Not credible because Italy was already oversupplied and well diversified with pipeline gas and LNG from multiple directions—from Russia, Algeria, Libya and the Middle East—and, moreover, Italy is building a new LNG reception capacity. And it was not until the spring of this year that the Trans-Adriatic Pipeline Consortium, after a number of years changed its talking points and suddenly started talking about Italy not as the main destination market, but as a transit corridor to markets in Europe, reaching up all the way to the North Sea. Also the recent talking points of TAP include the potential export of Caspian gas, originating ultimately from Azerbaijan, from Belgium and the Netherlands into Britain, which could fit in with BP's interests as the leading shareholder in the Shah Deniz Consortium.

So we have this spectacular development in which Italy could become a transit corridor, the transit country as an extension of the Southern Corridor, not as a recipient country, but a transit country. And we see, or at least I begin to see, a grand design on the part of SOCAR and Belgian Fluxsys to establish a European North-South–South-North bidirectional transit corridor—extending from the Belgian and Dutch terminals on the North Sea all the way to the tip of the Italian boot, with potential prolongations through the Netherlands-Britain Interconnector and Belgian-Britain Interconnector. This would be a completely unexpected extension of the Southern Corridor, a grand design, as I said. It's taking shape now to judge from TAP's communiqués and, in the meantime, it bypasses Central Europe. Its main destination is Northern Europe, Northwestern Europe, which is already most diversified, thanks to LNG deliveries

from the Middle East. It is Northwestern Europe that the spot markets are the most advanced in the LNG deliveries and this is what becomes the ultimate destination of Caspian gas via the Italian and Swiss and German transit corridors. So, it is a complete change of the situation in the last few month, we do not know whether this ambitious plan can be accomplished or not, but we are witnessing its very interesting development.

Question from Glen Howard: Is Azerbaijan seeing an increase of Greek businesses coming to Baku to seek investment and can you describe how the dynamics of your relationship with Greece are changing?

Rauf Mammadov: The cooperation started in the energy field and we have seen the Prime Minister and the Foreign Affairs Minister of Greece visiting Baku many times throughout the year. Right now the acquisitions and businesses are directed from Azerbaijan to Greece, but we believe that these investments will bring more mutual collaboration between the two countries.

Question from Julia Nanay: My question is to Gulmira. Could you expand on what you said about the TANAP share-holding structure and what might be holding up finalizing it?

Gulmira Rzayeva: The negotiations are currently being conducted with the Shah Deniz partners BP, Statoil, Total. SOCAR is planning to have the majority share of 51 percent—as an operator of the project it currently holds 80 percent. It does not mean that there are problems or something is holding up the agreement, but there are some technical questions between the partners. If the agreement is not reached soon, that can negatively affect the final investment decision for Shah Deniz. This does not necessarily mean there are problems. Just the usual technical and financial matters that partners should agree upon among themselves.

Question from Tom de Waal: My question was about Azerbaijan. As we know, from this year oil exports have gently begun to decline and I wonder if the panel could look forward and predict when Azerbaijan will become more of a gas exporter than an oil exporter? How does that, in your view, shape Azerbaijan's long-term economic model being more of a gas exporter than an oil exporter?

Gulmira Rzayeva: Yes, the oil production is declining in the country and it is not a secret that starting from 2015–2016 it will be declining significantly. But I should say that gas revenues are obviously not the same as oil revenues, they are much lower. But as you know, the current government strategy is for investment in non-oil sectors of the economy, which I think is going very successfully. We have a number of projects that are currently under way to direct Azerbaijan's oil gold into development of the non-oil sectors in the country—investment in the infrastructure, education, reduction of poverty. I think this will start giving fruit probably in the next decade or so.

Alexandros Petersen: It is probably also worth mentioning that the State Oil Fund of Azerbaijan (SOFAZ), which was one of the first to comply with EITI [Extractive Industries Transparency Initiative] and is externally audited, is generally considered to be one of the better managed oil funds in the world.

Rauf Mammadov: When talking about declining oil production in Azerbaijan, this is mainly the ACG field, but the COP project is about to produce oil at the end of 2013. Nevertheless, there are more gas fields that are being explored right now, we are talking about Umud, Absheron and Shah Deniz II and also ACG deep gas, therefore the tendency is leaning toward gas projects.

Vladimir Socor: Azerbaijan or the State Oil Company is making a major breakthrough into the petrochemical sector in Turkey. The acquisition of Turkey's petrochemical enterprise and the construction of the Star refinery near Izmir will provide substantial revenues to the State Oil Company of Azerbaijan, even if crude production declines in Azerbaijan itself. That is a multibillion-dollar investment, which SOCAR is able to make and it will produce and yield very high revenues. Incidentally, the very fact that Azerbaijan has undertaken the TANAP is an example of successful recycling of oil revenues into the gas sector in order to prolong Azerbaijan's life as an energy supplier also in the petrochemical sector, which will supply practically 90 percent of the Turkish market.

Rauf Mammadov: Besides the Star refinery, SOCAR owns the biggest petrochemical industry Petkim in Turkey that currently supplies almost 40 percent of the Turkish petrochemical demand. But there will be more investment in the petrochemical industry in Azerbaijan as SOCAR is undertaking the construction of a new petrochemical complex based on gas. This will contribute to more production of gas for the use of the petrochemical industry.

Question from Alexander Melikishvili: Thank you for your very informative presentations—I really appreciate them, they are very detailed. I have a question regarding the security of the pipelines, in particular with the expansion of the South Caucasus Pipeline because of Shah Deniz. I was wondering if you could give a quick overview of the security capabilities of Georgia and Azerbaijan in particular with regards to the protection of the pipeline.

Rauf Mammadov: The expansion of SCP pipeline is basically the construction of a new pipeline parallel to the Baku-Tbilisi-Ceyhan Oil Pipeline (BTC). That pipeline has been operating for more than five or six years and all the necessary security measures have been undertaken to protect the pipeline that goes through Azerbaijan, Georgia and Turkey. Throughout the years, we have not had any major problems in the Azerbaijani or Georgian section of the pipeline. In Turkey, there were second party interventions, there were that kind of security problems, but in general it has been taken care of by the operating companies BTC, BTE and BIL respectively.

Alexandros Petersen: If I may add just briefly, there are special pipeline services protection units both in Azerbaijan and Georgia of the BTC and SCP pipelines and they are also protected in Turkey. As far as I know, similar sorts of provisions are going to be made for the expansion of the pipelines as well as for the local communities, which were very successful in aiding with the security of the BTC project and actually made it an industry standard at the time.

Question from Veaceslav Pituscan: Mr. Socor, can you comment on the current situation and possible future developments from the perspective of the countries in South-Eastern Europe that were supposed to be a part of Nabucco-West project?

Vladimir Socor: The answer in a one-word summary would be “disappointment.” Beyond this one-word summary, a few illustrations of this disappointment when commissioner Gunther Oettinger, who by the way is doing tremendous work in his capacity and I have praised his performance many times. But when he said in a statement addressed to the Nabucco countries that they would be able to derive some gas volumes from the Trans-Adriatic Pipeline, Basescu reacted in a public speech in Bucharest by saying that Romania is no longer a political adolescent to believe in such consolation statements. Indeed, it was an attempt to console the losing parties, but Romania is staunchly adhering to Western-oriented projects and continues to stay out of South Stream. Romania is the one country in Central and South-Eastern Europe that has all along refused to have anything to do with Gazprom’s South Stream project and remained staunch to Nabucco all along. Conversely, the current Bulgarian government at present tends to exploit the demise of Nabucco as the argument for going for South Stream, as the energy minister recently said in a speech. So this is the range of disappointed reactions. And finally, for its part the lead company in Nabucco and Nabucco-West has come up with a new slogan “European gas for European consumers” and the European gas is supposed to be the one in the Black Sea, which Romgaz is exploring jointly with ExxonMobil. The two companies propose to build a pipeline across Romania via Hungary all the way to Baumgarten. I think this is questionable, because the current estimate of gas reserves in the Black Sea is between 55 and 85 bcm, which is modest and might not justify a pipeline all the way to Baumgarten.

And finally, to conclude this, because the question came from Moldova, there is a Moldovan aspect to this as well. Had Romania been able to receive gas from Nabucco, it would have supplied a portion of it to Moldova. Moldova without Transnistria consumes about 1.5 bcm per year, all of it from Gazprom and gas volumes coming via Romania to Moldova could have emancipated Moldova, really emancipated it from Gazprom’s monopoly, but it will not happen. Romania might have some volumes to offer to Moldova by 2017, when the first volumes of Black Sea gas might come on-stream. Romania and Moldova have recently started a construction of an interconnector between the two countries. The construction might be ready in one year, but there won't be gas volumes to fill it, certainly not to its declared capacity of 1.5 bcm until Black Sea gas comes on-stream by 2018. Until then Moldova is negotiating with Gazprom and the Russian Vice Prime Minister Dmitry Rogozin just a week ago wished to Moldova that it should not freeze in the next winter.

Gulmira Rzayeva: I think Azerbaijani gas will go to the Balkan market, but not necessarily through Nabucco-West or similar projects. Of course, the issue depends on how Azerbaijan will negotiate some political issues with Moscow. I think the best commercially viable way to bring this gas to the market is through interconnectors. It will not require big investment, because some interconnectors already exist between the countries in the region and there is just a small investment needed. The EU energy strategy envisions that by 2015 all European markets will be linked with interconnectors and electricity grids. I think by 2018 or 2019 Europe will be better connected than it is now.

Panel Two – The Trans-Adriatic Pipeline: Implications for Southeastern Europe and the Eastern Mediterranean

Moderator Margarita Assenova: We have three panelists today, Greg Saunders, who is the Senior Director for International Affairs at British Petroleum, their representative in Washington, and Anthony Livanios, who is going to talk about the Southern Gas Corridor after the Trans-Adriatic Pipeline: implications for the Eastern Mediterranean. We are going to start with Mr. Saunders—“Shah Deniz and the Southern Gas Corridor: New Developments and Timelines.” My name is Margarita Assenova, I will be talking about Bulgaria: the Implications of TAP for Eastern Europe and the Balkans.

Greg Saunders, Senior Director, International Affairs, BP

“Shah Deniz and the Southern Corridor: New Developments and Timelines”

It was just a few months ago that many of us gathered in this distinguished room to look at the progress of one of the most important engineering projects and the political developments in this region since the start and then the finish of construction of the legendary BTC Oil Pipeline. I have the pleasure of joining my dear friends in this panel, hopefully to share some insights with you from a commercial perspective in general and in particular the perspective of BP—the main operator of the gas project. There are countless conferences like this one around the world, many of them over the past 20 to 30 years, and many speakers have referred to the traditional gas map of Europe, which shows solid arrows with established gas supply sweeping into Europe from Russia, from the North Sea, from North Africa and, more recently, LNG. One arrow always stood out. It was different from the others, it was shown as a dotted line and it came from the Caspian Sea. I think we are now very close to redrawing those maps and, for the first time, to changing that dotted line to a solid line. That solid line will become the Southern Gas Corridor.

At a time when global demand for energy and natural gas in particular is rising, BP and its partners are developing one of the most important natural gas projects in the world—Shah Deniz Phase 2, which will open up the Southern Corridor and for the first time deliver gas from the Caspian to Europe. Azerbaijan and the Caspian are certainly no strangers to establishing milestones in the energy industry. Many of you know that Azerbaijan was involved in the birth of the oil industry back in the late 1800s and played a historic role in its development. At one stage, Azerbaijan was the world’s largest oil producer. Moreover, just 18–19 short years ago, President Clinton joined his Azeri, Georgian and Turkish counterparts in Baku for the signing of what became known as “the Contract of the Century.” Then it was about the development of Azerbaijan’s offshore oil reserves and the construction of one of the most sophisticated engineering achievements—the BTC pipeline to bring Azeri oil to global markets. Then it was about oil; today it’s about gas. And Azerbaijan, like it did 20 years ago, is now emerging as one of the world’s great natural gas producers and a potential catalyst for bringing the market a range of new gas sources over the next decades. So, it certainly is an exciting opportunity for those of us in the energy industry and certainly for those involved in the Shah Deniz project.

Just wanted to give you a quick snapshot of the infrastructure that has been developed over the last 20 years, beginning with “the Contract of the Century,” and you can see the extraordinary array of offshore

fields, gas and oil, as well as the connecting pipelines that bring that resource to global markets. The first is the BTC Pipeline with capacity of 1.2 million barrels of oil a day, bringing oil from Azerbaijan, Kazakhstan and now Turkmenistan to global markets at the huge seaport Ceyhan in the Mediterranean Sea. It is called the Western Export Route—some people call it Baku-Supsa Pipeline—built in the Soviet era, rehabilitated, expanded in the last decade and now transporting about a 100,000 barrels of oil a day to the Georgian port of Supsa. The topic of our conversation today is the Shah Deniz field—one of the largest offshore gas fields—and the South Caucasus Pipeline that ports Phase 1 production of Shah Deniz to markets in Azerbaijan, Georgia and Turkey.

But before companies in the energy industry look at new projects or expanding existing projects, we look first at markets and the global forecast for energy in those markets. I would share with you some of our internal considerations. Each year BP publishes Energy Outlook, which outlines our projections of world energy trends. The outlook forecasts that total world energy demand will increase by some 40 percent by the year 2030. Almost all of that growth, approximately 90 percent, will be in non-OECD countries (countries that are not members of the Organization for Economic Cooperation and Development). To put that in perspective, this is the equivalent of adding another America and another China to world energy demand—all in the next 20 years. About 80 percent of the world's energy consumption in 2030 will still come from fossil fuels, but that mix is going to change considerably, as the era of domination by one fossil fuel—first coal and then oil—will come to an end. We expect that natural gas will continue to be the fastest growing fossil fuel worldwide and become an important energy source by the year 2030. In fact, we predict that by 2030, oil, coal and natural gas will converge to about 30 percent of global market share. And despite all the noise every year since the first OPEC oil crisis in 1973, oil has lost market share, steadily losing global market share as countries and companies transition, primarily in the power generation sector, from oil to other sources of feed stock.

There are similar forecasts for Europe. Energy demand in the EU stagnates at the moment, for many reasons, there is a real growth in demand forecast for natural gas in key markets in Turkey, Southeastern Europe and parts of Southern Europe. This is caused both by increasing consumption through power generation, as well as the substitution of coal and oil. There will be an even more important trend over the next 20 years and that relates to sources of supply. BP's projections of Europe's gas supply sources in the year 2030 show a sharp decline in indigenous production of gas that will make Europe increasingly dependent on imports. By 2030, Europe will need to import more than two thirds of its overall natural gas requirements. Some of these imports will come from LNG, but most of the remaining supply will come from pipelines and this includes imports from Algeria, Libya and Russia.

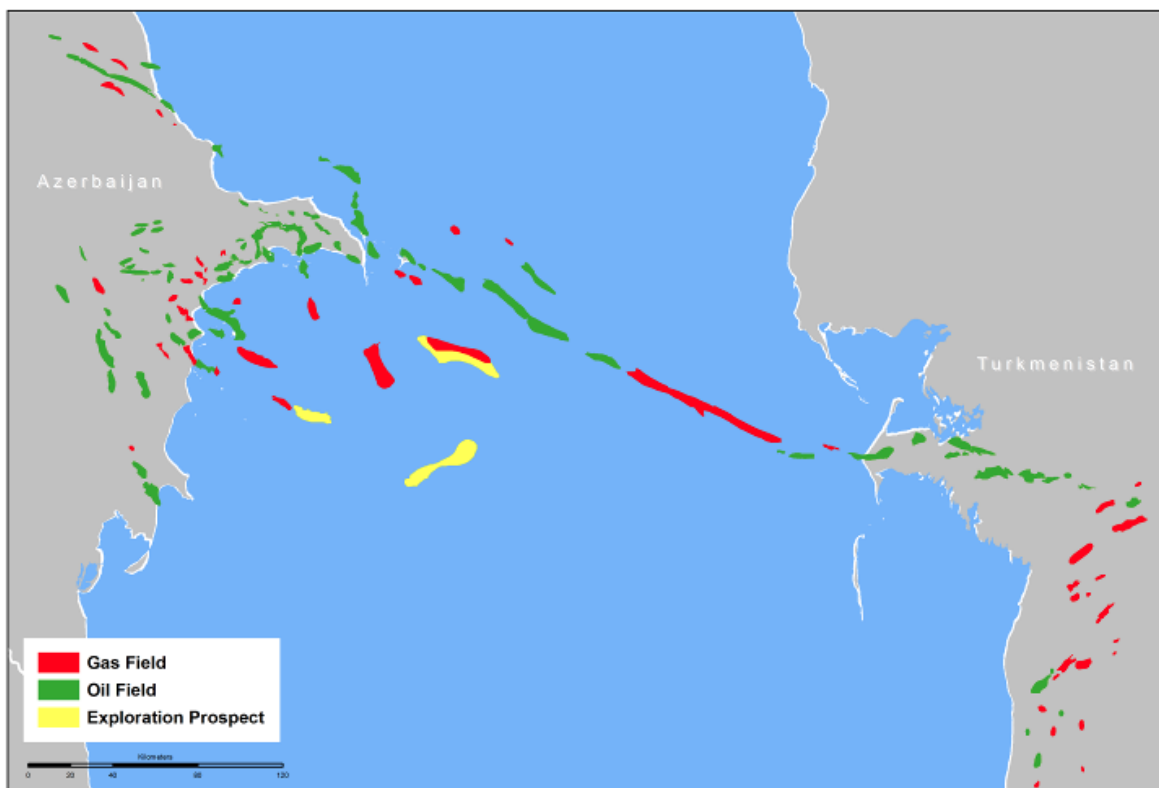
But there is an important new source, that dotted line on the map—the Caspian Sea—one of the world's greatest, undeveloped gas resources. This, combined with EU's aspiration to diversify its sources of supply, creates a unique opportunity for countries and companies involved in the Caspian gas sector. And this is where Azerbaijan and the Southern Corridor come into the story. Azerbaijan has built an extraordinary track record as a reliable oil and gas supplier, first through the ACG oil field and the BTC Pipeline and now through Shah Deniz and its associated South Caucasus Pipeline. Azerbaijan stands at the fault line of a more fundamental competition, the competition for resources between East and West—the fulcrum between the Atlantic and Asia. For Europe it is important to secure strategic interests by

ensuring that the gas from Azerbaijan can flow to Europe, as promptly and as efficiently as possible. This is the practical realization that has become known as the Southern Gas Corridor. The key to development is that one field—Shah Deniz—will kick start the entire process.

Discovered in 1999 by BP, Shah Deniz is one of the world's largest gas fields and set to become one of the largest and most complex engineering projects in the world. Phase 1 was commissioned in 2006. BP and its partners are working now to develop Phase 2 for first gas in 2018. It is an extraordinary project; let me give you just a quick snapshot of what it looks like. Phase 2 will involve additional exploration, offshore facilities, the doubling in size of the Sangachal Terminal and three pipeline projects—through Azerbaijan and Georgia, through Turkey and from Turkey into Europe. The total cost of Phase 2 will be \$40 billion. It will produce an additional 16 bcm of gas, of which 6 bcm will be sold to Turkey and the remaining 10 bcm made available for onward transmission to European markets. It is this 10 bcm that enables the pipeline corridor to Europe to be established and bring Caspian gas to Europe for the first time.

In the end of June 2013, the Shah Deniz Consortium in collaboration with the government of Azerbaijan selected the Trans-Adriatic Pipeline or TAP as the European pipeline for Shah Deniz that will transport the 10 bcm to markets in Europe. Later this month in Baku, the Shah Deniz partners will announce the names of the buyers of that 10 bcm of gas. These decisions mean that Shah Deniz Phase 2 is literally moving from sheets of paper to sheets of steel. It is also a very real project, with over a thousand people working on it.

But there are also additional sources of gas available coming from Azerbaijan. First, there are additional reserves of supply below Shah Deniz—we call it Shah Deniz Phase 3. Work is already underway, looking at the possibility of producing an additional supply of gas from Shah Deniz. Unfortunately, it lies at such great depth that the technology is not available today to develop Phase 3. Our teams in Houston are working feverishly on a project to develop the technology to access the gas at such great depth. Moreover, to the South of Shah Deniz, lies another project called Shafag-Asiman. In 2010, BP and SOCAR signed a production-sharing agreement to explore and develop this potential field. At Absheron, Total has achieved initial appraisals success. This important appraisal success requires additional work, but gas could certainly be available from Absheron by the year 2020. Moreover, at the giant oil field ACG there is another gas field, both above the oil reservoir and below. BP and SOCAR are drafting a work plan for the development of non-associated gas, both in ACG Deep and ACG Shallow. These reservoirs require additional appraisal studies, but we are confident that they could result cumulatively and considerably in additional supply of natural gas from Azerbaijan and potentially made available to Europe.



South Caspian Basin: Gas Fields and Prospects (Source: BP presentation)

We have already started work on the expansion of the South Caucasus Pipeline, both in Azerbaijan and Georgia. It is a massive project, particularly in Georgia. In fact, it will be the largest foreign direct investment in Georgia's history—a \$2 billion investment. Moreover, we are working with SOCAR and our partners in Turkey for the development of the Trans-Anatolian Pipeline called TANAP. And under SOCAR's leadership, TANAP will be the strategic length for the Southern Corridor and it is also highly important project in developing Turkey as a gas hub.

Lastly, the Trans-Adriatic Pipeline or TAP will conclude the Southern Corridor, delivering Shah Deniz gas from the Western border of Turkey to customers in Europe. So, as you can see Shah Deniz offers an extraordinary opportunity to open up the Southern Corridor and equally importantly make a significant contribution to Europe's energy security. Shah Deniz reflects its partners' confidence for the potential of developing both oil and gas from the Caspian region. Europe needs a Southern Corridor, which will meet its demands, enhance its diversity and security of supply and also contribute to energy efficiency. The plans are well advanced. We have a lot more work to do before the Shah Deniz project reaches its final investment decision. But it is a time table we are on and we look forward to the day when natural gas from the Caspian Sea will flow to Europe and the gas maps of the region will finally be amended to show the Southern Corridor as a solid line—and that day is not far off.

Margarita Assenova: Excellent presentation on what is going on in the Caspian. Now we are continuing with the overview of the implications of TAP on the Eastern Mediterranean by Anthony Livanios, who is

the CEO of Energy Stream, an international energy consulting company based in Frankfurt Germany.

Anthony Livanios, CEO, Energy Stream CMG GmbH

“The Southern Gas Corridor After the Trans-Adriatic Pipeline: Implications for the Eastern Mediterranean”

The Southern Gas Corridor today consists the cornerstone of the European energy security policy. Europe today is the largest natural gas market in the world. It is importing 60 percent of its natural gas needs. It is well known that the vast majority of natural gas imports are coming from one country, from one source—they are coming from Russia. The projection over the next 20 years is that the demand for natural gas in the European Union will increase, while the European domestic supply of natural gas will decrease in the year 2035, according to the International Energy Agency. The forecast is that Europe will need 90 percent of its supplies of natural gas to be imported from abroad. The challenge for Europe right now is to diversify its routes and its resources. This is why bringing Caspian gas to Europe is key. Europe will also be the largest natural gas market in the year 2035 and the EU countries need inexpensive gas to maintain competitiveness of their products. In Germany, the biggest concern is how the country can import natural gas at competitive prices in order to keep manufacturing competitive products. This concerns not only Germany; it is a concern throughout the EU. At this point the Shah Deniz gas field will produce 16 bcm of natural gas that will be transported to Europe, of which 6 bcm will go to Turkey and 10 bcm will go to the EU. Overall, the Southern Gas Corridor is the cornerstone of EU energy security and Azerbaijani gas transported to the EU will strengthen energy security.

What is the geopolitical and commercial rivalry for Caspian gas resources? Why are we talking for such a long time about gas pipelines? Geographically, Azerbaijan is a landlocked country. Natural gas or oil that is discovered in the Caspian Sea does not have any value unless it is exported. The worst nightmare of an oilman is to discover oil and gas and not be able to export it. So, the competition among pipeline consortia, governments and national oil companies define the challenge, which is ownership and control of gas pipelines. Ten years of negotiations for Nabucco-West, for TAP, for TANAP, resulted in what we have today—the Trans-Anatolian Pipeline through Turkey and the Trans-Adriatic Pipeline that will be linked with TANAP to transfer Shah Deniz gas to Europe. Turkey and TANAP—this is the golden gate of Caspian gas to Europe. Mr. Socor presented it very well this morning—if TANAP was not there, if TANAP would not be constructed, then the Southern Gas Corridor could not be realized. Turkey has made it a priority to be a transit country for Caspian gas now from Azerbaijan and in the future from Turkmenistan and other Caspian littoral countries.

It is key in any discussion that concerns the Southern Gas Corridor to understand that for Europe and the West, Turkey and TANAP are the golden gate of gas. And the Trans-Adriatic Pipeline that is linked with TANAP via Greece will make Greece the silver gate of natural gas, because Greece is the first country that Shah Deniz gas will reach the EU market. Once you are in Greece, you are in the entire EU market and also, Greece allows for potential gas swaps in the future via the LNG terminal in Revithoussa. Around 65 percent of the Trans-Adriatic Pipeline will go via Greece, then to Albania and from Albania it will reach Italy.

TANAP is very important for energy security of Europe—it strengthens energy security of Europe, but also stabilizes the Eastern Mediterranean, because it gives an opportunity for closer cooperation between Turkey and Greece. If we look at the regional effect of the Trans-Adriatic Pipeline, I think that the first stability result in the region is that Turkey and Greece will cooperate closer. Secondly, Azerbaijani gas via the Greek-Bulgarian Interconnector will flow to Bulgaria—we heard this morning that 1.5 bcm will be going to Bulgaria. For Bulgaria it is very important because today Bulgaria is 100-percent dependent on Russian gas. By the way, Bulgaria pays 40-percent higher natural gas prices than Germany and Bulgaria pays the highest natural gas prices among the EU countries. Is this because it is dependent on Russia and Gazprom? I think it is. Azerbaijani gas will go to the Western Balkans: Albania, Croatia and possibly Serbia can be recipients of Caspian and Azerbaijani gas. Right now, these countries either do not have any gas, like Albania, or they are heavily dependent on Russian gas. Therefore, TAP does indeed strengthen EU energy security and it does stabilize the Eastern Mediterranean and Greece.

For Greece especially, TAP was the best news that happened in the last five years. Greece is suffering from a severe debt crisis; it has become over the last years headline news around the world because of its economic crisis. TAP will bring \$2.2 billion in direct investment; it will create more than 3,000 direct jobs and 10,000 indirect jobs. Greece will be able to receive transit fees from TAP; Greece will benefit in economic terms and in geopolitical terms, which I will discuss in a moment.

The Trans-Adriatic Pipeline implications, especially for Greece and Turkey, and the role of Azerbaijan is a new development in the region. Greece and Turkey started in 2007 a closer cooperation. At that time, Prime Minister Konstantinos Karamanlis and Turkey's Prime Minister Recep Erdogan inaugurated the Greek-Turkey Interconnector; they signed an intergovernmental agreement to build a pipeline through which natural gas from Shah Deniz Phase 1 was flowing to Greece. It was a direct bilateral contract between Botas and DEPA, but this very experience allows all of us today to think that what started in 2007 will be strengthened with TANAP and with TAP. TANAP and TAP reflect the solid energy cooperation between Turkey and Greece, which has a strong impact on EU energy security—a very important development that puts Azerbaijan in a strategic position.

SOCAR purchased DESFA, the natural gas grid of Greece. The Russians and Gazprom were really very dynamic in pursuing to buy DEPA and DESFA. Gazprom bid for DEPA and Sinter bid for DESFA—both are Russian companies. Why would Russia want to buy DESFA? In order to have control of a key gas pipeline grid and potentially create problems and challenges in the Southern Gas Corridor. Eventually, SOCAR won the bid, Russia did not participate in the final bidding and this allows us today to talk about TAP and TANAP strengthening EU energy security, strengthening U.S. energy security, because more non-Russian gas will flow to Europe and this will also have an impact on the other side of the Atlantic.

Azerbaijan is developing a strategic partnership with Greece and I believe this can be a source of stability between Greece and Turkey. If in the future there is a potential disagreement between Greece and Turkey, it is in Azerbaijan's interest to mediate, to convince both Turkey and Greece that it is to the benefit of all to have a peaceful, stable and economically good cooperation. Why is Azerbaijan in a position to play a strategic role in the Turkish-Greek relationship in the future? Because the Turks can listen better to the Azeris, and the Greeks can listen better to the Azeris. There is a known strategic partnership that is

developing between Greece and Azerbaijan for the benefit of energy security. On the bigger scale, Europe's energy security will benefit from this new relationship, will benefit from this stability.

The benefits are tremendous, but what are the risks? What are the risks for TANAP and TAP? In my judgment, the biggest risk comes from Russia and Gazprom—and President Putin himself is on top of this project. This is the prospective South Stream Natural Gas Pipeline. In my mind, I have no doubt that South Stream presents the largest risk, the most serious risk to the future of the Southern Gas Corridor. Russia will try to do whatever it can to boycott both TAP and TANAP, because it is in Russia's interest to boycott the Southern Gas Corridor in order to maintain its markets in that part of the world. This is a huge pipeline—it is a 62-billion-cubic-meter pipeline with more than a \$30 billion cost of construction. Does it make sense commercially? No. So why is Russia building it? It is a political project. Russia wants to bypass Ukraine and boycott the Southern Gas Corridor. Will South Stream bring new gas to Europe? No. It is the same Russian gas, so this is a political project. Russia will try to boycott both TAP and TANAP and all of us involved in the project should know that such a challenge exists.

Think for a moment that we are not talking about natural gas but about consumer goods: let's say we are talking about Coca Cola. If Coca Cola, for example, had the largest market share in all those countries and Pepsi Cola would like to enter, Coca Cola would do whatever it takes in order to maintain its market share. So, purely for commercial interests, Russia will try to maintain its market share in that part of the world. But when we are talking about gas, it is also a geopolitical issue. It is not only a commercial interest, it is also a geopolitical interest and we do know that Russia uses gas as a weapon. So, Russia will try to exploit the economically vulnerable Greece. Greece will be vulnerable unfortunately in the years to come. DEPA will be on a public bid to be privatized. Russia will try again to do whatever it can to vulnerable Greece, but Turkey is also vulnerable because it is energy-thirsty. Turkey's economy is booming and this is the other side of the problem. Turkey needs more gas.

And then there is a different risk—it is Iran. Do you think that when TAP and TANAP are constructed Iran will stay out? I believe that Iran is a risk, a different risk, a different ball game—of course, under the assumption that Iran is under sanctions: banking, oil and gas sanctions. South Pars is the largest gas field in the world and Assaluyeh is what Iran is doing to exploit. Iran aspires to trade its gas from South Pars via the Southern Corridor. The National Iranian Oil Company (NIOC) or its daughter company is a shareholder of Shah Deniz and this creates a psychologically uncomfortable situation. Iran has made it clear that it opposes the Trans-Caspian Pipeline, which would transport gas from Turkmenistan to the Southern Gas Corridor. And both Russia and Iran consider *casus belli* the development of the Trans-Caspian Pipeline.

What are the policy priorities of the U.S.? Would the U.S. allow Russia and Iran to jeopardize the Southern Gas Corridor? The United States should allow neither Iran nor Russia to jeopardize the development of TAP and TANAP. There is a lot of work that needs to be done for these two pipelines to be completed. There is lots of money involved, technical challenges and geopolitical challenges. It is in the interest of the U.S. to implement a foreign energy policy and bring Azerbaijani and Caspian gas to Europe and the international market. More gas from the Caspian region to European markets means a more flexible European market; more natural gas on the world market means better prices for U.S. consumers.

The U.S. should strengthen its ties with Azerbaijan. Azerbaijan is squeezed between Russia and Iran—it is the United States with its stronger ties that can give Azerbaijan the confidence to pursue its policy. The biggest challenge for the U.S. is to help first its NATO allies—Greece and Turkey—and then its ally Azerbaijan in the Caspian region to overcome any challenges that would come from Russia and Iran. And finally, to create the Southern Gas Corridor and to bring better, cheaper gas to diversify gas supplies and routes to the European market.

Margarita Assenova, Director of Programs, Balkans, Caucasus & Central Asia, The Jamestown Foundation

“Bulgaria’s Political Upheaval and the Energy Politics in Southeastern Europe”

For the last three months there have been protests in Sofia against the new government that was elected in mid-May. The protests started two weeks after the government took office and were triggered by the controversial high-level appointment of a media magnate related to Russian economic interests. He was appointed to be the new Chairman of the National Security Council. The Bulgarian people went out into the streets because they could not take any more shady dealings, government connections with oligarchs and non-transparent government politics. Just two weeks after the protests started, the Nabucco project was cancelled and this latest piece of bad news was like adding insult to injury for the public.

The current government coalition consists of the Socialist party and the ethnic Turkish Movement for Rights and Freedoms, but it could not survive without the critical support of the ultra-nationalist Ataka party, which is anti-Semitic, anti-Turkish, anti-Roma, anti-EU and anti-NATO. But there have been no anti-Russian statements so far. This absurd coalition is a problem and this is why the people in Sofia are protesting every day for three months already. The protest slogans are becoming increasingly anti-Moscow, against the Bulgarian authorities selling out the country to Russia, particularly the energy sector. These well-educated protestors have jobs and a future, if they move to other countries in the European Union to work. But they want to see their country free of an oligarchic type of governance. They are coming to the streets with their families and children; the protests are peaceful and very creative. It is probably the best thing that has happened to Bulgaria over the last several years. I have not seen such level of creativity at protests and I hope that they would succeed in keeping the government accountable. Right now they want the resignation of the government.

The moment is very critical for two reasons: because the Nabucco project was cancelled and because the South Stream natural gas pipeline project is advancing rapidly. There are important documents to be signed and important work to be done, if the project is going to start at all. I have doubts as to what extent South Stream is going to be realized and as to what extent Russia has available resources at the moment to feed the enormous pipeline.

Couple of facts about Bulgaria: the country is over 90 percent dependent on Russian gas and 70 percent of its petroleum is produced by Lukoil, the Russian-owned oil company that transports crude oil from Russia via the Black Sea to be processed at Lukoil’s refinery near Burgas. The preceding government of Boyko Borisov had a completely different approach to the Russian energy projects in Bulgaria, which were

approved by the previous Socialist-led coalition in 2005–2009. The three main projects were the South Stream Gas Pipeline, the Burgas-Alexandroupolis Oil Pipeline and the construction of a second nuclear power plant that was supposed to be built at Belene on the Danube. The Borisov government reviewed all three of them. South Stream was stalled for a long time until the government eventually agreed to go ahead with the project, but the construction of the nuclear power plant was cancelled. A referendum in January 2013 was not successful and eventually the Parliament made the final decision to abandon the second nuclear power plant, which was going to be built by the Russian Atomstroyexport. The third project—the Burgas-Alexandroupolis Oil Pipeline—was cancelled because it was not economically justifiable and was also threatening with pollution the Black Sea coast near Burgas, which is very popular with tourists.

But now the new government is trying to renew these projects. In his first TV interview, Prime Minister Plamen Oresharski said that the Belene Nuclear Power Plant project would be examined again and, if it makes economic sense, the government would build it. The former president Georgy Parvanov joined in with a similar statement. The Burgas-Alexandroupolis Pipeline is not on the agenda yet, but it was interesting that the Russian media immediately commented—as soon as the Socialists returned to power in Bulgaria—that now Sofia was going to reinstate all three Russian energy projects. What does this tell us? It confirms the traditionally close—historically motivated and economically profitable—relations between the Bulgarian Socialist party leadership and the Russian energy interests throughout the region. These energy interests are not only in Bulgaria—Russia has energy cooperation with Serbia, Republika Srpska in Bosnia-Herzegovina, Macedonia and Croatia. Some of the Bulgarian companies that are promoting and profiting from such Russian energy interests, also operate in the wider region.

What is supposed to happen now that Nabucco is cancelled? Bulgaria will receive 1.5 bcm of gas from TAP, which is going to cover up to 50 percent of its needs. Bulgaria is a very small market for Russia, it is not important as a market to Gazprom. It buys only about 3 bcm per year, which is a very small volume, but Bulgaria is a critical country for the South Stream project. South Stream cannot happen without Bulgaria. This is the only way it could be realized, since Romania refused to participate in the project. The other countries that have interest to participate in the South Stream Pipeline are Serbia, Croatia, Slovenia, Hungary and Austria. Serbia is very interested in the project because there are no plans to receive gas from TAP for the time being. It needs about 5 bcm per year, a little larger market than Bulgaria. Macedonia is a country that Gazprom is currently courting to support South Stream instead of receiving gas from TAP.

My prediction is that the construction of South Stream might be delayed on the Bulgarian side as the government is distracted at the moment with the ongoing protests. This is not a government that can effectively rule the country, because it does not have credibility and depends on a very fragile and shaky coalition. The ruling coalition has exactly 50 percent of the seats in Parliament, thus, without the ultra-nationalist party, the cabinet cannot pass anything in Parliament. The environmental assessment for South Stream is not ready yet, but it was prepared for Nabucco by the previous government. This fact demonstrates that there have been significant differences between the priorities of the previous government and the current government.

This is the place to say, however, that the government of Boyko Borisov made a big mistake in enforcing a moratorium on shale gas exploration. Although Borisov's government was center-right, it also had a strong populist side. The moratorium was a very big setback for Bulgaria's energy security—a country that does not have its own gas reserves, hopes to find natural gas in the Black Sea with no success so far, and yet denying itself the opportunity to even explore what is there in shale and whether the expected shale gas deposits could be proven. The moratorium was put in place after Chevron won a bid for large fields in northeast Bulgaria and was already in the country ready to work. This moratorium is indefinite and, given the current Socialist government's catering to Russian energy interests, it is for sure not going to be lifted. The current government does not have an interest in Bulgaria becoming energy independent because, frankly, many politicians and related economic circles are getting nice kickbacks from Russian companies working in the country and this is why South Stream is the one project they are going to support.

There are many questions, however, about the viability of South Stream. Does Russia have enough gas available for this huge pipeline that is supposed to transfer 63 bcm to South Europe? First of all, the market in the Balkans is not that large. Even going up to Central Europe, it is not that large of a market that can absorb such volumes of gas coming to Europe. Secondly, since Russia has not yet developed most of the Eastern Siberian gas deposits and there are problems not only from a climate point of view, but from an investment and technological point of view, it is very possible that Russia would only deliver to the Balkans—mostly diverted from the Ukrainian network to South Stream—and that's not going to be more than 15 to 20 bcm. The countries that will co-finance the pipeline will end up with a serious financial burden. Bulgaria, for example, plans to borrow the money from Gazprom and pay back the loan during the first 15 years of pipeline operation with the revenues from transit fees. But it seems that there may not be such great revenues from transit fees, because the volumes of transited gas are going to be probably four times smaller. So, how long is Bulgaria going to be repaying this loan? Much longer than it is now calculated, if the pipeline does not transfer the promised 63 bcm. These questions, however, have not been asked by either the current government or by the previous government, because they require considering the national interest before any other interests.

Panel Three – Closing Remarks

Moderator Glen Howard: The purpose of this panel is to present the EU perspective, represented by Christian Burgsmüller, Head of the Energy, Transport and Environment Section of the European Union Delegation to the United States, followed by Amos Hochstein, Deputy Assistant Secretary for Energy Diplomacy in the U.S. State Department, Bureau of Energy Resources, who will offer the U.S. perspective. And last, but not least we will have a perspective from many different directions from a former insider by Matt Bryza, who is well known to everyone here in this room. He will speak about TAP and the Southern Corridor and a passive U.S. policy victory. So I will go ahead and ship it over to Christian to present the EU perspective on the Southern Gas Corridor.

Christian Burgsmüller, Head of the Energy, Transport and Environment Section of the European Union Delegation to the United States

“EU Energy Security and the Southern Gas Corridor”

It is definitely an honor and a pleasure being here today to speak about EU energy security and the Southern Gas Corridor. For us definitely the Southern Corridor is part of the big diversity case and strategy for European energy, and the Southern Gas Corridor certainly is part of the diversification strategy for natural gas imports. To back up a little bit, I have to say that a very big part of our diversification strategy is moving Europe to a low carbon economy and getting a great deal of renewable energy. We have our famous 20-20-20 goal—20 percent renewables by 2020—and it looks like we might reach about 25 percent by 2030. In the electricity sector we are now talking about 45 percent renewables by 2030. So, certainly that’s a big thing. But it is also true that natural gas will remain a major part of the European energy mix and when we say natural gas in the EU we have our dwindling, conventional, homegrown resources, especially in the UK and the Netherlands, slowly coming to an end.

We have Norway, the good friendly brother in the North, which keeps our natural gas running. When we move clockwise around in our neighborhood, we certainly have Russia. As Commissioner Oettinger had said on numerous occasions, Russia will remain a major part of the European natural gas equation, but we are certainly interested in diversification. And in this respect, when we move further south, the Southern Corridor has been a priority project for the EU for years, if not decades. And there has always been the economic side to it and there has been the political side to it. The political side has always been to get Azerbaijan and possibly other countries closer to the European Union via an economic project—and in this we always had the help of our American friends. Ambassador [Richard] Morningstar has worked tirelessly in the past to make the Southern Gas Corridor happen and he continues to do the same from Baku. It has always been and continues to be an economic and a political project. But because it is also an economic project, the math has to work. And because the math has to work, the Shah Deniz Consortium has to make decisions based on what they consider sound economics in the business.

We always get the question “Tell us how do you really feel about TAP and Nabucco-West and wouldn’t it have been better if...” The answer is always the same: the Shah Deniz Consortium has to make a decision that works and that actually gets the gas flowing. The most important thing is that we actually start getting the gas flowing, because within five years after the gas starts flowing, we will have very different quantities

coming through the Southern Corridor in Europe. So, we think that the 10 bcm currently destined to Europe might rather quickly become 20 or 25 bcm—perhaps within five years after the gas starts flowing. We think that something is there for everybody and we should not think that the decision to get the project going would preclude any further projects in the future. That also includes, for example, Cyprus. When you look at Cyprus, the most likely option for the time being seems LNG export, but why not consider that Cyprus might also be able one day to put its gas into the Southern Corridor.

I think there are many ideas out there that you can play with. The Europeans have been working hard on the side of the reverse flow and the interconnectors. Already under the TANAP-TAP scenario you can think about the Bulgaria-Greece Interconnector working with reverse flow, so there are possibilities already to get gas into South-Eastern Europe. We are very optimistic and looking forward to the final investment decision. I am delighted to see such a good audience here today because one of the things I noted since my arrival three years ago is that the Southern Corridor is not that hip anymore when it comes to Washington think tank events in the brave new LNG shale gas worlds. It is The Jamestown Foundation and the Atlantic Council, which carry the torch, and we are very grateful for that.

Glen Howard: Thank you very much, Christian, for enlightening us about the EU position. Next presenter will be Amos. Thank you.

Amos Hochstein, Deputy Assistant Secretary for Energy Diplomacy at the Bureau of Energy Resources, U.S. Department of State

“U.S. Perspectives on the Southern Corridor”

Secretary [Hillary] Clinton created the Energy Bureau two and a half years ago. The idea for it came soon after she became the Secretary [of State] due to real concern that we want to address energy security. There are many outside the think tank world—and [outside] certain individuals in the U.S. government like Matt Bryza and Richard Morningstar—who did not understand that energy security is a fundamental and integral part of national security for the U.S. And instead of having one envoy that was looking at Europe and Eurasia and one envoy looking at the rest of the world and few people sitting on another bureau or division looking at sanctions, we needed to have a comprehensive approach to energy. I will touch on why it is comprehensive, because we got a lot of questions when we did this: “Are you downgrading the Europe and Eurasia relationship, as you no longer have an envoy?” And my answer was we were upgrading it, because a bureau and an envoy shop are very different. So, we upgraded it. And part of it is because you cannot look anymore in isolation at a region. It is all interconnected and some are more obvious interconnections, but I would argue that things that are happening in the smallest countries in Southeast Asia are directly linked to what is happening in the Southern Corridor. So, let me just, with that mindset, give a view of how we see it in the government.

At first we were neutral regarding the choice between TAP and Nabucco; and it was important that we were neutral because it goes to what Christian talked about—the fact that the importance of the Southern Corridor is that it be built. The route was secondary. And therefore whether it was TAP or Nabucco, we wanted it to happen. Therefore, we see the decision to select TAP as very important because it finally put us in a position of not theoretically talking about when there is a route and if it happens, to now talking entirely about the implementation. What’s the size of the pipe? Where is it going to go? What is the

future? Christian has a slightly more optimistic view than I do about the quantities—as far as timelines. I think it will take a while. But that is the conversation we wanted to get to. So we worked diligently. And I am eager to hear Matt’s presentation beyond the title of our “passive engagement.” I think we had a very active engagement, but what we need to have is working together with our colleagues in Brussels and in the region, because at the end of the day this is a European issue.

Let me just touch a little bit on what the Southern Corridor is and what it is not. First, the Southern Corridor is critically important for EU energy security and diversification, it is important for Azerbaijan and the efforts that Azerbaijan has been making and committing for so many years. Secondly, it is a victory for U.S. policy on a number of fronts. It continues what President Clinton started—working with Azerbaijan and the West toward leaning Azerbaijani policy—and there is nothing like infrastructure to tie a country in a certain direction, and I think that is critically important to our policy. From a U.S. policy and national security perspective, there is nothing more important in the region than energy security, so the EU’s energy security is a U.S. national security imperative. From that perspective, the Southern Corridor is a hugely important development.

But what if it is not a silver bullet that is going to bring about EU diversification? EU demand is for over 500 bcm, and this is a 10 bcm pipeline. That does not mean it is not important, it is important for all of the reasons I have said before, but it is not the silver bullet, and this is why we in the U.S., in Washington and our friends in Brussels need to continue working together on EU diversification. I think it is an important signal, an important development, but we cannot take our eye off the ball. We have to continue the process with other options, which may not be multibillion-dollar infrastructure projects. Secondly, it is not only about pipelines anymore. It is about unconventional sources such as renewables and LNG. And if we can start looking at the region and the sub-regions in an interconnection model of what we need to do in different key places, that will allow both LNG and nuclear and renewables to fit in with each other.

I agree with Christian that economics have to drive decisions. If they are only political, they will fall apart because politics change. And if the politics change and the project fail, now we have a multibillion-dollar failure. We in the U.S. government have a hard time managing our own budget these days. The last thing we want is to be involved in decisions on what makes more economic sense in a multibillion-dollar project that we know nothing about from an operational perspective. So letting the Shah Deniz Consortium do that is the healthy choice, and they made that choice. We think that our job now is to say: “They made that choice, let’s make it the best thing it can be.” And that means making sure that Bulgaria gets gas from Greece, looking downfield at how to get a spur that goes through Albania up to Croatia, so that it could fit into the model of integration with the rest of Europe. An LNG plant in Croatia and a pipeline that comes in and other things that they are working on can turn Croatia into a very big beneficiary and service provider for the sub-region right in their neighborhood.

Lastly, let me talk about a broader view that I started with. Decisions being made in Azerbaijan or in Turkey are directly linked to decisions that have to be made in Jerusalem, in Cyprus, in Lebanon, in Qatar, in Asia and in the United States. They will contribute to developing a gas market in Asia, which does not exist yet as an integrated market. If that happens, we will have reunifications in Europe. The old

world of an oil OPEC cartel that controls most of the production is no longer there. It is no longer there in oil and it is no longer there in gas. Over the next several years we will have major productions in the Eastern Mediterranean, Mozambique, Tanzania, Uganda, Kenya and on the west coast of Africa. And Asia will be supplied from there. We have Australia coming online around the same exact timeline.

The U.S. is the largest natural gas developer in the world today. How does that impact the market? We just gave a new license yesterday, the 4th for exports. How many more licenses? What happens in the market in the U.S. for demand for gas? Does it rise? Do we have transportation that starts using it? All these questions are out there and they all fit into what is going to happen, not only in Azerbaijan, but also in Turkmenistan and in the entire region. So we, as the government and as a think tank community, have to start thinking in the bigger and broader picture of where are we going in the development of a natural gas market and where are we going overall in the energy market.

With that I will finish where I started, which is that the decisions on TAP and the Southern Corridor are critically important to our national security imperative and to the EU national security imperative. We think it is a great step forward to make a decision and now we look forward to getting engaged in making sure that whatever roadblocks come up we can clear. We want to make certain that the rest of the community that did not get the pipeline to run through it is still taken care of and ensured independence from a single energy source, because that continues to be a critical point for us. I will be going out to Europe very soon to meet with my colleagues and counterparts from the countries that did not get the Southern Corridor running through their territory to make sure they understand that their energy independence is still a critical foreign policy imperative for us.

Glen Howard: Thank you very much for reassuring us that the United States remains committed to this region, despite the fact that Ambassador Morningstar is no longer the envoy—so that I think it's a pretty reassuring assessment of the U.S. continuous reengagement in the region. I will turn the floor over now to Ambassador Matt Bryza. Mr. Ambassador describes the passive U.S. policy victory.

Ambassador Matthew Bryza, Former U.S. Ambassador to Azerbaijan, Director, International Centre for Defense Studies, Tallinn, Estonia

"TAP and the Southern Corridor: A Passive U.S. Policy Victory?"

Let's start off with the title of my talk. The passive part should be in quotes, because it does not come across when there are no quotes that I am being a bit ironic. The U.S. was not at all passive. The U.S. government is criticized for having been passive recently, but whether there is Ambassador Morningstar who is the envoy and who I'd love to say on the record is probably my favorite boss of all time, there is the Energy Bureau, there is Deputy Assistant Secretary Amos Hochstein and there is Special Envoy Carlos Pascual, and they are doing that same work. In fact, I would argue that the need for a U.S. Envoy or someone back in the bureaucracy to be showing everybody the way, is no longer there because the EU has taken on that task tremendously.

I think back to my own experiences 6–7 years ago as a Deputy Assistant Secretary in the European Bureau. At a conference in Budapest on Nabucco, it was one of the greatest honors and saddest things I've

ever heard when Energy Commissioner Piebalgs said: “We are not doing enough. It is the U.S. that is pulling the EU forward and we need to get our act together and figure out that the Southern Corridor is our strategic objective.” I agree with Christian that the EU for the last few years has been the one that is doing all of the work, because it is the EU’s own interest that is at stake here first and foremost.

But the U.S. going back to the Clinton administration has been doing everything it could, maybe not so visibly all the time, but everything behind the scenes and in public lays the foundation for what is becoming the Southern Corridor. During the Clinton administration that also included brokering the international agreements that provided the legal and commercial framework for the Baku-Tbilisi-Ceyhan Oil Pipeline and the South Caucasus Gas Pipeline, which is the beginning of the Southern Corridor. So, we have not been passive, though countries in the region like to blame the administration for being maybe strategically passive and I hear that all the time in the Baltic States where I spent a lot of time.

Bottom line, the TAP decision is a huge victory for U.S. foreign policy, most importantly for the EU and for Azerbaijan in terms of creating diversification, about what Amos was just talking. But let’s back up a little and put this in perspective, because what I want to do is reflect on some of the remarks we have heard already today. We have to keep in mind the difference between strategy and tactics. The choice between TAP and Nabucco is the tactical decision, unless you are Romania or Hungary, in which case you have to find a way to diversify your supply of gas. From Washington’s perspective and from Brussels’ perspective, TAP versus Nabucco is a tactical decision. What matters is that strategically there is a corridor of natural gas exports and oil that fulfills a couple of strategic objectives that have been present and prevalent in the U.S. since the Clinton administration. One is to secure the independence of the producers and that’s Azerbaijan and the transit state Georgia. In my experience of 14–15 years of working on these issues, including in Baku, what has become clear to me is that, yes, Azerbaijan is the enabler of the Southern Corridor, but it also, along with the BTC pipeline provides Azerbaijan with the oxygen of independence. It is the decision that Heydar Aliyev made back in 1994—to connect Azerbaijan physically with Turkey, the Euro-Atlantic community and now to the European markets—that is critical to Azerbaijan’s survival as an independent state.

I’ll come back to a very powerful thing Gulmira was saying about Rosneft and SOCAR working together. Many people in this room are maybe worried about that development, but I would argue it is a huge positive, because it reflects the diversification and globalization of Russia’s own natural gas market—which is terrible news for Gazprom and great news for all of us who have been pursuing all those things for all those years. What matters is that there is the Southern Corridor. We heard the figure \$40 billion, which is going to be the total amount of investment for this project to get Shah Deniz gas, just 10 bcm to Europe. Today in Azerbaijan, if you take all the upstream investment—oil upstream, gas upstream, all of the pipelines, oil and gas—the figure is around \$25 billion in direct investment. And look what that has done to transform Azerbaijan. The Shah Deniz investment, just upstream, can be almost the same amount—\$23 billion. So a huge amount of investment is coming to Azerbaijan. Strategically, Azerbaijan’s dream of helping itself and Georgia secure their independence by virtue of physical connectivity to Turkey and beyond is being realized. That’s number one.

Number two: yes, many of us in this room have lamented the fact that it was TAP and not Nabucco. But it wasn't ever going to be Nabucco, because of the way Nabucco had structured the project. There simply is not enough gas available at the right time to finance Nabucco. There was never going to be enough gas at this time to provide 31 bcm to Europe and if you do not have that gas, you can't finance the pipeline—unless Azerbaijan or the companies decide to be great global citizens and help Romania and Hungary diversify their supplies of gas on the backs of their taxpayers or shareholders, respectively. That is not realistic. So until there is more gas, somebody was going to lose and, unfortunately, it is tragic that Romania, who has been the staunchest supporter of the Southern Corridor in that part of the world, is suffering, frankly, because Bulgaria for years has been ambivalent in which choice it was going to take, as Margarita described to us. I remember desperately working with the foreign minister and then—prime minister of the Socialist government in Sofia years ago, saying: “Please be clear that you are committed to Nabucco and not South Stream,” and they did not take that advice. Bulgaria chose not to follow this unambiguous support for the Southern Corridor and diversification and it gets the mess that Margarita just described. And unfortunately Romania inherits that same mess. So, that's the bad news.

Tactically, there are ways to deal with this. I'll come back to that in a moment. If I run out of time you can read an article that David Koranyi, Ian Brzezinski and I wrote just a couple of weeks ago on how to help TAP transform into a project that not only supplies the Italian market, but also, through the Ionian-Adriatic Pipeline and the interconnectors that Amos was just talking about, provides gas not only to Albania as a new natural gas consumer, but to Croatia, to Serbia, to Montenegro and then allows that gas to feed into the European market after all.

I think we are beyond the period where it was important to draw lines on the map of pipelines, sort of like Moscow does—divide the world into spheres of influence. That's Russia's game—that has never been our game. Our strategic objectives have been: number one, help Azerbaijan and Georgia secure their sovereignty and independence; number two, make sure that these new supplies of energy from the Caspian Sea make their way to the global markets, first and foremost to the European market, without being hostage to geographic points like the straits of the Bosphorus and Dardanelles and without being held hostage to pipeline monopolies. Until now that meant Gazprom. We have achieved that goal with the evolution now and the establishment of the Southern Corridor—that's a huge strategic victory.

The other big strategic objective, what is underlying all of this, is the economic wellbeing and efficiency of our European allies' economies. It's hard to imagine a goal outside the physical security of the United States that is more important for the U.S. than that our European allies' economies operate efficiently and free from the sort of intimidation they were subjected to in previous decades by Gazprom on price setting. That era is coming to an end now for many reasons, not only because of the Southern Corridor. As you were saying Amos, 10 bcm in an over 500 bcm market is small, but the presence in its sense is huge. As Vlad described earlier and as Gulmira was saying, it is a shame and maybe a setback or a loss that the EU and U.S. were unable to attract Turkmen gas, which would have enabled the Nabucco pipeline to be financed. But as Vlad also pointed out this morning, this simply is not going to happen until Turkmenistan knows the Southern Corridor is in place. Because why would a Turkmen leader subject himself to all the pressure he will face from Moscow for agreeing to defy Moscow and send Turkmen gas West to Europe, if the Turkmen President does not know that Turkmen gas is physically going to make it

to European markets? And he will not know that possibility until the Southern Corridor is taking shape. The outcome is totally predictable and I think what we are going to see in a few years is the EU ambition for more gas, as Commissioner Oettinger says, 30 or 40 bcm coming from Turkmenistan into the Southern Corridor. I think the chance of that happening is high, but it is only going to happen once the Southern Corridor is physically materializing, and I do not think it is reasonable to expect that Turkmenistan's government would act in any other way.

But the goal is to get as much natural gas flowing into Europe as possible and to make sure that the gas can move according to the price signals and—by supply and demand—physically move from where it is supplied to where it is needed. Yes, that requires diversification of supply, but it requires the interconnections that Amos was talking about as well. And it requires regulations—regulations that allow the gas to move according to the price signal set by supply and demand. The EU's Third Energy Package aims to do exactly that and that sort of integration of physical infrastructure and regulations needs to advance. Northern Europe already has it. You have gas-trading hubs around the North Sea, or gas is traded like a normal commodity where there are spot markets and, in fact, where the spot market prices have converged since about 2008, which means gas is being traded through gas competition, not through long-term contracts indexed on the price of oil. The underlying big strategic goal is to proliferate that sort of purely market-based trading of natural gas everywhere in Europe. And it's something we spend a huge amount of time on in our Institute in Estonia, where the Baltic States are starting to go through this process with the EU. Once you have hub-based natural gas trading all around the EU, it is impossible for monopolists to dominate the market, it is just physically impossible. It's time for us to focus much more on the nuts and bolts of what the EU is doing—which is developing genuine hub-based trading and market-based trading of natural gas—and worry less about the color of the map based on which pipeline reaches which market and when. We do have to help, of course, countries like Romania diversify their supplies or Bulgaria, which will get gas from Azerbaijan through the Greece-Bulgaria Interconnector.

One last point, I flew here directly via Frankfurt from Cyprus, where I attended a conference on Eastern Mediterranean natural gas and I was wearing my corporate hat—I am on the board of directors of a Turkish Energy Company called Turkgas Energy Holding. Christian was talking about the prospect of Cypriot gas making its way to the Southern Corridor and I think that's a strong possibility, but what makes the most sense commercially is not an LNG terminal on Cyprus first, it's a pipeline from Israel to Turkey. That's what we are trying to develop and it is moving forward. I truly believe that real victory commercially and politically will be when an Israel-Turkey pipeline is built, [with] the early revenues generated from those gas fields then fed back into the financing and realization of the LNG terminal on Cyprus. And we'll see both: a pipeline from Israel to Turkey and an LNG facility on Cyprus, so there will be a multiple-win situation, which then could feed back into the politics of the Cyprus settlement process, helping Turkey and Israel reestablish their strategic partnership—big issues we can talk about over time. And some of that gas will then make it into the Southern Corridor, and we are planning in our own investment strategy in this company Turkgas on how to finance the link not only from Israel to Turkey, but all the way up to TANAP and then, once it gets to TANAP, into Greece. So, there could be a huge win-win by the Southern Corridor. It becomes a way also to link Cyprus and Israel to Turkey and to Greece, which is a radical idea that I think, is becoming commercially viable. Thanks for your patience in letting me ramble a little bit, but I wanted to try to integrate a lot of these questions.

Summary of Q & A Discussion:

Glen Howard: Thank you very much Matt. It was an enlightening presentation and I am intrigued by some of the things you said. I thought that most of Israel's gas is going to go for internal consumption rather than for export. Can you clarify?

Matthew Bryza: Gas from the first field, Tamar, will be for domestic consumption. The Israeli government has decided that 40 percent of the natural gas from the second big field Leviathan can be exported. The decision needs to be confirmed by the Judiciary in Israel. Everybody is hoping it will be, but Israeli politics are unpredictable.

Amos Hochstein: I think it is a bit complicated because the government approved it, but the Parliament challenged the government's power to make decisions. Now the court will decide who gets to make the decision. There have also been a lot of protests around the issue. So, 40 percent is the ceiling right now, but it could go a bit lower. I think there are a lot of things that have to be ironed out and decided. Tamar is all for domestic consumption with some modification. Leviathan then is going to be the big one for exports, but some of the decisions have to be made in anticipation of what other fields will be developed and how much more gas there will be. It is difficult to predict without knowing how much gas is there in Cyprus, how much is there in block 12, or what happens with Eni and Total.

Question from Veaceslav Pituscan: It seems that the key answer to the current situation for the countries remaining outside the TAP project is the interconnectors. Can you comment on the current situation and future prospects to put this system in place so that gas from Italy or Greece can get to Moldova via the interconnector, which we started to build now between Moldova and Romania?

Christian Burgsmüller: Certainly, there is a European program called the European Connector Facility that helped with the financing of those projects. It is probably the biggest European infrastructure program on energy, and the goal is to have no energy islands in the European Union by the year 2015. These are individual projects that get evaluated as they are submitted and then EU financing is made available for them. But the big dates we have are 2014 for the completion of the internal European energy market and 2015 for the elimination of the last energy island in the EU.

Amos Hochstein: I think this is really important for Moldova, which is making very good decisions in its relationship with Romania. As Christian said, we have to think strategically. It is not just about the interconnectors, they have to make economic sense. But here really we need the politics to work—we need the countries to come together on the grand vision and then the regulatory side to follow it. I think the goal of no energy islands is absolutely right and I join Matt in saying that Europe is really doing tremendous work on this. But it is not going to be a Brussels program, this is going to work only if the member states and European countries are coming up with creative solutions and putting all their efforts behind it to make it happen. We stand ready in the U.S. because this is a part of our foreign policy imperative to support the EU member states.

Question: Barry Wood, economics journalist. I'd like to ask first of all, do you think that South Stream will be built? If so, by when? And secondly, it seems that in addition to Romania, Serbia and Macedonia are also among the big losers from the cancelation of Nabucco. What do you make of that?

Matthew Bryza: My sense is the same as Margarita's—a delay of South Stream, not a cancellation in Bulgaria. I think they are going to do this [build South Stream] and I think it is ridiculous. It is the craziest pipeline since the white elephant gas pipeline in Ukraine, which I wish would have been filled with gas, but is never going to happen. I just recall years ago talking to the CEO of a Central European energy company and I asked him the same questions and he said yes, it was going to be built because the President of Russia wants it. He has this grand vision, which is not only to block the Southern Corridor: it is to unite the Third Rome (Moscow) with the Second Rome (Constantinople) with the First Rome (Rome). The CEO of this European company was saying his partners in Gazprom lament the reality that this is what is happening, because it hurts Gazprom, it makes Gazprom inefficient and uncompetitive and [it] loses a lot of money.

The other huge development is strategic as these projects move forward and there is greater competition in Europe. There is also something happening in Russia with the liberalization of the Russian natural gas market. Gazprom is about to lose its monopoly on gas exports, right? How far will that go? Will that lead to it losing control of pipelines? It is unclear at this point. But what is clear is that Rosneft and Novatek are competitors to Gazprom. Rosneft is pretty connected to the Russian government with Igor Sechin as head of it, but it is a competitor to Gazprom and Novatek, which is quietly connected to President Putin, yet it also is a competitor. So, there is something exciting happening within the Russian natural gas system. That is also leading to domestic competition. It is unclear how all that is going to shape up, but in the end, if Gazprom is forced to demonopolize, that's maybe the best thing that could happen to Gazprom in the long run, if you think back to what that Central European CEO was saying about the huge inefficiencies that projects like South Stream cause.

Amos Hochstein: South Stream will transfer the same gas through new pipes to almost all the same places—personally, I don't understand it, but maybe there is an economic sense that I am missing. The other thing that is important as a follow-up on to what Matt just said, is that there is something else that needs to happen in Russia and I think it is happening. The demand structure for Europe over the next 30 years and, if you look at the demand in Asia, those are very different curves. Russia understands it and, I think, Rosneft understands it. South Stream to me is a doubling down on Europe, when it makes more sense to be looking at the new market where the growth demand is huge.

Christian Burgsmüller: Perhaps one reason for the doubling down on Europe might be it is just nicer to negotiate gas prices with Europe than with China.

Question: I'm John Utley with the American Conservative and I write on the oil market for *Reason* magazine. If Turkey intends such a large consumption, that does not seem to make much change to the rest of Europe at all. And so looking at this handout from Jamestown, it looks like Russia still would play the dominant role with Europe. Why should Russia be so worried, if most of the gas will go to Turkey?

Matthew Bryza: Good point and many people in Washington have argued that 10 bcm is so little. The reality is this is just the beginning. TANAP is a much bigger pipeline that is designed to absorb or to transit a lot more gas that is going to come from Azerbaijan in the future. As Greg Saunders was pointing out, there are many more fields that are going to produce more natural gas in Azerbaijan. Hopefully, Turkmenistan is going to decide, once the Southern Corridor is in place, that it's ready to export gas through the West route. There is potential gas coming from Cyprus, Israel and Northern Iraq, which we did not talk about. So this is just the beginning. Now that the Corridor is established and a precedent is now set, this entire strategic concept makes commercial sense.

Why is Russia worried about it is a question for Russia, but the fact is that they are worried and fought like mad to block this through—whether with disinformation campaigns, whether through South Stream or what they tried to do with DESFA. Anthony was completely right on target with DESFA and DEPA. Gazprom had this Sintez company that was double-bidding with it to acquire DESFA, which is the Greek national pipeline system, and DEPA, which is the contracting arm that negotiates and implements all gas contracts. It was when the European Commission made it clear to Russia that they would not be allowed to operate DEPA and DESFA as a monopoly that suddenly both Gazprom and its partner Sintez quit and left the field to SOCAR. I can just say that was an almost miraculous turnaround; it took enormous courage by the EU to do that. Just the day before that happened, I was with some very senior people from BP and what we were strategizing about was what do we do when DESFA is acquired by Gazprom and then there is no way to move gas that could come through TAP into Greece and beyond—there would have been a blocking place. But the Greek government and the EU showed great courage. The Russians are worried but my sense is it is because this is just the first step and they are going to lose their ability to continue setting prices using oil indexation and monopoly pressure.

Question: Salkhis Balkhian from the Armenian National Committee of America. I do have actually a couple of questions. As we all know, the U.S. gas exports have been increasing gradually as time goes on. If in time the gas that is delivered through TAP and TANAP increase to 30 bcm per year or even more, do you think that in time the U.S. and Azerbaijan will be competing for the same gas markets? And my second question is what are the U.S. concerns about the fact that Iran controls around 10 percent of the shares of this project?

Amos Hochstein: We are in the middle of a major shift in gas worldwide and much of the decisions for the creation of the Southern Corridor were made before these major shifts were happening. And now we are getting to the implementation long after the sea change in gas markets. Leading in that sea change is the U.S. We went from a major importer of gas to soon becoming an exporter of gas. I don't think there will be a competition with Azerbaijan for markets. I think that there is rising demand and everybody is going to be just fine. I think demand will rise in the U.S. as well. Gas price consistently at the rate of \$3.50 to \$3.75, as it is at Henry Hub today, is remarkably low. It is not the lowest rate historically, but even with all these licenses, one of the predictions was that just the issuance of licenses would create a dramatic rise in price at Henry Hub, up to \$5 and \$6. That has not happened, prices have been relatively stable.

I expect to see some rise in price once exports start. But the U.S. is a very innovative place and as soon as the corporate sector sees that low gas prices are here to stay and the supply is rising and will stay

consistent, there will be new usages of gas, not just in the petrochemical industry, but potentially in other sectors as well. You know that most of our fleet vehicles are already running on natural gas and our city busses are on natural gas. Beyond that, demand is rising everywhere for gas and I expect that to continue. So, I do not think that demand issues will be a problem.

On Iran, when Congress passed the sanctions legislation in the National Defense Authorization Act of 2013 and also in 2012 and 2011, Congress made sure there was language included in the law to ensure that the Shah Deniz Consortium can continue operating. That has been reaffirmed in all legislation on Iran sanctions since. I think that safeguards have been put into place. That is not to say that we will not be watching and won't be vigilant, but the companies involved in the Consortium are well aware of what the restrictions are, and I am confident that they will be followed. I think Iran has bigger issues to worry about now with losing over a million barrels a day of oil exports in the last year alone. I expect this to occupy more of their time since those exports will continue to decline.

Question: Rafiq, Assembly of Friends of Azerbaijan. My question is about Middle East gas. I wonder whether you see any prospect of transporting Middle East gas, specifically Iraqi, Bahraini, Qatari or Saudi Arabian gas to the TAP pipeline, also through Syria after the resolution of the Syrian conflict? Do you see any geopolitical complications in such a project?

Amos Hochstein: Yes and no. I don't expect to see Qatar being part of the Southern Corridor. There is a change in how we trade gas and it is no longer just pipelines—it is now LNG and pipelines. What has to make sense will be dictated a lot by prices and how spot prices for LNG interact with some of the long-term contracts on pipelines. I think the market has to figure out all this. From a proximity perspective, it would make sense to evacuate Iraqi gas from Kurdistan through Turkey. Turkey is playing a tremendous role in the Southern Corridor, but it is also important to know that Turkey has its own interests and Turkey imports its gas from Russia and from Iran. And if we are talking about diversification in Europe, I think Turkey would like to have diversification for itself. So multiple sources of gas coming into a pipeline that is going through Turkey are important for Turkey itself. Some of it will stay in Turkey and some of it will move on—Turkey is a growing economy that is dependent on energy and it needs new sources of energy. That's why it makes sense that Iraqi gas in Kurdistan would ultimately go to Europe via that route. As far as Syria, let's table that question to another time when we can talk about pipelines from the Bosphorus through to Banias and discuss Syria's role. I hope that these pipelines will come up soon, but for now I think it is better to focus elsewhere.

Vladimir Socor: Croatia was mentioned. TAP's handouts never convinced me about the viability of the Ionian-Adriatic Pipeline proposal—it is not a project, it is a proposal. This pipeline is to connect from Fier in Albania, branching off 500 kilometers from TAP all the way to Split in Croatia. It never convinced me because there is no financing inside for a 500-kilometer pipeline and no volumes. TAP proposes to market the bulk of its volumes apparently in Northwestern Europe at this point. So, I do not know where the volumes would come from all the way to Croatia. But Croatia is important in another respect. It's important as a possible site of an LNG terminal. That is worth great attention. The Croatian government has tried for many years to put together or to stimulate a national company or an international consortium to build the LNG terminal. The landlocked countries in Central Europe would like very much

to see that LNG terminal built in Croatia. There is an interconnector between Croatia and Hungary at a capacity of 6 bcm per year, which could be extended to Slovakia and to Romania.

I think the U.S. and the EU should assist the Croatian government in putting together this project. It also involves disentangling a number of corruption affairs in Croatia. It also would involve getting Croatia to treat the Hungarian MOL company more fairly. MOL has practically revolutionized the Croatian oil and gas company INA, which is the largest business entity in Croatia. MOL was the 49-percent stake in it, and has overhauled, modernized and westernized INA—practically revolutionized it. Some elements in the Croatian government seem intent on rolling that back. And that deserves attention as well. Croatia actually is 60-percent self-sufficient in gas and imports 40 percent, much of it via MOL. Gazprom is trying hard to break into Croatia, so there is great attention to Croatia, moreover, with having in mind the decline in Russian oil exports via the Druzhba Pipeline, which makes Hungary, Slovakia and other Central European countries and Poland concerned. And again Croatia could become a transit corridor for oil deliveries via Omišalj Terminal in Central Europe. That's the importance of Croatia, not in terms of IAP.

A quick comment about South Stream, because so many speakers raised it. Since the first proposal in 2007 by President Putin, South Stream's objective has evolved over time. Number one, it failed in its initial objective to capture Turkmen gas, so that was a failure. Second objective was to discourage Nabucco. The prospect of South Stream being possibly built had some contribution in discouraging financing for Nabucco. Thirdly and now most topically, the main goal of Gazprom and South Stream now is to enlist transit countries such as Bulgaria, in the first place, into breaking the European Union's legislation together with Gazprom because Gazprom wants to extend co-ownership of the pipeline into countries on EU territory against the Third Energy Package. Gazprom would like to create a precedent in this regard not only to break it in the South Stream transit countries, but to create a precedent to protect Gazprom's existing holdings in countries like Germany and maybe the Baltic States. And that's why I think both Washington and Brussels should put Bulgaria on the spot not to become an accomplice of Gazprom in breaking EU legislation.

Amos Hochstein: On Croatia—there are many people who say that something is not viable in the beginning. I can guarantee you that if we look back into the 1990s, BTC Pipeline was not viable, Trans-Caucasus Gas Pipeline was not possible and neither was the Southern Corridor. I think you are right—it depends on how developments shape. There are many reasons why it is very valuable to have a pipeline to Croatia. Part of it is political and part of it is economic. I don't disagree with you at all; I endorse everything you've said about the importance of an LNG terminal in Croatia and the kind of role that it could play. I can tell you that we are in very active talks with the Croatian government. I am not always a fan of those national companies and the way they go. But that is not for me to decide—that is Croatia's decision and they need to figure out what is the best route and we will be there every inch of the way to help Croatia in that process. And I agree with you that the main importance [of such a terminal] is not for Croatia's domestic demand, but for the region, Hungary and Slovakia primarily and other neighbors as well.

I think that regardless of South Stream, the 31-bcm pipeline for the Nabucco project was just too big from a geographic prospective and a gas demand prospective to have been able to move forward. This is why it

is important not to have a debate today about TAP in light of the original Nabucco project or what it would have been—because that was not a realistic option.

Glen Howard: On that note, we would like to thank everyone for coming today. I appreciate your participation and the event will be posted online within the next week. Thank you very much.

Participant Biographies

Margarita Assenova

Margarita Assenova is Director of Programs for the Balkans, the Caucasus and Central Asia at The Jamestown Foundation. She is a regular contributor to the Jamestown publication Eurasia Daily Monitor on political and energy security developments in the Balkans. She also serves as a Contract Chair of the Southeast Central Europe Area Studies course at the U.S. Foreign Service Institute. Ms. Assenova is a professional journalist with over 25 years of experience in print and broadcast media. After working as a reporter and editor in Bulgaria from 1987 to 1997, she was awarded a John Knight Professional Journalism Fellowship at Stanford University for her reporting on nationalism in the Balkans. Her articles appeared in U.S. and European newspapers, magazines, and online publications, including RFE/RL's Newline and Balkan Report, The Washington Times, The Moscow Times, The World and I, Transitions Online, Balkan Times, The Capital Weekly and Reason Magazine (Bulgaria), Internationale Politik (Germany), Essays in Arts & Sciences, World Finance Review Magazine (UK), and Future Prospects (UAE). Assenova authored book chapters on security, energy, and democracy published by CSIS Press, Brassey's, Freedom House, and Bertelsmann Foundation Publishers.

Matthew Bryza

Matthew Bryza is the Director of the International Center for Defence studies in Tallinn, Estonia, and a member of the Board of Directors of The Jamestown Foundation. He is also a Non-Resident Senior Fellow at the Atlantic Council of the United States. He resides in Istanbul, Turkey, where he also works as a consultant on business and democratic development and as a board member of several private companies. Bryza just completed a 23-year career as a U.S. diplomat, over half of which he spent at the center of policy-making and international negotiations on major energy infrastructure projects and regional conflicts in Eurasia. His most recent assignment was as U.S. Ambassador to Azerbaijan from February 2011 to January 2012. During 2005 to 2009, Ambassador Bryza served as Deputy Assistant Secretary of State for Europe and Eurasia, with responsibility for Eurasian Energy, the South Caucasus, Turkey, Greece and Cyprus. Ambassador Bryza simultaneously served as the U.S. Co-Chair of the OSCE's Minsk Group mediating the Nagorno-Karabakh conflict, and as U.S. mediator of the Cyprus, South Ossetia and Abkhazia conflicts. During 2001 to 2005, Ambassador Bryza served in the White House as Director for European and European Affairs on the National Security Council Staff. His responsibilities included Eurasian energy, the South Caucasus, Central Asia, and political Islam in Eurasia. Previous assignments include Deputy to the Special Advisor to the President and Secretary of State on Caspian Energy, Advisor on Economic Reform in the South Caucasus and Central Asia and Russia Desk Officer at the State Department; and Political Officer at the U.S. Missions to Russia (1995–97) and Poland (1989–91).

Christian Burgsmüller

Christian Burgsmüller is a career EU diplomat with the European External Action Service (EEAS). Since 2010, he has been serving as Counselor at the EU Delegation to the U.S. in Washington, DC, where he heads the Energy, Transport and Environment section. Mr. Burgsmüller is a lawyer by training and joined the European Commission in Brussels in 2000. Over the following six years, he held posts both in the Commission's Directorate-General for Enterprise and Industry as well as in the Directorate-General for Trade. He finished his Brussels years as coordinator for EU-U.S. trade and investment relations. Continuing his career overseas, Mr. Burgsmüller headed the Political, Economic and Public Affairs section of the EU Delegation to Brazil in Brasilia from 2006 to 2010. He studied law in Freiburg im Breisgau, Geneva and Cologne, and holds a Ph.D. in constitutional law from the University of Cologne. He has been a visiting lecturer on EU and German politics at Sciences Po in Paris and the University of Sao Paulo.

Amos J. Hochstein

Amos J. Hochstein currently serves as the Deputy Assistant Secretary for Energy Diplomacy at the U.S. Department of State in the Bureau of Energy Resources (ENR). In this capacity, Mr. Hochstein oversees the Office of Middle East & Asia and the Office of Europe, the Western Hemisphere & Africa where he leads the bureau's energy diplomacy efforts. He oversees U.S. foreign policy engagement in the critical intersection of energy and national security. In this role, he focuses on promoting U.S. interests to ensure energy resources are used to increase economic opportunity, stability and prosperity around the world. Prior to joining the State Department, Mr. Hochstein spent more than 15 years advising U.S. elected officials, candidates for public office and thought leaders on domestic and global energy policy initiatives. He began his career in Washington, D.C., on Capitol Hill where he served in a variety of senior level positions, ultimately serving as the Senior Policy Advisor to the Foreign Affairs Committee of the U.S. House of Representatives. Mr. Hochstein first served as the principal Democratic staff person on the Economic Policy, Trade & Environment Subcommittee where he oversaw work authorizing Ex-Im Bank, OPIC and USTDA, as well as drafting legislation on export controls and trade-related multilateral organizations and regimes. Mr. Hochstein served as Policy Director to Senator Chris Dodd (D-CT). Prior to his work with Sen. Dodd, he worked as a Senior Policy Advisor to Senator (then Governor) Mark Warner (D-VA). Harnessing his experience in the policy, campaign and public sector, Mr. Hochstein moved to the private sector as Executive Vice President of International Operations at Cassidy & Associates. Throughout his career, he has been a sought-after counselor for both domestic and international oil and gas companies, as well as companies focusing on renewable energy. In this capacity, he assisted corporations in assessing potential new markets and the development of alternative sources of power and best strategies to bring them to market. Amos also serves on the board of several non-profit organizations.

Anthony Livanios

Anthony Livanios is the CEO of Energy Stream CMG GmbH, an international advisory firm in the oil and gas industry based in Frankfurt, Germany. He has over 20 years of experience in structuring, negotiating, and implementing oil and gas projects, intergovernmental agreements, pipeline negotiations, geopolitical risk assessments, and market intelligence. His experience includes providing advice on oil and gas project development agreements, shareholders and project sharing agreements. He has been advising oil majors, national oil companies, and oil independents on concessions, pipelines and LNG projects on investment strategies, establishment of joint ventures, privatization, and oil and gas infrastructure development. He has implemented energy projects in Eurasia and the Caspian region, the Persian Gulf and the Arab world, Europe and the United States. He was Managing Director for LNG Trading at M&M Gas S.A. of the Motor Oil group, (2010–2011), President of Poseidon S.A., Offshore Natural Gas Greek-Italian Pipeline (2009–2010) achieving the agreement for the construction of the Greek-Bulgarian Natural Gas Pipeline (IGB). From 2000 to 2009, he was the CEO and founder of Alpha Metrics S.A., a company specializing on market intelligence, geopolitical risk analysis, media relations, and organization of exclusive international business and energy conferences. In 1994 he established American Research Inc., specializing in political risk analysis, public opinion research, and business to government relations. From 1994 to date he has been appearing as a commentator on the geopolitics of oil and gas in Eurasia and the Eastern Mediterranean, on international media networks such as CNN, Reuters, Associated Press, Al Jazeera, and the Middle East News Agency, and newspapers such as The New York Times, Wall Street Journal, and Al Ahram. Anthony Livanios holds a Master's Degree in International Political Economy from Columbia University, New York, N.Y. (1991), and a B.A. in Economics from the American University, Washington, D.C. (1988). He is fluent in German and Greek. He served as a Navy SEAL in the Hellenic Navy (1992–1994).

Rauf Mammadov

Rauf Mammadov spent six years working as a senior assistant to the CEO of SOCAR when the company launched the process of transforming from a national to an international oil company. After finishing high school in South Bend, Indiana, Mr. Mammadov graduated from Baku State University and completed an MBA at the State Economic University. Rauf Mammadov has been director of the SOCAR USA Office since its establishment in August, 2012. He is fluent in English and Russian, and studied Arabic for five years.

Alexandros Petersen

Dr. Alexandros Petersen served as Advisor to the European Energy Security Initiative (EESI) at the Woodrow Wilson International Center for Scholars. A scholar of energy geopolitics, he had a decade's experience conducting research across Europe and Eurasia. Dr. Petersen authored the book *The World Island: Eurasian Geopolitics and the Fate of the West* and co-ran chinaincentralasia.com. He had been a Senior Fellow for Eurasia and Fellow for Transatlantic Energy Security at the Atlantic Council, a Visiting

Fellow with the Russia and Eurasia Program at the Center for Strategic and International Studies (CSIS) and has provided research for the National Petroleum Council's Geopolitics and Policy Task Group. Dr. Petersen regularly provided analysis to publications such as the *Economist*, *New York Times*, *Wall Street Journal*, *Foreign Affairs*, *Foreign Policy*, *National Interest* and the *Atlantic*. He had appeared on the BBC, Sky News, CTV and NPR and taught classes on energy geopolitics at the U.S. Foreign Service Institute, the U.S. National War College and the American University of Central Asia, amongst many others. He received a B.A. in War Studies with First Class Honors from King's College London and an M.Sc. and Ph.D. in International Relations from the London School of Economics. In January 2014, Dr. Petersen was tragically killed in a bomb blast in Kabul, Afghanistan, where he recently joined the faculty at American University.

Gulmira Rzayeva

Gulmira Rzayeva is a principal research fellow at the Center for Strategic Studies (CSS) under the President of the Republic of Azerbaijan, visiting research fellow at the Oxford Institute of Energy Studies (OIES), and a non-resident scholar at Hazar Enstitutu (HASEN) based in Istanbul. Her area of expertise includes energy security, covering issues such as the energy policy of Azerbaijan, the Black Sea/Caspian region energy security, as well as the Turkish domestic natural gas market. As part of her engagements in the field of energy security, she has worked at the Moscow Carnegie Center as a visiting research fellow and Finish Aleksanteri Institute of the Helsinki University and lectured on the topic at the Universities of Helsinki, Jouensuu and Tampere. Her other engagements in this field include a fellowship awarded by the Central Asia–Caucasus Institute Silk Road Studies Program, a joint program of the Paul H. Nitze School of Advanced International Studies of Johns Hopkins University and the Stockholm-based Institute for Security and Development Policy, financed by the U.S.-based Rumsfeld Foundation. Over time she has participated as an invited speaker at a number of international conferences on energy security issues in Europe, the U.S. and Asia. Having a B.A. in international relations from the Baku Slavic University and an M.A. in Global Affairs from the University of Buckingham, U.K., Ms. Rzayeva has published several scholarly publications focusing on her area of expertise. She is a co-author of the report entitled “Strategic Imperative: Azerbaijani Gas Strategy and the EU’s Southern Corridor” published at the SAM Review Journal of CSS and “Natural Gas in the Turkish Domestic Energy Market: Policies and Challenges” to be published at OIES in October.

Greg Saunders

Greg Saunders is the Senior Director, International Affairs, responsible for U.S. political and government relations in support of BP's global portfolio of commercial operations. He joined BP's Washington office in 2004. Mr. Saunders was previously posted to BP's corporate headquarters in London and then to Algeria. Resident in Algiers, he served as the Director for Communications and External Affairs and was responsible for corporate responsibility, reputation/branding and relationship management programs for BP's extensive oil and gas operations in Algeria as well as its entry strategy in Libya. Prior to joining BP, he culminated a career with the U.S. government with assignments in Asia, Africa, the Middle East and

Europe. Mr. Saunders graduated from West Point with a Bachelor's Degree in Engineering. He has an MBA from George Washington University and an M.A. in International Relations from the Naval Postgraduate School. He is also a graduate of the French Ecole de Guerre in Paris. He speaks French and Portuguese.

Vladimir Socor

Vladimir Socor is a Senior Fellow of the Washington-based Jamestown Foundation and its flagship publication, Eurasia Daily Monitor (1995 to present), where he writes analytical articles on a daily basis. An internationally recognized expert on former Soviet-ruled countries in Eastern Europe, the South Caucasus, and Central Asia, he covers Russian and Western policies there, focusing on energy policies, regional security issues, secessionist conflicts, and NATO policies and programs. Mr. Socor is a frequent speaker at U.S. and European policy conferences and think-tank institutions. He is a regular guest lecturer at the NATO Defense College and at Harvard University's National Security Program's Black Sea Program (Kennedy School of Government). He is also a frequent contributor to edited volumes. Mr. Socor was previously an analyst with the Radio Free Europe/Radio Liberty Research Institute (1983–1994). He is a Romanian-born citizen of the United States based in Munich, Germany.