

Georgia's Energy Sector Achievements, Challenges and Outlook

W-Stream

Prospects and Potential benefits of International Energy Transit Projects

August 5, 2016



W-Stream Caspian Pipeline Company Ltd - the promoter of the Trans-Caspian Pipeline – essential component of the Southern Gas Corridor – PCI 7.1.1.

Giorgi Vashakmadze – Director



W-Stream Caspian Pipeline Company Ltd

- the promoter of the Trans-Caspian Pipeline

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Project of common interest:

7.1.1

COUNTRIES INVOLVED

TU,TR,AZ,EL

PROJECT PROMOTERS

TCP: W-Stream Caspian Pipeline

Company Ltd

SCP-(F)X: SOCAR MIDSTREAM

OPERATIONS

TANAP: TANAP DOGALGAS ILETIM

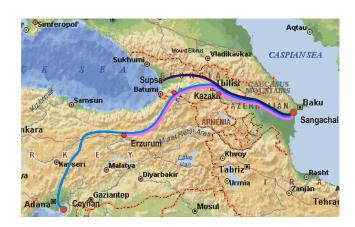
ANONIM SIRKETI

Gas interconnection

POLAND PROBLEM REPRESENTATION POLAND PROBLEM REPRESENTATION PROBLEM REPRESENTATION Projects belonging to cluster 7.1 Gas compressor station Gas pipeline Source: PLATTS, GISCO, European Commission

https://ec.europa.eu/energy/sites/ener/files/documents/pci_7_1_1_en_2015.pdf





"Our main Transit Function of Georgia must earn huge dividends"

Bidzina Ivanishvili, February 2014

http://news-cafe.gipa.ge/index.php?option=com_content&view=article&id=794:newcitizen&catid=201&lang=geo



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Hosting International Energy Transit Projects – why are countries so keen? Earnings? A possibility to be useful for partners?

> But just imagine a future where Israeli gas fields make a major contribution in supplying Europe's energy needs, and how that could impact the way in which the world views military threats against this country.

http://www.jpost.com/Opinion/Snap-Judgement-Why-Israels-gaspipe-dreams-are-no-Turkish-delight-462070

PROPOSED ISRAEL-TURKEY SUBSEA PIPELINE Ceyhan Port TURKEY Turkey's exclusive





https://ec.europa.eu/energy/sites/ener/files/documents/pci 7 1 1 en 2015.pdf



August 2008 is when Russian military invaded Georgia

This is how FT was seeing the scenery just 3 weeks before the invasion:

"The US and most European Union members support Georgia's efforts to escape Russia's influence and integrate with the west, including joining Nato. The west is also worried about the security of pipelines taking Caspian oil and gas across the Caucasus to Turkey. Meanwhile, a resurgent Russia sees the region, including the pipelines, as a key test of its capacity to reassert itself in the former Soviet Union."

FT 2008-07-13

http://www.ft.com/intl/cms/s/0/0287616e-5108-11dd-b751-000077b07658.html#axzz2tmc0GPw4

Oil is no more a strategic commodity in the world, maybe gas still is? Will Europe need more gas?



SD2 gas into TAP – the great start

of the Southern Gas Corridor

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The first project of the southern corridor is now under way, making it possible to bring necessary plans for "enlargement" on track.

Commissioner Oettinger: "Ten bcm is a good start, but ... If 10 bcm is all that there is, I will not fly to Baku and seek controversy with Russia for that."

Turkmen

Reuters, Nov 28, 2012

What are the other possibilities for timely Corridor enlargement that will pass through Georgia?

Azerbaijan has reserves in addition to SD2 but will take some time to develop.

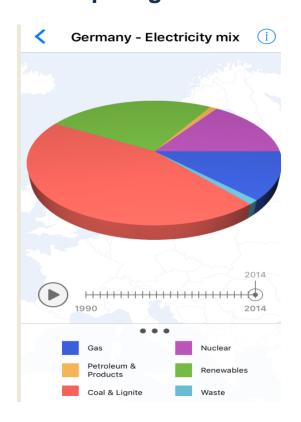
Iraq is promising, but there is no confidence in speed of development.

East-Mediterranean gas could be developed timely to feed into TANAP and TAP.

Iran may TANAP and TAP, or will choose LNG only



Turkmen gas can be very competitive in the EU Southern Europe is not where most of new gas will be needed in future Caspian gas should aim at the main gas consumption areas



Turkmen gas for Turkish and European consumers: How to make it a reality

European Commission is much less interested now – too many competing options. Some EU countries even see the Turkmen gas as a competitor to their interests. Will Georgia start playing a role?



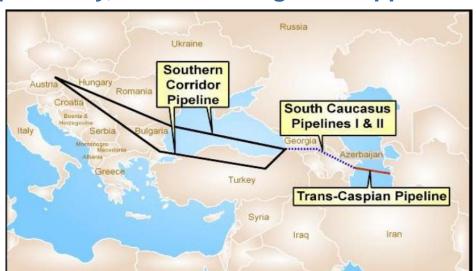
"Southern Corridor" and the "trust in gas"

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Turkmenistan wants to supply 30bcma......

Gas supply from Turkmenistan can closely follow the SD2 without insurmountable obstacles. The choice of TAP and the commencement of its implementation have created good conditions for making this a reality.but there is no need for 30bcma in Turkey and Southern Europe ... but there is a need of additional access to Baumgarten via the most economical route – TCP-SCP(F)x > White Stream > Trans-Balkan Pipeline-Ukraine-Slovakia > Baumgarten

Availability of sizable quantities of Turkmen gas will affect EU's gas market positively, and thus bring more opportunities to other suppliers



Source : EU's CDC report for Turkmen gas



White Stream's PCI status was blocked by Romania in 2015.

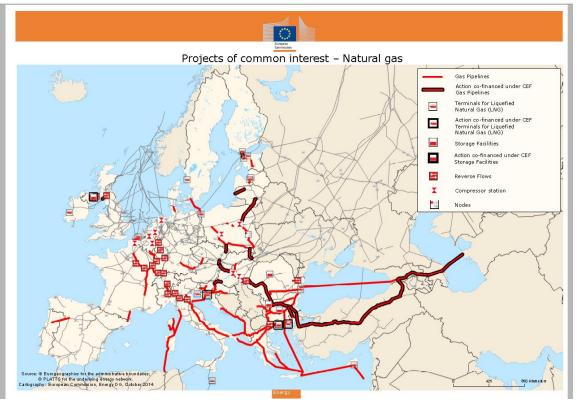
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2014 - Projects of common interest – Natural gas

Action co-financed under CEF Gas Pipelines

White Stream's PCI status was blocked by Romania.

European Commission is interested to have it included in the forthcoming 2017 list





The Economist Incoming Pipeline Routes, April 2014



The Economist

http://cdn.static-economist.com/sites/default/files/20140405 EBM952.png



Azerbaijan is keen to have Turkmen gas in the TCP

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23 May 2016 Baku, Azerbaijan, May 23 Trend: <u>Azerbaijan and Turkmenistan are</u> negotiating the opportunities of transporting Turkmen gas to Europe through the <u>Southern Gas Corridor</u>, Natig Aliyev, Azerbaijani energy minister, said in an interview with ANS TV channel.

"There are two pragmatic options," the minister said. "The first option is to construct the Trans-Caspian pipeline, while the second option is to connect the platforms in the Caspian Sea through the subsea pipelines." "The Southern Gas Corridor envisages the transportation of 16 billion of Azerbaijani gas annually," Aliyev said, adding that at the same time, it is open to other sources, including Turkmenistan. "Turkmenistan claims about an opportunity of exporting up to 30 billion cubic meters (bcm) of gas a year to Europe, but on condition of its sale on the country's border, in this case - on the shore of the Caspian Sea," the minister said, adding that this raises big questions. "At present, Turkmenistan can export up to five bcm of gas from the offshore fields annually with the further increase up to 10 bcm," said the minister. "This option creates great prospects for the Southern Gas Corridor." Aliyev said that despite the reality of the construction of the Trans-Caspian pipeline, there are a number of unresolved issues, which do not depend on Azerbaijan. "Azerbaijan's position is that while constructing this pipeline, the country is creating opportunities for each country to export its gas to Europe," he said. "Azerbaijan is even ready to make additional investments, increase the capacity of the pipeline, build additional gas compressor stations, but the country needs guarantees in the form of long-term contracts of the potential exporters, including Turkmenistan, with the buyer-countries in Europe."

http://en.trend.az/business/energy/2536950.html



Is Georgia interested?

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Turks, Turkmens, Azeris to meet for European gas

ASHGABAT – The Associated Press July/24/2016

A Turkish diplomat says the presidents of Turkey, Turkmenistan and <u>Azerbaijan</u> are set to meet to lay groundwork on possible future deliveries of natural gas from Turkmenistan to Europe. Mustafa Kapucu, Turkey's envoy to

Turkmenistan, has said that the three-way summit will happen later this year.

http://www.hurriyetdailynews.com/turks-turkmens-azeris-to-meet-for-european-gas.aspx?pageID=238&nid=102001

Georgia is not a signatory of the Ashgabat Declaration on the importance of equal and mutually beneficial cooperation in ensuring reliable natural gas supplies from Turkmenistan to Europe between Turkmenistan, the Republic of Azerbaijan, the Republic of Turkey and the European Union



European Commission 1 May 2015

Ashgbat Declaration

https://ec.europa.eu/commission/2014-2019/sefcovic/announcements/ashgabat-declaration_en



Commissioner Oettinger in Tbilisi:

The realization of the Southern Gas Corridor will in fact provide strong incentives to further deepen and sustain our energy cooperation based on mutual benefits. In this respect, this project still has a tremendous unexploited potential that can be realized. The EU does not expect the Southern Gas Corridor to only transport gas from Shah Deniz II field. We expect that in the medium-term this corridor could supply 10% of EU demand, accommodating additional volumes from other gas fields in Azerbaijan, Turkmenistan, Iraq, but potentially also Iran, among others. Upon realization of the Trans-Caspian Pipeline, Turkmenistan alone has indicated that is like to supply 30 bcm per year to the EU by 2025.

http://weg.ge/wp-content/uploads/2014/02/Seminar-Brochure.pdf



Georgia has no dedicated institutional structures to deal with countries strategic transit potential. And the government seems to experience a constant lack of capacities in this field.

Who will take the lead?
Political parties?
Civil Society?

The only legal framework currently existing is 2002 SCP Treaty that limits westward throughput through Georgia to 30bcma. Georgia gas a potential to have twice more soon if work starts now



TCP vs Nord Stream 2

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However, Angela Merkel said that Germany would not need "<u>a third, fourth or fifth branches of</u>

<u>Gazprom's pipeline"</u>, and it became clear that she didn't support Moscow's ambitions to expand the Nord Stream.

But this was said in 2011

http://www.eurodialogue.eu/Project-Nord-Stream-what-next

Now Germany feels it needs more gas soon and considers LNG excessively expensive

Now, as the Government of Turkmenistan has completed the so-called East-West pipeline capable to supply 30 bcm/y if Trans-Caspian pipeline is built, SCP and TANAP could accommodate initial volumes of Turkmen gas, commercial feasibility of White Stream is fully confirmed, and a reverse-flow possibilities of Trans-Balkan pipeline legally enabled, Germany could expect Turkmen gas in the same time framework as a proposed Nord Stream 2.



AGRI-LNG?

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Romania is offering AGRI – LNG to Turkmenistan.

"Bishkek (AKIpress) - President of Turkmenistan Gurbanguly Berdymukhamedov received Foreign Minister of Romania Bogdan Aurescu, who arrived in Ashgabat, reports the press service of the Turkmen leader.

Berdymukhamedov, Romanian Foreign Minister discuss joint projects on Caspian gas supply to Europe...... Implementation of gas project AGRI (Azerbaijan-Georgia-Romania Interconnector), which envisages supply of Caspian gas in liquefied form to Romania, was also considered at the meeting."

http://akipress.com/news:565075

The concept of AGRI LNG is no different from White Stream.

A caveat is the cost of transportation across the Black Sea. Compare: 60 US\$ per 1000 cubic meter via White Stream and 180 US\$ per 1000 cubic meter for AGRI.

This was the reasone that marine part of AGRI could never receive a PCI status despite lobbing by Romania and Hungary – the EU member states.



The next stage - Trans-Caspian Pipeline

Now or never

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...but what is the role for transit countries?

That's what happened back in the 1990s. When instead of remaining focused on the Trans Caspian Pipeline from Turkmenistan, Turkey decided to play a double game and then signed an agreement for Blue Stream under the Black Sea. That meant Trans Caspian Pipeline was postponed for so many years.

Matthew Bryza 2014

http://www.salom.com.tr/SalomTurkey/haber-92691-southern_gas_corridor_is_a_clear_signal_to_russia.html

Georgia was distancing itself from developments on White Stream and the TCP for last 10 years – and have been reluctant to accept invitation to join Energy Community Treaty.

Could Georgia be suspected of playing similar game on White Stream and the TCP?

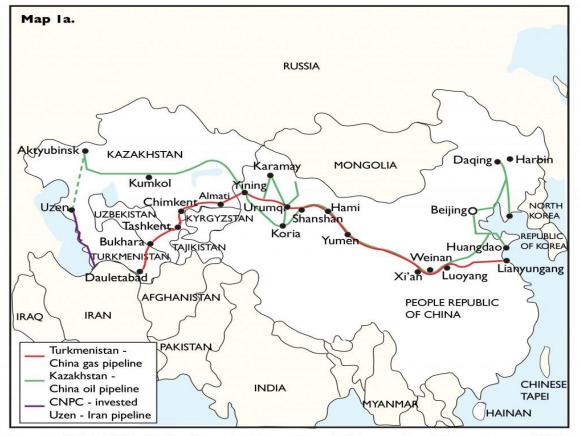
There is a role for Georgia and if TCP is desired, actions have to start now – EU market are in the process of major restructuring and new infrastructure will appear redundant if delayed.



Background slides

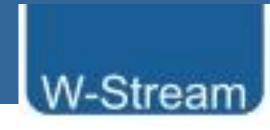


China started earlier and has proven that the <u>distance of 6700km</u> is not too long when it comes to Turkmen gas. Similar distance from Urengoy in Russia to Kassel in Germany.



Sources: "China's Worldwide Quest for Energy Security" International Energy Agency 2000;

The strategic objective of the SGC



Can the SGC fulfill all assigned objectives?

The EU strategy document - Energy infrastructure priorities for 2020 and beyond (17 November 2010) – outlines the parameters of the Southern Gas Corridor:

"The strategic objective of the corridor is to achieve a supply route to the EU of roughly 10-20% of EU gas demand by 2020, equivalent roughly to 45-90 bcma"

These plans are outdated now



Caspian gas

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How important is the role of Caspian gas?

Commissioner Oettinger:

"Caspian gas is our salvation"

28 November 2012

"Access to Caspian gas - a key issue for the EU"

8 September 2011

"The trans-Caspian pipeline is a major project in the Southern Corridor"

12 September 2011 EUROPEAN COMMISSION PRESS RELEASE





Clear EU Policy line on the Southern Gas Corridor

.. two entry points for Caspian gas: via Turkey and the Black Sea









A common 'PIPELINE' interests of Slovakia and Georgia

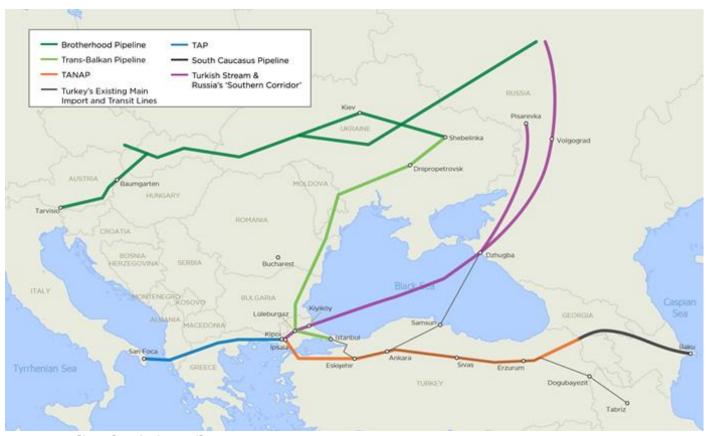


Image credit: Atlantic Council.

Nord Stream 2? Why not the TCP?

White Stream

The controversial Nord Stream 2 pipeline will wreck the EU's Energy Union strategy and kill off its plans to boost Liquefied Natural Gas (LNG) in the bloc, a veteran US ambassador has warned.

Richard Morningstar said that the Germany-backed project would only worsen the EU's addiction to Russian gas.

"If you want to kill the LNG strategy go ahead with Nord Stream," the former ambassador to the EU and Azerbaijan yesterday (23 February, 2016) said at the event in Brussels.



http://www.euractiv.com/section/energy/news/nord-stream-2-will-kill-eus-lng-strategy-warns-us-ambassador/

Turkey will benefit from the concurrent development of TANAP and White Stream



White Stream will enable Turkey to achieve its strategic objectives

- Monopoly transit to EU can severely limit developments in Caspian and hence the flows of gas from Caspian via Turkey
- Concurrent development of TANAP and White Stream will not only result in increased transit through Turkey from the Caspian, but also provide enhanced supply diversification and competition
- Turkey is also vitally interested in helping Caspian countries to strengthen their economies and independence; there is no better way for this than enabling them to establish large scale strategic trade relations with the EU



The SAGA of the North – South Gas Pipeline (1995 - - -)

Gazprom was a targeting Georgian North-South Gas Pipeline since 1995

Georgian Prime Minister Nika Gilauri promised that if Georgia sold shares of the pipeline, that the government would keep controlling interest. The opposition tried to hold the prime minister to his word by offering an amendment that would limit the sale of pipeline shares to 49 percent. Had the amendment passed, it would have been impossible for the government to sell control of the pipeline to any outside investors. Parliament rejected the amendment, leaving open the possibility that either GAZPROM or a GAZPROM affiliate could snap up the pipeline.

