

THE GAS PIPELINES: A GAME OF CASPIAN PATIENCE

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We all know that the European gas reserves in the North Sea are rapidly depleting. This means that the leading countries of Western Europe and some of the East European countries will have to look for fuel elsewhere. Scared by the Russian-Ukrainian “gas squabbles” they are actively seeking alternative sources. Poland went as far as suggesting that the EU should create an energy pact (patterned on NATO) under which all members would pledge to help those in their ranks that need urgent support. So far, the idea has not gained support.

Today, new pipelines from the Caspian area, the Middle East, and North Africa might be built; new marine terminals for tankers carrying liquefied gas from the Persian Gulf are also needed. The commissioned North African gas fields cannot cover Europe’s gas needs. The Middle East cannot be described as a stable gas supplier; it also prefers to sell its liquefied gas to Southeast Asia. In this context, the Caspian looks like the best possible option.

Practically all the projects look at Central Asia and Azerbaijan as the main gas suppliers; so

far little has been said about the projects’ possible economic efficiency. It is still much more important to attract attention to one’s own country, to raise a “political wave,” and to scare away potential rivals. The Europeans are working on the Nabucco project (a gas pipeline that will go from the southern part of the Caspian, via Turkey to Southeast Europe. It will end in Baumgarten in Austria). The plan is far from complete: investments, gas sources, and transportation tariffs have not been discussed, no national companies have been set up for engaging in construction; preliminary works have not yet begun.

The “gas projects on paper” seem to pursue purely strategic aims. The West and Russia are fully aware that until the Caspian’s legal status has been fixed all talks, let alone agreements, on extracting anything on the Caspian shelf or laying pipelines on its bed will remain futile deliberations measured in mega- and giga-bites of political wishful thinking rather than in cubic meters and dollars. This and the fact that the local proven gas reserves will not be enough to fill all the pipelines are successfully ignored.

Oldie but Goodie

In November 1999, the presidents of Turkmenistan, Turkey, Azerbaijan, and Georgia signed an agreement on a Trans-Caspian gas pipeline laid on the seabed at a depth of up to 1 km. It is expected to transport gas from Kazakhstan, Turkmenistan, and Azerbaijan to Turkey and further on to the European markets. They went as far as setting up the PSG Consortium of General Electric, Bechtel National, and Shell. Commissioning of the pipeline that was to carry 16 billion cu m of gas to Turkey and 14 billion cu m to Europe annually was planned for 2002. The sides, however, failed to agree on the construction conditions and the money sources. In 2000, the works were discontinued.

The steadily rising fuel prices and completion of the South Caucasus Pipeline (SCP) that moves gas from the Azeri gas condensate Shah Deniz field to Turkey revived the Trans-Caspian project. The European Union also displayed an interest in the abandoned project. The new gas pipeline will connect Tengiz (Kazakhstan) and Europe via Turkmenbashi (Turkmenistan), Baku (Azerbaijan), Tbilisi (Georgia), Erzurum (Turkey), Bulgaria, Rumania, Hungary, and Austria. It will be over 3 thousand km long with an initial annual carrying capacity of 30 billion cu m. Its cost is assessed at about \$6 billion, but from experience we know that the real cost is normally 40 to 60 percent higher than the experts' estimates. It seems that earlier neither the U.S. nor Europe believed that the money would be well spent; they readjusted their ideas under pressure of the skyrocketing fuel prices and Moscow's rising political ambitions.

In 2006, Turkey, Turkmenistan, and Azerbaijan revived the project, this time supported by Washington and Brussels. U.S. State Secretary Condoleezza Rice discussed the strategically important project with her Turkish and Greek colleagues. During his visit to Kazakhstan, Dick Cheney also touched upon the issue. The project cannot be commissioned before 2011. Late in June 2006 European Commissioner for Energy Andris Piebalgs, the project's main ideologist, and ministers of the five transit countries signed the corresponding documents in Brussels.

Late in 2006, during a visit to Astana,¹ Andris Piebalgs declared: "The Trans-Caspian pipeline will become the fourth corridor through which gas will reach Europe. It will bring more gas and we believe that Kazakhstan's involvement in the project is important." Today Astana looks much less interested than before. In the spring of 2007, President Nazarbaev, in an interview to *El Pais*, voiced his doubts about the project's future. Later, Foreign Minister of Kazakhstan Marat Tajin repeated this opinion.

The doubts are justified: so far there is no clarity about the resources, or the technical, legal, and financial issues. This, and other problems, makes the project a thing of the distant future. American and EU political support cannot make up for the absence of feasibility studies. Indeed, after passing through the Trans-Caspian pipeline and crossing several countries (eight in the case of Germany's participation), gas (from Kazakhstan, for example) will accumulate transit tariffs (the Istanbul Declaration clearly states that the transit countries have an inalienable right to set the amount of transit and fiscal dues) to become forbiddingly expensive.

Astana and Ashghabad are obviously unwilling to become tied to the doubtful Trans-Caspian project: they are paying more attention to gas liquefaction technologies and are busy building up their tanker fleets.

In fact, methane-carrying tankers are better suited to the ecologically vulnerable closed Caspian Sea than an underwater pipeline. So far, Tengizchevroil of Kazakhstan produces about 10 million tons of liquefied gas at the Tengiz fields. Despite the fairly high transportation costs this gas is moved across Russia by rail. Its growing share in world energy consumption² (the current share is about 20 percent)

¹ See: K. Konyrova, "'Pri' vmesto 'Trans'," *KazEnergy*, No. 5, 2007, p. 61.

² According to the IEA report, world production of natural liquefied gas will grow from 240 billion cu m in 2005 to 470-600 billion cu m in 2015.

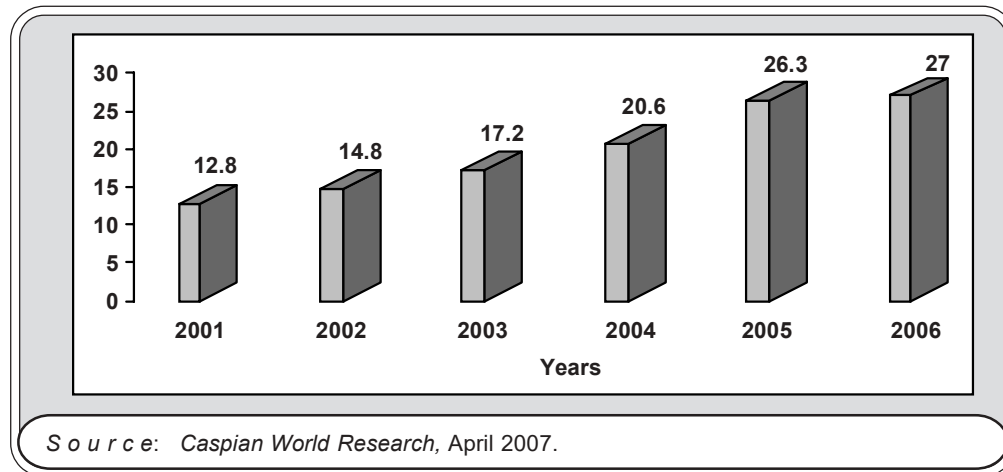
might tempt other gas producers in Kazakhstan. We cannot exclude the possibility that in the future it will become profitable to deliver liquefied gas to the western Caspian shore, and, some time later, to Iran. This means that so far the Trans-Caspian project remains a political rather than economically justified venture.

In an effort to draw the Caspian countries into its projects, the EU is promising economic aid, training, and even “ensuring safe production and safe delivery” with NATO cooperation. The world pipeline projects make sense only if there is enough gas or oil to move along them. In our case, this is doubtful. Let’s have a look at the “gas scene” of the near future (I have in mind the gas reserves of Kazakhstan, Turkmenistan, and Azerbaijan).

Gas Arithmetic

Today,³ according to the figures endorsed by the State Commission for Mineral Reserves of the Republic of Kazakhstan, the recoverable gas volumes (together with the new shelf fields) are over 3 trillion cu m, while the potential resources are estimated at 6-8 trillion cu m. In 2006, overall output was 27 billion cu m (14.8 billion cu m of tank gas). In the medium term, this volume can be doubled. It is expected that by 2015 the production of tank gas will reach the figure of 36 billion cu m and 40 billion cu m by 2020.⁴

Dynamics of Overall Gas Production in Kazakhstan
(billion cu m)



Kazakhstan’s gas industry is based on oil and oil-gas fields, which means that the republic will increase its gas production by building up the volumes of associated and oil-dissolved gas by developing its offshore fields. Kashagan could have supplied considerable volumes of gas, but its development has once more, and probably not for the last time, postponed. Some of Kazakhstan’s gas will go to China, some will be used inside the country, the rest will be exported by the Kazrosgaz JV, which means that there will be no gas for the Trans-Caspian line.

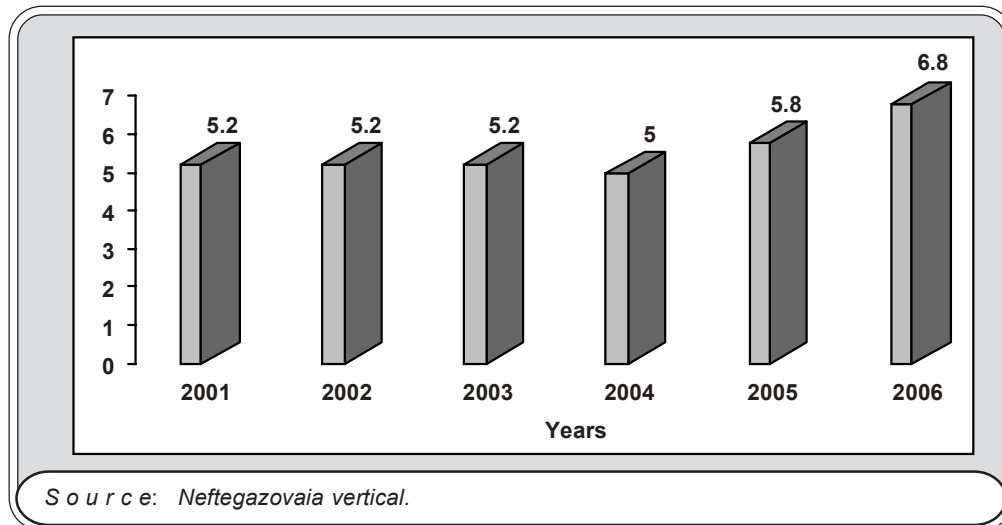
³ See: *Neftegazovaia vertical*, No. 17, 2007, p. 110.

⁴ *Ibid.*, p. 122.

In June 2007, at the opening ceremony of the 14th Caspian Gas&Oil Exhibition, President of Azerbaijan Ilham Aliev announced that Shah Denis, Azerbaijan's main gas field developed by the AIOC international consortium, contained 1.2 trillion cu m of gas. The associated petroleum gas of the Azeri-Chirag-Gunashli fields, as well as the gas of the fields developed by the State Oil Company of Azerbaijan Republic (SOCAR), brings the country's gas potential up to no more than 1.7 trillion cu m (ENI of Italy cites a much more modest figure of about 1.4 trillion cu m).

According to Minister of Industry and Energy Natik Aliev,⁵ at Stage-2 of the Shah Denis project Azerbaijan will send 12 billion cu m of gas to Europe through Nabucco. Stage-2 will be commissioned in 2013. According to the SOCAR forecasts, in 2015 the gas field will produce 20 billion cu m maximum (in 2006, Azerbaijan produced 6.8 billion cu m). Today, at Stage-1 gas is exported to Georgia and Turkey; and Azerbaijan is covering its domestic needs with gas from the same field. This means that even in 8 to 10 years the republic, the most active supporter of the Trans-Caspian project, will be able to cover barely half of the planned capacity.

Dynamics of Gas Production in Azerbaijan
(billion cu m)

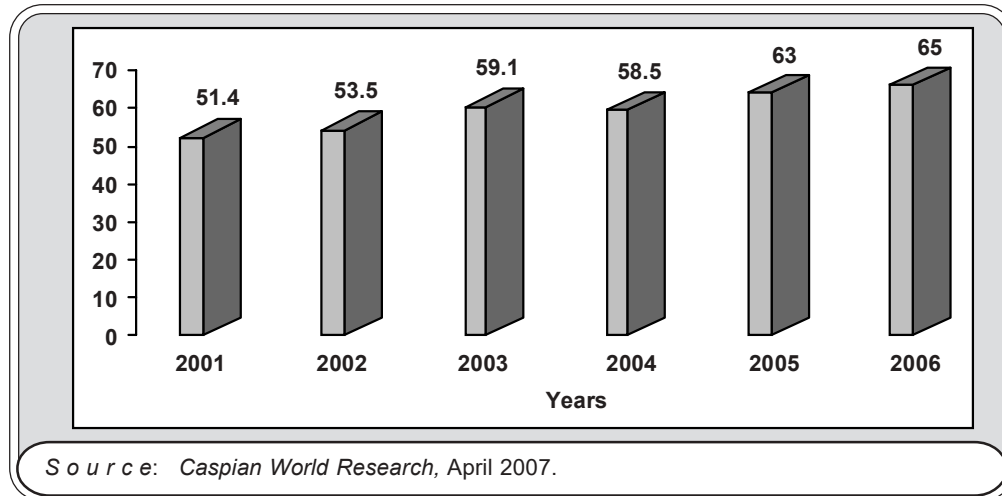


There is the opinion that Turkmenistan comes third or fourth in the world in terms of gas reserves. Today it produces 65 billion cu m, but the republic's leaders are convinced that by 2030 their country will produce 250 billion cu m of gas. So far, the real figures testify that growth is slow, while the real volumes of gas produced are trailing behind the planned. In 2006, production increased by 1 percent. The new president (like the previous one, for that matter) dismissed all doubts about the possibility of his country meeting its gas-related obligations. In May 2007, however, Turkmenistan signed a \$1.5 billion contract with the CNPC of China for natural gas prospecting⁶ (probably to fulfill the already signed contracts). Newly discovered gas reserves will take many years to be developed to the commercial level. The same can be said about the probable gas reserves on the Turkmenian shelf.

⁵ See: [<http://www.ngv.ru/shownews.aspx?newsID=98437>].

⁶ In twelve years the CNPC should drill 12 exploratory wells at the Iuzhny Iolotan field (on the right bank of the Amu Darya).

Dynamics of Gas Production in Turkmenistan
(billion cu m)



Simple calculations show that to fill all the pipelines, Turkmenistan will need at least 170 billion cu m every year; this means that it will sell more gas to Europe than Russia. Meanwhile, the republic has to send 30 billion cu m, nearly half of the exported volume, to China.

In the absence of reliable figures about the proven gas reserves, we cannot expect the country to maintain its gas exports on a stable level for a long time. It is possible that Turkmenistan's obligations to China will deprive the Trans-Caspian project of all hope and will cast doubt on the future of this gas pipeline.

The Caspian Project

The idea is not a new one: back in 2003 the gas pipeline was to begin at the Turkmenian gas fields and run along the Kazakh stretch of the eastern Caspian shore to cross Russia and reach Europe was estimated at \$1 billion. Gazprom favored it as an alternative to increasing the carrying capacities of and reconstructing the Central Asia-Center (CAC) pipeline that crossed Uzbekistan and Kazakhstan. The project failed because of Gazprom's inadequate price of \$25-27 per 1 thousand cu m.

Speaking at the 62nd Session of the U.N. General Assembly, President of Turkmenistan Gurbanguly Berdimukhammedov announced that the Intergovernmental Agreement on Cooperation among the three countries in building the Caspian pipeline (in conformity with the Joint Declaration of the Presidents of Kazakhstan, Russia, and Turkmenistan of May 2007) is also being postponed because of price disagreements.

The Turkmenian side, which wants to push the disbursing gas prices up 1.5-fold in 2008 (China is paying no more than \$90 per 1 thousand cu m of Turkmenian gas),⁷ argues that world fuel prices are climbing and that Gazprom is resolved to raise the disbursing prices for the CIS coun-

⁷ See: "Turkmenia otdala nedra Kitaiu," *Oil&Gas of Kazakhstan*, No. 4-5, 2007, p. 177.

tries. In view of the already signed agreement between Gazprom and Turkmenistan on gas deliveries in 2006-2009 (162 billion cu m at the fixed price of \$100 per 1 thousand cu m) the position of Turkmenistan's new president looks strange to say the least. It may even damage Ashgabad's business reputation: its intention to upset the international contract places it in the category of unreliable suppliers.

When modernized, the functioning Caspian gas pipeline (that currently transports about 4 billion cu m a year), the new Caspian pipeline, and the reconstructed CAC system will be united into a system with a capacity of over 80 billion cu m a year (the amount bought under the contract that ends in 2028).

It seems that Russia is not the only winner—its Central Asian partners will profit too. The project means that the so-called "Gas OPEC" has become a fact (at first it was devised as Russia + Central Asia), which will be able to set its own gas prices for Europe.

Foggy Turkmenistan

The European Union and the United States are pushing, through diplomatic channels, the idea of gas pipelines from Turkmenistan to Azerbaijan, Turkey, and further on to Europe, even though the question of the country's real gas reserves remains unanswered. Here I have in mind the proven exportable amounts confirmed by independent auditing. The auditing information of May 2005 gathered by American DeGolyer and MacNaughton and Gaffney, Cline & Associates of the U.K., has not yet been published.

This means that the Nabucco project, as well as the pipelines to Iran and across the Caspian, may be left idling. The largest Western companies will never pour billions of dollars into the project with no confirmed loading.

The new Turkmenian leader, however, is basking in the attention of Russia, Kazakhstan, the U.S., and Azerbaijan: during the first nine months of 2007, eighteen American delegations visited the republic (15 of them were sent by U.S. executive structures and three by Congress)⁸ under the pretext of establishing bilateral relations. Washington, however, has an eye on the fuel and energy sector; it is seeking Ashgabad's agreement to export the bulk of its gas through the planned Trans-Caspian pipeline.

Official meetings with the president of Turkmenistan have acquired their own scenarios: the guests describe their general interest in the regional security sphere, then they present investment projects and potential joint actions designed to increase the natural gas deliveries to the world markets. Turkmenistan should step up its involvement in the region—this is vitally important for it. Its gas riches, confirmed by international auditing or not, are pulling the Russians, Americans, and Chinese to Ashgabad.

President Berdymukhammedov relies on personal diplomacy to open new avenues of cooperation. This is vitally important for his country's future. While opening the doors to the foreign oil and gas business, however, and talking about the long-term intention to diversify gas exports, he always keeps his country's interests in mind.

The Turkmenian president, who never fails to say that the export routes should be varied, invariably adds that he is prepared to move gas in any direction ... within his own territory. In this way he

⁸ See: *Ekspert Kazakhstan*, No. 26, 2007, p. 46.

is tempting China, Russia, Europe, and America with the chance of acquiring a share of Turkmenian fuel. In August 2007, the United States, having discussed the idea of the Trans-Caspian gas pipeline with Ashghabad, hastened to allocate \$1.7 million of an “energy grant” to Azerbaijan to start feasibility studies of two new trans-Caspian pipelines. America obviously wants to spur on the project and attract investments. The new lines will be used to move oil and natural gas from Kazakhstan, Uzbekistan, and Turkmenistan to Europe via Azerbaijan and Georgia.

Having confirmed his desire to cooperate with Kazakhstan in the Caspian project (along the eastern Caspian coast and across Russia to Europe), the Turkmenian president displayed an interest in the Trans-Caspian project; his country is also prepared to lay gas pipelines to Iran and China.

Kazakhstan's Own Road

Astana's multi-vector policy raises numerous questions. The frequent meetings with Russian and American representatives have so far failed to shed light on Kazakhstan's choice of “close and priority partner.” It remains unclear whether it will cooperate on a priority basis with Russia, America, or a third country.

The recent constitutional amendments invited no comments from the United States: it obviously puts business and its investment positions in Central Asia above politics. Washington expects the Central Asian countries to side with it on the key international issues. It is equally interested in trimming Russia's role in producing and exporting Kazakhstan's energy fuels.

Even though Kazakhstan's gas reserves are much smaller than those of Turkmenistan, the United States will place its stakes on Astana as a more predictable partner and will try to increase gas exports from Kazakhstan to third countries.

Kazakhstan is prepared to become a transit country, a role that Russia has the monopoly on: the gas pipeline from Turkmenistan to China will cross Kazakhstan and Uzbekistan. In this way Astana will come to the world markets bypassing Russia.

Construction of the gas pipeline to China will start in 2008. According to Arman Darbaev, Executive Director of the National Company KazMunayGaz, it will consist of the following stretches: the border with Uzbekistan-Shymkent-Khorgos with an annual carrying capacity of 40 billion cu m; the Beyneu-Bozoy-Samsonovka stretch with an annual carrying capacity of 10 billion cu m will be added later, when its economic efficiency has been confirmed. It is planned to complete the first stretch in 2009.”⁹

The far from simple relations between Ashghabad and Tashkent cast doubts on the date of the project's commissioning. Contrary to Chinese expectations it will hardly be ready by 2010. The project, however, might be completed by 2015 if the transit disagreements are settled.

With the “Chinese” oil and gas pipelines in operation, Kazakhstan will become a much more independent fuel exporter to the East. It may even claim the dynamic and still vacant Southeast Asian market. These routes can be used as a foreign policy trump card and will put the diktat of Western companies within certain limits. By the same token, the republic will decrease its dependence on Russia's transit monopoly.

At the same time, experts¹⁰ point out that cooperation with China is unfolding in the interests of the Chinese economy. China's economic advance undermines Kazakhstan's processing and agricul-

⁹ *Novosti KMG*, 2 October, 2007.

¹⁰ See: S. Smimov, “Kitayskiy drakon na Kasprii,” *Caspian World Kazakhstan* 2007, p. 105.

tural sector. In fact, the growing Chinese demand on Kazakhstan's energy fuels is gradually turning the country into a raw material appendage of the Western and Chinese economies. There is the opinion that Kazakhstan and its neighbors can hardly expect Chinese business to come to the non-raw material sectors, such as high technologies. In real life China is interested in the Caspian states as sources of raw materials.

Illegal Chinese migration (according to expert estimates there are hundreds of thousands of illegal Chinese migrants in Kazakhstan) cannot but cause concern. The migrants are mostly engaged in primitive industrial and pre-industrial economic activities; there are no educated and highly skilled people among them able to add to the country's scientific and technological potential. Illegal migration cripples Kazakhstan's economic interests and threatens its political stability.

“Gas OPEC” within the SCO

The Central Asian oil and gas producers need a diversified pipeline network; the market is forcing them to play a simultaneous chess game for an obvious reason: only some the options stand a good chance of being realized. There is the commonly shared opinion in the expert community that the West can hardly win the race with Gazprom and China. According to Prof. Jonathan Stern of the Oxford Institute for Energy Studies, the Trans-Caspian gas pipeline requires three things—gas, markets, and money. The West has none of them.¹¹

The SCO members are also competing, more actively than before, for the region's energy resources; the local countries are tempted by China's growing interest in their hydrocarbon wealth to wrench concessions from Russian and Western companies. In August 2007, in Bishkek, however, the leaders of Russia, China, and four Central Asian SCO members reached an agreement on an “energy club.”

If realized, this idea will make it harder for the West to gain access to the Caspian's Central Asian fuels. Washington and the leading European capitals were concerned: it is not that important what the club will do when it is formed. What is important is its members' firm intention to keep America and Western Europe away. This Russian-Chinese energy cooperation with the Central Asian countries will keep the local energy resources out of Western Europe's reach and will strengthen Russia's position as a transit country.

Everyone knows that the export fuel routes are the best possible instruments of influence in the region, which means that the struggle for the Caspian gas pipelines will become even tougher and that at least one of the projects will not be realized in the near future because of raw material shortage. We can even predict with a great degree of certainty that the Trans-Caspian project will fall victim to the Great Game on the Caspian. It is hard to say how the Caspian game of patience will proceed. One thing is clear: a new situation giving the local countries wider elbow space is gradually emerging on the Caspian shores.

¹¹ See: *Ekspert Kazakhstan*, No. 36, 2007, p. 49.