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CENTRAL ASIA AND THE CAUCASUS



ENERGY POLICY AND ENERGY PROJECTS IN CENTRAL EURASIA

Igor TOMBERG

Ph.D. (Econ.), leading fellow at the Center of Energy Studies, Institute of World Economy and International Relations, Russian Academy of Sciences (Moscow, Russia)

In Central Asia, energy policy and energy projects as part of the fuel and energy complex and regional economy as a whole are two sides of the same coin. In other words, the key energy projects that determine the development trends and major parameters of the republics' fuel and energy complexes for many years to come are, as a rule, closely connected with the main strategic foreign policy trends of those who rule Kazakhstan, Turkmenistan, and Uzbekistan. The main strategic actors (Russia, the United States, EU, and China) are exerting their influence on the local developments in the energy sphere. The second echelon (Iran, Turkey, Azerbaijan, Georgia, Ukraine, and Poland) recently joined the struggle over influence in the energy sphere. The list of those involved is even longer: Japan, India, Malaysia, and South Korea are ready with their money to pursue their commercial and resource-related interests.

The long list of those wishing to have a finger in the Central Asian resource pie explains the local countries' multi-vector energy policy. While bringing certain short-term political and even economic dividends, this policy interferes with longterm strategic decisions and slows down progress in the region's fuel and energy complex.

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Here are several recent examples: the already commissioned or planned pipelines depend for their continued functioning or even realization on Central Asian involvement. The Baku-Tbilisi-Ceyhan (BTC) pipeline will not reach its designated annual capacity of 50 million tons of oil without Kazakhstan's oil. The planned Trans-Caspian pipeline (along the seabed) will never be realized if the Central Asian countries refuse to use it. This explains the heightened attention (bordering on pressure) to the leaders of Kazakhstan and Turkmenistan. The aim is obvious: the two countries should be removed from Russia's gasand oil transport orbit to channel their fuel to Europe bypassing the Russian Federation and its pipeline system.

The Central Asian Fuel and Energy Complex Today

In 2006, the former Soviet republics produced 599.8 million tons of oil and gas condensate, or 15.3 percent of the world's production (3,914 million). With a consumption of 4.5 percent of the world's oil yield last year, the group supplied 14.2 percent of the world oil trade. In 2006, net export of oil and oil products constituted 274.6 million tons at a world market capacity of 1,933 million tons.¹

Within a year, the oil-producing CIS countries increased their total oil production by 3.9 percent (or 22.7 million tons). Russia, in which oil production is nearing the stagnation point, traditionally accounts for about half of the increase (10.5 million); Azerbaijan, which in 2006 increased its oil production by leaps and bounds (+ 44.9 percent), added 10 million; Kazakhstan demonstrated moderation in increasing its oil production (+ 5.6 percent), while in Turkmenistan and Uzbekistan the oil production level dropped (see Table 1).

Table 1

Country	1998	1999	2000	2001	2002	2003	2004	2005	2006	Increase in 2006
Russia	304.3	304.8	323.3	348.1	379.6	421.4	458.8	470.0	480.5	2.2%
Kazakhstan	25.9	30.1	35.3	40.1	48.2	52.4	60.6	62.6	66.1	5.6%
Azerbaijan	11.4	13.9	14.1	15.0	15.4	15.5	15.6	22.4	32.5	44.9%
Turkmenistan	6.4	7.1	7.2	8.0	9.0	10.0	9.6	9.5	8.1	-15.2%
Uzbekistan	8.2	8.1	7.5	7.2	7.2	7.1	6.6	5.4	5.4	-0.7%
S o u r c e: BP Statistical Review of World Energy, June 2007.										

Oil Production in the Soviet Successor-States

The Caspian region is the world's most important oil- and gas-rich area; about 4 percent of the world's hydrocarbon resources are found under its seabed. While the risks of geological prospecting

¹ See: BP Statistical Review of World Energy, June 2007.

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are relatively small and the Caspian shelf looks very promising, the area is one of the risky investment objects. American experts have estimated recoverable oil reserves at 2.4-4.6 billion tons, while the potential resources are several times larger. The figures look plausible, if slightly overstated. Table 2 shows Western estimates of the oil and gas reserves of Kazakhstan, Azerbaijan, Turkmenistan, and Uzbekistan. The figures diverge widely, but experts agree that Kazakhstan is the oil-richest country, while Turkmenistan has the largest gas reserves. There is no agreement on the real Caspian oil and gas reserves, however, investors are surging ahead to put the already discovered oil fields into operation, which means that in the next decade Kazakhstan and Azerbaijan will join the group of the world's largest oil exporters.

Table 2

	Oil (m	illion tons)	Gas (billion cu m)						
Country	Proven reserves	Potential resources	Proven reserves	Potential resources					
Kazakhstan	5,500	12,500	3,000	2,500-3,000					
Azerbaijan (shelf)	1,000	4,500	1,350	2,000-2,500					
Turkmenistan	100	4,000-12,000	2,860	4,000-4,400					
Uzbekistan	100	3,500	1,870	3,000					
S o u r c e s: BP Statistical Review of World Energy, June 2007 (proven reserves); Central Asia and the Caucasus, No. 4 (22), 2003, p. 72 (potential resources).									

Hydrocarbon Reserves in the Caspian Region (end of 2006 assessment)

Judging by what the leaders of the Caspian states say, the plans for the oil and gas sphere are gigantic. Even though Kazakhstan might decrease the planned oil production by 2015, the figures remain fairly impressive. On 12 October, 2007, President Nazarbaev said: "By 2010 forecasted oil production in Kazakhstan will be over 80 million tons, by 2015 it will reach 130 million tons with domestic consumption of no more than 25 million tons." Earlier Astana operated with the figure of 150 million tons of oil a year in 2015 to join the top ten oil-producing countries.

Today, those involved in Kashagan, the largest oil project, are discussing the possibility of postponing its commissioning and cite 2010 as the date instead of the earlier planned 2008. The same can be said about the ambitious plan to join the ten largest oil producers. The Kazakh president remains optimistic: "By 2017 we shall become one of the ten largest hydrocarbon exporters."

By 2010 Azerbaijan will produce 48 million tons of oil and over 120 billion cu m of gas every year; the figures for 2020 are 100 million tons and 240 billion cu m, respectively. By 2030 Turkmenistan plans to produce 250 billion cu m of gas; in 2006, however, it produced only 65 billion cu m instead of the planned 80 billion. The figures show that gas production is rising slowly, which means that the real figures trail behind the planned. It should be said, however, that the galloping world hydrocarbon prices greatly affect the development processes in the Caspian states.

Advances in the fuel and energy complexes of the region's countries are responsible for their positive economic results. In mid-September 2007, in its *Asian Development Outlook 2007* (ADO

2007), the Asian Development Bank (ADB), for example, revised its own forecasts of GDP growth rates for six out of seven Central Asian countries (excluding Tajikistan): "The subregional forecasts will grow from 10.3 to 11 percent. In the first half of 2007, these Central Asian countries demonstrated inordinate economic activity." (The Bank regards Azerbaijan and Armenia as Central Asian countries.)

The oil and gas complex accounts for over 40 percent of Azerbaijan's economy; the high oil prices are spurring on its GDP, which accounts for the changed forecasts of the GDP growth in 2007 from 25 to 27 percent and from 17 to 20 percent for 2008. In the first five months of 2007, economic growth reached 36.2 percent of the annual basis, which is achieved because of net exports and increased oil production in the first six months by nearly 65 percent in annual terms.

In Kazakhstan, growing domestic consumption is sending up the GDP growth rates. In Turkmenistan, the increase is based on higher natural gas export prices: according to ADB, in the first half of 2007 export prices increased by 9.7 percent; the planned annual increase is forecasted at the 8 percent level.

Uzbekistan is improving its economic indices thanks to investment inflow and exports growing in the favorable foreign economic context.

The economic development strategies of Russia, Kazakhstan, Azerbaijan, and Turkmenistan (the countries oriented toward raw material export) for the coming decade regard the fuel and energy complex as the main driving force of the structural changes in their economies. Similar strategic landmarks have made these countries rivals on the world oil and gas market.

This means that the forecasts of the total volumes of crude oil exports from Azerbaijan and Kazakhstan of 150-180 million tons a year by 2010-2015 (several times higher than the present figures) are justified by the most plausible assessments of increased oil production in the region and the present and forecasted dynamics of domestic oil consumption. Most of the produced oil and gas will probably reach the European market, which means that the oil suppliers will have to compete for one, essentially, cartel buyer—the EU members. The future of Russia and the Caspian countries is bleak; in order to create conditions for coordinated hydrocarbon exports to the main markets, Russia must increase its investment and production potential in the region.

The Russian Federation cannot merely increase the production of oil and gas on its territory, since this will send the oil prices down; the Russian companies might be elbowed out of the market because of the high production costs. To preserve its position on the European market, Russia will have to extend its presence in oil and gas production in Kazakhstan, Turkmenistan, and Uzbekistan, as well as in the Russian sector of the Caspian shelf.

In recent years Russian business has increased its presence in the industry: two Russian giants (Gazprom and LUKoil) plan to invest several billion dollars in the prospecting, development, and production of natural gas. Uzbekneftegaz and LUKoil are working together in the very heart of Kyzylkum on the Kandym-Khauzak-Shady mega-project totaling approximately \$2 billion. They are moving toward commercial gas production at the CIS largest gas field. Specialists compare it with Karachaganak, Kazakhstan's richest gas field. Uzbekistan and Gazprom of Russia are steadily building up gas exports: in 2006, the main Central Asia-Center pipeline received 9 billion cu m of Uzbek gas, while the planned figure for 2007 is 13 billion.

Experts are optimistic about supplies of Uzbek gas to the foreign market; the newly developed gas fields on the Ustiurt Plateau will increase gas exports to 17-18 billion cu m a year; Gazprom is prepared to invest \$100 million in the project, while the total volume of investments of the Russian gas monopolist amounts to \$1.2 billion.

LUKoil is likewise prepared to launch commercial production at its Uzbek facilities late in 2007, whereby the maximum production level within these project might reach 10 billion cu m of gas a year. There are plans to reach a production level of 3 billion cu m by 2008. The company's capital costs on

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the Kandym-Khauzak-Shady field with proved geological gas reserves of 283 billion cu m are estimated at \$1 billion. Russian investments may help Uzbekistan to become a prominent gas player.

The new Turkmenistan leaders allowed LUKoil to develop three promising oil-bearing blocs in the Turkmenian sector of the Caspian under the agreement signed on 12 June, 2007 in Ashghabad by Turkmenistan President G. Berdymukhammedov and LUKoil President V. Alekperov. In the next five years the Russian company might invest \$1.5-2 billion in the project.

It seems that LUKoil is not the only Russian company that may move to Turkmenistan. President Berdymukhammedov has already invited Sistema Company to join others in developing the Caspian hydrocarbon resources. After the meeting between the presidents of Russia and Turkmenistan in May 2007, we all learned that Zarubezhneft, Itera, Stroytransgaz, Soiuzneftegaz, and Rusal had already been planning their involvement in Turkmenistan.

Oil Transportation

More active involvement of the oil companies working on Russian money will spur on oil production and will add urgency to the issue of oil and gas deliveries to the main customers, the European countries.

The Caspian region has sufficient oil pipeline capacities. So far the amount of locally produced oil is much lower than the total network capacity, which makes the rivalry for oil even fiercer.



The United States and the EU deemed it necessary to complete the fairly ramified pipeline network with *Baku-Tbilisi-Ceyhan*, another oil pipeline, without guaranteed loading and profitability.

Today it is one of several main pipelines that move Caspian oil to Europe: the *Baku-Novoros*siisk (the concessionaires are Transneft of Russia and AIOC of Azerbaijan) and *Baku-Supsa* (AIOC and Georgia) pipelines, which move Azeri oil (each with a capacity of 0.1 million barrels a day). There is also the *Atyrau-Samara* pipeline (Kazakhoil of Kazakhstan and Oreloil of Russia), which moves Kazakh oil, with a capacity of 0.2 million barrels a day. Since 1995, *TRACECA* (the railway corridor

between Azerbaijan and Georgia) has been serving another oil route. Oil from Kazakhstan reaches the port of Aktau through a pipeline, where it is loaded onto Azeri tankers (carrying from 5 to 10 thousand tons of oil each) and sent to Baku across the Caspian. From the Azeri capital it reaches the railway stations of Dubendi and Ali-Bayramli by pipelines, where it is loaded into oil tank wagons to be brought to Batumi on the Black Sea coast, where it is loaded onto tankers to be delivered to Europe.

The route that brings oil across the Caspian to Makhachkala and Novorossiisk is a relatively new one. Many of the exporters find it fairly attractive: the pipeline bypasses Chechnia and, built for Azeri oil, of which there is currently not enough to load it, remains practically idle.

The *Caspian Pipeline Consortium* (Tengiz-Novorossiisk) was commissioned in March 2001. It involved several oil giants—Mobil and Chevron of the U.S., British Gas of the U.K., JV LUKArco (Russia-U.S.), Kazakhoil of Kazakhstan, JV Rosneft-Shell (Russia-U.K.), and Agip of Italy. Its total length is 1,500 km, the annual planned capacity is 67 million tons; however, the Russian side refuses to extend the pipeline capacity to reach the planned amount. Serious disagreements undermined the project: its total debt to the shareholders amounts to approximately \$5 billion. Before 2006 the pipeline was losing money; in 2006, however, when 31 million tons of oil were pumped through the pipeline, the consortium started earning money, but the exact size of the 2006 profit remained undisclosed.

On 18-19 September, 2007, the CTC shareholders met in Almaty to support Transneft, which suggested that the interest on loans to the consortium should be lowered from 12.66 to 6 percent, while the tariffs should be increased from \$30.2 to \$38 per ton to allow the unprofitable enterprise burdened with debts to avoid bankruptcy.

Moscow is not merely interested in earning money on moving Kazakh oil across Russia: it also seeks control over a share of Kazakhstan's oil exports. Today, it controls 42 million tons (87 percent) of the Kazakh oil exports through the CTC and Atyrau-Samara pipeline. This explains why Transneft, after gaining control over Russian shares in the CTC, pushed the measures designed to save the CTC from bankruptcy through a shareholders' meeting.

With the CTC out of the picture, the situation with Kazakhstan's oil exports will change dramatically: first, part of the oil will be sent via the Baku-Tbilisi-Ceyhan and/or Chinese pipeline. In this case, Kazakhstan might start moving its oil across China to Chinese ports. Second, the pipeline might fall into the wrong hands, so Transneft prefers to stick to the pipeline no matter what.

In fact, money is not the aim of continued control over Kazakhstan's oil exports. It is much more important to keep Kazakhstan at Russia's side. With the CTC out of the game and in the presence of the BTC (ready to receive 25 million tons) and Chinese pipeline, Russia will lose its grip on Kazakhstan's oil exports. This means that Transneft will spare no efforts to keep the CTC afloat.

It looks as if the Russian company does not want to extend the pipeline's capacity: potentially it can move from 5 to 7 million tons of oil (the possibility was discussed in 2002), but it refuses to build the 50-kilometer long pipeline between the towns of Tikhoretsk and Kropotkin.

Russia, however, is ready to exchange permission for the 50-km-long stretch for guaranteed involvement of one of its main shareholders in using the Burgas-Alexandroúpolis pipeline. Today, the Kazakh oil exporters are trying to avoid Russia because it looks at oil transit and export as a geopolitical issue rather than as business. At the same time, the efforts to bypass Russia and the need to load the Burgas-Alexandroúpolis pipeline have made tariff compromises inadequate: Moscow will have to work on export priorities and strategies that will match the growth of oil production in the Caspian region and the appearance of new export routes.

Even though there are more than enough oil pipelines leading to Europe, new pipelines are being planned. Recently the United States and Poland joined forces to revive the idea of completing the *Odessa-Brody-Gdansk* pipeline and to find oil to load it. The reversed Odessa-Brody pipeline, which connects the terminal on the Black Sea coast with the Druzhba mainline, was completed in 2001; since 2004 it has been moving Russian oil to Odessa.

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When the pipeline reaches Plock in Poland, connected by a pipeline to Gdansk on the Baltic coast, oil will be moved further on to Central and Western Europe. It is expected that Caspian oil will reach Odessa in tankers.

So far the plans are being implemented as political statements; the idea was further developed on 10-11 October, 2007 at the Vilnius Energy Security Conference 2007: Responsible Energy for Responsible Partners. The state oil companies of Azerbaijan, Lithuania, Georgia, Poland, and Ukraine joined the Sarmatia consortium set up to extend the Odessa-Brody oil pipeline to Plock. The members pin their hopes on Azerbaijan as the potential oil supplier; we all know, however, that this country sends the bulk of its oil via the BTC, which remains underloaded. It is planned, however, to enlarge the BTC's annual capacity to 60 million tons of oil, which means that Azeri oil will not reach Gdansk, even in the distant future. Frankly speaking, there is not enough oil to load the Odessa-Brody-Plock-Gdansk pipeline.

Early in April 2007 Rumania, Serbia, Croatia, Slovenia, and Italy signed an agreement on building the *Constanța-Trieste* oil pipeline to connect the Black and Adriatic seas to move Caspian oil to Europe bypassing both Russia and Turkey.



The 1,300-km-long oil pipeline with the annual planned capacity of up to 100 million tons of oil will be completed by 2012; the oil refineries of Italy and Central Europe will receive Kazakh and Azeri oil.

The European Union stood firmly behind the project. According to EU Energy Commissioner Andris Piebalgs, the project is part of the EU strategy designed to reduce its energy dependence on Russia. He said that oil would reach Constanța mainly in tankers from Ceyhan where it arrives by means of the BTC. This is an expensive and, therefore, practically unrealizable alternative. There is another option: oil can be moved from the Georgian port of Supsa to Constanța across the Black Sea, thus avoiding not only Russia, but also Turkey. However, there is still the problem of the Bosporus.

According to preliminary estimates the Constanța-Trieste pipeline will cost \$2-3.5 billion; the money will come from the coffers of the states involved, the European Investment Bank, and private sources. The line will compete with the Burgas-Alexandroúpolis pipeline now under construction with Russia's support.

On 24 April, 2007, construction of another oil pipeline began in Ceyhan that will connect it with the Black Sea port of Samsun. The project, which costs \$1.5 billion, is being implemented jointly by

Turkey's Çalık Enerji Sanayi and Italy's ENI. The 550-km-long pipeline will be completed in two years; initially it will move about 1 million barrels a day; it is planned, however, to bring the amount of oil that reaches Ceyhan to 1.5 million barrels a day. The *Samsun-Ceyhan* pipeline will offer new opportunities for Central Asian and Russian trade on the world markets.

Gas Transportation

Whether Russia's CIS neighbors will side with the West, wishing to leave Russia out of the gas transportation projects, depends on the world political and energy situation. What happened to the *Baku-Supsa* pipeline confirms that they are guided by their national interests: the first of the export oil pipelines built to bypass Russia was put out of commission in April 2007: its political usefulness and technical life had come to an end. To be revived, it will have to be renovated; moreover, Azerbaijan is insisting on a revised agreement with the investors.

This brings to mind Russia's conflict with the Western CTC shareholders. Moscow also wants to make the project more profitable. In the Baku-Supsa pipeline case, too, haggling over the financial conditions narrows down the pipeline's potential.

This means that various projects and countries are demonstrating the same mounting desire to revise the oil transportation projects of the 1990s. Today, when the oil prices have reached their maximum and the governments of the former Soviet republics have gained much more confidence, the oil industry has reached a period of political volatility. This may prove to be bad news for the Western strategists who, in the final analysis, have the interests of their own countries and companies close at heart.

The rivalry, which I spoke of above, between Russia and Central Asian countries (Kazakhstan, Uzbekistan, and Turkmenistan) over hydrocarbon supplies to the European market may become a reality, if the countries involved do not harmonize their export policies. The U.S. and EU are actively pushing the Central Asian exporters toward continued disagreements (especially on the gas market). Today, the price and resource strategy in relation to Europe is based on Gazprom's de facto monopoly on the gas delivery market. This means that new gas pipelines bypassing Russia may create competition among the suppliers, which will push the prices down—something that the gas users naturally want to achieve. The Central Asian countries, not quite delighted with Russia's monopoly, have to bear this prospect in mind.

So far Russia's Caspian partners remain "locked" on their gas fields: Gazprom's main lines are not entirely adequate to their needs. To compensate for the very low gas prices at home, the Russian pipeline monopolist tends to lower the procurement prices, which cannot but irritate the Central Asian partners. They rightly believe that they have to pay for Gazprom's ineffective financial and economic activities.

The Soviet gas transportation infrastructure was geared toward supplying Europe, which made transit across Russia the only route open to the gas-producing countries. This means that for the time being Russia remains in control of Central Asian and Trans-Caucasian oil and gas exports. About 70 percent of oil sold by Kazakhstan, Azerbaijan, and Turkmenistan to the far abroad and 100 percent of Turkmenian gas exports are moved across Russian territory, which neither foreign investors nor foreign political leaders like.

Today, Russia's fairly weak transportation infrastructure lacks adequate capacities and has deteriorated to the extent that it no longer corresponds to the growing pressure of Central Asia oil and gas exports. Russia's inadequate policy in Central Asia and its relations with the raw material exporters, which want stability more than anything else, have forced them to look elsewhere: there are sev-

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eral planned and implemented alternative oil and gas transportation projects that exclude Russia's territory. The leaders of the newly independent states regard the alternative oil and gas export routes as an element of their countries' real sovereignty. Hence the strong political support of the new pipe-line projects, which so far look fairly exotic.

The *Turkmenistan-Afghanistan-Pakistan* (TAP) gas pipeline to the south is one of the most pertinent examples. As the Central Asian Gas Pipeline, or CentGaz for short, it has been discussed, buried, and revived for nearly a decade. As soon as the Taliban regime in Afghanistan was overthrown, President Niyazov tried to revive the project first suggested by Bridas of Argentina in 1993 and later, until 1998 (when the Taliban openly clashed with the rest of the world), developed by the tandem of Unocal of the United States and Delta Oil of Saudi Arabia.

The ADB, in turn, which paid for the feasibility studies, hoped that by the end of the same year the structure of capital stock would be formed together with the funding mechanisms. At the early stages, however, the risks involved and the market, which could not consume between 20 and 30 billion cu m of gas (the amount that would have made the project profitable), made the project's future vague. Early in October 2007, the prospects brightened.

The Indian government decided to join the TAP, which might become the *Turkmenistan-Afghan-istan-Pakistan-India* (TAPI) project.

India consumes about 140 million cu m of gas every day, which removes the market issue from the agenda. All the other doubts remain, which allows the experts to describe the project as geopolitically dubious. So far, no one knows exactly how much gas Turkmenistan has; the situation in Afghanistan, one of the possible transit countries, remains unstable. There is a rivaling project across Iran, Pakistan, and India, which Gazprom is actively lobbying, etc.

The specifics of the gas transportation methods and Europe's dependence on Gazprom's pipelines makes Russia's impact on the gas market much more pronounced than on the oil market. So far, diversification of gas supplies, Brussels' heartfelt desire, is going on slowly, hence the increasingly active efforts to devise and realize alternative routes for the Caspian and Central Asian gas.

The West, in an effort to weaken Moscow's control over the Caspian and Central Asian gas resources, is exploiting the disagreements among the partners to promote alternative routes bypassing Russia. Their prospects look dim: there are numerous political, geographic, technological, financial, and resource limitations.

Today Washington and Brussels joined forces to realize the idea of the *Trans-Caspian gas pipe-line (TCGP)*. laid along the Caspian seabed. America's geopolitical ideas about Central Asia serve the cornerstone of the thesis that oil and gas exports from the region, which will exclude Russia and Iran, is the U.S.'s "strategic priority." Any of the American emissaries visiting the Central Asian countries talk about the Trans-Caspian gas pipeline. The project, however, remains a doubtful enterprise: it is still unclear whether it will receive enough gas to justify construction; the technical side of the pipeline laid in a seismically hazardous zone across the territories of several countries likewise invites numerous questions, including the risks of terrorism, project appreciation, etc.

The project was launched in 1996 on the initiative of the United States, which declared the Black Sea-Caspian region to be a zone of its strategic interests. At that time, the Americans sat down to create a new pipeline architecture from which Russia and Iran were to be excluded. America went as far as setting up the PSG consortium, consisting of General Electric, Bechtel National, and Shell. In 2002 Turkey and the European markets should have received 16 billion cu m and 14 billion cu m of gas, respectively. In 2000 numerous disagreements over conditions cut short the progress.

Recently, the EU and the GUAM countries pooled their efforts to lobby the project as a logical extension to Nabucco, the gas pipeline initiated in 2002 by gas companies of Austria, Hungary, Rumania, Bulgaria, and Turkey.

Early in 2006 Turkey and Turkmenistan revived the TCGP idea; later Azerbaijan and Kazakhstan displayed their interest. Early in 2007 Baku, Astana, and Ashghabad discussed the possibility of moving their gas across Azerbaijan, Georgia, and Turkey. Their interest is easily explained: it is expected that the EU will receive natural Central Asian gas through Nabucco, a TCGP modification. Its western part will cross Georgia, Turkey, Bulgaria, Rumania, and Hungary to reach Austria.

The idea looks realizable if the Aktau-Baku stretch is laid along the sea bottom; the southern stretch, from Iran and the Gulf countries, may be linked to the main pipeline. Its planned annual capacity is \$26-32 billion cu m; the initial cost of about \$6 billion may be increased by 40 to 60 percent. The planned deadline is 2012.

Resources are the project's weakest point: even 8 to 10 years later Azerbaijan, one of the most active supporters, will be able to come up with only half of the planned load; in fact the republic is no gas supplier: it consumes about 12-14 billion cu m of gas every year. By 2006 it produced less that 6 billion cu m and bought the rest from Russia and Iran. According to optimistic assessments, starting in 2007-2008, Azerbaijan will no longer need Russian gas: it will cover the present gap with Shah Denis gas. V. Aliev, who heads the Foreign Investments Department of the State Oil Company of Azerbaijan Republic, believes that in 2007 his country will be able to supply over 4 billion cu m to Turkey; the figure for 2008 is 6.3 billion (which looks doubtful, to say the least). According to Minister of Industry and Energy of Azerbaijan Natik Aliev, by 2015 the country may count on 15-16 billion, 20 billion cu m of gas at best, from Shah Denis. This makes Kazakhstan and Turkmenistan the central figures without which the project has no chance.

Kazakhstan is demonstrating restraint. The country's leaders and heads of the fuel and energy complex agree that so far the TCGP does not look promising. On 11 October, 2007, when speaking at the Vilnius Energy Security Conference 2007, Minister of Energy and Mineral Resources of Kazakhstan Savat Mynbaev said that his country was prepared to join only economically justified projects, which means, added the minister, that any diversification project would be scrutinized.

Even though Kazakhstan's government is actively discussing the project within the republic's multi-vector policy, only Turkmenistan has enough gas to make the project economically attractive.

Late president of Turkmenistan Niyazov rejected the seabed project when Gazprom agreed to pay \$100 per 1,000 cu m of Turkmenian gas in 2007-2009. Under the agreement signed on 5 August, 2006, Gazprom pledged to buy 12 billion cu m of gas in 2006 and 50 billion every year between 2007 and 2009. This will cost the Russian company \$6 billion more than expected; this is the price for its total control over Central Asian gas exports to Europe until 2010. Gazprom will obviously have to pay to "freeze" the TCGP. President Niyazov hastened to say: "We shall sell our gas primarily to Russia. You should not imagine that Turkmenistan wants to move aside with its gas; we are not ready to discuss the Trans-Caspian Gas Pipeline yet."

The situation around the TCGP shed light on the different positions of the energy producers (Russia) and energy users. Costly, but effective, measures allowed Russia to preserve its control over gas exports to Europe. Russia's willingness to pay more for Turkmenian gas was not wholly political. It made gas trade fairer; together with Kazakhstan and Turkmenistan, Russia should ensure steady gas supplies to Europe for fairer prices than before. The common interests of the gas producers suggest that they should cooperate both in gas production and gas trade. In other words, they should coordinate their pricing policies, which means that a gas OPEC in one form or another is around the corner.

For political reasons, the TCGP project is impossible without Russia's and Iran's consent, because under the 1996 American project the eastern and western Caspian coasts should be connected by a pipeline laid along the seabed. The post-Soviet status of the Caspian Sea, however, has not yet been established and the national sectors have not yet been identified. This means that any of the five coastal states can object to the project.

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Iran objects for ecological reasons and because of the Caspian's still indefinite status; Moscow supports Tehran, which means a consensus will not be reached in a hurry.

The size of Turkmenistan's gas reserves remains undetermined: there is the firm conviction inside the country (much doubted outside it) that the reserves are enormous.

The situation with Dauletabad, the country's largest gas field, described as the resource basis for gas supplies to the Soviet successor states and for the "paper gas pipeline" across Afghanistan to Pakistan, remains vague. In November 2006, President Niyazov announced that the reserves explored by Turkmen geologists at the Iuzhny Iolotan field amounted to 7 trillion cu m, much more than the Russian Stockman field could yield. Later, the new president of Turkmenistan announced that Osman, another rich gas field, had been discovered in the southeast of Iolotan.

The Western media that maintain contacts with the Turkmenian opposition in exile write that the statements about the recent discoveries are nothing more than a PR campaign launched by President Niyazov together with some Turkish firms with licenses from well-known Western companies on auditing gas fields. The project presupposed that Turkmenistan would announce that rich gas reserves had been discovered, while the Turks, acting in the name of well-known companies, would confirm this in exchange for preferences at tenders for all sorts of projects and other benefits.

It is a commonly known fact that early in the 1970s highly skilled experts of the U.S.S.R. Ministry of Geology who worked in the southeastern corner of Iolotan along the Afghan border did not find anything like rich gas reserves. In any case, the Russian experts are very pessimistic in this respect, which explains why the Russian, and Western major companies for that matter, prefer to keep away from Ashghabad's grandiose projects. Only the Chinese risked joining the development on the left bank of the Amu Darya.

The size of Turkmenistan's reserves is the most zealously guarded state secret. Ashghabad quotes the figure of 28.6 trillion cu m of proven reserves, but will not permit foreign experts wishing to check this information to enter the country. The Russian and Western assessments say that the total potential does not exceed 15.5 trillion cu m. Ashghabad, however, offers higher figures: it has already moved from the earlier figure of 23 trillion to 42-44 trillion cu m of gas.

The Turkmenian president speaks loudly of his policy of "multi-option export routes," promises gas left and right, and warns that his country is ready to move its gas in any direction to its own border. Ashghabad has already promised its gas to China, Russia, the United States, and Europe; taking into account its previous obligations, there is doubt that it can cope with the 30 billion cu m of gas it promised to China. The country is obviously unable to produce enough gas to live up to its export obligations to Russia, Iran, and China and to send enough gas to its domestic market. According to BP, in 2006, the country produced 62 billion cu m of gas; in 2007-2008, it promised to supply Russia with 50 billion cu m, send 7 billion to Iran, and consume 17.4 billion cu m a year at home.

This is very typical of the region as a whole: the Russian expert community, and even official circles, are quite open about their doubts: the plans to double gas production by 2020 and the figures quoted by Turkmenistan, Kazakhstan, and Uzbekistan (230 billion, 70 billion, and 75 billion cu m, respectively) look overstated.

Gas pipeline projects are mushrooming despite the obvious fact that alternative gas pipelines (which exclude Russia's involvement) are absolutely unrealizable without Central Asian gas.

Washington plans to work together with Baku on building the *Turkey-Greece-Italy* gas pipeline to fill the Nabucco project. The United States intends to develop other projects together with Azerbaijan to ensure Europe's energy security by diversifying natural gas supplies.

Nabucco was devised to exclude Russia from gas transportation to Europe. At the early stage it will move Azeri and Middle Eastern gas to the heart of the European Union across Turkey. The Cen-

tral Asian suppliers are expected to join later. Austria's OMV oil company put on the table the idea of a gas pipeline from the Caspian to Europe (bypassing Russia). It will be about 3,300-km-long and will cost about \$6 billion with a capacity of 25-30 billion cu m. Construction will start in 2008 and be completed in 2012; its western part will cross Turkey, Bulgaria, Rumania, Hungary, and Austria. The pipeline will collect gas from Turkmenistan, Kazakhstan, and Azerbaijan.

The future of the project depends not so much on Azerbaijan (by 2015 it will produce a mere 16-20 billion cu m of gas), which explains why it prefers the role of a transit country. According to Natik Aliev, Minister of Industry and Energy of Azerbaijan, his country will not join the project until it is sure of the positions of Turkmenistan and Kazakhstan, two key gas suppliers.

"As a huge project, Nabucco cannot rely solely on Azerbaijan," the minister said, "therefore we need to know what Kazakhstan and Turkmenistan think of it before going ahead with infrastructure."

The large number of diverse projects suggests that in the former Soviet Union the lobbying of all sorts of alternative routes that leave Russia out in the cold has developed into a business in its own right. There is no other plausible explanation for why commercially lame projects are appearing: their authors are obviously fishing for feasibility study funding, since no other actions can be taken a priori.

The recent events in the areas bordering on the Caspian suggest that the Central Asian states should be guided by the political context when deciding on oil and gas routes. From this point of view the TCGP looks less than attractive. The recently announced American plans to divide Iraq and create an independent Kurdistan may turn the vast region populated by ethnic Kurds into a zone of a serious armed conflict. This is confirmed by Turkey's readiness to begin hostilities against the Northern Iraq-based Kurds. What is described as a trans-border military operation is, in fact, the armed invasion of another country. The conflict might prove to be a long one: the Kurdistan Workers' Party knows how to wage guerilla warfare, which means that the future (TCGP and Nabucco) and already functioning (BTC) routes, as well as the pipelines from Iraq and Iran to Turkey, will be at risk. The Turkish-Kurd-ish conflict in Northern Iraq might fan the old ethnic strife between the Kurds and Iraqi Turkmen (or Turkomans) who live in the northwest of Kurdistan. There is the opinion that there are as many seats of potential conflict in the north of Iraq as in its Arab south.

Taken together, the negative political, economic, and resource factors devalue the very idea of a costly gas pipeline across the Caspian.

The Chinese Factor

China, which has become more active and more noticeable on the Central Asian fuel and energy stage, has changed the regional balance of forces. In June 2007, the president of Turkmenistan not only came to terms with Beijing about gas supplies to China, but even signed a document under which the Chinese National Petroleum Corporation received a license for developing Bagtyiarlyk, one of the republic's most promising gas fields. China hopes that it will yield enough gas to fill the new pipeline.

On 3 April, 2006, the then President of Turkmenistan Niyazov and PRC Chairman Hu Jintao signed an intergovernmental agreement on building a gas pipeline between their countries and on selling Turkmenian natural gas to the People's Republic of China. Under this document Turkmenistan is obliged, starting in 2009, to supply China for 30 years with 30 billion cu m of natural gas every year from the gas fields on the right bank of the Amu Darya.

On 29 August, 2007, Turkmenistan President G. Berdymukhammedov paid a working visit to Bagtyiarlyk to launch the practical stage of the Turkmenistan-China project, which will also cross Uzbekistan and Kazakhstan. Of its total length of 7,000 km, 188 km will cross Turkmenistan, 530 km, Uzbekistan, 1,300 km, Kazakhstan, and over 4,500 km, China.

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Late in August 2007, in Astana, Chairman Hu Jintao and President of Kazakhstan Nazarbaev signed several documents on cooperation in various spheres. One of them is related to the gas pipeline from Turkmenistan with an annual capacity of 40 billion cu m; the project will be completed by 2010.

The agreements with China give Astana and Ashghabad the opportunity to reach the Chinese energy market, which can be used as a lever of pressure on Gazprom of Russia and (if the TCGP is realized at all) on the European customers.

At the same time, the Turkmenistan-China pipeline, with no detailed technical documents or approved budget, is already being built in Turkmenistan. It looks as if Astana and Ashghabad are using this and similar projects to haggle over gas prices with Gazprom. As for China and its chances to receive gas—we shall have to wait and see.

Russia Still Holds its Position

Moscow is countering the serious efforts of Washington and Brussels, and recently Beijing, to cement their positions in the region with its own measures. So far Russia remains the dominant player in Central Asia.

Challenged by the active American-European diplomatic maneuvers of the last couple of years intended to lure the energy-rich Central Asian countries to their side, Moscow is stepping up its efforts to set up an Energy Club under the SCO's aegis. It is designed as a club of the SCO's major energy producers and energy consumers to coordinate pricing policies and implement regional oil and gas transportation projects. Today the SCO countries control 23 percent of the world's oil reserves, 55 percent of natural gas, and 35 percent of coal reserves.

On 12 May, 2007 Kazakhstan, Turkmenistan, and Russia signed the Declaration on the Caspian Gas Pipeline along the Caspian coast across Turkmenistan territory; 150 km of it will cross Kazakhstan to join the functioning Central Asia-Center gas pipeline at Aleksandrov Gay on the Kazakh-Russian border. Its assessed cost is \$1 billion and its annual capacity amounts to 30 billion cu m. The project was discussed together with the problem of modernizing the old Central Asia-Center pipeline to increase its carrying capacity. Construction is expected to start in 2008, but by 1 September, 2007 (the date fixed by the Declaration), the sides failed to draw up an intergovernmental agreement on construction to fix the dates and launch feasibility studies.

Price disagreements were probably the real cause for the delay: the presidents of Kazakhstan and Turkmenistan decided that they would fix the price for the gas they sell to Gazprom together. According to the Kazakhstan president, "the two countries are equally interested in channeling their resources to the world market for good prices." This means that the Caspian energy resources will be sold to those who would offer the best prices and the most reliable routes. Russia will profit from the Caspian Gas Pipeline together with its Central Asian partners: it has finally agreed to modernize the Central Asia-Center pipeline, something that its Central Asian users wanted.

The project's geopolitical importance is amply illustrated by the West's consistent efforts to find alternative routes and squeeze Russia out. If realized, the Caspian Gas Pipeline will de facto become the regional version of a so-called gas OPEC (initially devised in the Russia + Central Asia format) able to dictate their prices to the European consumers.