Energy security in the Caspian region

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Abstract

Energy security is an important issue in economic relations between individual countries. With energy rising prices, major consuming states are struggling to come up with effective long-term energy policies. In the second half of the 1990s, the global public grew aware of the energy potential of the Caspian region, which contains some of the largest undeveloped oil and gas reserves in the world. Not only countries but also a large number of international corporations invested in energy projects in the region. Newly independent states in Central Asia and the Caucasus hoped their oil and gas resources would help them secure economic growth and political independence.

The growing energy needs have given Turkey, the United States, China or European Union a strong interest in developing ties with energy - producing states in the Caspian Region to build necessary pipeline infrastructure. The lack of consensus on a legal status of the Caspian Sea is a main obstacle in developing the energy potential of the region. The Caspian's growing production will undoubtedly contribute to the diversification of oil and gas supplies and to the global energy security.

Energy security

Security is one of the most important terms in political science, international studies, economy or, more broadly, in social sciences in general. There are many definitions, which evolve due to the changing nature of security as an entity, state, process and phenomenon. During the westphalian international system, it was easy to answer the question: what is the security and who is the subject of the security policy.¹ The security meant the lack of danger, and the state was the only producer and the subject of it. Only centralized state and its territory was protected by the security policy. The security of the state was a zero sum game.² The security of one state marked the insecurity of the other one. Military power was a key element of the state security. Today, in the new latewestphalian international system, security is something more. Now we should spill security issues over into other sectors, which are fundamentally different from military ones.³ Security is a multidimensional idea which needs a political, economical or societal and cultural dialog between and within states, civilizations and other actors on the international scene.

Nowadays, energy security is a growing concern in the state foreign policy. With energy rising prices, major consuming states are struggling to formulate effective long – term energy policies.⁴ The interdependency in the energy field is a very important dimension of the contemporary relations between states and transnational corporations. Upstream and downstream investments have no borders or limits. Thereby, there is a necessity to improve a dialog between producers, consumers and transit states to ensure the energy security. Nowadays, private companies are very influential actors in producing and delivering energy to consumers.

Energy security is a quite new term used in international relations a few years ago. According to the most analysts, it means "assured delivery of adequate supplies of affordable energy to meet a state's vital

requirements, even in times of international crisis or conflict".⁵ The European Commission defines energy security as "the ability to ensure that future essential energy needs can be met, both by means of adequate domestic resources worked under economically acceptable conditions or maintained as strategic reserves, and by calling upon accessible and stable external sources supplemented where appropriate by strategic stocs".⁶ We can also describe energy security as "the reliable and affordable supply of energy on a continuing, uninterrupted basis".⁷ Analyzing the term of energy security we should underline, that it is strongly connected with the economy security. Sufficient supplies of energy are inherent elements of the economical development of every state and nation. It is estimated, that the world energy consumption is expected to grow by 72% between 2003 and 2030. According to the British Petroleum (BP) Statistical World Review of Energy, the main sources of world primary energy consumption is oil (34,8%), coal (29,3%) and gas (24,1%).⁸

To ensure the energy security, every consumer state should diversify sources of supplies. Being addicted to only one energy producer is very dangerous from the economical point of view and makes state vulnerable to political pressure. Thereby, energy security also incorporates a foreign policy dimension in terms of maintaining good relations with various energy producing states.

World oil and gas production is mostly concentrated in politically unstable regions: Africa, Persian Gulf or Caspian Region. It is connected with the risk to the uninterrupted flow of energy supplies.⁹ Oil and gas facilities become a target of attack by insurgents, terrorists or separatist groups. According to R. Ebel from the Center for Strategic and International Studies, "pipelines are very soft targets".¹⁰ That is why the need to protect the production and transportation infrastructure will probably grow.

Analyzing the energy security of the state we should take into consideration the perspective of the energy producers. Their aim is to diversify the export routs and create the encouraging investment climate in the state energy market. For most of the exporters, benefits from the energy production and trade are the most important elements of their security and prosperity in economical dimension. Transit states are also very important players in the energy market. Because of their geographical position between producers and consumers of energy resources, they are indispensable element of the global energy security.

There are some important energy security indicators which include:

the proportion of imported energy fuels in the energy balance sheet;

the degree of diversification of: sources, transmission channels, the energy commodities used to produce energy;

supply stability (transit, political factors);

the share of energy from renewable sources in the overall energy balance sheet;

the price of energy;

the amount, sufficiency and share of energy fuel reserves;

the reliability of power networks;

energy efficiency;

the concentration of energy-intensive industries;

the international commitments related to the development of energy resources;

the adequacy of energy strategy priorities;

adequate investment outlays and other (economic, political) resources invested relative to the future internal energy demand;¹¹

Those indicators have to be analyzed and interpreted as a whole, because they are all complementary.



Energy potential of the Caspian region

The Caspian region has the opportunity to make a significant contribution to ensuring energy security in the global dimension. Early oil activities were concentrated on the Absheron Peninsula of Azerbaijan, around the town of Baku. The Baku region, was accounted for half of the world's oil production in 1900.¹² The oil companies had been interested in Baku since XIX century. The Noble brothers, the Rothschilds and the Royal Dutch Shell helped Russia in developing Caspian energy resources.¹³ Oil had also a strategic value in both world wars. The German army sought unsuccessfully to capture the Baku region. It was the main reason for its defeat in 1918 and 1945.¹⁴ Since 1950s, after Russia discovered big oil reserves in Siberia and Ural regions, investments and production in the Caspian region decreased.¹⁵

The end of the Cold War changed the geopolitical situation in the Caspian region. New states appeared on the wreckage of the Soviet Union in the Caucasus and Central Asia. The new game started, the rules of which were not known yet. There was also a lack of clearly defined mechanisms for preventing regional conflicts, instability within the new states, and tensions among them. It created a serious risk of international military clashes and widespread civil war in the heart of Eurasia. That is why Z. Brzeziński called it: "Eurasian Balkans".¹⁶

Nowadays, five states share the Caspian Basin: Azerbaijan, Iran, Kazakhstan, Russia and Turkmenistan. Their common aim is to explore and develop the region's hydrocarbon resources.¹⁷ The region is surrounded by nuclear powers: China, India, Pakistan and the not nuclear, but important regional player - North Atlantic Treaty Organization (NATO) member, Turkey.

Because of the geopolitical position between East end West of Eurasia, the Caspian region plays a special role in the contemporary international relations. It became open to the world energy market. The Caspian basin is estimated to be the world's third largest source of oil and natural gas after Persian Gulf and Russia.¹⁸ According to International Energy Agency (IEA), it is the world's largest undiscovered reservoir of energy resources.¹⁹ In the World Energy Outlook it is estimated, that Caspian oil production will grow from 2,9 million barrels per day (mb/d) in 2009 to 5,4 mb/d between 2025 and 2030.²⁰ Caspian natural gas production is also projected to grow, from an estimated 159 billion cubic meters (bcm) in 2009 to nearly 260 bcm by 2020 and over 310 bcm in 2035.²¹ There are also some potential barriers to the development of the energy resources in the region. The complexities of financing and constructing pipeline infrastructure passing through several states, or uncertainty of the investment climate and export demand, could effectively constrain the expansion of the Caspian energy market.²²

There is an important role of the transnational companies in developing the Caspian energy resources. BP and Statoil took a pioneering role in development of Azeri, Chirag and Guneshli oil fields. BP also participated in finding the Shah Deniz gas fields in Azerbaijan. Kazakhstan also attracted serious interest. The American Chevron Texaco company together with ExxonMobil, agreed to developed the Tengiz oil field.²³ Kashagan is another source of oil, which offers a certain potential to become perhaps the world's largest oil field. That is why many corporations, like: BP. Statoil. Agip. British Gas. Total Fina Elf. were interested in investments there.²⁴

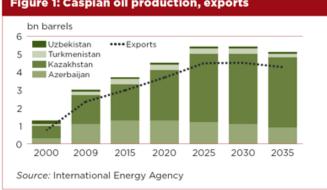
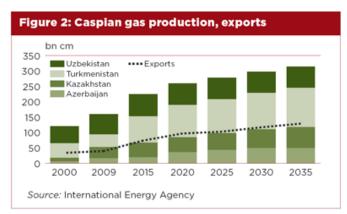


Figure 1: Caspian oil production, exports

Tbilisi - Batumi, GEORGIA May 27, 2011 – May 29, 2011



Source: http://www.petroleum-economist.com/default.asp?page=14&PubID=46&ISS=25725&SID=72754 (03.04.2011).

Table 1. Gas potentials of the Caspian states

billion cubic metres	proven reserves	potential reserves	eksports 2002	exports 2010
Kazakhstan	1 910,3	2 498,9	6,1	36,0
Turkmenistan	2 009,3	7 496,9	38,8	93,4
Azerbaijan	849,0	990,5	0,0	14,2
Russia	47 544.0		182.4	
Iran	26 602,0		1,3	10,0

Source: A. Łoskot, "Turcja – korytarz tranzytowy dla surowców energetycznych do UE?", Prace OSW 2005, no 17, p. 6.

Table 2. Oil potentials of the Caspian states

Million tones	proven reserves	potential	exports 2002	exports 2010
		reserves		
Kazakhstan	4 000,0	12 551,2	40,0	85,0
Turkmenistan	150,1	5 184,2	2,8	7,5
Azerbaijan	1 364,3	4 365,6	10,4	50,0
Russia	9 549.8	20 463.8	188.4	
Iran	17 162,3		94,6	249,0

Source: A. Łoskot, "Turcja – korytarz tranzytowy dla surowców energetycznych do UE?", Prace OSW 2005, no 17, p. 6.

Table 3. Main Caspian oilfields potentials

Country	Field	Recoverable resources (billion barrels)
Azerbajan	Azeri-Chirag-Guneshli	5,4
-	Shah Deniz	2,5
Kazakhstan	Tengiz Field	6-9
	Karachaganak Field	2,5
	Kashagan Field	13
	Kurmangazy Field	6-7
	Uzen Field	7
	Kumkol Field	0,1
	Zhanazhol Field	3

Source: G. Hall, T. Grant, "Russia, China and the Energy – Security Politics of the Caspian Sea Region after the Cold War", Mediterranean Quarterly 2009, no 2, p. 66.



Legal status of the Caspian basin

The lack of consensus on the legal status of the Caspian Sea (or Lake) is the main obstacle of the energy market development in the region. Geographically, it is a salt lake covering about 375,000 square kilometers, bordered by Elburz Mountains of Iran to the south and the Caucasus to the northwest. The Volga River flows into it from the north forming a large delta near Astrakhan.²⁵

In accordance with the agreement between Russia and Iran in 1921 (Friendship Treaty) and 1940 (the Treaty of Commerce and Navigation), the Caspian basin was only open to their own vessels and was closed to the rest of the world.²⁶ Those treaties did not involve the development of mineral resources under the seabed. Agreements did not also differentiate between warships and passenger or transport ships. The two states reserved a twelve-mile zone along their coasts for the exclusive fishing rights.²⁷

Nowadays, after the collapse of the Soviet Union, we have three new Caspian littoral states: Kazakhstan, Turkmenistan and Azerbaijan. The largest hydrocarbon resources are situated in the Azeri and Kazak sectors and to a lesser extend in the Turkmen sector of the Caspian. Russia and Iran are estimated to have fewer deposits.²⁸ Developing energy resources is considered crucial to the economic and political survival of the newly independent states.²⁹ Thereby, there is a heated debate on the legal status of the Caspian basin. The question is whether it is a sea or a lake. According to the United Nations Convention on the Law of the Sea, states bordering a sea may claim twelve miles from the shore as their territorial waters and beyond that, a two hundred miles as their Exclusive Economic Zone.³⁰ If the Law were not applied, the Caspian and its resources would be developed jointly, as an condominium.³¹

The problem with boundaries in the Caspian basin appeared with the dissolution of the Soviet Union in 1991.³² The legal status of the Caspian has become a key issue not only for littoral states but also for the international companies especially after the agreement between Azerbaijan and BP-led consortium (Azerbaijan International Operating Company) in 1994.³³ Russian policy in the Caspian has varied over time. In 1996 it proposed that within a forty-five miles coastal zone each littoral state will have sovereign rights and could develop the seabed resources.³⁴ The central part could be developed by a joint companies of the five littoral states.³⁵ This proposal was rejected by Azerbaijan, Kazakhstan and Turkmenistan. After this, Russia proposed to divide the seabed and its resources along the "median line", which runs across the seabed at the same distance from both opposite shores (map 1).³⁶



Map 1. Median line division of the Caspian basin

Source: Caspian Sea yet to see new discoveries, http://www.eurodialogue.org/56 (03.04.2011).



In accordance with this conception, Russia signed an agreement with Kazakhstan in 1998 and with Azerbaijan in 2001. Those three states decided, that the Northern Caspian would be open for investments. In 2001, the leaders of Russia and Iran declared, that until the legal regime of the Caspian is finalized, the two states do not officially acknowledge any boundaries there.³⁷ Turkmenistan and Iran declared, that Caspian basin should be divided on the basis of five-nation treaty.³⁸ Iranian policy in the Caspian is the "condominium approach".³⁹ It rejected all agreements and favored equal division of the basin, giving each littoral state twenty percent of the seabed. Such position is a consequence of the fact, that Iranian shores on the Caspian seem to hold less natural resources than other four states.⁴⁰ Nevertheless, Iranian oil companies have participated in developing hydrocarbon resources in the other Caspian littoral states. Turkmenistan, initially supported the concept of the "median line approach", and signed the agreement with Azerbaijan to divide the Caspian seabed, but both countries still could not get the consensus, where to draw the line. Additionally, both states have been involved in a dispute over three fields: Kyapaz, Azeri and Chirag in Azerbaijan and Serdar, Khazar and Osman in Turkmenistan.⁴¹

The legal status of the Caspian basin is still uncertain, which limiting the development of the energy resources in the region. It is also a risk that investors have to consider in doing business in the region. Without agreement between Turkmenistan and Azerbaijan, it will be impossible to build the trans - Caspian pipeline infrastructure.

Main pipeline projects

There are many options of transporting Caspian resources on the world energy market. Caspian basin is landlocked, that is why a fundamental question is how many pipelines will become operational in near future and which direction will be the most convenient transit option for Caspian oil and gas. The natural route is through Iran, but this is unacceptable for the United States because of the Iranian nuclear program. Another is to the Black Sea, for shipment via the Bosporus in tankers, but it is very dangerous from the ecological point of view. Expanding pipelines through Russian territory will give Russians critical control in the Caspian Region. China, because growing dependence on imports, entered the Caspian energy game with a proposal for a pipeline in eastern direction.

The western route through Azerbaijan, Georgia and Turkey to EU is very important. Major pipeline projects realized and others under construction will inevitably contribute to EU's energy security interest. They are enhancing Turkey's role as an important transit country and energy hub in the Eurasia.⁴² Turkey has concentrated its efforts on the transportation of Caspian oil and gas reserves to Western markets, which was often referred to as the 'Silk Road of the 21st Century'.⁴³ Nowadays, the idea to restore the Silk Road connecting Eastern Asia with Western Europe via the post-Soviet republics in the Caucasus and Central Asia has been gaining importance.⁴⁴ In this context, very significant and perspective was the Eurasian Energy Corridor Project which concerned the transportation of Caspian oil and gas as a resurrection of the historic Silk Road.⁴⁵ This project provided an opportunity for Turkey to be a transit state for the energy resources from Central Asia and the Caucasus to the European markets.⁴⁶

Turkey has several sea terminals. The most important one is the Mediterranean city, Ceyhan. It receives Iraqi and the Caspian oil. The Turkish Straits of Bosporus and Dardanelles that connect the Black Sea with the Mediterranean, serve as one of the most important transit routes in Eurasia.⁴⁷ Every year, some 10,000 tankers pass through the Bosporus Strait. Traffic keeps growing rapidly there.⁴⁸ Because of the weak capacity of the Turkish Straits, shipping of energy resources is very difficult and problematic not only technically but also taking into consideration the ecological issues. That is why there is a need of alternative solutions. The key project is



the 1768 kilometers long Baku – Tbilisi – Ceyhan (BTC) pipeline (map 2). It is a very valuable venture not only economically but also politically for Turkey, European Union, United States and Caspian states rich in oil and gas. The BTC pipeline project and the issue connected with the role of Turkey as a key corridor state for Caspian energy resources was discussed in 1992 during the meeting of Turkish President, T. Özal and A. Elchibey, the President of Azerbaijan.⁴⁹ The construction of BTC was the priority for Turkey for three reasons. First of all, the participation in extracting and transporting the Caspian energy resources reflected in the power of the state in the region in economic and political sense. Secondly, Turkey wanted to establish good relations with Turkic World, and common pipeline is a good instrument of this ambitious plan. Thirdly, the pipeline is an important economical impulse for Turkish private and state sector. The transport of the energy resources is an important source of income for Turkey and the access to the oil and gas is necessary in fast growing Turkish economy.⁵⁰

In April 1998, Presidents of Turkey, Georgia and Azerbaijan declared the official support for the BTC project. Next, in October 1998, during the 75th anniversary of founding the Republic of Turkey, the Presidents of Azerbaijan, Kazakhstan, Turkmenistan, Georgia and Turkey signed the declaration supporting the common pipeline project.⁵¹ Moreover, Turkey signed the agreement with Turkmenistan about the transportation of gas simultaneously to the BTC. The proposition of building the BTC pipeline was also introduced during the 1999 summit of the Organization for Security and Cooperation in Europe (OSCE) in Istanbul.⁵² The construction of this pipeline started in 2002, the cost of this venture was about 4 billion USD.⁵³ The official opening of the BTC in Azerbaijan was in May 2005 and in Georgia in October 2005.⁵⁴ Officially, the pipeline has operated since 13 July 2006.⁵⁵ It can transport up to 1 million barrels per day (approximately 1.5% of the world's oil supply), and it is the second longest pipeline in the world.⁵⁶ On 16 June 2006, Kazakhstan has officially joined the BTC oil pipeline project. According to the agreement between Presidents of Azerbaijan and Kazakhstan, Kazakh crude oil will be shipped to Baku across the Caspian Sea, and then pumped through the BTC pipeline to Ceyhan (Aktau – BTC Project).⁵⁷

The BTC pipeline is located in a very unstable environment: between the Caucasus and the south - eastern part of Turkey. In August 2008, Kurdish militants in Turkey bombed the pipeline, forcing to halt shipments briefly. Fighting between Russia and Georgia days later cast further doubt on the security of the pipeline. Turkey stands to lose millions of dollars in transit fees if crude flows stop.⁵⁸

The BTC came into being because of the cooperation of many companies within Baku-Tbilisi-Ceyhan Pipeline Company (BTC Co.): BP (Great Britain); SOCAR (Azerbaijan); TPAO (Turkey); Statoil (Norway); Unocal (US); Itochu (Japan); INPEX (Japan) or ConocoPhillips (US). BTC Co. get support also from the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD).⁵⁹



Map 2. BTC pipeline.

 $Source: http://www.oilfund.az/pub/tiny_upload/map.jpg (02.04.2011).$

It is anticipated that 6 to 7 % of global oil supply will be transported via Turkey by 2012 and that Ceyhan will become a major energy hub and the largest oil outlet terminal in the Eastern Mediterranean. The Ceyhan terminal has already been designed to receive the crude oil reaching from Kirkuk, Baku and Samsun.⁶⁰

Turkey has the most dynamic gas market in south – eastern Asia. In 1996, it signed a 23 billion USD contract with Iran about the purchase of gas. In 1997 Turkey, Turkmenistan and Iran signed the agreement about the extension of the Turkish – Iran pipeline to Turkmenistan.⁶¹ Another important venture is Transcaspian Turkmenistan – Turkey – Europe Natural Gas Pipeline Project. Its aim is to transport gas from Turkmenistan via Caspian Sea to Turkey and Europe. In accordance with the agreement signed on 29th of October 1998, 30 billion cubic meters of gas should be transported to Turkey, 16 billion cubic meters Turkey can use domestically and the rest will go to Europe.⁶² In May1999 Turkey and Turkmenistan decided to build the Trans – Caspian Gas Pipeline to transport Turkmen gas via Turkey to Europe. This project has not been realized because of the problematic status of the Caspian basin and the misunderstandings between Azerbaijan and Turkmenistan relating to the right to the Caspian energy resources.⁶³

Another project was the Baku – Tbilisi - Erzurum (BTE) pipeline from Shah Deniz gas fields in Azerbaijan. It was built in parallel to BTC. According to the Turkish Petroleum Pipeline Corporation, after the immanent completion of the 20 billion cubic meters capacity of BTE pipeline, Turkmen gas deliveries to Turkey and to Europe would most probably follow.⁶⁴

Other important gas pipeline project is Turkey – Greece – Italy Interconnector (map 3). The construction of such a gas pipeline to connect the Caucasus and Europe was begun in July 2005 and inaugurated on 18th on December 2007.⁶⁵ The gas is extracted from the Shah Deniz field in Azerbaijan. The pipeline is crossing the Turkish territory, reaching Greece, and from there it is to be extended toward Italy via underground pipeline crossing the Adriatic Sea. The future extension opening is scheduled for 2012.⁶⁶ The capacity of the pipeline is approximately 250 million cubic meters per year.⁶⁷

Map 3. TGI Pipeline.



THE TURKEY-GREECE-ITALY PIPELINE

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Source: http://cambridgeforecast.wordpress.com/2008/02/10/turkey-greece-italy-gas-pipeline/(02.03.2011).

The European Union has been exploring various options for accessing Central Asian and Caspian energy without relying on Russia. The Turkey - Greece - Italy Interconnector is the first step. But the project that could make a bigger significance to Europe's energy security, and to Turkey's role as an energy hub, is Nabucco (map 4). The Presidents of Turkey, Austria, Bulgaria, Hungary and Romania signed an agreement about the construction of the Nabucco gas pipeline on 13th July 2009. According to this decision, the gas from Central Asia, the Caucasus and the Middle East will be transported to Europe via Turkey. The main aim of the pipeline is to secure the gas deliveries to European Union without the Russian participation. The 3300 kilometers long, Nabucco pipeline will go from Azerbaijan (Shah Deniz field), Egypt, Iraq and Turkmenistan through Turkey, Bulgaria, Romania and Hungary to Austria. The project got the support from the United States and the European Union.⁶⁶ There are many companies which are also interested in building the pipeline, for example:



BOTAŞ (Turkey), BulgarGas (Bulgaria), Transgas (Romania), MOL (Hungary), OMV (Austria) and RWE (Germany).⁶⁹ The intergovernmental agreement assumed that the construction of Nabucco will be realized between 2011 and 2014 and its cost is estimated on about 8 billion euros.⁷⁰

During the EU summit on 19 - 20th of March 2009, member states decided to give 200 million euros to the Nabucco pipeline project within the economic anti – crisis package of 5 billion euros.⁷¹ It was an important political symbol of support for the Nabucco, but in the face of high costs of the pipeline construction and the necessity to build it until 2014 it is definitely not enough.⁷²

The main planned gas source for Nabucco pipeline is Shah Deniz field in Azerbaijan. It will produce enough gas to feed the new Turkey – Greece – Italy Interconnector. Some experts say that Nabucco will have to wait until Shah Deniz goes into its second phase of development, expected in 2013.⁷³ The companies involved in the Nabucco project are confident that Azerbaijan will produce enough gas to make Nabucco viable. But some independent energy analysts warn that other sources would be needed to fill Nabucco in the long term.⁷⁴ There was a plan to include the Iran to the Nabucco pipeline, because it has the world second largest gas resources (estimated for 16% of world's resources). Iran was also interested to participate in the project, but nowadays it is impossible because the strong US opposition caused by the Iranian nuclear program.⁷⁵ In such circumstances, Turkmenistan becomes a much more important player with its 4, 3 % word gas resources.⁷⁶

Turkey is a key transit state for the Nabucco pipeline. 60 % of it will go through Turkish territory. From the Turkish perspective, Nabucco has not only economical dimension but it is also a significant political move. According to the Turkish elites, if Turkey becomes the main energy bridge between East and West, it will speed up its process of integration with the EU and increase its regional position.⁷⁷ Eager to secure its own energy needs, Turkey wants to divert 15% of Nabucco's gas for a cheap domestic use.⁷⁸ The realization of the Nabucco pipeline project could effectively make EU member states not dependent on the Russian gas. It can also increase the role of Europe in Central Asia, the Caucasus and the Middle East. The huge energetic potential of those regions and their geopolitical significance are also the challenge for the European Neighborhood Policy.



Map 4. Nabucco pipeline project.

Source: http://www.nabucco-gaspipeline.com/english/800px-Nabucco_Gas_Pipeline-en_svg.png (12.03.2011)

Russia is the most significant Turkey's rival in the Caspian Region. Both states compete in the issue of energy policy. The Central Asian states have been providing Russia with cheap gas which has enabled Gasprom to export Russian gas to Europe at a much higher price. That is why, Russia is against the attempts of the Central Asians to transport and sell their gas to European markets. The Russian Prime Minister, W. Putin administration is trying to increase its control on Central Asian energy. The instrument of this policy was the project of a European Alliance of Gas Producers which would have included Kazakhstan, Turkmenistan and Uzbekistan.



However this idea failed to materialize.⁷⁹ Thereby, the serious challenge for the realization the Nabucco pipeline is the antagonistic Russian attitude. Russia tries to convince the EU members and the potential suppliers to give up the Nabucco project. From the other side, Moscow refused to participate in this project.⁸⁰ On 15th of May 2009 in Sochi, Gasprom and its counterparts from Serbia, Bulgaria, Greece and Italy signed series of agreements regarded the realization of South Stream gas pipeline project. The pipeline will run under the Black Sea from the Russian coast (Beregovaya) to the Bulgarian coast. It is an element of the gas pipeline competition in Europe and bipolar energy policy in EU. Some of the European states supported both Russian and Nabucco projects.⁸¹

Until recently, the existing pipelines in the Caspian Region were designed to link the former USSR internally and were routed though Russian territory.⁸² The port of Novorossiysk is the most important Black Sea terminal, from which Caspian oil and gas are transported in tankers to European markets.

The key Russian energy transit project is the Caspian Pipeline Consortium (map 5). The main pipeline connects the Tengiz oil fields in western Kazakhstan with the new Black Sea Marine Terminal in Russia. In October 2001, CPC for the first time loaded crude oil at its Marine Terminal Yuzhnaya Ozerevka, near the Russian city of Novorossiysk on the Black Sea.⁸³ In April 2003 the first phase of the CPC pipeline system was introduced into regular operations. The development process for CPC to reach its full capacity is not completed.⁸⁴ This pipeline is 1,460 km long with planned capacity 1,343 bpd.⁸⁵ CPC project reflects cooperation between Russia and transnational corporations.⁸⁶ Probably in the future, Russia will continue to be the main outlet for oil shipments from Kazakhstan.⁸⁷



Map 5. CPC pipeline

Source: CPC, http://www.cpc.ru/portal/alias!press/lang!en-us/tabID!3357/DesktopDefault.aspx (02.02.2011).

Another transit option for energy resources through the Russian territory is the Baku-Novorossiysk oil pipeline known as the Northern Corridor. It started to pump oil in 1997. The pipeline is going from Baku port in Azerbaijan to Novorossiysk, from where oil with tankers is transported from the Black Sea through the Turkish Straits to the ports of the Mediterranean Sea. It has a potential of exporting 5 million tons of oil per year.⁸⁸ This energy corridor has some negative elements. First of all, oil from Novorossiysk is transported in tankers through the Turkish Straits, which is connected with the ecological risk for the more than 10 million populated metropolis, Istanbul. In addition, the Baku-Novorossiysk pipeline is not economically advantageous transit route for Azerbaijan.⁸⁹ In comparison with the Baku-Tbilisi-Ceyhan pipeline it eventually became less beneficial, which led to the stoppage of pumping oil to Baku-Novorossiysk pipeline since April 2008.



Map 6. Baku-Novorossiysk pipeline



Source: http://www.socar-germany.de/eng/socar/scp.html (04.04.2011).

China is becoming a much more active player in the Caspian energy market as a main world importer of the hydrocarbon resources. Satisfying its energy needs is the country's number one energy security issue. Since 1980, energy consumption in China has increased approximately by 250%.⁹⁰ Chinese government directed its oil companies to acquire interests abroad.⁹¹ Over the past few years, China has poured investments into Kazakhstan and Turkmenistan with two main projects: the Kazakhstan - China oil pipeline and the Turkmenistan - China gas pipeline (also known as Central Asia - China gas pipeline).⁹²

The key infrastructure project, the Kazakhstan – China pipeline (map 6), was built by a joint venture between China National Petroleum Corporation (CNPC) and KazMunaiGaz. The pipeline's annual capacity is 10 million tons, which will be doubled in the future.⁹³ In June 2010, CNPC signed an agreement with KazMunaiGaz to build the second phase of the Kazakhstan - China Gas Pipeline in a bid to tap gas reserves in Kazakhstan.⁹⁴ "The pipeline will be implemented in five stages with the final stage scheduled for completion by 2013", said Sauat Mynbayev, Kazakhstan's energy minister.⁹⁵ It will reach a full capacity of 40 bcm by 2013 when the final stage will be completed.⁹⁶ This transit route is part of a larger project to build pipelines connecting China with Central Asia's natural gas reserves. It will stretch from Turkmenistan, through Uzbekistan and Kazakhstan, and enter China's northwestern Xinjiang region.⁹⁷ This project is a part of China's attempts to secure more energy sources worldwide. This is part of China's overall Silk Road strategy to diversify energy dependence on the unstable Gulf region and build overland routes to hedge against maritime supply disruptions from the Gulf.

Map 6.



CHINA-KAZAKHSTAN PIPELINE

Source: http://www.stratfor.con

Existing infrastructure
Completed Dec. 2005
Under construction

d_balance_power (02.02.2011).



China also cooperates with Turkmenistan in the energy field. Beijing's main economic interest is gaining access to natural gas in this Caspian largest gas producer. On 3 April 2006, China and Turkmenistan signed an agreement on the pipeline construction and a long-term gas supply. According to the bilateral agreement, Turkmenistan supply China with 30 bcm of natural gas annually, beginning from 2009.⁹⁸ Turkmenistan also granted China National Petroleum Corporation a license to develop the Bagtiyarlyk fields, situated near the Uzbek border.⁹⁹ The pipeline from Turkmenistan to China is the first leg of a wider system, gathering gas from Uzbekistan and also from Kazakhstan.¹⁰⁰ The Central Asia - China Gas Pipeline, linking gas fields South Yolotan in Turkmenistan to Xinjiang region was inaugurated in December 2009. The 1,833 km pipeline is expected to reach full annual capacity for 40 bcm by 2012-13.¹⁰¹ In June 2010, Turkmen President Gurbanguly Berdimuhamedov announced a trans - Turkmen pipeline project to connect the Central Asia - China pipeline east of Turkmenistan to the country's western resources.¹⁰²

China appears to have three main goals in the Caspian region: provide security to the region, gain access to natural resources, and consolidate political influence to become a regional power using the Shanghai Cooperation Organization framework.¹⁰³

Another possible transit option for the Caspian resources is Iran. It has an strategic location between Caspian basin and the Persian Gulf. Iran could be a cheap and natural corridor for the oil and gas to the world markets. Most of Iranian oil fields are situated in the south, while the northern part of the country is much more populous. Thereby, Teheran prefers to deliver Caspian crude to its refineries in the north to save the transportation costs.¹⁰⁴ It is difficult to realize this plan without necessary investments which are limited because of the US sanctions. An existing 337 km pipeline from Iran's Caspian port of Neka to Tehran refinery is dependent on Azeri oil deliveries to Neka on Iranian frontier. Its capacity is 175 bpd.¹⁰⁵

Because of the geopolitical position in the center of Eurasia, the Caspian region is becoming significant in the global international relations both politically and economically. It probably contains some of the biggest undeveloped oil and gas reserves in the world. After the collapse of the Soviet Union, the Caspian newly-independent states became open to foreign investments.¹⁰⁶ The region can play an important role in the diversification of oil and gas supplies and consequently in the global energy security. Taking into consideration the fact, that there is a deficit of the energy resources in the global market, we can anticipate, that the foreign investments and transnational companies will be more active in the Caspian region.

Because of the rising instability of the Middle East energy supplies, the Caspian basin has emerged in prominence as an alternative resource for the world's growing energy consumers. For Western states it is important to reduce dependence on hydrocarbon supplies from the Gulf especially after the September 11. The rising energy prices will also have a strong impact on energy security in the Caspian region. For Azerbaijan, Kazakhstan and Turkmenistan, the energy sector is the most important element of their economical growth.

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