## <sup>1</sup>T.A. Kamaljanova, P.Gaur<sup>2</sup>

<sup>1</sup>Candidate of Historical Sc. of International Relations Department of L.N. Gumilyov Eurasian National University, Nur-Sultan, Kazakhstan <sup>2</sup>PhD, Associate Fellow, Center for Research in Rural and Industrial Development (CRRID), Chandigarh, India

# THE ROLE OF THE OIL AND GAS SECTOR IN THE FOREIGN POLICY OF KAZAKHSTAN

#### Abstract

The article discusses the role of the oil and gas sector in the foreign policy of the Republic of Kazakhstan. It is known that the oil industry of Kazakhstan is one of the main sectors of the economy of Kazakhstan. The economic, and therefore social development of the country as a whole depends on the export of this mineral. The article analyzes the main large oil fields such as Tengiz, Kashagan, Karachaganak, Uzen, Zhetybai, Zhanazhol, Kalamkas, Kenkiyak, Karazhanbas, Kumkol, Northern Buzachi and others, which are the most attractive investment sectors for foreign investors. The article also shows the proportionality of the production and consumption of oil and gas resources in the republic, as well as the dynamics of their development from the period of independence to the present. According to some reports, the production of the so-called "liquid currency" exceeds its consumption in the republic. According to Kazakhstan experts, oil production in Kazakhstan will continue to grow in subsequent years, which will undoubtedly attract more investors, especially in the oil and gas sector. Along with this, the negative side of the resource is considered in the work, for example, oil production in the region can destroy its ecosystem and have a negative impact on the environment as a whole. Thus, the article is devoted to the most urgent issues in Kazakhstan and its purpose is to show what role the oil and gas resource plays in the foreign policy of Kazakhstan as a whole.

**Keywords:** oil, gas, oil-producing countries, minerals, natural resources, oil and gas sector, foreign investments, foreign policy of Kazakhstan.

Камалджанова  $T.A.^{1}$ ,  $\Gamma$ ayp  $\Pi.^{2}$ 

<sup>1</sup>к.и.н., и.о.доцента кафедры международных отношений Евразийского национального университета имени Л.Н. Гумилева, г. Нур-Султан, Казахстан <sup>2</sup>PhD доктор, младший научный сотрудник,

Центр исследований в области развития сельских районов и промышленности, Чандигарх, Индия

## РОЛЬ НЕФТЕГАЗОВОГО СЕКТОРА ВО ВНЕШНЕЙ ПОЛИТИКЕ КАЗАХСТАНА

#### Аннотация

В статье рассматривается роль нефтегазового сектора во внешней политике Республики Казахстан. Известно, что нефтяная отрасль Казахстана является одной из основных отраслей экономики Казахстана. Экономическое, а следовательно, и социальное развитие страны в целом зависит от экспорта этого минерала. В статье анализируются основные крупные нефтяные месторождения, такие как Тенгиз, Кашаган, Карачаганак, Узень, Жетыбай, Жанажол, Каламкас, Кенкияк, Каражанбас, Кумколь, Северные Бузачи и другие, которые являются наиболее привлекательными инвестиционными секторами для иностранных инвесторов. В статье также показана пропорциональность добычи и потребления нефтегазо-

вых ресурсов в республике, а также динамика их освоения с периода независимости до настоящего времени. По некоторым данным, производство так называемой «жидкой валюты» превышает ее потребление в республике. По мнению казахстанских экспертов, добыча нефти в Казахстане будет расти в последующие годы, что, несомненно, привлечет больше инвесторов, особенно в нефтегазовый сектор. Наряду с этим в работе учитывается негативная сторона ресурса, например, добыча нефти в регионе может разрушить его экосистему и оказать негативное влияние на окружающую среду в целом. Таким образом, статья посвящена наиболее актуальной проблеме Казахстана, и ее цель - показать, какую роль играют нефтегазовые ресурсы во внешней политике Казахстана в целом.

**Ключевые слова:** нефть, газ, нефтедобывающие страны, полезные ископаемые, природные ресурсы, нефтегазовый сектор, иностранные инвестиции, внешняя политика Казахстана.

## ${}^{1}T.A.$ Камалджанова, ${}^{2}П.$ Гаур

<sup>1</sup>т.ғ. к., Л.Н. Гумилев атындағы Еуразия ұлттық университеті Халықаралық қатынастар кафедрасының доцент м. а., Нұр-сұлтан Қ., Қазақстан <sup>2</sup>PhD доктор, кіші ғылыми қызметкер, ауылдық аудандар мен өнеркәсіпті дамыту саласындағы зерттеулер орталығы, Чандигарх, Үндістан

## ҚАЗАҚСТАННЫҢ СЫРТҚЫ САЯСАТЫНДАҒЫ МҰНАЙ-ГАЗ СЕКТОРЫНЫҢ РӨЛІ

#### Андатпа

Мақалада Қазақстан Республикасының сыртқы саясатындағы мұнай-газ секторының рөлі Қазақстанның мұнай саласы Казақстан экономикасының салаларының бірі болып табылатыны белгілі. Экономикалық, демек, елдің әлеуметтік дамуы жалпы осы минералдың экспортына байланысты. Мақалада Шетелдік инвесторлар үшін неғұрлым тартымды инвестициялық секторлар болып табылатын Теңіз, Қашаған, Қарашығанақ, Өзен, Жетібай, Жаңажол, Қаламқас, Кеңқияқ, Қаражанбас, Құмкөл, Солтүстік Бозашы және басқалар сияқты негізгі ірі мұнай кен орындары талданады. Мақалада сондай-ақ республикада мұнай-газ ресурстарын өндіру мен тұтынудың тепе-теңдігі, сондай-ақ оларды тәуелсіздік кезеңінен қазіргі уақытқа дейін игеру серпіні көрсетілген. Кейбір деректер бойынша, "сұйық валюта" өндірісі оны республикада тұтынудан асып түседі. Қазақстандық сарапшылардың пікірінше, Қазақстанда мұнай өндіру келесі жылдары өсетін болады,бұл әсіресе мұнай-газ секторына көбірек инвесторларды тартады. Сонымен қатар жұмыста ресурстың теріс жағы ескеріледі, мысалы, өңірде мұнай өндіру оның экожүйесін бұзуы және жалпы қоршаған ортаға теріс әсер етуі мүмкін. Осылайша, мақала Қазақстанның ең өзекті проблемасына арналған және оның мақсаты - жалпы Қазақстанның сыртқы саясатында мұнай-газ ресурстарының қандай рөл атқаратынын көрсету.

**Түйін сөздер:** мұнай, газ, мұнай өндіруші елдер, пайдалы қазбалар, табиғи ресурстар, мұнай-газ секторы, шетелдік инвестициялар, Қазақстанның сыртқы саясаты.

This study is due to the rapidly growing attention in recent years to the issues of ensuring the economic interests of the Republic of Kazakhstan with foreign policy tools. Noting the actualization of this direction, it is necessary to especially note that in the general context of the priority tasks of Kazakhstan's international activity, a special role belongs to the oil and gas complex, which is a key sector of the economy of the republic and many oil-producing countries. Therefore, stable provision of energy resources, reliable access to their sources are issues that are currently among the priorities for almost all countries of the world. The energy issue has long gone beyond the domestic framework, both economically and politically. Many current regional conflicts and crises are inextricably linked to oil and gas issues. Under the influence of globalization, the importance of the energy factor in world affairs will undoubtedly increase further [1, p.21].

This also applies to Kazakhstan. In connection with the transition of the country's economy to new economic conditions, implemented, in particular, in the oil and gas industry, the improvement of the organizational structure and forms of management of the republic's oil and gas industry has acquired more international significance. The problems of developing the oil and gas complex of the Republic of Kazakhstan and ensuring its position in the global oil and gas market are among the main ones [1, p.21-22].

Since 1992 government of Kazakhstan has been faced with the issue of how to best develop its oil and gas resources. The size of the reserves compared with the population meant that the potential for revenue was great and represented a source of prosperity [2]. As Usen (2014) noticed Kazakhstan's oil reserve totals are comparable to those of Nigeria and Libya [3].

According to confirmed oil reserves, Kazakhstan is among the 15 leading countries of the world. In November 1899, in the tract Karashungul, the first fountain hit a 40-meter-deep well, laying the foundation for the history of Kazakhstani oil. In April 1911, an oil field of such high quality was discovered in Dossor that it caused a stir on a global scale. Today, Kazakhstan has 3.3% of the world's hydrocarbon reserves. The total estimated recoverable hydrocarbon resources in the republic are 17 billion tons, of which 8 billion tons are in the Kazakhstan sector of the Caspian Sea (KSCS). The oil and gas regions of the republic, where 172 oil and 42 condensate fields are located, occupy an area of about 62% of the territory of Kazakhstan [4].

Henriksen (2013) states that 90% of Kazakhstan's proven oil reserves are concentrated in 15 large fields such as Tengiz, Kashagan, Karachaganak, Uzen, Zhetybai, Zhanazhol, Kalamkas, Kenkiyak, Karazhanbas, Kumkol, North Buzachi, Alibekmola, Prorva Central and East, Kenbai and Royal. Most of the reserves are located in the western part of the country or in the Caspian Sea. According to EIA (2012) about 80 percent of gas reserves are located in the four fields of Kashagan, Tengiz, Karachaganak and Imashevskoe [2, p.30].

The importance of the oil aspect is determined by two main good reasons:

- oil and gas are one of the main natural resources of Kazakhstan, a guarantor of the country's energy security for many decades to come;
- The oil industry is one of the most attractive areas of capital investment for foreign investors, which makes the industry an object of controversy between representatives of various capital groups [4].

The supply of raw materials and semi-finished products continues to dominate in Kazakhstan's exports. Demand in the world market for them is still quite high. Oil export in 2005 amounted to 27 849 billion dollars, and in 2013 increased to 82 511 billion dollars, sales of oil products in 2005 amounted to 910.9 billion dollars, in 2012 this mark reached 3619.9 billion dollars. This fact indicates that Kazakhstani products are in demand on the world market [4]. But at the same time, according to Baimuzhinov, starting in 2012, the export rating of oil from the country is reduced annually by about 11-12% [5].

In addition, according to experts, oil and gas production will grow in the near future. This is primarily due to increased investment due to favorable global market conditions and increasing resource potential through the study of the Caspian and Aral Seas.

Moreover, Usen (2014) states that the Republic of Kazakhstan as a large energy exporter produces more energy than it consumes. For instance, from 1990 to 2012, the country's primary energy production increased from 145.5 Mtce to 249.1. Mtce (Table 1), whereas its primary energy consumption declined from 105 Mtce to 87.3 Mtce (Table 2). The final energy consumption per US\$1,000 of GDP decreased from 2.4 tons of oil equivalent in 1992 to 1.1 tons in 2003 [3, p.53]. The remarkable decrease in Kazakhstan's energy consumption was possible due to efficiency improvement.

Table 1. Kazakhstan's primary energy production and its composition, 1991-2012

Total	Oil	Natural Gas	Nuclear
Mtce	%	%	%

1991	145.5	26.1	6.5	0.1
1992	141.8	26.0	6.8	0.1
1993	125.3	26.2	6.4	0.1
1994	113.9	25.5	4.7	0.1
1995	100.3	29.4	7.1	0.1
1996	99.2	33.1	7.9	0.1
1997	102.1	36.1	9.5	0.1
1998	100.1	37.0	9.5	0.1
1999	99.9	43.1	11.9	0.0
2000	121.7	41.5	11.4	0.0
2001	131.9	43.4	10.6	0.0
2002	139.2	49.4	9.7	0.0
2003	156.2	47.9	10.7	0.0
2004	179.1	48.3	14.8	0.0
2005	185.1	48.3	16.2	0.0
2006	212.6	44.4	14.9	0.0
2007	218.7	44.9	16.0	0.0
2008	233.4	44.6	15.9	0.0
2009	238.6	44.7	16.3	0.0
2010	243.5	45.0	16.7	0.0
2011	246.3	46.8	16.9	0.0
2012	249.1	47.0	16.9	0.0

Source: [3, p.54].

It should be noted that "the composition of energy production in Kazakhstan does not coincide with the composition of its energy consumption, because if oil dominates in the structure of primary energy production, natural gas dominates in the structure of primary energy consumption" [3, p. 55]. As for the production of fuel mixture, the share of oil for the period from 1991 to 2012. increased from 26.1% to 46.8%, while natural gas increased from 6.5% to 16.9% (Table 1). In the case of fuel consumption in the period from 1990 to 2012, the share of oil decreased from 29.5% to 18.5%, while natural gas, on the contrary, increased from 16.1% to 30.5% (Table 2). It turns out the disparity between the composition of production and its consumption.

Table 2. Kazakhstan's primary energy consumption and composition, 1991-2012

	Total	Oil	Natural Gas	Nuclear
	Mtce	%	%	%
1991	105.0	29.5	16.1	0.2
1992	105.8	27.4	16.4	0.1
1993	93.8	23.9	17.8	0.2
1994	83.8	21.1	15.9	0.2
1995	73.1	23.3	19.0	0.2
1996	65.5	22.1	17.8	0.2
1997	58.1	25.2	15.7	0.2
1998	56.2	21.4	16.6	0.3
1999	50.5	19.8	20.2	0.0
2000	58.6	18.0	21.3	0.0
2001	60.4	21.1	21.5	0.0
2002	63.0	21.1	22.7	0.0
2003	68.5	18.4	25.0	0.0
2004	73.2	17.6	27.0	0.0
2005	80.7	17.6	30.9	0.0

2006	85.2	18.3	31.5	0.0
2007	85.9	17.6	29.6	0.0
2008	86.3	17.9	30.1	0.0
2009	86.4	18.1	30.2	0.0
2010	86.9	18.2	30.2	0.0
2011	87.1	18.4	30.3	0.0
2012	87.3	18.5	30.5	0.0

Source: [3, p.55].

One way or another, despite the imbalance between the consumption and production of oil and gas, there is no plan to reduce oil and gas production in Kazakhstan in the near future, but rather to increase as noted above. This means that the country will still continue to export this raw material due to its market demand.

It should also be noted that over the past 20 years, large projects in the field of oil production and gas have begun, new pipeline routes have appeared. In 2007, Azerbaijan, Iran, Kazakhstan, Russia and Turkmenistan at the Caspian summit in Tehran agreed to independently regulate oil and gas issues in the Caspian. The Presidents of these countries signed a declaration that laid the foundation for a future security system based on good neighborliness and mutual trust. The countries declared the Caspian as the "Sea of Peace" [4].

Below in Tables 3 and 4 is an overview of major oil and gas projects in Kazakhstan.

Table 3. Major Oil and Natural Gas Projects. Onshore Projects

Name of	Project Partners	Estimated Reservers	Project status
field/project			
Actobe	CNPC Aktobemunaigaz –	1.17 billion barrels	Produced 116 660
	85%	of oil (2007)	bbl/d of oil, and
Zhanazhol	In the block ADA:		69.6 bcf a year of
Kenkiyak	KNOC (South Korea)		gas (1.948 bcm) in
	- LGIC		2005.
	- Vertom		
Alibekmola and	-KMG – 50 %	Proven reserves of	Produced 1.14
Kozhasai	-Caspian Investments	102 million barrels	million tons of oil
	Resources – 50 %	of oil (2011).	(22 891 bbl/d) in
			2011.
Amangeldy	- Amangeldy Gas	22-25 bcm of gas	Produced 0.32 bcm
	(KazTransGaz subsidiary)	(2008)	of gas in 2007
Arman	-Caspian Investments	Proven reserves of	Produced 76 500
	Resources – 50 %	2.8 million barrels	tons (1 536 bbl/d)
	-Shell – 50 %	of oil (2011).	of oil in 2011
Emba	-KMG – 51 % -MOL Rt.	500 million barrels	Produced 57 700
	Vegypszer (Hungary) – 49	of oil (2007).	bbl/d of oil in 2004,
	%		3.1 bcf of gas
			(0.086 bcm) in
			2004.
Karachaganak	Foreign investors share -	Gross reserves of	Producing 202 900
(Karachaganak	90%	2.4 billion barrels of	bbl/d, 1.1 mmcf/d
Petroleum	-BG Group (UK) (joint	condensate, 16	natural gas (2005).

Operating B.V.)  Karakuduk	operator) - 29,25 %, -ENI (joint operator) - 29,25 % -Chevron - 18%, -Lukoil - 13,5%, -KMG - 10 % Karazhanbasmunai: - Citic	286 million barrels	244 000 bbl/d of condensate in first half of 2012. 70% of oil is exported through CPC pipeline. Future development plan foresees an investment of \$ 1.5 billion by 2020 Produced 36 200
	Resources Holdings (China) – 50% -KMG – 50 %	of oil (2011).	bbl/d in 2011.
Karazhanbas	Karazhanbasmunai: -Citic Resources Holdings (China)— 50 % -KMG – 50 %	286 million barrels of oil (2011).	Produced 36 200 bbl/d in 2011.
Kazgermunai	KMG – 50% -Petro Kazakhstan (China) – 50 %	100 million barrels of oil (2007).	Produced 3.0 million tons of oil (60 240 bbl/d) in 2011.
Kumkol North	Turgai Petroleum: -Lukoil - 50% -PetroKazakhstan – 50 %	Proved reserves of 86 million barrels of oil, 29.7 bcf of gas (0.83 bcm) (2011).	Producing 2.5 million tons of oil (50 200 bbl/d) in 2011.
Mangistau	Mangistaumunaigaz: - KMG – 50 % -CNPC – 50 %	1.4 billion barrels of oil (2007).	Produced 117 000 bbl/d of oil from Jan- June 2012, and 33.3 mmcf/d of gas in 2005.
North Buzachi	-CNPC - 50% -Caspian Investments Resources (Russia/China) - 50%	Proved reserves of 134 million barrels of oil (2011).	Produced 1.97 million tons of oil (39 558 bbl/d) in 2011.
Tengiz	TengizChevroil Share of foreign investors - 80%	6-9 billion barrels of oil (2013).	Produced 25.8 mill tons of oil (579 000 bbl/d), 1.3 million tons of LPG and 6.9 bcm in 2011.  The majority of oil is exported through CPC.  The project for the future expansion of Tengiz by 2023, investments amount to 38 billion US dollars)
Uzen	Uzenmunaigaz (KMG subsidiary) – 100 %	Proved and probable reserves of	Produced 5.1 million tons of oil

166 million tons of	`
oil (1.2 billion barrels) (2011).	2011.
barrers) (2011).	

Note: Some of the projects include multiple fields. The table is as of 31. December 2012. Numbers in brackets are converted to with BP's conversion factors (BP 2013b).

Source: [6, p.3; 2, p.30-31].

**Table 4. Caspian Sea Projects** 

Name of	Project Partners	Estimated	Project Status
field/project		Reserves	
Kashagan:	North Caspian Operating	9 to 13 billion	PSA. Production is
Kashagan E	Company (NCOC).	bbl of oil	estimated to start in the first
Kashagan W	The share of foreign	recoverable	half of 2013. Initial
Kairan Aktoty	investors - 83%.	(2007).	production of 75 000 bbl/d,
Kalamkas	ENI (Italy) – 16.81%		and max of 1.2 million
	KMG – 16.81%		bbl/d.
	Total (France) – 16.81%		
	Shell (UK/Nederland) –		
	16.81%		
	ExxonMobil (US) -		
	16.81%		
	ConocoPhillips (US) –		
	8.40%		
	Inpex (Japan) – 7.56%		
Kurmangazy	KMG – 50%	550 to 1800	PSA. Exploration.
	Rosneft (Russia) – 50%	million tons of	
		oil recoverable	
		(4 to 13 billion	
T 1 1/		barrels) (2013).	
Tyub-Karagan	KMG – 50% Lukoil	N/A	PSA. Exploration. Lukoil
	(Russia) – 50%		financing 100 % of the
			exploration.
Atash	KMG – 50% Lukoil	N/A	Exploration contract.
	(Russia) – 50%		Exploration. Lukoil
			financing 100 % of the
			exploration.
Zhemchuzhiny	Shell (UK and	N/A	PSA. Exploration. Shell
("Pearls Block")	Nederland) – 55 %		and Oman Oil Company
	KMG – 25%		financing 100 % of the exploration.
	Oman Oil Company		enprotution.
3.6.11	(Oman) – 20%	<b>3.</b> 774	DGA E. I.
Makhambet	Atyraumunaigaz. (KMG subsidiary)	N/A	PSA. Exploration.
Bobek	Atyraumunaigaz. (KMG	N/A	PSA.
DOUCK	subsidiary)	1 <b>1</b> / <i>L</i> 1	1 0/1.
Imashevskoe	-KMG	Over 100 bcm	Joint Russian-Kazakh
	-Gazprom (Russia)	of gas	agreement on exploration.

Khvalynskoe	Lukoil – 50%  -KMG - 25%  -Total (France) – 17%  -GDF Suez (France) – 8%	N/A	Negotiations. Russia's jurisdiction.
Tsentralnoe	-KMG – 50 % -TsentrCaspNeftegas (Gazprom/Lukoil) – 50%	N/A	Negotiations. Russia's jurisdiction
Abai	-KMG N/A -Statoil (Norway)	N/A	Negotiations.
Isatai	-KMG N/A -ENI (Italy)	N/A	Negotiations.
Darkhan	-KMG -Chinese consortium headed by CNOOC.	N/A	Negotiations.
N-block	-KMG – 51% -ConocoPhillips (US) – 24.5% - Mubadala Development Company (UAE) – 24.5 %	270 million tons of oil (1.98 billion barrels) (2013).	PSA. Exploration.
Satpayev	-KMG – 75 % -ONGC (India) – 25 %	N/A	Exploration and production contract.
Zhambai South – Zaburunie South	-KMG – 50% -Repsol (Spain) – 25% -Caspian Investments Resources (Russia/China) – 25%	N/A	PSA. Exploration.
Zhambyl	-KMG -Korean consortium lead by KNOC.	N/A	Negotiations.

Note: Some projects include several fields. Numbers in brackets are converted to with BP's conversion factors (BP 2013b).

Source: [6, p.3; 3, p.32-33].

Currently, the North Caspian Sea Production Sharing Agreement (NCSPSA) project is Kazakhstan's largest direct foreign investment project, creating local jobs and business opportunities. The Kashagan Phase 1 project cost approximately \$55 billion, with local content in goods, works, and services valued at more than \$13.3 billion since 2004. The project will produce for decades and its shareholders, including ExxonMobil, expect to contribute billions of dollars in direct revenue to the Kazakhstani government [7].

As we see, the main investments in Kazakhstan are directed to the oil industry. According to the Santander report, 70% of investments go to the oil industry (49.8% according to the statistics of the National Bank).

In general, according to the National Bank of Kazakhstan, the total investment from 1993 to 2018 amounted to \$301.1 billion. Foreign direct investment in 2018 amounted to \$24.3 billion and \$6 billion for the first quarter of 2019, which is 7.8% more than the same period last year. The Ministry of National Economy of Kazakhstan plans to increase the annual inflow of foreign direct

investment to \$34 billion by 2025 [5].

Along with this, transnational companies that are engaged in direct investment in a particular sector of the country's economy are gaining great importance. A large role is played by the many foreign companies present in the Kazakhstan market, investing large capital, including corporations from 45 countries, including the USA, the Netherlands, Great Britain, France, Italy, Canada, China, Japan, Russia, Switzerland and others [8]. The conducted research and analysis of these fields shows that each field is invested by at least one or two foreign companies. Each foreign company has significant shares in projects related to oil production [5].

Table 5. Countries - investors in the oil aspect of the Republic of Kazakhstan [5]

Countries – investors	Investment period
Korea	1995-1996
United Kingdom	1997
USA	1998-2015
Italy	1999-2015
China	2005-2015

However, despite all these positive aspects, there are also negative ones. In terms of investments, the main problem for Kazakhstan remains their attraction to other sectors of the economy for their further development, while the economy continues to depend on oil prices.

According to the World Bank, if the republic does not take the necessary measures and continues to rely on oil, the country will face a slowdown in the economy and stagnation due to the deterioration of overall productivity. The institute offers Kazakhstan to take the path of economic diversification, reduce the role of the state in the economy, fight corruption more aggressively and comprehensively and restructure the economy to stimulate private investment.

The CIA World Fact Book states that corruption, bureaucracy, and arbitrary law enforcement are the main sources of concern for investors in Kazakhstan, especially at the regional level. Another concern is the banking sector, which suffers from poor asset quality and lack of transparency [5].

From an economic point of view, investors in the mining industry are often faced with the presence of investment risks. In the case of oil-field development, these risks are related to the fact that the project could be unprofitable in terms of poor quality of oil, which, in turn, will increase production, refining and transportation costs, oil market price may change, norms and quotas for drilling and production of energy resources could be introduced, and other risks. These risks may have serious harmful consequences to the financial position and reputation of the petroleum producer as well as negatively affect the environmental, social and economic situations of the region [9, p.31].

In addition, factors of technology and human capital play an important role in the development of the extractive industries. Meeting the needs of these factors in the domestic market allows oil and gas companies to build their own potential, reducing dependence on foreign capital. According to the global innovation index and the human development index, Kazakhstan ranks last among countries such as Canada, Russia, Norway and Australia that also have oil and gas reserves (table 6 below). The weakest point in the innovation implementation section of Kazakhstan is the degree of market development, human capital and research, which are one of the necessary conditions for using the country's investment potential [6].

Table 6. Comparison of some indices by group of countries [6, p.13]

Countries	Human	Global Innovation	<b>Business Ease Index</b>

	development index	Index	
	Index (place in the overall ranking)	Index (place in the overall ranking)	Index (place in the overall ranking)
Australia	0.939 (3)	51.98 (20)	80.13 (14)
Russia	0.816 (43)	37.90 (46)	77.37 (35)
Norway	0.953 (1)	52.60 (19)	82.95 (8)
Kazakhstan	0.8 (58)	31.42 (74)	77.89 (36)
Canada	0.926 (12)	53.00 (18)	79.26 (18)

Furthermore, for Kazakhstan, oil production in the region can destroy its ecosystem and have a negative impact on the environment as a whole. In this regard, Cherdabaev (2011) distinguishes two main problems: 1) it is environmental pollution caused by the presence of a large number of drilled oil and gas wells, many of which are not exploited and mothballed. Hydrocarbons seep into the sea, polluting it; 2) this is the seismic state of the region. So, the results of seismography of the Institute of Oceanology of the Russian Academy of Sciences in the Aktau region, conducted in 2010, are alarming. In total, 45 remote seismic events were recorded at a distance of 250-600 km from the place of implementation. During the study, three moderate earthquakes were recorded in the southern Caspian - off the coast of Iran-Azerbaijan [10].

Therefore, in order to prevent the possible consequences for the region and the country, oil production companies, in addition to internal regulations of life and environment safety, are required to carry out the requirements of "the Environmental Code", "the Law on Protection", "Reproduction and Use of Wildlife", "the Land Code", "the Water Code", and "the Forest Code" [9, p.32].

Undoubtedly, the attractiveness of Kazakhstan for investors, obviously, will continue to increase particularly in oil and gas sector. But it will also depend on solving issues such as improving the quality of infrastructure, diversifying the economy, eliminating corruption (including nepotism), reducing state participation in the economy, political stabilization, improving property rights and stimulating the development of the service sector. In the meantime, investments will remain dependent solely on the attractiveness of resources that the republic possesses [5].

At present, oil is a resource of strategic importance. As a result of the industrial revolution, it has become the object of persecution of many leading powers. The struggle for the possession of natural resources is the source of the main modern wars and the cause of the destabilization of the country. An analysis of the events of the last decade shows that at the heart of every international conflict lies an energy interest. For example, Iraq, Nigeria, Russia, South Sudan and Syria receive the bulk of their revenues from the sale of oil, and large energy companies have huge power and influence in these and other countries involved in this process. The so-called terrorist organization called ISIS would not have been able to achieve today's results if it had not occupied key oil-producing areas in Syria and seized oil refining capacities in Iraq. Another striking example is the conflict in Ukraine, which is one of the hot spots in the international arena. Another example is the civil war in Sudan, between south and north, one of the reasons for which is the struggle for oil deposits in the southern region and their transportation through the north. According to many researchers, these resources would not have existed; many of the conflicts taking place in the modern world would have gradually exhausted themselves due to a lack of funds for the purchase of weapons and financing of troops. But while oil is flowing, the conflicting parties will have both the means and incentives to continue the struggle.

Kazakhstan in its policy and economy adheres to multi-vector and diversification, which helps to prevent many risks that destabilize the national economy. Kazakhstan cooperates with such

international oil institutes as OPEC and MEA. The sale of Kazakhstani oil is carried out in the Asian direction, European, as well as in the markets of the CIS countries. The republic cooperates with many countries, such as Turkmenistan, Russia, China, the USA and the EU. The reasons for the attractiveness of our republic are primarily, as mentioned above, rich resources. Secondly, relatively political stability and security, and finally, geographical location [4].

As you know, the "Caspian Pipeline Consortium" is one of the priority directions of export supplies of Kazakhstani oil. The CPC oil pipeline with a total length of 1,510 km (of which 452 km is the Kazakhstan section) connects the Tengiz Kazakhstan oil field and the South Ozereyevka oil terminal on the Black Sea (near the port of Novorossiysk) [6].

According to National Bank of Kazakhstan Report (2019), in 2017, the CPC pipeline transported 55.1 million tons of oil, including 49.6 million tons of Kazakhstani oil.

At present, in Kazakhstan, in addition to CPC, alternative export pipeline routes are also being considered:

- 1) Aktau Baku-Batumi (Trans-Caucasus corridor). About 2 million tons of oil per year is already being transported in the Baku-Batumi section. In accordance with the additional agreement on the modernization of the pipeline, signed by Kazakhstan, Azerbaijan and Georgia, its throughput will increase to 10 million tons;
- 2) Trans-Caspian route. Using the Trans-Caspian route will allow integration with the Baku-Ceyhan pipeline. The project cost is \$ 4 billion, and throughput from 50 to 70 million tons per year;
- 3) Kazakhstan-China. China is an attractive market for Kazakhstan, as the demand for oil in the region is constantly growing. According to the proposed route, West Kazakhstan oil will be transported to the western regions of China. The total length of the pipeline will be about 2800 km, the minimum throughput is 20 million tons of oil per year;
- 4) The southern route. This route, which runs through Turkmenistan and Iran to the Persian Gulf terminals, provides the shortest transportation route for Kazakhstani oil. The total length of the pipeline will be 2137 km, throughput at least 25 million tons per year [11].

Regarding the Kazakhstan gas pipeline, it should be noted that most gas pipelines (as well as oil pipelines) are located in the west of the republic. Several pipelines, which, starting in Turkmenistan and Uzbekistan, pass through Western Kazakhstan to Russia, the Kazakh cities of Aktyubinsk, Uralsk, Kustanai and Rudny are now supplied with Uzbek gas. These transport routes, in particular pipelines from Turkmenistan, are not operated at full capacity and therefore can potentially also be used by Kazakhstani producers to export gas to Russia and Europe. The bulk of the gas supplied through these two pipelines enters Gazprom's system. Consequently, any project involving the export of Kazakhstani gas to the world market, Kazakhstan will most likely discuss with Gazprom until alternative routes are developed [11].

The domestic gas pipeline system of Kazakhstan supplies gas only to some regions of the country. Through these pipelines, gas from Uzbekistan is transported to southern Kazakhstan (the cities of Shymkent, Taraz and Almaty). At the same time, most of the country (including the cities of Ust-Kamenogorsk, Semipalatinsk, Pavlodar, Astana, Karaganda and Taldykurgan) still does not have a gas pipeline infrastructure and is forced to rely on other energy sources.

Existing Kazakhstan gas pipelines require significant repairs. According to KazTransGas, in the near future it is planned to begin the reconstruction of the main gas pipeline Central Asia - Center, which will be financed both from current tariff revenues and from external sources. The Central Asia - Center gas pipeline, with a total length of 4495 km, is the main pipeline connecting the states of the region with Russia.

Given the gas demand of the northern regions and the capital, KazTransGas also plans to build a pipeline that would be connected to the Gazprom system and provide gas transportation to Petropavlovsk, Kokshetau, Astana, and possibly Karaganda and Temirtau [11].

Of course, Kazakhstan needs the further development of its gas pipeline infrastructure to develop its gas fields. Therefore, gas pipelines belong to priority sectors of the economy of Kazakhstan, for which special tax benefits and preferences are provided.

To summarize the foregoing, it should be noted that the production, transportation and export of

oil began to be seen as an opportunity to strengthen the influence of Kazakhstan in foreign policy. State approval of various energy companies, the work of energy companies in the republic act as a way of pressure or support of political allies of Kazakhstan. This defines a new level and system for establishing new relations with the countries of the world.

Today, countries such as the United States, Russia and China are the most important vectors and partners in Kazakhstan's foreign policy, which in turn is reflected in the development of Kazakhstan's energy sector.

#### References:

- 1. Misina S.E. Neft' kak istochnik energii I factor "Bol'shoi politicheskoi igry" [Oil as source of energy and the factor of the "Big political game"] // Bulletin of Kazakh National University named after Al-Farabi. N 3-4 (53-54). 2001. PP. 21-24
- **2.** Henriksen K.-E.B. Kazakhstan's Energy in Foreign Policy: Oil and Gas in the Multi-vektor Policy. Oslo: University of Oslo, 2013.
- 3. Usen, 2014. Geopolitical Dynamics of Energy Cooperation between Kazakhstan and China. Pennsylvania: Jayrad, 2014. 214 p.
- 4. Azizbaeva N., Matakbaeva L.H. Bezopasnost Neftegazovaya otrasl Energetika Investitsii [Safety Oil and gas field Energy investments]. Bulletin of KazNPU named after Abai. 2016.
- 5. Baizhuminov S. Mozhet li Kazakhstan uvelichit' pritok inostrannyh investitsii. Vosem' factorov imeushih znachenie dlya investorov [Can Kazakhstan increase the number of foreign investments. Eight factors which is important for investors] // Vlast. Power. 9 August 2019. URL: https://vlast.kz/jekonomika/34726-mozet-li-kazahstan-uvelicit-pritok-inostrannyh-investicij.html
- 6. National Bank of Kazakhstan Report, 2019. Analiz istochnikov finansirovaniya nefregazovyh proektov na primere gruppy stran [Analysis of sources of financing oil and gas projects using the example of a group of countries]. Analytic note Balance of Payments and Currency Regulation Department. May, 2019. 16 p.
- 7. U.S. Embassy and Consulate in Kazakhstan, 2018. Fact Sheet: The United States and Kazakhstan An economic Partnership for the 21<sup>st</sup> Century. URL: https://kz.usembassy.gov/fact-sheet-us-kz-economic-partnership-21st-century/
- 8. Jantureeva E. Neft' i gas Kazakhstana. Zapasy, dobycha, investitsii [Oil and gas of Kazakhstan. Reserves, production, investments]//Kazakhstan Business magazine. -2010. N4.
- 9. Yermekkaliyeva A. Regulation of the Oil Industry: The Case of Kazakhstan. Ottawa, Ontario: University of Ottawa, 2013. 50 p.
- 10. Cherdabaev R.T. Kaspii: dvadtsat' let spustya. Caspian: twenty years later. Kazakstanskaya Pravda. Kazakhstani truth. 3 August 2011
- 11. Krug K.Obzor neftegazovyh nruboprovodov Kazakhstana [Overview of oil and gas pipelines in Kazakhstan] //Kazakhstan Business Magazine. N3-4. 2001

### Пайдаланылған әдебиеттер тізімі:

- 1. 1. Мисина С.Е. Мұнай энергия көзі және "үлкен саяси ойын" факторы ретінде // Әл-Фараби атындағы Қазақ ұлттық университетінің хабаршысы. N 3-4 (53-54). 2001. Б. 21-24
- 2. 2. Хенриксен к. е. б. Қазақстанның сыртқы саясаттағы энергетикасы: көпвекторлы саясаттағы Мұнай мен газ. Осло: Осло Университеті, 2013.
- 3. 3. Usen, 2014. Қазақстан мен Қытайдың энергетикалық ынтымақтастығының геосаяси динамикасы. Пенсильвания: Джейрад, 2014. 214 б.
- 4. 4. Азизбаева Н., Матакбаева Л. х. кен орындарының энергетикасына мұнай-газ инвестицияларының қауіпсіздігі. ҚазҰПУ хабаршысы. Абай. 2016.
- 5. С.байжұминов Қазақстан шетелдік инвестициялар ағынын ұлғайта ала ма? Инвесторлар үшін маңызы бар сегіз фактор [Қазақстан шетелдік инвестициялар санын көбейте ала ма? Инвесторлар үшін маңызды сегіз фактор / / билік. Күш. 9 тамыз 2019 ж. URL: https://vlast.kz/jekonomika/34726-mozet-li-kazahstan-uvelicit-pritok-inostrannyh-investicij.html
- 6. Қазақстан Ұлттық Банкінің 2019 жылғы есебі. Елдер тобының мысалында аймақтық емес жобаларды қаржыландыру көздерін талдау. Төлем балансы және валюталық реттеу департаментінің аналитикалық жазбасы. Мамыр 2019 ж. 16 б.

- 7. 7. Қазақстандағы АҚШ елшілігі мен консулдығы, 2018. Ақпараттық бюллетень: Америка Құрама Штаттары мен Қазақстан-21 ғасырдағы экономикалық серіктестік. URL: https://kz.usembassy.gov/fact-sheet-us-kz-economic-partnership-21st-century/
- 8. 8. Жантуреева Е. Қазақстанның мұнай және газы. Қорлар ,өндіру, инвестициялар [Қазақстанның мұнай және газы. Қорлар, өндіру, Инвестициялар//Қазақстандық іскерлік журнал. -2010. N4.
- 9. 9. Ермекқалиева а. мұнай саласын реттеу: Қазақстан мысалында. Оттава, Онтарио: Оттава университеті, 2013. 50 б.
- 10. 10. Чердабаев Р. Т. Каспий: жиырма жылдан кейін. Каспиан: жиырма жылдан кейін. Казахстанская правда. Казахстанская правда. 2011 жылғы 3 тамыз
- 11. 11. Шеңбер к. Қазақстанның мұнай-газ құбырларына шолу // Қазақстандық іскерлік журнал. N3-4. 2001