Kazakhstan's Energy Policy on the Eve of Kashagan Oil Field Production

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The article examines the geopolitics of transport communications in Central Asia and the Caspian, and Kazakhstan's energy policy. Kazakhstan suffers from geopolitical isolation and preoccupied with identifying new inroads to foreign markets. This has become the main focus of its energy policy. Despite involvement by the Western countries, China, and Russia in regional energy geopolitics, Kazakhstan faces tough geopolitical choices. Astana is still in search of an effective energy policy that would enable further diversification of its transport communications. The existing transit routes for the Kashagan oil, as proposed by Russia and other external actors, do not fully support the energy security of Kazakhstan. As for Kashagan oil field production, the article concludes that the main obstacles include several complicated issues such as technical problems, as well as risks to the environment of the Caspian Sea. The new context, namely the dramatic decline of oil prices and its consequences for the global economy, makes it difficult to project a clear vision for the project's success.

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Introduction

Kazakhstan is a country with abundant natural resources. It has the largest hydrocarbon, uranium, chromium, lead, zinc, manganese and copper reserves in the Caspian basin and Central Asia, and ranks in the top ten for coal, iron, and gold reserves in the World. Of these resources, oil and gas constitute the backbone of the national economy. According to the International Energy Agency (IEA), Kazakhstan exported about 1.69 million barrels of oil per day in 2014.[1] Oil revenues make up the biggest share of country's budget. Until 2015, oil revenues accounted for 60% of Kazakhstan's budget, and 33% of GDP. However, income is set to fall. In October 2015 and again in 2016, Astana revised its budget projections, which were originally based on average forecast oil prices of US$90 per barrel, to a more conservative US$80 and finally to more realistic US$52 per barrel.[2]

On October 14 2016, the oil production in Kashagan – the project set to double the country's oil output once fully exploited – was finally launched. This was promising news in terms of increasing energy revenues amid the decline in oil prices. This has been the subject of intensive discussion among big business and political circles in Kazakhstan and beyond. It signals significant change for the economy of Kazakhstan, as well as the economies of other the littoral states in the Caspian region. However, current and emerging barriers to the effective development of the Kashagan project have given rise to speculation. Although the national government and Western companies are full of hope regarding Kashagan, this paper projects a cautious forecast, arguing that the large-scale crude oil production at Kashagan remains under question. This paper examines the development of Kazakhstan's energy policy within the framework of the geopolitics of transportation in Central Asia and the Caspian basin, and analyzes the obstacles to successful commercial crude oil production in the Kashagan field. The paper, moreover discusses the environmental and technical challenges of this project taking into accounts the specific geographic and weather conditions of the North Caspian environment.

1 Badykov, N. (2015) 'A new era for Caspian oil and gas', 13 February, Available at: https://www.csis.org/analysis/new-era-caspian-oil-and-gas (Accessed: 29 September 2016).

2 Vidyanova, A. (2016) 'Zalojennaya tsena na neft v budjet na 2016 god realistichna', Kapital, 2 January, Available at: https://kapital.kz/economic/47247/zalozhennaya-cena-na-neft-v-byudzhet-na-2016-god-realistichna.html (Accessed: 21 November 2016).

Kazakhstan's energy policy and geopolitics of transportation

Europe to the West and China to the East – especially with its rapidly growing demand - are among the main consumers of Kazakhstan's crude oil. However, transport diversification issues are particularly sensitive for Kazakhstan, as the economy is largely dependent on the implementation of the petroleum feedstock in global markets. Since Russia is the main transit route for Kazakhstan's energy exports, Kazakhstan's energy policy aims to promote the construction and distribution of new oil and gas pipelines directly to European and Chinese markets, either through Russia or bypassing it.

Kazakhstan's energy policy aims to organize transportation communications and the diversification of crude oil supplies towards oil-importing countries. If Kazakhstan is able to sustain the cycle of energy supplies to the final consumers, via Russia or another route, its energy policy will be more efficient and independent. Under these circumstances, Kazakhstan is interested in guaranteeing direct supplies in all directions – whether to Europe, China, or Russia.

In terms of transportation geopolitics, Kazakhstan is focused on ensuring affordable and reliable energy supplies to Europe, Turkey and China in collaboration with other both energy-rich littoral states and transit states. However, its geographical isolation from world energy markets and the emerging divide between the United States and Russia in regard to transportation communications and geopolitics began at the end of 1990s. This has been the main obstacle to the promotion of Kazakhstan's energy policy.

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Russia and the United States, two major world powers, seem to continue pursuing competing regional policies. Russia has been always interested in maintaining its monopoly over Kazakhstan in regard to transit routes. Russian policy in Kazakhstan has been led by four major Russian energy companies: Gazprom, Lukoil, Transneft, and Rosneft. These companies allow Moscow to exert influence over the energy sector of Kazakhstan, and prevent Beijing and other powers from dominating Kazakhstan's economy. The role of those four countries in local energy projects gives Russia access to vast oil and gas reserves, while consolidating bilateral

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links in the energy, transport, space, and agriculture sectors.[3] The situation is aggravated by the fact that Russian transport monopolist Transneft, together with another Russian company, Caspian Consortium Company, remains the main operator and one of the biggest shareholders of Caspian Pipeline Consortium (31%).[4]

Russia's ultimate aspiration is the creation of a Eurasian energy consortium between Russia, Iran, China and Central Asian oil extracting states. This could be a disaster for Western energy policy in the region.

The United States has been conducting a competing policy in the region; Washington supported energy exports to Europe and Turkey, as well as to China from oil fields in Kazakhstan developed by the US companies, via loyal or at least friendly countries. Ariel Cohen, a political scientist currently serving as the Director of the Center for Energy, Natural Resources and Geopolitics at the Institute for Analysis of Global Security, claims that "What is needed in Central Asia is a policy that allows the United States to continue to diversify its energy supplies."[5] He suggests that we continue to encourage the governments of India, China, and Pakistan to create alternatives to the Russian energy transit monopoly by establishing new energy transit routes (pipelines, shipping lines, and railroads) that head west and, in some cases, east and south.[6] Richard Morningstar, a former special advisor to President Clinton on Caspian energy issues and the Obama administration's special envoy for Eurasian energy, gives a broad description of the US energy policy in Central Asia. According to him, "the US position was and still is that Russia should not have a monopoly on pipelines."[7]

In light of this assessment, it is also important to recognize that it has appeared as if the United States has long tried to prevent

3 Guschin, A. (2015) 'China, Russia and the Tussle for Influence in Kazakhstan: The two powers are pursuing competing interests in Central Asia', 23 March, Available at: http://thediplomat.com/2015/03/china-russia-and-the-tussle-for-influence-in-kazakhstan/ (Accessed: 12 November 2016).

4 Kazakh Officials: Date Set For Kashagan Relaunch. FSUOGM - Former Soviet Union Oil & Gas, 14 September 2016, Week 36, Issue 898, Available at: http://newsbase.com/topstories/kazakh-officials-date-set-kashagan-relaunch (Accessed: 25 September, 2016).

5 Cohen, A. (2006) 'U.S. Interests and Central Asia Energy Security', Backgrounder. № 1984, 15 November, Available at: http://www.heritage.org/research/reports/2006/11/us-interests-and-central-asia-energy-security. (Accessed: 21 November 2016).

6 Ibid.

7 Morningstar, R. (2006) 'The Baku-Tbilisi-Ceyhan Pipeline: A Retrospective and a Look at the Future,' Central Asia-Caucasus Institute Analyst, 23 August, Available at: http://www.cacianalyst.org/publications/analytical-articles/item/11010-analytical-articles-caci-analyst-2006-8-23-art-11010.html?tmpl=component&print=1 (Accessed: 21 November 2016).

bilateral rapprochement in the Russian-Iranian, Russian-Chinese ties. Concerns about possible convergence of Russian-Chinese relations first appeared among Western analysts at the end of 1990s,[8] while fears of Russian and Iranian collective opposition to the US-led trans-Caspian pipeline projects emerged in the second half of the 2000s.[9]

However, concerns over rapprochement between Russia and China on the one hand, and Russia and Iran on the other, are exaggerated. Despite efforts to emphasize shared security, political, energy and economic interests in Central Asia, Russian-Chinese and Russian-Iranian ties remain uncertain and doubtful. Sooner or later, the increasing Chinese influence in Kazakhstan and Central Asia "will erode the foundation of the partnership (between China and Russia)"[10], "whilst Russian-Iranian ties are still complicated, and are likely to remain complicated long into the future."[11]

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In the meantime, Kazakhstan has won promises of cooperation, but no real deal for bypassing Russia. In fact, instead of forcing Russia to support the diversification of transportation communications and maintain direct crude supplies from Kazakhstan towards oil importing countries, the United States has frequently compromised with Russia. This has been especially true since the early 2000s, with the aim of ensuring crude supplies from Tengiz and Korolev oil fields in the Atyrau region of Kazakhstan (Tengizchevroil) through the Caspian Pipeline Consortium" (CPC).[12] Even Richard Morningstar, who promoted the diversification of energy supplies from the Caspian and hence advocated for active engagement by Western powers in the region, was compelled to declare, "the United States extended strong support to this project (Caspian Pipeline Consortium)."[13]

8 National Intelligence Estimate. 'Russian-Chinese Relations: prospects and implications.' Approved for release. Available at: https://www.cia.gov/library/readingroom/docs/DOC_0005526244.pdf. (Accessed: 21 November 2016).

9 Bhadrakumar, M. (2007) 'Russia, Iran and Eurasian Energy Politics,' 5(12). Available at: http://apjjf.org/-M-K-Bhadrakumar/2613/article.html. (Accessed: 21 November 2016).

10 Marantidou, V. and Cossa, R. (2014) 'China and Russia's Great Game in Central Asia' *The National interest*, 1 October, Available at: http://nationalinterest.org/blog/the-buzz/china-russias-great-game-central-asia-11385 (Accessed: 22 November 2016).

11 Katz, M.N. (2012) 'Russia and Iran', *Middle East Policy Council*, 19(3), Available at: http://mepc.org/journal/middle-east-policy-archives/russia-and-iran?print. (Accessed: 22 November 2016).

12 CPC is the largest international oil transportation project with participation of Russia, Kazakhstan and western producer companies, which was established for transportation of crude oil from large oil fields of West Kazakhstan and from Russian producers. For more see the website of the Caspian Pipeline Consortium at the following link http://www.cpc.ru/en/about/Pages/default.aspx.

13 Morningstar, R. (2006) 'The Baku-Tbilisi-Ceyhan Pipeline: A Retrospective and a Look at the

As a consequence, Kazakhstan has found itself held hostage to compromise policies between Russia and the United States.

Meanwhile, Sino-Kazakh ties can be regarded as a success story in terms of Kazakhstan's energy policy. China's intensive focus on expanding transport routes to its western border should be considered within the framework of China's energy geopolitical tactics in Central Asia. "As a neighbor region, Central Asia seems the most likely to play an important role in the Chinese strategy to reduce its dependence on energy supplies from the Middle East".[14] A combination of mutual interests of China, Central Asian countries (including Kazakhstan), and Western countries in regard to projects seeking to diversify energy supplies from the Caspian and Central Asian is obvious. The 2009 China-Central Asia oil and gas pipeline system is the best example of a recently completed project; at this point Russia's domination over transit routes began to gradually shrink. China's energy geopolitics also assumes significant increases in its role in implementing new energy and infrastructure projects in Central Asia. Given that Beijing hopes to ensure energy supplies to the Chinese market, its strategy is beneficial to China and Kazakhstan.

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China's new "One Belt, One Road" strategy signifies the importance of Kazakhstan and Central Asian countries in the development of the Chinese economy. Geographical proximity and the availability of rich energy deposits in Central Asia provide China with cheap sources of energy. China has already invested some USD 30 billion in the energy sector of Kazakhstan.[15] At the same time, China's energy geopolitics should be considered within the context of security issues and economic development of the Western parts of China. In this regard, there is significant role for cooperation between China, Kazakhstan, and other Central Asian countries in the fight against Islamic extremism and ethnic separatism in the Xinjiang Uygur Autonomous Region.

Iran and Turkmenistan to the south, and Azerbaijan to the west, can either compete or act as the partners of Kazakhstan in the transportation of natural resources from the Caspian to west-

Future' *Central Asia-Caucasus Institute Analyst*, 23 August, Available at: http://www.cacianalyst.org/publications/analytical-articles/item/11010-analytical-articles-caci-analyst-2006-8-23-art-11010.html?tmpl=component&print=1 (Accessed: 21 November 2016).

14 Pop, I. (2010) 'China's Energy Strategy in Central Asia: Interactions with Russia, India and Japan' *UNISCI Discussion Papers*, Nº 24, *University of Oradea*, p. 197.

15 Marantidou, V. and Cossa R.A. (2014) 'The great game in Central Asia,' *PacNet* № 73, 29 September, *Pacific Forum CSIS*. Available at: https://csis-prod.s3.amazonaws.com/s3fs-public/legacy_files/files/publication/Pac1473.pdf (Accessed: 20 September 2016).

ern consumer markets via Iran, Turkmenistan, or Azerbaijan. In this regard, Baku-Tbilisi-Ceyhan pipeline should particularly be mentioned as the first ever project to break Russian monopoly over the export of large quantities of Caspian oil to the World market. Astana is seeking to attract potential partners from all directions for cooperation in energy projects as a necessary addition to the common strategy of oil-exporting countries.

A key element in Kazakhstan's energy policy in terms of oil exports is the development of its onshore Tengiz and Karachaganak oil fields and the operation of the massive Kashagan offshore field in the Caspian Sea. But while Tengiz and Karachaganak are already up and running, Kashagan has become the most expensive and complicated oil filed development project in the world.

The Kashagan oil field

The Kashagan offshore oilfield was discovered in 2000, in the Kazakh sector of the Caspian Sea. Geological reserves are estimated at 4.8 billion tons. Common oil reserves are 38 billion barrels, of which about 10 billion barrels are extractable. There are also large recoverable reserves of natural gas in Kashagan - more than 1 trillion cubic meters.[16]

The Kashagan offshore oilfield is located 4,200 meters below the shallow waters of the northern part of the Caspian Sea, and is highly pressured (770 bar of initial pressure). The crude oil that it contains has high 'sour gas' content. Low salinity, due to the in-flow of fresh water from the Volga River, combined with shallow waters and winter temperatures below minus 30 degrees mean that the northern part of the Caspian Sea freezes for nearly five months of the year. Ice drifts and ice scouring place heavy constraints on construction activities.[17]

The Field Development Project Kashagan was started by a consortium known as the Offshore Kazakhstan International Operating Company (OKIOC). This consortium was later renamed the Agip KCO (Kazakhstan Operating Company), and then the North Caspian Operating Company (NCOC). This project can still be characterized as a project implemented by a consortium of Western oil giants: Italian Eni, US ExxonMobil Corp., Anglo-

16 Mukhit B. A. (2014) 'Geopolitics of Turkmenistan and Kazakhstan in the Caspian Region', in C. Frappi and A. Garibov (eds.) *The Caspian Sea Chessboard: geo-political, geo-strategic and geo-economic analysis*, Egea, p. 153.

17 Technical Challenges of the Kashagan Project. Website of North Caspian Operating Company. 18 November 2016, Available at: http://www.ncoc.kz/en/kashagan/technical_challenges.aspx (Accessed: 15 November 2016).

Dutch Royal Dutch Shell PLC, French Total, and Japan's Inpex.[18] Since 2013, it has involved Chinese CNPC, which entered into a consortium replacing ConocoPhillips.

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According to the preliminary plans of the consortium, the initial oil production from was projected at 180,000 barrels per day, rising to 370,000 barrels per day in later stages. In 2000, the initial plans of Nurlan Balgimbaev, the then-director of the government-owned company "Kazakh Oil" (predecessor of KazMunaiGaz), stated that commercial oil production was supposed to start in 2005. The same year, the Italian company Eni became an international operator of the North Caspian Operating Company. It was assumed that during the first stage (2013-2017), production would reach 50 million tons per year. During the second phase in 2018-2019, production was projected at 75 million tons. The realization of these projections would put Kazakhstan among the top five oil exporters in the world.[19] However, the start of Kashagan oil production has been repeatedly postponed; first in 2005, then in 2007, in 2008, in 2011, and again in 2012.

The most recent attempt to launch production was in 2013, but just a few weeks later, operations were quickly shut down. The problem was toxic hydrogen sulfide gas, which is corroding the pipelines.[20] Production was suspended because of gas leaking from the underwater pipelines running from mining sites to onshore sites, towards the Bolashak processing complex in Eskene village.

Kashagan's difficult fate

On October 14 2016, Kazakhstan's Ministry of Energy announced that the Kashagan project had finally succeeded in shipping its first export batch of crude oil. According to the North Caspian Operating Company, Kashagan oil delivery will be transported in a primarily northern direction, first to the Russian city of Samara, and then onto Novorossiysk on the Black Sea, from where it will be exported. Kazakh oil will be transported via the Russian transport monopolist Transneft.[21] The possible southwest export route

18 Kretov, P. (2013) 'Caspian Transport Consortium: Diary expansion", *Truboprovodnyi transport nefti,* N° 7, pp. 18-23. Available at: http://www.transpress.org/_docs/07-2013/18-23.pdf.(Accessed: 20 March 2014).

19 Mendebayev, T. (2014) 'Kashaganskya neft. Voprosi, voprosi,' *Oil & Gas Russia*, September, p.19.

20 Stafford, J. (2015) 'The Most Challenging Oil and Gas Projects in the World,' 26 March. Available at: http://time.com/3760013/most-challenging-oil-gas-projects/. (Accessed: 11 November 2016).

21 Export strategy of the Kashagan Project. Website of North Caspian Operating Company. 18 November 2016, Available at: http://www.ncoc.kz/en/kashagan/export_strategy.aspx (Accessed: 21 No-

is subject to the development of the Kazakhstan Caspian Transportation System (KCTS), and would transport oil from the Eskene area - where the Bolashak plant is located - to a new terminal at Kuryk. Oil would then be transported by tanker to the Sangachal terminal near to Baku, where it could further pumped into the Baku-Tbilisi-Ceyhan (BTC) pipeline or be exported to international markets via other routes.[22] However, it is unlikely that Kazakhstan will also resume barge shipments across the Caspian Sea from Atyrau to Baku, which it effectively halted last year due to excessive costs.[23]

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It is also expected that oil from Kashagan will be exported to China. In 2013, CNPC bought an 8.3 percent stake in the Kashagan project, seeking for an increase in oil supplies from Kazakhstan to China. However, this is currently limited by the existing pipeline capacity to deliver the Kashagan oil to China.

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Despite its promising perspectives, the complicated nature of the Kashagan project is recognized. Its implementation will constitute potentially large technological and environmental risks and challenges. This is due to the sensitive and fragile nature of the operating environment. The natural and climatic conditions present serious challenges to oil production. The climate in this region sees temperature fluctuations from -30º C in winter to 30° C in summer.

The average depth of water in Kashagan reservoir is only 3-4 meters. The sea is covered with ice for 4-5 months, from November to March. Average ice thickness is between 0.6 and 0.7 meters.[24] The combination of ice, shallow waters, and sea level fluctuations creates considerable operational and technical problems. The shallow water and cold winters mean that application of traditional drilling technology and oil production is too difficult, as traditional concrete structures and a self-elevating platform will not be suitable.[25]

vember 2016).

22 Export strategy of the Kashagan Project. Website of North Caspian Operating Company. 18 November 2016. Available at: http://www.ncoc.kz/en/kashagan/export_strategy.aspx. (Accessed: November 21, 2016).

23 Sorbello, P. (2016) 'Kashagan Restart Gives Kazakhstan Hope' *The Diplomat*, 17 October 17. Available at: http://thediplomat.com/2016/10/kashagan-restart-gives-kazakhstan-hope/. (Accessed: 22 November 2016).

24 Mendebayev, T. "Kashaganskya neft. Voprosi, voprosi" p. 19.

25 Ibid.

Other technical challenges include the disposal of by-products. This includes the disposal of sulfur and associated gas to be re-injected offshore into the oil reservoir. Also, in order to pump the gas, one must discharge pressure of up to 800 bar; in terms of gas re-injection this is the highest pressure ever demanded in oil the industry.[26]

Toktamys Mendebayev, a senior research fellow at Kazakhstan-based "Nauchno-vnedrencheskyi tsentr Almas" and expert in drilling technology, claims that oil production from pre-salt wells under high pressure and gas reinjection process even increases the risk of earthquakes.[27] After the detection of pipe defects in 2013, North Caspian project operator NCOC announced the urgent need to replace 200 kilometers of pipeline. Stefan de Mayë, NCOC's managing director, pledged "the completion of the repair of pipelines by the second half of 2016."[28]

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In October 2016, it was announced that Kashagan project would be launched again, and some top officials insist they did everything to make this happen. At least, "this autumn Kashagan is set to resume production after a hiatus of three years", officials have stated in Astana. "They also indicated, however, that commercial development operations were not likely to begin in October 2016, as previously anticipated."[29]

Finally, on October 14, the main mass media outlets in Kazakhstan published good news on the Kashagan project, announcing that the first batch of oil, - about 7,700 tons – had been shipped to the Caspian Pipeline Consortium system. In addition, a 18,800 ton batch of export oil was shipped to the JSC KazTransOil pipeline system, and 22.8 million cubic meters of commodity gas was sent to the JSC Intergas Central Asia pipeline system.[30]

In its turn, the operator of the North Caspian project, NCOC, announced that they were working to safely and gradually increase production capacity to a target level of 370,000 barrels per day

26 Butyrina, N. (2014) 'Severokaspiiskyi proekt: kolybel kazakstanskogo shelfa,' 30 January. Available at http://eurazis.kz/?p=2700. (Accessed: 15 November 2016).

27 Mendebayev, T. "Kashaganskya neft. Voprosi, voprosi" //Oil & Gas Russia. September 2014. P. 19.

28 Chervinskyi, O. (2015) 'Kashagan kak bolshoy chemodan,' 15 July. Available at: http://www.ratel.kz/raw/kashagan_kak_chemodan. (Accessed: 10 November 2016).

29 Kazakh Officials: Date Set For Kashagan Relaunch. FSUOGM - Former Soviet Union Oil & Gas, 14 September 2016, Week 36, Issue 898. Available at: http://newsbase.com/topstories/kazakh-officials-date-set-kashagan-relaunch. (Accessed: 25 September, 2016).

30 Ria Novosti (2016) 'Pervaya partya nefti s Kashagana postupila v sistemu KTK', October 14. Available at: https://ria.ru/world/20161014/1479225179.html. (Accessed 11 November 2016).

by the end of 2017.[31]

At the same time, one must consider a number of important challenges in regard to oil production in Kashagan. For the last several years, significant changes have taken place in world oil market, limiting the prospects of a full-scale launch of the Kashagan project. At the end of 2013 oil prices on the world market fluctuated between an average of $100-$110 per barrel; 2015 saw this figure drop dramatically, to 57.17 dollars per barrel for Brent crude.[32]

A further point to note is that there are different estimates for the cost of developing Kashagan oil field. According to David Sheppard, "originally scheduled to cost about $10bn, projects costs have spiraled over two decades to more than $50bn,"[33] whilst Oleg Chervinskyi claims the cost of the Kashagan project itself during this period increased by four times, from $30 to $130 billion dollars.[34]

Since "at the end of 2013 the prime cost of the production at Kashagan oil field was estimated at up to $110 per barrel of oil"[35], this project has already become one of the most expensive oil field development projects in the world. Furthermore, this project is likely be risky one if we take into consideration that price band for crude oil is likely to remain at around $50-$60 per barrel in the near future.

Conclusion

Oil revenues make up more than half of Kazakhstan's budget, and the economy is thus heavily reliant on exporting crude oil. However, transportation is a key challenge to this energy policy, as Russia is the main transit route for Kazakhstan's energy exports. As a result, the geopolitics of transportation in Central Asia

31 North Caspian Operating Company (2016) 'Kashagan's First Batch of Crude Oil Destined for Export', October 14. Available at: http://www.ncoc.kz/en/mediacentre/2016/news-14-10-2016.aspx. (Accessed: 13 November 2016).

32 Chervinskyi, O. (2015) 'Kashagan kak bolshoy chemodan,' July 15. Available at: http://www.ratel.kz/raw/kashagan_kak_chemodan. (Accessed: 10 November 2016).

33 Sheppard, D. (2016) 'Kazakhstan's Kashagan oil field (finally) makes first shipment,' *Financial Times*, October 14. Available at: www.ft.com/content/59112d8a-898e-3a9c-83c1-77009854b1a5. (Accessed: 16 November 2016).

34 Chervinskyi, O. (2015) 'Kashagan kak bolshoy chemodan,' July 15. Available at: http://www.ratel.kz/raw/kashagan_kak_chemodan. (Accessed: 10 November 2016).

35 Chervinskyi, O. (2015) 'Kashagan kak bolshoy chemodan,' July 15. Available at: http://www.ratel.kz/raw/kashagan_kak_chemodan. (Accessed: 10 November 2016).

and the Caspian is among the primary concerns for Kazakhstan's energy policy. This paper has analyzed the geopolitics of Kazakhstan's dependence on the Russian monopoly over the main transit routes, and explored Kazakhstan's efforts to diversify its transport communications. In addition, the paper has given particular focus to oil production at the Kashagan oil field, one of the largest oil fields and most expensive projects in history. As the energy sector is still the backbone of the economy, Kazakhstan intends to increase its oil production at any cost, and therefore the Kashagan oil field is a key priority. Yet, as this paper suggests, the rapid and dramatic drop of oil prices combined with a number of potential technical and environmental complications and challenges, limit the practical incentives for developing the Kashagan project. Given the existing obstacles to successful commercial crude oil production in the Kashagan field, large-scale production at Kashagan remains under question.