



LAUNCH OF OIL AND GAS PRODUCTION AT THE KASHAGAN FIELD

The economy of Kazakhstan is highly dependent on energy. Being the largest oilfield of the country, the Kashagan field bears strategic importance for the petroleum sector of Kazakhstan. The last three years are described by reduction of oil production from 81.8 million tons in 2013 to 80.8 million tons in 2014, to 79.4, 8 million tons in 2015 and expectedly to 75 million tons in 2016. Therefore, there was a decrease of oil output by 1.2% in 2014, 1.7% in 2015 and expectedly, 5.5% in 2016 on a year on year basis. In this light, the launch of the Kashagan project is anticipated to increase production levels avoiding further deterioration of the energy sector.

Oil and gas production at the Kashagan oil field was finally started 16 years later after the beginning of the project with a cost of over \$50 billion for Phase I of the project. The field was officially opened in Atyrau on December 7, 2016. Initially, production was originally scheduled to start in 2005. However, due to a number of issues including cost overrun, policy mismanagement, re-shuffle of shareholders and technical issues, the project was stalled. An unsuccessful launch of the project took place in 2013. The launch was postponed due to the leaks caused by corrosion of pipes because of the high sulfur content. After the delay in the project due to the recovery of pipelines production was resumed on September 28, 2016 and the first batch of hydrocarbons in the amount of 194 thousand barrels, 56 thousand barrels of which was transferred via the Caspian Pipeline Consortium, was sent abroad on October 14, 2016.

The Kashagan field is the largest discovery of hydrocarbons since the Priobskoe North in Russia in 1982. The field is located offshore in the northern part of the Caspian Sea on the territory of Kazakhstan. The surface area of the field is about 45 kilometers by 75 kilometers. The reservoir itself is 4200 meters deep and the reservoir pressure is 770 bar. It is estimated that the recoverable oil reserves of the field amount to 9 to 13 billion barrels. The amount of the natural gas reserves is over 1 trillion cubic meters.

Kashagan was discovered in 2000 as a result of exploration works conducted at the Caspian shelf by the Offshore Kazakhstan International Operating Company (OKIOC). In 2001, Eni became an exclusive operator of the project under the name of Agip Kazakhstan North Caspian Operating Company NV (Agip KCO). In 2009, operatorship was transferred to the North Caspian Operating Company BV (NCOC). Besides, due to the delays, Kazakhstan increased its share in the

project from 8.33% to 16.81% in 2008. Later, in 2013, ConocoPhillips withdrew from the project selling its 8.4% share to Kazakhstan's KazMunayGas (KMG), 8.33% of which KMG using its pre-emption rights re-sold to the Chinese CNPC, increasing its own share by 0.07% to 16.88%. Currently, the shareholders of the field consist of the following companies: KMG Kashagan BV with 16.88%, Eni, Total, Shell and Exxon Mobil with 16.81% each, CNPC with 8.33% and Japan's Inpex Corporation with 7.56%.

The field is to be developed further in the framework of the Full Field Development Plan, which consists of several phases. It is planned to re-inject half of the produced gas back into the reservoir during Phase I, also known as the Experimental Program, which has already been started. During Phase I maximum production of 370 thousand barrels a day is expected to be reached by the end of 2017. Phase II is the phase of initial design, which has a potential to bring the production up to 1 million barrels per day. However, some issues were faced in the course of development of this stage of the project. The Government of Kazakhstan delayed Phase II of the project till 2018-2019 due to the high cost of the stage in 2010. Initially, the proposed cost of the phase was \$68 million, later, the number was reduced down to \$50 billion, yet, it was also rejected. As a result, the Shell Development Kashagan responsible for development of Phase II was closed. As for plans of the next phases, they have not been developed yet.

The Kashagan field project is the most expensive energy project in the history of the petroleum industry. Shallow water and harsh climate with cold winters bring some technical challenges to the implementation of the project. The waters of the North Caspian Sea are shallow and tend to freeze in winter months, which led to construction of complicated and costly infrastructure. For instance, the project was prolonged due to the need to build artificial islands that would support drilling equipment. Moreover, oil and gas production conditions at the field are complicated due to several factors such as low surface temperature, depth of deposits and as a result a high rock pressure, high sulfur content. Besides, the shores of the Caspian Sea have diverse ecosystem which will undoubtedly suffer from negative impacts of operations on the field. Therefore, strict environmental regulations are being implemented. A number of programs aimed at protecting environment such as Environmental Impact Assessments (EIA), biodiversity

research projects, soil surveys and bird and seal population studies were conducted. The EIA has come to the conclusion that all documents comply with international regulations and are in accordance with the Environmental Code of the Republic of Kazakhstan. However, despite the efforts, after the leakage accident in 2013, Agip KCO and NCOC were fined at \$737 million due to excessive flaring of sour gas in the amount of 2.8 million cubic meters.

As a result of all the difficulties faced in the process of development of the field, by the start of production the cost of Phase I of the project increased from initial \$38 billion to \$53 billion. The total cost of the project is expected to reach \$136 billion. Taking into account the current situation regarding the oil price in the market and funds invested into the development of the field, it is difficult to predict when investments will be paid off and the project will start bringing profit. According to the Chairman of the Board of KMG, Sauat Mynbayev, the Kashagan project would be economically viable with oil prices at \$100 per barrel. Therefore, Kazakhstan is anticipating further increase of oil price.

Before the meeting between the OPEC and non-OPEC members, which was held in Vienna on December 10, it was already announced that production at the Kashagan field is strategically important for Kazakhstan; therefore, despite the current situation on the oil market, oil production at the field was not planned to be cut back. According to the results of the meeting in Vienna, starting from January 1, 2017, Kazakhstan agreed to reduce oil production by 20 thousand barrels per day from the November 2016 level, when the oil production was at 1.7 million barrels per day. However, production at the Kashagan is to remain as it was initially planned, while the decision to reduce oil production will be related to the other oilfields in the country.

According to the Energy Minister of Kazakhstan, Kanat Bozumbayev, since the re-launch of the project oil production at the field has reached 3.5 million barrels, while the gas production has totaled to about 97 million cubic meters. NCOC expects a production of 8 million barrels of oil by the end of 2016. It is planned to increase production at the field up to 58 million barrels in 2017. Overall, the country hopes to get revenue from the costly Kashagan project and is looking forward to a significant increase of the oil price that would bring positive impacts on the economy of the country.

Written by Saule Akhmetkaliyeva,
Eurasian Research Institute, Kazakhstan

Politics, Foreign Affairs and Security

- The Central Election Commission of Uzbekistan reported that Shavkat Mirziyoyev, won the presidential elections with 88.61% of votes, which is over 15.906 million people. The turnout during the elections was 84.8% or 17.951 million of registered voters. Three more candidates who participated in the presidential elections Sarvar Otamuratov, Hotamjon Ketmonov and Narimon Umarov gained 2.35% (421,055), 3.73% (669,187) and 3.46% (619,972) of votes respectively.
- During his official visit to Moscow, the Prime Minister of Turkey, Binali Yildirim, and the President of Russia, Vladimir Putin, discussed the development of bilateral trade and economic cooperation. In particular, the sides discussed the Turkish Stream project and the Akkuyu Nuclear Power Plant construction. In addition, investments in agriculture, tourism, shipping, industry were discussed.
- During his official visit to Baku, the Minister of Foreign Affairs of Turkey, Mevlut Cavusoglu, and the President of Azerbaijan, Ilham Aliyev, discussed a number of issues of mutual interest including the resolution for the Karabakh conflict.
- During his official visit to Beijing, the Chairman of the Senate of Kazakhstan, Kassym-Jomart Tokayev, and the Chairman of the Standing Committee of the National People's Congress, Zhang Dejiang, discussed possibilities for further parliamentary cooperation between the two countries including the adjustment and improvement of the laws.
- During his official visit to Baku, the Minister of Internal Affairs of Russia, Vladimir Kolokol'tsev, and the President of Azerbaijan, Ilham Aliyev, discussed issues related to the cooperation between the ministries of internal affairs, and the sides expressed confidence that bilateral ties between the two countries will be further strengthened.
- During the 23rd the OSCE Ministerial Council held in Hamburg, over 50 Foreign Ministers from the OSCE region discussed the ways of strengthening the organization's capacities in civilian crisis management, reviving conventional arms control as well as empowering the OSCE to effectively address new global challenges.
- During the meeting in the C5+1 Format held in Hamburg, the foreign ministers of five Central Asian countries and the US State Secretary John Kerry exchanged opinion on perspectives of cooperation in political, economic and other spheres. Moreover, the parties discussed the prospects of multilateral cooperation for 2017-2018.
- According to the Ministry of Defense of Kazakhstan, the country opened its first pier for the military vessels of the Naval Forces of Kazakhstan in Aktau seaport. The Minister of Defense of Kazakhstan,

Colonel-General Saken Zhassuzakov, stated that the creation of the pier with a sufficient infrastructure would increase the combat capability of Kazakhstani Naval Forces.

Economy, Finance and Energy

- According to the President of Organization of the Petroleum Exporting Countries (OPEC) Energy Minister of Qatar, Mohammed bin Saleh al-Sada, non-OPEC countries agree to cut oil production by 558,000 barrels per day (bpd), which is slightly less than initially proposed 600,000 bpd. Russia agreed to cut output by 300,000 bpd in 2017. Mexico, Azerbaijan, Oman and Kazakhstan pledged to cut oil output by 100,000 bpd, by 30,000 bpd, 40,000 bpd and by 20,000 bpd respectively.
- The General Administration of Customs of China reported that Turkmenistan became the leader in gas supply to China in January-September 2016. During the reported period, the country supplied 18.32 million tons of gas to China, which increased by 11.2% compared to the same period in 2015. It was also stated that in January-October 2016 Uzbekistan delivered 2.73 million tons of gas to China, which is by 2.4 times more than the amount in January-October 2015.
- According to the National Atomic Company of Kazakhstan, Kazatomprom, the company and the China General Nuclear Power Corporation (CGNPC) proceeded to implement a joint innovative project in the nuclear sector. The parties will start to construct the plant with a production capacity of 200 tons of fuel assemblies per year. It is planned to be commissioned in 2020. The project will be managed by Ulba-FA, a joint venture of Kazatomprom subsidiary Ulba Metallurgical Plant and CGNPC subsidiary CGN-URC.
- The Chinese company Tebian Electric Apparatus reported about the completion of the construction of the power plant worth \$350 million in Dushanbe, Tajikistan. It was noted that the company could use a gold mine in northern Tajikistan to offset the cost of the investment for the power plant.
- During the meeting in Baku, the Heads of the railway authorities of Azerbaijan, Kazakhstan, Turkey and Georgia signed a Memorandum of Understanding (MOU) on prospects of development of the Trans-Caspian International Transport Route (TCITR). The sides also discussed prospects for further increase in the freight traffic via the route and optimization of tariffs.
- The state oil company of Azerbaijan SOCAR reported that the second phase of Petlim container port's construction in Turkey is scheduled to be completed in the first quarter of 2017. It was noted that the work on the first phase of the port's construction was completed and the cargo terminal with a capacity of 1.5 million TEU started operating.

- The Asian Development Bank (ADB) and the Government of Kyrgyzstan signed a financing agreement amounting to \$95.1 million to rehabilitate a section of the North-South Alternate Road Corridor in the country. Moreover, the ADB announced that it approved a \$198 million loan to Uzbekistan to implement a project on upgrading and widening 77 km of the Karshi-Shakhrisabz-Kitab highway in the Kashkadarya province.
- The Asian Development Bank stated that it approved a \$500 million loan to help Azerbaijan to maintain social spending, create jobs, and diversify its economy to mitigate the adverse impact of a crash in oil prices. It was noted that the package is boosting social assistance for around 3.7 million people, or more than one third of the population.
- The State Customs Committee of Azerbaijan announced that in January-October 2016 the export of the Azerbaijani products to Kazakhstan grew by 74% to over \$22 million in comparison with the same period of 2015. It was also noted that in January-October 2016 import of the Kazakhstani products to Azerbaijan grew by 12% to \$84 million. As a result, the trade turnover constituted about \$107 million that is 22% more than in January-October 2015.
- According to the Central Bank of Azerbaijan, the country is putting limits on the foreign currency remittances According to the new rules, individuals will be able to transfer abroad no more than \$1,000 in a day and no more than \$10,000 in a month without opening a bank account. Currently, the monthly limit for the remittances is \$30,000.

Society and Culture

- The Presidents of Azerbaijan, Kazakhstan, Kyrgyzstan, Russia, Uzbekistan and other Eurasian countries sent their condolences to Turkish President, Recep Tayyip Erdogan, and the whole Turkish people after the terrorist attack in Istanbul in which 44 people died (36 policemen and 8 civilians) and 155 injured. Turkey declared a one-day mourning after the two bombings at Besiktas Vodafone Arena in Istanbul.
- According to the European Commission, all airlines from Kazakhstan were removed from the EU Air Safety List, following further improvements to the aviation safety situation in the country. The list now shows a total of 193 airlines from 18 states that are banned from the EU skies.
- The Mission Control Center of Russia's Space Agency stated that the uncrewed Progress MS-04 space station supply ship carrying nearly 5,400 pounds of rocket fuel, food, water and a new spacesuit burned up in Earth's atmosphere shortly after it blasted off from Kazakhstan. The evidence points to a problem with the third stage of the cargo carrier's Soyuz booster