



Special Energy Issue on Kazakhstan

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The Economic Section of the Embassy of the Kingdom of the Netherlands in Kazakhstan intends to distribute this newsletter as widely as possible among Dutch institutions, companies and persons from the Netherlands. The newsletter summarises economic news from various Kazakhstani and foreign publications and aims to provide accurate information. However, the Embassy cannot be held responsible for any mistakes or omissions in the bulletin.

GENERAL

JOGMEC provides equity financing to Kashagan field development

Japan Oil, Gas and Metals National Corporation (JOGMEC) announced that it will provide equity financing to INPEX North Caspian Sea Ltd. (INCS), a subsidiary of INPEX CORPORATION (INPEX), which holds a 7.56% equity interest in the Kashagan project.

Located in the Kazakhstan sector of the Caspian Sea, the Kashagan field with approximately 9-13 billion barrels of recoverable oil, known as the world's largest discovery in the past four decades, has achieved stable production since October 2016. The Kashagan project is operated by North Caspian Operating Company (NCOC), on behalf of a consortium of national and international oil companies including INPEX.

The Phase I development, or the Experimental Program, is still underway to ramp up oil production to a capacity of 370,000 barrels per day at the earliest possible. Beyond the Experimental Program, NCOC plans future development phases to gradually and significantly increase output volumes.

Since the establishment of INCS in 1998, JOGMEC, as Japan National Oil Corporation until 2005, has been continuing its financial supports to INCS, including equity investment covering exploration expenditures and guarantee for the initial development loan. Grant of JOGMEC development equity finance will allow INCS to raise capital required for further Kashagan development to boost production. This is the first-ever development investment since the amendment of the JOGMEC Law enacted in November 2016 where JOGMEC functions were enhanced to enable it.

JOGMEC's continued supports to INCS will contribute to diversifying and increasing crude supply to Japan for a longer time through the further expansion of giant Kashagan, reported by Your Oil and Gas News.

Kazakhstan produces over 1 million tons of sulfur from Kashagan

Some 1.5 million tons of sulfur has been extracted from oil produced at Kashagan field, Atyrau region, Kazinform reports.

"In October 2017, we started exporting Kashagan sulphur by railway. Production of granulated sulfur has increased. By the end of the year, the export of sulfur amounted to more than 100,000 tons. In total, since the start of production, more than 1.5 million tons of sulfur have been produced. By today, we have exported more than 250,000 tons of sulfur," Bruno Jardin, Managing Director of NCOC told Kazinform.

According to Bruno Jardin, the extracted sulfur is supplied by pipelines in a liquid condition in two directions - to the sulfur blocks and to the plant for granulation. Once the design capacity is reached there will be no need to stack sulfur blocks. The entire sulfur produced will be exported. The company also plans to melt and process accumulated sulfur blocks into granules.

The ready granulated sulfur is loaded onto the railcars which go to Karabatan to one of the NCOC shareholder companies which handles sale of sulfur and other North-Caspian project products.

The potential sale markets are China and the countries of West Mediterranean district where sulfur is used as a raw material for production of agricultural fertilizers, Bruno Jardin added.

OIL & GAS EXPLORATION & DEVELOPMENT

Four new fields put into operation in the Caspian

The development of four new offshore fields is planned to begin by a consortium of companies that are mining at Kashagan.

Studies have already been completed at the Kalamkas-Sea and Khazar fields, which make it possible to talk about the profitability of production.

Specialists have begun to study the potential of the deposits of Aktota and Kairan. All of them are located near Kashagan, where from the beginning of operation 11.5 million tons of oil and 3.5 billion cubic meters of gas were produced.

“We have solved a complex engineering task of injecting associated gas back into the reservoir. This allowed to increase oil production in the Kashagan field to 300,000 barrels per day and to produce 2.5 million tons of oil from the beginning of this year.” Bruno Jardin, CEO of the oil company said, 24.kz reported.

OIL & GAS INFRASTRUCTURE

Construction to begin in July on gas pipeline serving Astana, Karaganda regions

Construction on the Saryarka gas pipeline, intended to bring gas to Kazakhstan’s capital and central and northern regions, will be launched in July, Kazakh Minister of Energy Kanat Bozumbayev told a March 13 government meeting. A cubic metre of gas will vary at a level of 47-50 tenge (\$0.1-\$0.2).

“We agreed to ensure the development and approval of design estimates and the allocation of land for the gas pipeline construction along the Kyzylorda-Zhezkazgan-Karaganda-Temirtau-Astana route. The Ministry of Energy; Ministry of Investments and Development; executive bodies of Kyzylorda, Karaganda and Akmola regions; and the KazTransGas company are responsible for the project’s implementation,” said Bozumbayev.

According to the ministry, the gas pipeline will be constructed in four stages. In the first stage, over the course of a year, a pipeline is to be built along the Kyzylorda-Zhezkazgan-Karaganda-Astana route with a length of 1,081 kilometres. The project costs 267.3 billion tenge (\$837 million). The second stage of the project will see the pipeline continue from Astana to Kokshetau; the third stage will extend it to Petropavlovsk. The fourth stage envisages the construction of Zhezkazgan and Temirtau compressor stations.

KazTransGas is developing the design and estimate documentation for approval. The gasification roadmap has already been approved.

“The working group consists of state bodies and organisations to work out issues related to the implementation of the first phase of this project, including the terms of financing, by raising funds from international financial institutions such as the Eurasian Bank for Reconstruction and Development (EBRD), the Eurasian Development Bank, the Development Bank of Kazakhstan and other organisations,” he said.

On March 5, Kazakh President Nursultan Nazarbayev, as part of his Five Social Initiatives project intended to improve the lives of citizens, set the task of increasing access to gas by building a gas pipeline from Karaozek in the Kyzylorda region to Astana.

The project implementation will have a socio-economic impact, as it will replace some considerable coal consumption. It is expected to save 36,100 tons of pollutant emissions, including sulphur dioxide, carbon monoxide, nitrogen dioxide, nitrogen oxide and solid particles, per year in Astana alone.

“The construction and the ceremony of welding the first joint of the gas pipeline are scheduled for early July this year,” Bozumbayev said.

Regions taking part in the project should provide the design and construction of gas distribution networks to ensure gas supply to consumers by the time construction on the pipeline is completed in December 2019, Astana Times.

OIL & GAS EXPORT & TRANSPORTATION

NCOC exported 11,5 million tons of Kashagan oil

The NCOC has shipped 11,5 million tons of oil from Kashagan field, Kazinform reports.

“Since early 2018 we have produced about 2,5 million tons of oil and about 1,5 billion cubic meters of gas. In total since September 2016 we exported 11,5 million tons of crude and we sold more than 3,5 billion cubic meters of natural gas. This gas goes to the pipeline system of KazTransGas,” Managing Director of NCOC Bruno Jardin told Kazinform in an interview.

At present, Kashagan oil is shipped in the western direction via Atyrau-Novorossiisk pipeline consortium, in the northern direction via Atyrau-Samara pipeline connected with the system of

Russia's Transneft and in the eastern direction via Atyrau-Alashankou pipeline, reported by Kazinform.

China to increase gas supplies from Central Asia due to insufficient reserves

The Chinese authorities intend to increase gas imports due to extremely inadequate reserves in many Chinese cities. This was stated at a press conference on Tuesday by the head of the State Committee for Development and Reforms of the country He Lifeng, Tass reports.

"As for gas supplies, we are going to increase them at the expense of the neighbouring states that produce this energy carrier. We are talking about Russia, the countries of Central Asia, the Asia-Pacific region," the official said.

Among the Chinese cities, Shanghai has the largest reserves of natural gas. "The reserve rate there is maintained at 15 days, but in other settlements this indicator needs to be gradually and systematically increased. For example, in Beijing gas reserves will last about 10 days without replenishment," stressed He Lifeng.

The official added that in 2017 the volume of gas supplies to the population of China amounted to 237 billion cubic meters, which is 14% more than a year earlier. "For the first time since the foundation of the People's Republic of China, we have experienced such a significant growth – this means that we will have to ensure energy security because of the increasing volumes of gas supplies, taking into account new prerequisites," he concluded.

In recent years in China, especially in the northern, central and north-eastern regions of the country, the lack of natural gas is increasingly felt, and demand for it is constantly growing. The traditional inland areas for the extraction of this energy carrier, for example the Datsinsky deposit, are close to depletion of the bulk of their reserves. As a result, cooperation with Russia in the energy sector is becoming increasingly important for China, reported by Podrobno.

RENEWABLE ENERGY

EBRD to invest \$244 million in Kazakh renewable energy projects

The Eurasian Bank for Reconstruction and Development (EBRD) plans to invest approximately \$244.2 million in Kazakh renewable energy sources (RES) attracting private and international financial investment. Fifty-two renewable energy facilities will be built through 2020, said Minister of Energy Kanat Bozumbayev during a February 27 government meeting chaired by Prime Minister Bakytzhan Sagintayev.

He added EBRD wants to engage private and international investors for 40 to 80 million euros (\$48.8 million-\$97.6 million).

"There are 55 operating RES with a total capacity of 336 megawatts. Up to the end of 2020, there are plans to put into operation about 52 renewable energy sources with a total capacity of two gigawatts. The total investment is almost \$31 million (9.9 trillion tenge)," he said.

The Green Climate Fund approved \$110 million in financing for Kazakhstan to implement RES projects under the EBRD, said Bozumbayev. Eni, General Electric energy companies and the Development Bank of Kazakhstan (DBK) are reviewing the perspectives to implement RES projects in the country.

The ministry is considering the possibility of cooperating with BRK-Leasing, Central-Asian Fuel and Energy Company, ENI International B.V., General Electric International Inc., Green Energy, Kaz Green Tek Solar and Samruk Kazyna United Green.

Bozumbayev noted the ministry attracted about \$200 billion in foreign investments to the oil and gas industry, including more than \$120 billion to develop Kashagan, Karachaganak and Tengiz, its largest projects.

Kazakh Invest and the Ministry for Investments and Development created a list of 145 investment projects worth \$47.8 billion, said Minister for Investment and Development Zhenis Kassymbek. The projects would generate 35,000 jobs in Kazakhstan-China, Kazakhstan-Russia and Kazakhstan-Turkey projects.

Sagintayev noted a particular Kazakh-Chinese project which will create 20,000 jobs. The joint Kazakhstan-China programme is implementing 51 projects worth \$27.7 billion.

The Ministry for Investment and Development suggested it is time for the country to adopt an offset agreements law that will provide for the conclusion of long-term contracts with foreign suppliers. Kassymbek noted more than 50 countries actively use the agreements, such as World Trade Organisation (WTO) members China, Greece, India, Poland, South Africa, South Korea and Sweden.

The offset agreements law was on track in 2015, but was postponed due to lack of support. Kassymbek asked Sagintayev to resume work on the draft.

The EBRD is a leading international financial institution in renewable energy and energy efficiency. The bank remains the largest and in some cases the only source of financing for renewable energy projects. It has invested more than \$8.7 billion in the Kazakh economy. In 2017, EBRD devoted 40% of its investments to projects promoting green economy, Astana Times reported.

Kazakhstan tenders 1GW in renewables

Overall, new auctions launched by the Kazakh government will allocate 1 GW of renewable energy generation capacity, including 620 MW of wind power plants.

The Ministry of Energy of the Republic of Kazakhstan has issued a series of tenders for the 1 GW of renewable energy power generation capacity it announced in late January.

According to the ministry's statement, through the specific auctions for solar energy projects, around 290 MW are planned to be allocated, while the volume expected to be deployed through the tender for wind power is estimated at 620 MW. Another two tenders for hydroelectric and biomass projects are expected to assign 75 MW and 15 MW of capacity, respectively.

A specific auction to allocate 10 MW of solar in the country's North and West zones will be held on May, 28, 2018; while two more auctions to assign 20 and 50 MW, respectively in the South Zones, will be held on June 6 and 7.

An auction for further 30 MW of solar in the West Zones is planned for August 8, while two more auctions for the same regions, allocating 30 MW and 150 MW, respectively, are scheduled for October 17 and 18.

Several large-scale PV projects are currently being developed in Kazakhstan, all of which are potential candidates to participate in announced auctions.

French company, Urbasolar is currently planning a 14 MW plant, while another project, the 50 MW Baikonur Solar park, is being planned for Kyzylorda region, in the south of the country.

The project's developer, Samruk Kazyna United Green Energy Ltd, is also developing two more 50 MW solar parks in Kazakhstan – the Burnoye Solar-1 and the Burnoye Solar-2 – both located in the southern region of Zhambyl. They will be financed by the European Bank for Reconstruction and Development.

Furthermore, a 100 MW PV plant is being planned by local company, KBEnterprises with the support of ABB, near Kabanbay, Tselinograd District, in the north of the country.

Kazakhstan is aiming to cover 3% of its electricity production with wind and solar by 2020, PV Magazine reported.

Wind and solar power plants to be launched in spring in Mangistau region

Mangistau region is building solar and wind power stations in Munayly and Tupkaragan districts with a total capacity of 12 megawatts. The sources of alternative energy to be put into operation this spring. This was announced at the energy and housing and communal services department of Mangistau region, Lada.kz reports.

The project for construction of a five-megawatt wind farm is being implemented in the village Akshukur in the Tupkaragan district. Also work is under way to implement the project "Construction of a solar power plant" in Batyr village, Munayly district. In Mangistau region these are the first objects of alternative energy. In late 2018, it is planned to launch a solar power plant in the village Shetpe with a capacity of 12 megawatts.

The cost of the project for construction of a solar power plant is one billion two hundred million tenge. To date, construction and installation work is underway.

The energy and housing and communal services department promises that both power plants in Munayly and Tupkaragan districts will be put into operation this spring and cover the electricity

deficit in the nearest villages and industrial enterprises. In addition, they will create jobs for about fifty residents of the region, *Kazakhstanskaya Pravda* reports.

Chinese company to build wind and solar power stations in Kentau

China's Jiangsu Zhenfa Holdings Group Co. Ltd investment company will start construction in August on \$154.5 million wind and solar power stations in the South Kazakhstan region. The new facilities are expected to generate 50 megawatts per hour of wind power and 30 megawatts per hour of solar energy. Kentau is a city located 150 kilometres north-west from the regional capital Shymkent.

Kazakhstan's Ambassador to China Shakhrat Nuryshev and Vice President of Jiangsu Zhenfa Holdings Group Co. Ltd Hu Wei discussed the implementation of the renewable energy projects during a March 19 meeting.

"The construction of the projects will be completed within two years. The sides exchanged views on the inclusion of this project in the list of priority projects of cooperation within the Programme on Industrialisation and Investments implemented between Kazakhstan and China," the press service of Kazakhstan's embassy in China reported.

Nuryshev stressed that Kazakhstan attaches great importance to the development of alternative energy sources.

"In 2017, Astana hosted the EXPO 2017, the main theme of which was the future energy. Our country will continue developing the potential of clean energy," the ambassador said.

The diplomat focused on the country's preferential policies for foreign investors engaged in priority areas for cooperation in Kazakhstan, such as transport and logistics infrastructure, water supply, energy and others. Wei noted that Kazakhstan has great potential to implement renewable energy projects. Upcoming projects can become exemplary in renewable energy cooperation between the two countries, he said, according to the embassy.

The Jiangsu Zhenfa Holdings Group Co. Ltd company owns 40 power plants in China and provides 10% of the Chinese market with photovoltaic power stations. Recently, the corporation completed a four-gigawatt power plant. The investment company cooperates with the China Energy Conservation Association and the China Guangdong Nuclear Power Group. The company's branches are located in Turkey, Pakistan, the U.S. and other countries, *Astana Times* reports.

INDUSTRY EVENTS IN 2018



Global Oil & Gas Atyrau

Atyrau Regional Oil and Gas Technological Conference
10 – 11 April 2018, Atyrau
Organizer: Iteca
www.oil-gas.kz



Atyrau Oil & Gas

North Caspian Regional Exhibition on Oil and Gas
10 – 12 April 2018, Atyrau
Organizer: Iteca
www.oil-gas.kz



KAZNEFTEGAZSERVICE-2018

Annual Conference on Oilfield Construction and Engineering
16 March 2018, Atyrau
Organizer: KazService
www.kazneftegazservice.com



KIOGE

International Oil & Gas Exhibition and Conference
3 – 5 October 2018, Almaty
Organizer: Iteca
www.kioge.kz

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