



Academica Globe: Inderscience Research

ISSN: 2776-1010 Volume 4, Issue 3, Mar., 2023

GAS FIELDS AND RESERVES

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Abstract:

Information is provided on gas fields, leading countries in gas production, gas reserves, gas fields in Uzbekistan, gas reserves, volume and share of gas production in Uzbekistan.

Key words: gas, gas fields, gas condensate, gas reserves, gas production.

Gas is a combustible natural substance that occurs in the porous rocks of the Earth's Bagre at a depth of 200 - 7000 m. Its composition consists of methane (SN₄). 1m³ natural gas provides heat of 8000-8500 kcal. There will also be gases separated from the oil content, which will come out of the oil fields along with the oil. Up to 10,000 kcal/m³ of heat is released from such gases. There are also artificial gases, which are generated by thermally processing solid and liquid fuel and converting coal underground into gas. Generator gas, Coke gas, etc. are artificial gases. 1m³ generator gas provides heat of 1000 - 1050 kcal. Gas fuel is delivered to consumers through trunk gas pipelines, complex compressor stations that transmit gas at a certain pressure, and underground gas storage facilities. Since the discovery of gas deposits on Earth, humanity's need for natural gas has been increasing for years.

As of 2020, the following 10 countries are in the leading positions in gas production:

10-Algeria. This country is located in North Africa. Much of Algeria is located in Sub-Saharan Kabir. There are oil and gas reserves in the depths of the country. In the fall of 2009, a gas condensate field was discovered in Algeria, which was renamed Ayn - Tsila. In it, gas fields are located at a depth of 1.5 - 2.0 km. In 2020, 81.5 (2.1 %) billion cubic meters of gas were mined in this country.

9-Norway. It is found on the Scandinavian Peninsula, the Svalbard archipelago and many islands. The country has large oil and gas reserves. The largest natural gas reserves are the Troll, Oseberg and Frigg fields. The troll stores 1287 billion cubic meters of gas, Oseberg - 60 billion cubic meters of gas, Frigg 225 billion cubic meters of gas. In 2020, 111.5 (2.9 %) billion cubic meters of gas were mined in this country.

8-Saudi Arabia. It is found on the Arabian Peninsula. The country has large oil and gas reserves. In February 2007, a gas field called Tuxman was discovered in the Rub al - Khali desert. Its deposits are located at a depth of 5-5.5 km. The original reserves of natural gas in tuxman are 1 billion cubic meters.



Also in the Persian Gulf basin is the Gavar large oil and gas field. The deposits in it are located at a depth of 1.5-3 km. The geological reserves of natural gas in Gavar are 1.01 billion cubic meters. It produced 112.1 (2.9%) billion cubic meters of gas in 2020.

7-Australia. Australia is a mainland located in the Southern Hemisphere. In 2020, 142.5 (3.7 %) billion cubic meters of natural gas were extracted in this country.

6-Canada. Canada is located in North America. The country has large reserves of natural gas. There are several gaseous basins in Canada. The main basin is located in the province of Alberta. It includes mines such as Rainbow Lake, Pembina Forks, and Medicine Hat. Taylor mine is located in the province of British Columbia, Christopher Bay mine is located in the province of Nunavut. In 2020, 165.2 (4.3 %) billion cubic meters of gas were mined in Canada.

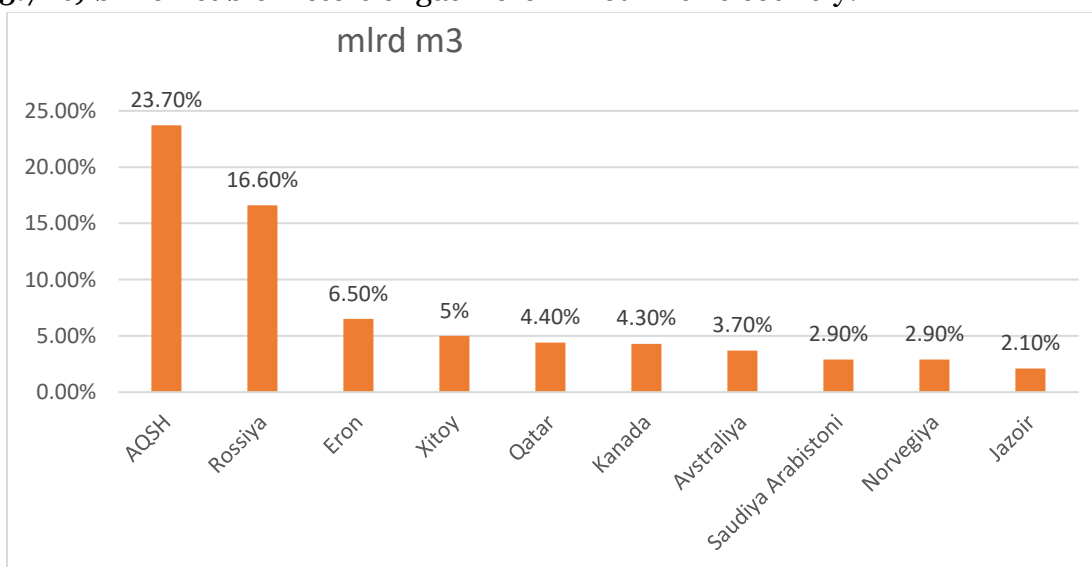
5-Qatar. Qatar is located in the northeastern part of the Arabian Peninsula. The country is rich in natural gas. In the central part of the Persian Gulf lies Severnoye, a large oil and gas field. In 2020, 171.3 (4.4 %) billion cubic meters of gas were mined in this country.

4-China. China is located in East Asia. Notable gas fields in China include gas fields such as Clameli, Sulige, Changbei, Shiyugou - Dongxi, and gas condensates at Liuhua, Yacheng sea. In 2020, 194.0 (5 %) billion cubic meters of gas were mined in this country.

3-Iran. Iran is located in Western Asia. The country has large reserves of natural gas. In the central part of the Persian Gulf is the South Pars large gas field. Iran is home to gas fields such as Kengan (gas condensate field), Foroz, Khayyam, Khongiron, which produced 250.8 (6.5 %) billion cubic meters of gas in 2020.

2-Russia. Russia is located in eastern Europe and Northern Asia. The country has large reserves of natural gas. As of 2020, 638.5 (16.6 %) billion cubic meters of natural gas have been extracted in this country.

1st U.S. The US is located in North America. The country has large reserves of oil and natural gas. In 2020, 914.6 (23.7 %) billion cubic meters of gas were mined in this country.





According to the 2020 results, Uzbekistan ranked 17th in this ranking with 47.1 billion cubic meters (1.7%).

Natural (oil - fired) gas in Uzbekistan began to be extracted from 1932, but the amount of natural gas released at that time was much smaller (0.7 - 3 million per year).m3). In the Republic, the well - studied reserves of gas until the end of the 1950s amounted to 24 million tons.while forming the m3, by the 1960s a radical turn was made in the area with the opening and commissioning of a number of gas fields. By 1962, with the opening of the gas - oil field, the foundation was laid for the creation of domestic main gas pipelines in Uzbekistan (Zharkaq - Bukhara - Samarkand - Tashkent gazoprovod 1960, Bukhara - Ural gazoprovod 1963, Bukhara - Tashkent - Bishkek - Almaty gazoprovod 1965, Central Asia - Central gazoprovod 1967). By 1968, the length of pipelines distributing gas from Uzbekistan's fields (excluding the Central Asia - Central gas station) had reached 8,500 km.

After Uzbekistan gained independence, reforms began to be carried out in the field of development of the gas industry. The oil and gas industry and all enterprises, organizations, institutions associated with them were combined into a single management and the National Corporation "Uzbek - neftgaz" was formed. Several project works were planned by the corporation towards achieving the country's fuel independence and increasing its export potential.

Currently, 175 oil and gas fields have been opened in oil and gas - rich areas such as Ustyurt, Bukhara-Khiva, south-west Hisor, Fergana, Surkhandarya. Gas production increased 1.37 times in 2000 compared to 1990. Using the current available facilities in the Saltane gas field, it is possible to obtain up to several tens of tons of liquid gas per day and several thousand tons of high-quality sulfur per year. The expansion of the main gas system in the gas industry sector, the creation of new underground gas storage facilities, as well as the technical equipment of existing ones, overhaul are being carried out intensively. The construction of the gas roads in Maye, Gazli - Nukus, Pakhtakor - Yangiyer - Tashkent was completed. This network gave Karakalpakstan and Khorezm the opportunity to supply the Republic with its own gas (before that, the region received gas from Turkmenistan). The existing gas industry enterprises are now worth 47.1 billion annually.m3 is able to process gas and extract 350 - 400 thousand tons of sulfur.

As of 1 January 2021, the proven natural gas reserves in Uzbekistan are 1trln. 866.9 crore. estimated at cubic meters. This figure is 766.9 billion from the 2016 estimate of the British company BP. cubic meters more. At the time, BP was operating gas reserves in Uzbekistan at a cost of 1.1 trillion. it was estimated at cubic meters.

In the draft government resolution of 2020, the natural gas reserves of Uzbekistan in 2020 - 2025 amounted to 361 billion. the cubic meter increase was assessed at. In particular, Uzbekneftgaz reserves 120 crore gas reserves. per cubic meter, oil reserves of 5 million. the tonnage also included Epsilon Development Company (USA) gas reserves of Rs 194 crore. per cubic meter, NaturalGas - Stream, a company formed by Gas Project Development Central Asia and Uzbekneftgaz, developed gas reserves of 11 crore. it was envisaged to provide an increase to cubic meters..

JSC uzbekneftgaz has 118 fields, of which 85 are producing natural gas. The remaining 33 mines are undergoing Geosciences. Most of the gas-34.1 billion. cubic meters (64.3%) are planned to be mined by



Uzbekneftgaz enterprises. Of this, Mubarak oil and gas accounted for 48.8%, Saltan oil and gas 26.3%, gas oil and gas 13.7% contributed to the production departments, Ustyurt gas production department 10.9%, Valley oil and gas production department 0.1%.

Total gas production throughout Uzbekistan is 53.8 billion. cubic meters.

Gas production of companies in Uzbekistan the size and share are listed below.

Table 1.

No	Company	Production volume (crore. cubic meters)	Share (%)
1	"O'zbekneftgaz"	34.1	64.3
2	"Lukoil"	13.8	25.7
3	Uz-Kor Gas Chemical	2.1	3.9
4	Epsilon Development Company	1.4	2.5
5	Natural Gas-Stream	1.2	2.2
6	New Silk Road Oil and Gas	0.34	0.68
7	Jizzakh Petroleum	0.28	0.51
8	Gazprom Uzbekistan	0.23	0.42
9	Gazli Gas Storage	0.15	0.27
10	Gissarneftgaz	0.12	0.23
11	Kokdumaloq-gaz	0.026	0.04

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Academica Globe: Inderscience Research

ISSN: 2776-1010 Volume 4, Issue 3, Mar., 2023

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