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# THE DEVELOPMENT OF ENERGY SECTOR IN CENTRAL ASIA AND THE ROLE OF UZBEKISTAN IN IT

**Abstract**: The article gives an overview of the energy potential of Central Asian countries and the geostrategic significance of the region, the opportunities for accelerating the integration processes of the region's states, the creation of transport corridors for the entry of these countries into the world market, and the work carried out in the country in the development of the energy resources of the Republic of Uzbekistan.

**Key words**: hydropower resources, gas and condensate reserves, the place connected with civilization, uranium product, regional cooperation, national interests, foreign policy concept, Central Asian integration, subregion, international relations subsystem, autochthon ties, collective relations, sustainable development.

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## Introduction.

From the point of view of the energy potential of Central Asian countries, it can be divided into two groups: the highest (Tajikistan and Kyrgyzstan) and the lower (Kazakhstan, Uzbekistan, Turkmenistan). The countries of the first row possess significant volumes of hydropower resources, but have no hydrocarbon reserves. The countries of the second layer have huge hydrocarbon reserves - oil, gas, and coal, but have no large hydroelectric reserves. It is known that in Central Asia, the largest gas and oil-producing countries are Kazakhstan, Uzbekistan and Turkmenistan. The export earnings in this area constitute an important part of the budget of these countries and provide significant imports of products in the form of production and consumption.

## Main part.

The Central Asian region has been the center of civilization and important transit zone for international trade. We can say that Central Asia is the most important and indivisible part of Heartland, according to the famous British geographer H.Mackinder's Theory of Heartland. According to Mackinder, "Who governs the world's island (Eurasia and Africa), who governs the world, manages the whole world" [1]. As it is known, although it is impossible to reach the seaport for Central Asian

countries, it is possible to establish economic relations not only with neighboring countries, but also with the whole world by developing land transport. First of all, in the countries of the region, it is necessary to achieve internal stability and to create transport corridors for entering the world market.

Kazakhstan has a high potential for energy exports in the region, primarily due to its 105 million tons of oil production and consumption - 50 million tons. The Kazakh government plans to increase oil production by 2015 to 178 million tons a year [2]. It is also planning to increase gas production by 2020 by 40 billion cubic meters at the expense of the Caspian shelf (estimated reserves - 2 trillion m3) [3].

For the New Silk Road project, which will help China to implement the multi-billion dollar plan, Kazakhstan is currently building a railway station in the Horgos desert region on the eastern border with China [4]. The share of European countries in the export of Kazakh energy exports to foreign countries in 2013 is 76% [5].

In Turkmenistan, total primary energy production is almost 60 million tons, of which nearly 50 million are natural gas and 10 million tons of oil. 34% of natural gas, 2/3 of oil and petroleum products are exported [6]. In Kyrgyzstan, domestic primary energy production only covers half of the country's energy needs and generates at the expense of



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hydropower demand of more than 80%. In Tajikistan, energy production is mainly driven by hydropower, with the total energy balance of hydropower at 96% [6].

Today, Uzbekistan is implementing large-scale plans for modernization and diversification of its economy, and additional revenues from natural gas sales are important. Energy is the root of any economy, so energy diversification is a topical issue. Oil, gas and coal are the main sources of energy. Currently, Uzbekistan is extracting 12 billion tons of energy sources in a year. However, approximately in the next 40 years oil, in 50-60 years gas and in 100 years coal will end. Therefore, alternative or renewable energy development is important. Leading countries are currently using solar, wind, water, and geothermal energy. These comprise more than 20 percent of the total energy potential [7].

Uzbekistan has about 182 million tons of sun power, which is equal, the same amount of oil per year. If the country consumes 60-65 tons of oil equivalent per year, it means that there are more than three shares of this demand. In total, the sun has a capacity of 51 billion tons of oil.

In 2019, Uzbekneftegaz plans to produce 43 billion cubic meters of gas. Overall, the country plans to increase its gas production from 60 billion to 63.6 billion cubic meters in 2018 and 70 billion cubic meters by 2025 [8]. Nowadays Lukoil, Gazprom, China National Petroleum Corporation, as well as leading companies in the world. The government is negotiating with VR PLC and Total SA.

Today, the country's domestic demand for gas is about 40 billion cubic meters. Uzbekistan exports gas to Russia, Kazakhstan, Tajikistan and Kyrgyzstan. Last year, the volume of gas supplies to China via three pipelines reached 9 billion cubic meters, and it is planned to increase this capacity by commissioning the fourth line.

In general, the fuel and energy complex of Uzbekistan grew strongly in the Soviet era, consolidating the oil and gas, coal, and power sectors. In addition, Uzbekistan produced uranium, but it was only for the domestic export of the union, and there were no nuclear power facilities in the country. Due to the large population and the presence of large industrial complexes, Uzbekistan's energy needs were enormous, and most of the energy sources were consumed in the country.

Only the Uzbek oil and gas sector, as well as the uranium product, were of union importance [9]. According to the "Oil and gas" magazine in January

2014, oil reserves were estimated at \$594 million and total oil production and other fuel products in 2013 amounted to 102,000 barrels a day [10].

Uzbekistan's hydropower station consists of more than 190 natural gas, oil and gas condensate and coal mines. The total reserves of these deposits are estimated at 2.1 to 5.7 billion cubic meters. The reserve for energy is natural gas, proven reserves are about 1.8-2 trillion.m3. Uzbekistan occupies the second place in the CIS on production of natural gas, with its share in world production accounting for 2.3% - 2.5%. Uzbekistan is among the world's top ten uranium reserves and has the necessary production and technology capability.

Uranium production in the country today is equal to 7% of world production [6, p.4]. Gold reserves are 2100 t. but this account can be up to 3,500 tons. Annual gold extraction is 80-85 t., representing 3% of global production [11].

It is possible that Uzbekistan has unique fuel and energy resources. Exploded gas reserves reach \$ 2 trln. About three billion cubic meters of coal, 2 billion cubic meters of coal. More than T. There are more than 160 oil deposits. Oil, gas and condensate reserves do not only meet our needs, but also enable us to export energy resources. Uzbekistan has very large oil and gas deposits underground. Approximately 60% of the country's territory can be explored in the future. There are five main regions where oil and gas can be found.

These are Ustyurt, Bukhara-Khiva, South-West Gissar, Surkhandarya and Ferghana regions. Oil and gas reserves reach \$ 1 trln. More than US \$. The explored reserves cover the republic's demand for natural gas for more than 35 years, with oil up to 30 years [11].

In terms of natural gas, Turkmenistan, Kazakhstan, and Uzbekistan account for about 10.6% of global gas reserves. In this regard, the share of Tajikistan and Kyrgyzstan is almost unclear in the British Petroleum report. According to the BP report, the share of Kazakhstan in the world's oil reserves is 1.8%, with the potential of Uzbekistan and Turkmenistan to be less than 0.05%.

## Conclusion

In short, the discovery of new aspects of the economic potential of the Central Asian region will further enhance its geopolitical and geo-strategic significance. This, in turn, determines the interest of leading world states in the region to further increase competition.



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## **References:**

- 1. Alimov, R. M, & Arifkhanov, S. R. (2002). *Tsentral'naya Aziya: geoekonomika, geopolitika, bezopasnost'.* (p.87). Tashkent: «Shark».
- 2. (n.d.). Energy Information Administration. Retrieved 2019, from www.eia.doe.gov/emeu/cabs/kazak.html
- 3. (n.d.). Retrieved 2019, from www.newsru.com/finance/22may2006/kazgaz.h tml
- 4. (2014). "The Economist", November 15th-21st, Volume 413, Number 8913, p.61.
- 5. (n.d.). Retrieved 2019, from www.eia.gov/countries/analysisbriefs/Kazakhst an/images/crude exports.png
- 6. (2007). "*Analiticheskaya zapiska*", UNDP, № 1 (8), p.3.
- (n.d.). Alikhonov: takhminan 40 yilda neft', 50-60 yilda gaz, 100 yilda kymir zakhiralari tugaydi. Retrieved 2019, from <a href="https://kun.uz/news/2019/05/24/alixonov-taxminan-40-yilda-neft-50-60-yilda-gaz-100-yilda-komir-zaxiralari-tugaydi">https://kun.uz/news/2019/05/24/alixonov-taxminan-40-yilda-neft-50-60-yilda-gaz-100-yilda-komir-zaxiralari-tugaydi</a>

- 8. (n.d.). «Uzbekneftgaz» zhoriy yil okhirigacha uchta aloxida kompaniyaga bÿlinadi. Retrieved 2019, from <a href="https://kun.uz/news/2019/05/22/ozbekneftgaz-joriy-yil-oxirigacha-uchta-alohida-kompaniyaga-bolinadi">https://kun.uz/news/2019/05/22/ozbekneftgaz-joriy-yil-oxirigacha-uchta-alohida-kompaniyaga-bolinadi</a>
- Strokov, A., V. (2013). & Paramonov, Evropeyskoe prisutstvie energetike Uzbekistana, Kyrgyzstana, Tadzhikistana. Retrieved 06, 2019, from May www.easttime.ru/analytics/tsentralnayaaziya/evropeiskoe-prisutstvie-v-energetikeuzbekistana-kyrgyzstana-tadzhikist
- (n.d.). Uzbekistan, Country Analysis Note, US Energy information administration, independent statistics and Analysis. Retrieved 2019, from www.eia.gov/countries/countrydata.cfm?fips=uz
- 11. Klavins, M., Zaloksnis, J., & Azizov, A. (2014). *Environment, pollution, development: The case of Uzbekistan*. University of Latvia, Riga, ISBN 978-9984-45-888-5, p.13.

