



## MINERAL RESOURCES

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**Abstract:** Natural resources found in nature in the form of minerals are called mineral resources (resources). Currently, more than 200 types of mineral resources are used for economic needs. In practice, mineral resources contain almost all the elements in D. I. Mendeleev's periodic table of chemical elements, and they lie underground in the form of minerals. Man has been using available resources since time immemorial. With the passage of time, the type and volume of mineral resources used has increased.

The volume of use of underground mineral resources, which is a finite and non-renewable natural resource, is also increasing year by year. These are coal, oil, natural gas, ferrous and non-ferrous metal ores, mining and chemical raw materials, construction materials. Some of them have large reserves, while others have not much.

**Introduction.** Analysis of the volume and rate of use of the main types of fossil resources shows that humanity's "appetite" for these resources is growing at an unprecedented level. For example, between 1950 and 1968, while the population increased by only 38%, the mining of coal and iron ore increased by 2 times, and the extraction of oil by almost 3.5 times. In 1913, the use of fossil resources was on average 5 tons per capita, in 1940 it was 7.4 tons, in 1960 it was 14.3 tons, and in 1990 it was 25 tons, i.e. increased by 5 times during the next 80 years. Now 150 billion tons of mineral raw materials are mined in the world every year. According to the information of the United Nations, 32 billion per year in the world. tons of coal, 2.6 bln. tons of oil, 6 bln. tons of iron ore, 3.6 mln. tons of chrome ore, 7.3 mln. tons of copper ore, 3.4 mln. tons of lead ore, 159 mln. tons of table salt, 120 mln. tons of phosphates, 1.2 mln. tons of uranium, mercury, molybdenum, nickel, silver, gold and platinum ores are mined. According to some data, if the mineral resources are used at this rate, the reserves of gold will last for another 30-35 years, zinc - for 36 years, mercury and antimony - for 70 years, uranium - for 47 years, copper - for 66 years, coal, oil and gas reserves will last only 150 years. According to other data, the reserves of aluminum should last for another 570 years, copper - 292 years, zinc - 232 years, iron - 150 years, and gold, silver and platinum reserves should be exhausted in 1990. These contradictory opinions based on Khomchot, although they cannot clearly show the picture of the future, in any case confirm that the reserves of fossil resources are limited. This gives experts the task of further studying the lithosphere, searching for new reserves, using non-traditional methods of using resources and making maximum use of ores, recycling their waste, and creating technology for extracting the necessary elements.

The land of the Republic of Uzbekistan has a huge amount of various mineral resources. Almost all the elements of Mendeleev's periodic system were found on this land. So far, more than 2,700 mineral deposits and their occurrences have been identified on the territory of the republic. There are about 100 types of raw materials in these deposits, the total amount of which is estimated at 3.3 trillion US dollars. Oil and gas reserves alone are worth \$1 trillion, 900 of the identified mines have been found and studied, and the reserves in them are worth 970 billion. equal to a dollar. Currently, the number of mines in use in the republic is about 400. 5.5 billion from these mines every year mineral resources of USD 6-7 billion are being obtained. new dollar reserves are being found.

Uzbekistan is a rich country in fuel and energy reserves. Natural gas reserves found in it are 2 trillion cubic meters. around the cube. These gas reserves are enough to supply the republic with gas for 35 years. The reserves of gas in the Kokdumalak fields alone are 144 billion cubic meters. cubic meters, the oil in them is 54.2 million tons, and gas condensate is 67.4 million tons. The number of currently used oil fields is more than 160, and their reserves reach 30 years. In 1985-1994 alone, 38 new oil and gas fields were put into operation. In addition, 155 more promising oil, gas and gas condensate fields have been identified. Investigations show that almost 60% of the republic's land has underground oil and gas deposits. These layers are mainly located in 5 regions. These are: Ustyurt, Bukhara-Khiva, South-West Hisar, Surkhandarya and Fergana regions. More than 90% of the total oil obtained in the republic is obtained cheaply, that is, by the method of fountains. So far, only 32% of the oil reserves discovered in the territory of the republic have been exploited. This indicator is 61% in Turkmenistan, 60% in Tajikistan and 41% in Kyrgyzstan. The situation is similar in the development of natural gas reserves.

The total coal reserves are 2 billion tons, and our republic ranks second in Central Asia in terms of coal reserves. Coal is mined from Angren, Shargun and Boysun mines along with coal, valuable minerals such as kaolin, limestone and quartz sand are extracted from these mines. Alumina, i.e. aluminum oxide and aluminum, refractory materials, ceramic coatings, metlax tiles, porcelain, faience, white and other colored cement, refractory bricks are obtained from kaolin.

Uzbekistan has large reserves of precious metals. 32 types of precious non-ferrous metals were found in its territory. Currently, they are mined from 33 mines. In terms of gold reserves, Uzbekistan ranks fourth in the world, and in terms of gold mining, it ranks seventh. The main deposit of gold is located in Central Kizlyukum. Currently, gold is extracted from 7 mines. The discovery of the Muruntov mine was recognized by the International Geological Society as the biggest gold discovery of the second half of the 20th century. Modern technology of affinage, i.e., the process of extracting the purest metal, is introduced here, and because of the high quality of mined gold, genuine gold with a purity level of "four nines" is obtained, which has the appearance of a premium product. Currently, the ore soil that was removed from the Muruntov mine and has been dumped for many years is being processed with the participation of the American company "Newmont Maying Corporation", and the remaining gold in it is being extracted. Gold is also found in Ajibugut, Bulutkon, Balpantov, Aristontov and Turboi mines in Kyzylkum region. Exploration of these mines continues. Later, gold was also found in Tashkent and Samarkand regions.

**In conclusion:** Applying the world's advanced technologies in mining operations, making large-scale investments, establishing joint ventures, fully involving in the production of ores,

extracting their accompanying minerals, and at the same time improving the economy and reducing waste reduction plans are being made. These works require a lot of effort, money and time. Currently, the first steps on this path have been taken, and the British company "Oxis Mining" has started to extract gold, and the companies "Omontaytov-Fred" have started to extract lead, zinc and gold. Undoubtedly, the planned plans and the work being carried out will raise Uzbekistan to the level of developed countries in the future, which will be the foundation for ensuring the prosperous life of the Uzbek people.

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