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NATURAL RESOURCES AND THEIR WISDOM USAGE

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Abstract: Saving solid fuels today is one of the important factors for us to leave as a reserve for future generations. Also, non-renewable resources are limited. This article discusses the current pressing problems of preserving species diversity in aquatic ecosystems and terrestrial ecosystems.

Key words: Solid fuel, fossil resources, environmental protection, mining coal industry, forest vegetation, mountain, desert.

Conserving solid fuels now is important so that we can leave them as a reserve for future generations. Non-renewable resources are finite. Their prices may increase in the future. As a result of excessive burning of solid fuels, exhaust gases are rising into the atmosphere, leading to atmospheric pollution. This leads to the destruction of the ecosystem.

It is widely accepted that it is important to use alternative energy sources instead of fossil fuels. Fossil Fuel Connections: Almost everyone in the world uses fossil fuels directly every day. Because fossil fuels are non-renewable and their supply on earth is limited. In the future, it may become more expensive and harder to find. Fuel use is one of the most pressing environmental problems.

For example: while coal is an ecosystem-destroying fuel, we need to mine it. Burning fossil fuels pollutes the air, producing unwanted gases containing smog and acid. For this reason, many people suggest reducing fuel consumption and finding other sources of energy, and we can also take other simple measures to reduce fuel use. Such as turning off the lights when you leave the room, turning off the TV when you are not watching. By doing these things, you will reduce the use of power plants that generate energy by burning fuel. Millions of cars in the US use it. A good way to reduce fuel consumption is to ride a bicycle. Alternative energy sources are sunlight, water, wind and nuclear energy. These energy sources are inexhaustible. Solar Energy: Solar water heater units use the energy of sunlight to increase water temperature through solar collectors.

An airtight enclosure with a transparent coating, painted black, an absorbent metal plate with water-conducting tubes, and insulated flat solar collectors on the back and side walls of the enclosure to prevent heat loss are common.

Wind energy: Wind energy can be used to produce mechanical or electrical energy. This energy is directly related to the speed of the wind. A standard wind turbine consists of a three-bladed rotor mounted on a tubular steel pole. A slewing mechanism turns the rotor in the direction of the wind. The rotor drives the reducer and the asynchronous generator. The wind generator operates at a speed higher than 3-4 meters per second. Its maximum operating speed is 25-30 meters per second.

80-90% of the biomass used in biogas plants is made from manure with the addition of organic waste from dairy farms and poultry farms. Biogas production typically requires livestock to be raised on farms to collect manure. The world's population is expected to reach 9 billion by 2050.

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Population growth will lead to traffic congestion, overcrowding of subways, overcrowding of buses, and a decline in food supplies. Population density increases, food availability becomes more difficult, and infectious diseases spread more widely.

Minerals are a source of energy and crops for humanity and its economy, and their use is increasing year by year. The development of science and technology is forcing scientists to discover new mineral deposits.

For example, according to Japanese scientists, the metal concentrations at the bottom of the ocean could provide the world's industry with copper for 2,000 years, nickel for 70,000 years, and manganese for 14,000 years at the current consumption rate. These resources are used for 1% to 20% of the world's industrial needs. In addition, underground minerals are often mined for 1 or 2 metals, and the rest is dumped into the environment. Waste is especially prevalent in the extraction of oil, coal, potash, construction materials, ferrous and non-ferrous metals, and mining and chemical raw materials.

In many oil fields around the world, 50-60% of the oil is extracted from the extracted part. Thus, currently, 150 billion tons of ore are extracted from the Earth's lithosphere every year, and 95-98% of it, after the necessary elements have been extracted, is released into the environment.

Wind energy can be used to produce mechanical or electrical energy. This energy is directly related to the wind speed. A standard wind turbine consists of a three-bladed rotor mounted on a tubular steel pole. A slewing mechanism turns the rotor in the direction the wind is blowing. The rotor drives the reducer and the asynchronous generator. The wind generator operates at a speed higher than 3-4 meters per second. Its maximum operating speed is 25-30 meters per second.

Organic waste from animal husbandry and food industry is the raw material for biogas production. During anaerobic digestion of biomass, biogas can be used by domestic consumers in place of natural or liquefied petroleum gas (LPG) or converted into heat or electricity. The biogas produced contains 60-70 percent methane (M4), 30-40 percent carbon monoxide (CO2) and 500 ppm (parts per million) hydrogen sulfide (H2S).

80-90% of the biomass used in biogas plants is made from manure with the addition of organic waste from dairy farms and poultry farms. 25 m3 of cattle manure, 190 m3 of poultry manure, and 130 m3 of industrial waste can be produced from one ton of biogas.

Biogas production typically requires cattle to be raised on farms to collect manure. The use of biogas plants has the following advantages:

1. Biogas is a neutral fuel compared to CO2, and its use prevents the increase in the amount of methane gas released into the atmosphere during the fermentation of organic waste.

2. The value of fertilizers obtained from fermented biomass is much higher than that of the initial raw material. 3. The advantage of secondary processing - fermentation of solid biomass to produce biogas - is the environmentally safe and economically beneficial method of obtaining nutrients on farmers' land.

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Mineral resources include ore and non-ore metals, oil, gas, coal, peat, and underground water. Minerals are a source of energy and crops for humanity and its economy and development, and its use is increasing year by year.

If over the past 25 years, the world's demand for coal has increased 2 times, iron ore 3 times, oil and gas 6 times, manganese, potassium, phosphorus, and salts 2-3 times, then the share of the population during this period has reached 40%. Currently, 150 billion tons of mineral raw materials are mined in the world annually. As a result of the natural struggle, 15 bln. t. is draining rocks, 3-4 bln. t. rising into the atmosphere. According to experts' information, if fossil resources are used at the current rate, gold may run out in 30-35 years, zinc 36: antimony-70: potassium-40: uranium-47: copper-66: mercury-70: coal, oil, gas, in 150 years.

Therefore, many developed countries: Japan, England, Germany, Italy, Holland, Belgium and others, due to the lack of raw materials and underground resources, are resorting to the processing of secondary waste and the use of the resources of other countries. The development of science and technology is forcing scientists to discover new mineral deposits. For example, according to Japanese scientists, metal concentrations at the bottom of the ocean could provide the world's industry with copper for 2,000 years, nickel for 70,000 years, and manganese for 14,000 years at current consumption levels.

These resources are used for the needs of world industry from 1% to 20%. In addition, underground minerals are often mined for 1 or 2 metals, the rest of which is dumped into the environment.

Thus, 150 billion tons of lithosphere are removed from the earth's lithosphere every year. ore is mined and 95-98% of the necessary elements are extracted from it and thrown into the environment. In the process of searching for, processing and transporting fossil resources, the structure of the earth's surface is destroyed, fertile areas are reduced, plants die, soil erosion accelerates, and as a result, the area of unusable land increases.

There are not many countries on the world map that possess the wealth that exists on the land of Uzbekistan. The power of these riches has not been used. This will certainly attract the attention of famous foreign companies and banks around the world. Uzbekistan is proud of its mineral wealth. Almost all the elements of the famous Mendeleev periodic system have been found here. To date, more than 2.7 thousand different mineral reserves and promising areas of mineralization have been identified. They include about 100 types of mineral raw materials.

More than 60 of them are involved in production. More than 900 deposits have been explored, and their proven reserves amount to 970 billion US dollars. At the same time, it should be noted that the total potential of mineral raw materials is estimated at more than 3.3 trillion US dollars.

Very important strategic resources - 155 prospective mines for oil and gas condensate, natural gas, more than 40 for precious metals, 40 for non-ferrous, rare and radioactive metals, 15 mines for mining and chemical raw materials.

The current level of discovered minerals and the associated development of extremely rich deposits of precious, non-ferrous and rare metals, all types of fuel reserves - oil and gas condensate, natural gas, many types of mineral raw materials and construction materials - allow us to look to the future of the republic with confidence.

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Every year, approximately $5.5 billion worth of minerals are extracted from the republic's mines, and new reserves worth $6.0-7.0 billion are being added to them. Uzbekistan occupies a leading position not only in the CIS, but also in the world, in terms of proven reserves and promising ores for a number of minerals, such as gold, uranium, copper, natural gas, tungsten, calcium salts, phosphorites, and kaolin.

For example, the republic ranks 4th in the world in terms of gold reserves, 4th in terms of its extraction, 10th-11th in terms of copper reserves, and 7th-8th in terms of uranium reserves. Uzbekistan has unique fuel and energy resources. Discovered gas reserves are about 2 trillion m3, coal - more than 2 billion tons. There are more than 160 oil fields. Oil, gas and condensate reserves not only fully meet our own needs, but also allow us to export energy resources. Now it has become one of the most profitable areas of capital investment.

In Uzbekistan, coal is mined at the Angren, Shargun and Baysun deposits. Their total reserves are 2 billion. tons. Along with coal, very valuable mineral raw material reserves are also mined: kaolins, limestones, quartzites, stone alloys and other rare elements.

They serve as a powerful raw material base for the development of many types of modern production. Uzbekistan is one of the countries in the world with the largest reserves of gold, silver and other precious and rare metals.

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