



## Problems in the Field of Energy and Ways to Overcome Them

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### ABSTRACT

This article explains the problems in the electric power industry. The current problems of the energy sector in the world and their research, the views of scientists are covered. Proposals and recommendations for the development of renewable energy sources in Uzbekistan are provided.

### Keywords:

Solar Energy, Wind Energy, Power Plant, Energy Industries, Investment.

**Access.** One of the great problems that is facing humanity today is an energy problem. The change in climatic conditions throughout the world, the population development of the industry causes an increase in the demand for fuel and energy. In particular, the rate of fuel, heat to heat will increase even in the autumn-winter season.

As developing countries industrialization, the use of their reliable electric power will increase. In countries where the development process increases, the increase in income source is directly related to the development of the middle class and the improvement of lifestyle.

The energy problem is one of the current global problems, which is the importance of the energy sources that the majority of the World Energy balance will be foler. In other words, mineral fuels (oil, natural gas, charcoal, shannes, peat) are a significant increase in the incumbency between the energy needs of the population and production creates the problem. It is estimated to the problem, according to most specialists: the widespread introduction of energy technologies as well as solar energy, winds, rashes, geothermal energy, biodiversity energy gradual transition to the use of sources.

Fifth of primary energy supply consuming the population living on earth is

obtained from reformable sources such as wind, solar, hydro and geothermal. This sector is expected to continue to grow 2.6% annually until 2040.

The main source of renewable energy has been considered hydroelectric power. Today, winds and solar energy are developing rapidly. Scientists, areas in most countries, researchers are conducting research on new photovolta cells, which can be printed on flexible panels, which leads to reducing solar energy costs.

The wind and solar energy is very relevant to the weather and the bright times of the day, in solar conditions, when they are high, the main part of the electricity is the main part. Currently, many states are struggling to reserve more reliable sources of energy production by keeping them in back. This means that the atomic, gas and even active power plants are working without work, but when the wind or the sun falls below the horizon, the production will have a high level.

The largest oil producers in the world is the United States, Saudi Arabia and Russia [2]. The United States produced the most oil in the world in 2019, producing 17 million barrels of oil per day. Saudi Arabia and Russia are one of the highest countries in the second and third largest producers, as well as oil exports. In

contrast, the largest solar-producing countries are China, USA and Germany in China, as well as the world's leading countries in the world.

**Reference literature analysis.** The leading experts on the topic examines the fuel and energy issues in countries where the world is in the world, which is harming the environment, no fuel-energy-efficient countries, and non-fuel-energetial countries They are working on a wide range of research.

R.V. Gorodov, V.YE. Gubin, A.S. Matveyev [2] the textbook, written by foreign scientists, considers the main directions for the development of renewable energy sources, methods for converting wind, solar, geothermal energy, as well as ocean energy into electrical and thermal energy, taking into account the latest achievements of technology and technology. Particular attention is paid to the comparison of traditional and unconventional energy sources, the dynamics of energy consumption and the development of energy facilities, as well as the environmental problems of unconventional energy.

In the study conducted by V.Y.Ushakov three main problems with the satisfaction of electricity needs: energy resources and energy shortages, environmental damage, geopolitical and social threats were discussed. Based on the analysis of the "energy map" of the modern world, the main method of solving these problems is highlighted by energy conservation and the implementation of energy exchange concepts.

Adel Saleh Raweaa, Shabana Uroj Electronic access to electricity problems in the Republic of Yemen and the widespread use of renewable energy sources and the problems in investment projects in the introduction of these renewable energy sources are revealed.

**Research Methodology.** The article in the country in the country of electricity in our country, the methods of induction and determination were widely used in the analysis of research visits, opinions and reviews of scientists in the world. Proposals and recommendations were developed on an increase in the requirements for alternative energy sources and analyzes on the

introduction of renewable energy sources in Central Asia.

**Analysis and results.** Today, the method of storing electricity manufactured using wind or solar energy has not been developed for a certain period of time. Technologies such as the condenser and volan can provide the power stored for several minutes or hours. But it is especially important to set power outages, and they only work when they are the same as the amount entered energy. However, it will not be easy to link these new energy producers to existing networks. One of the biggest problems of using continuous reinstable sources such as wind and sun is a sign of the system.

Electrical energy obtained by burning gas and coal is unable to be suspended suddenly, but it is time to move to renewable energy sources. In this regard, the Energy Ministry has been working in our country.

In order to eliminate the above-mentioned problems and find new energy sources, increase the efficiency of renewable energy and expand the scope of their use in the energy system, with the support of the Asian Development Bank, the World Bank and the European Bank for Reconstruction and Development, Large projects are being implemented at the expense of foreign investments. In particular, cooperation relations have been established with the subsidiaries of the Saudi Arabian "ACWA Power" company, the French "Tota Eren" company, the "Masdar" company of the United Arab Emirates, and the "Mubadala Investment Company" investment holding in Abu Dhabi.

By expanding the scope of work on the production of alternative energy sources, specific projects for 10 years have been developed. During this time period, it is planned to build solar power plants with a total capacity of 5 thousand MW, as well as wind farms with a total capacity of 3 thousand MW.

**Conclusions and suggestions.** It would be expedient to address the following suggestions in the elimination of problems in the country in depth and profitableing of renewable energy sources in foreign countries:

☒ Updating the oldest infrastructure in the field of fuel energy;

☒ Capital repairs of existing power plants and establishment of new modern;

☒ Investment in investors for renewable energy equipment;

☒ Expansion of access to renewable energy sources;

☒ It is necessary to expand training camps to expand training centers and open up-to-renewed training programs, including training of specialists on renewable energy technology;

☒ It is not the import of technical, technologies of different countries, but also work on the establishment of enterprises producing refining energy sources in our country;

☒ Propagational and propaganda work to use wind mills, solar panels and sunectors to the population.

Improving the lifestyle of the population, social and economic development of natural and clean electricity, the development of grounded mineral resources, access to remote villages, not to harm technical and technology, not harming techniques, technical and technology, The result of environmental pollution and various disasters due to climate is achieved.

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