### **VOLUME-3, ISSUE-3** THE ROLE AND IMPORTANCE OF THE "GREEN" ENERGY SECTOR IN ENSURING THE ECONOMIC SECURITY OF THE STATE

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Abstract: this article highlights the role and importance of the "green" energy sector in ensuring the economic security of the state. The main problem of the economy is the limited economic resources, but the limitless human needs, as a result of the increased demand for energy resources, the need to switch from non-renewable resources to renewable resources, the importance of green energy has been revealed. In addition, the directions of the state policy on green energy are highlighted.

**Key words:** green energy, green economy, economic security, limited economic resources, economic problem, state policy.

Every task, proposal and assignment indicated in the Address of the President to the Oliy Majlis and the people of Uzbekistan serves to ensure the prosperous life of the people living on this land.

In fact, the head of our state, while putting forward important tasks and proposals for the development of all directions, paid special attention to the work done in the energy sector, existing problems and their solutions.

It was noted that problems in the field of energy have not arisen today, and for many years no investments have been made in new gas fields, electricity and gas networks have not been modernized. The main factor in this was the lack of accurate accounting in the system and the fact that large losses became commonplace.

Today, on the initiative of the President, solutions to the problems in the field are being sought. It should be noted that the development of "green" energy and the initial steps in this regard have begun.

Of course, such reforms can be the basis for covering the demand in the field. As the President noted, in the last six years, our population has increased by 12%, and industrial enterprises have increased by 2 times, from 45 thousand to 100 thousand. This is evidence that the demand for electricity has increased by at least 35% and it is increasing year by year.

In the address, the honorable President emphasized the issues that need to be implemented in order to improve the supply of energy resources, and said that for the sustainable development of our economy, 25-30 billion dollars of investment in the energy sector is needed, and this can be achieved only by attracting private investments.

As noted, in the last three years, 8 billion dollars of direct investment has been attracted to the industry. In particular, last week, the competition for the construction of 3 more solar photoelectric power plants with a total capacity of 500 megawatts was completed in Bukhara, Namangan and Khorezm regions.

In fact, since the beginning of this year, 7 power plants with a capacity of 1.5 thousand megawatts have been put into operation. Next year, we will implement 11 large projects of 4.5

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thousand megawatts. In particular, solar and wind power plants to be built in Bukhara, Jizzakh, Kashkadarya, Navoi, Samarkand, Fergana, Tashkent regions and the Republic of Karakalpakstan will create an additional 14 billion kilowatts of electricity production. This will increase the amount of electricity supplied to households by 50%.

today, the use of energy resources is also the most important issue. The President focused on the same issue and noted that energy consumption in our economy is 2 times higher than in other countries, and therefore we will accept the National Program for Energy Efficiency Improvement.

Based on this, it should be said that today "green" energy can be a solution to existing problems. It is advisable to use every opportunity for this.

In the Address, the President noted that in the next three years, all state organizations will be instructed to install solar panels and hot water collectors, and due to this, 60 percent of their electricity and gas consumption will be transferred to "green" energy. It can be said that the volume of subsidies allocated for the installation of solar panels in households will be doubled, which is the beginning of the work that has started in this regard.

In short, energy is the most important system for the economy of our country. Considering the development of "green" energy as an important factor of the "green" economy, not only system employees, but also residents and consumers are responsible for contributing to it. This is important in ensuring more effective implementation of priority tasks defined in the Address of President Shavkat Mirziyoyev.

Today, humanity is facing new threats. The population of our planet continues to increase, and the stock of natural resources is constantly decreasing. First of all, we are observing the aggravation of global environmental problems. The world community emphasizes the need to introduce the principles of "green development" in the world economy in order to correct the situation. This approach is reflected in the UN Sustainable Development Goals.

The tragedy of the island is of urgent importance for Central Asia and the whole world, as well as inefficient use of land and water resources,

and environmental problems such as the degradation of the ecosystem, the reduction of biological diversity, the gene pool of plant and animal species, the pollution of atmospheric air and waste water, the accumulation of industrial and household waste, require every country to pay more serious attention to this issue . Such problems are very important for us and cannot be postponed.

Because, if the above environmental issues are not resolved, they may cause irreparable consequences in the future.

The fact that the first direction in the election program of Abdushukur Hamzaev, the candidate for the Presidency of the Republic of Uzbekistan, is devoted to ensuring the country's stable development and accelerating the transition to a "green" economy is a sign of how important and important this goal is.

In order to transition to a "green" economy, the Ecological Party of Uzbekistan sets a number of goals in its election program:

First, a policy aimed at the development of all sectors of the economy based on the principles of "green" economy is implemented. This ensures the rational use of natural resources, their conservation and the restoration of biological resources.

It is known that the transition to a "green" economy in our country is based on geographical location, climate change and innovative approaches. Based on the fact that Uzbekistan has a high

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technical potential for energy production from renewable sources, first of all, special attention should be paid to the use of solar, wind, small water flows, geothermal and biomass energy in economic sectors, as well as the introduction of advanced innovative technologies in these areas. attention should be paid.

In the election program, it is proposed to create organic mechanisms for the transition to the use of renewable energy sources in all areas of the economy.

Based on the climatic conditions of Uzbekistan, about 97% of "green" energy sources correspond to solar energy. The power of generating solar energy in the regions of our country is from 525 to 760 billion kWh. This is because the number of sunny days per year is 320 days and the number of active sun hours is 3000 hours on average.

Seven years ago, with the initiative of our President Shavkat Mirziyoyev, a new era began in the energy sector in our country. In particular, great attention has been paid to the introduction of renewable energy sources and energy-saving technologies. At that time, some people thought: "This is a temporary campaign." But the past period has shown that they have been renewed. In the following years, a solid legal framework was created for the development of the industry. Foreign investors were attracted and many promising projects were developed. One after another, solar and wind power plants, small hydroelectric power plants are being put into operation. The most important thing is that we are not turning back from the chosen path in this regard. On the contrary, the scope of work is expanding and the pace is accelerating. Last week in the city of Bukhara, under the chairmanship of the President of the Republic of Uzbekistan, 430 megawatts of renewable energy sources were built in the video selector meeting, where the issue of guaranteeing the population and economic sectors with energy resources was also discussed. They alone produce 1.2 billion kilowatt hours of electricity per year. This means that it is equal to 60% of the annual consumption of social sector objects.

Of course, these changes and reforms will be another important factor for us to rise to a new stage in development.

Almost everyone knows that natural gas, oil, and coal reserves are limited. Their extraction is becoming more and more difficult every year, so their prices are getting more and more expensive. Moreover, the use of these fuels causes a lot of damage to nature. In the conditions where the population and the quality of life are growing, various enterprises are increasing, the most optimal way is the efficient use of renewable energy sources. Many countries envy our country's great potential in this regard. For example, there are 320 sunny days a year in our country. We also have a lot of windy areas, streams and creeks. According to the calculations of international financial institutions, the annual reserve of alternative energy (especially solar energy) in the republic is equivalent to 270 million tons of conventional fuel. This is three times more than our real needs. So, if we can effectively use the opportunities, we will achieve unprecedented achievements.

It should also be noted that not only the state or business will benefit from the "green economy", but also ordinary people, significant positive changes will occur in their lives. That is its social importance.

We, deputies of UzLiDeP, are supporting the measures aimed at the development of "green energy" in our country with practical work. In particular, we are conducting public and parliamentary control over the processes of construction of green energy sources implemented

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within the framework of the programs. We are organizing promotional activities encouraging the widespread use of renewable energy sources in enterprises and households.

This is actually a favorable opportunity for widespread introduction of renewable energy sources in all aspects. How to adequately use this opportunity to increase the economic potential of our country, and how to introduce the principles of "green" economy into every sector, are clearly reflected in the election program.

In particular, we propose to implement market mechanisms in the field of renewable and alternative energy sources, to expand the participation of the private sector in the market of energy resources. Through this, it will be possible to meet the constantly growing energy needs of the population.

First of all, users of renewable and alternative energy sources in remote and remote areas are actively supported. Attractive projects are offered for them. Privilege for private investors

and through the introduction of preferences, it is planned to attract foreign direct investment to the sector.

The program envisages support for the widespread introduction of energy, resource-saving and other innovative ecological and digital technologies in the resource-intensive sectors of the economy - energy, construction, agriculture, transport communication system and utilities. By implementing them, first of all, the possibilities of creating material goods to meet the needs of the population and increase their well-being, level of living and quality without harming ecology and the environment will expand.

Secondly, the main producers in the country, especially large enterprises, will be directed to green technologies.

All over the world, including in our country, the rational use of natural resources, their conservation and the restoration of biological resources are becoming more and more important.

As part of the Paris Agreement, Uzbekistan reaffirms its commitment to reduce greenhouse gas emissions per unit of GDP by 35% by 2030.

It is planned to increase the share of "green" energy to 8,000 MW by 2026, which will reduce carbon dioxide emissions by 5 million tons.

Research shows that Uzbekistan loses at least 4.5% of its GDP every year due to the use of hydrocarbon energy - oil, gas, coal. In addition, about half of the country's power generation facilities are outdated. Their restoration or modernization requires a lot of money. Instead, it is preferable to switch to "green energy", which is considered to be both economically and ecologically efficient.

Thirdly, in order to increase the investment attractiveness of Uzbekistan, a proposal was made to introduce the "Green Visa" program. It is worthy of attention that capital will be attracted to our country for the effective use of natural resources.

As a result, developed "green" manufacturers of the world will begin to enter our country, and strong competition will be formed in the market of technologies that generate renewable energy sources. As a result, the population's and small business entities' access to "green" energy sources will significantly increase, and the cost of products and technologies will decrease.

Fourthly, the proposal to develop the "green economy transition index" of industries and regions will be put forward. What does this give us?

First of all, as the conditions and opportunities for the transition to the "green" economy are being created in our country, it is possible to achieve the desired results only by using it in a

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targeted manner. In order to assess the level of use of these opportunities in all sectors of the economy and regions, an "index of the transition to a green economy" is required. Moreover, since the "green" economy is the future of our country, it is clear which sector or region is ready for it or which is lagging behind.

Today in our country, preferential or interest-free loans, subsidies and grants, and tax incentives are provided to enterprises and organizations, various segments of the population, for the use of alternative energy sources, reduction of carbon consumption in the production process, use of "green technologies" and the purchase of relevant equipment. is being done. The result of our efforts, the work done to make everything "green" in the economic sectors, is clearly expressed in the "transition to green economy index" that we propose above.

"Green" economy (green economy) is a model of economic development that includes a responsible attitude of man to natural resources and is aimed at finding a reasonable compromise between the growth of well-being and the conservation of natural resources.

Of course, the transition to a "green" economy is not a quick process that will happen all at once. In this regard, we should not ignore the importance of using financial instruments. In particular, the role of the state in this process, the conditions created for market mechanisms are of decisive importance in how the industry develops.

The Ecological Party of Uzbekistan is not in favor of putting the financial burden of the development of the "green" economy on the state budget. At the same time, creating the necessary conditions for "greenness" in any business, giving incentives to implementers of "green" projects, creating incentives and motivation to work based on the principles of "green" economy will become a priority for achieving our goals.

One of the main issues before us is the prevention and elimination of problems in the energy system. As we all know, providing the population and economic sectors with continuous energy is a very important issue. From the beginning, special attention is being paid to this in the candidate's election program.

In recent years, 6 new thermal and 1 solar photoelectric power plants have been put into operation in our country, and it should be noted that the volume of new power generation capacity in the last 5 years has exceeded 5,000 megawatts. However, taking into account the growing energy needs of the population and economic sectors, such results may not be enough for our country in the coming years.

In the election program of the candidate, a special emphasis is placed on the development of renewable energy as the safest and most appropriate way to ensure energy stability in the country. In particular, alternative and safe ways to get rid of our people from the problem of electricity shortage in today's modern life are offered by carrying out the work in this regard as quickly as possible and with better quality.

First, we need to develop a "Green Energy Strategy" aimed at the development of renewable energy sources. The important aspect of this is that it will be possible to prevent and eliminate one of the main issues facing us - problems in the energy system.

It is known that a large investment is needed to increase the production capacity of renewable energy sources in Uzbekistan by 15 GW and to increase their share to more than 30% of the total volume of electricity production.

However, judging by today's demand, it is time to take the work to a new level.

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Secondly, the widespread introduction of energy, resource-saving and other innovative environmental and digital technologies in the resource-intensive sectors of the economy - energy, construction, agriculture, transport communication system and utilities - should first of all be supported by the state.

Of course, the candidate from the Ecological Party of Uzbekistan emphasizes that the "green economy" does not consist only of reforming the energy sector. Multifaceted measures such as food security, agricultural innovations, sustainable cities, rational waste management, expansion of forest areas, reduction of desertification are also being promoted.

The next step in the transition to a "green" economy is to encourage the population to buy environmentally friendly goods, encourage business entities relying on green technologies, and introduce energy-efficient technologies in construction and energy-intensive industries. When creating this system, the state itself must first of all fulfill its regulatory role.

Another of today's global issues is reducing the amount of toxic gases released into the atmosphere and ensuring environmental safety. Indeed, the main demand of the "green" economy is to develop the general economy without harming nature and the environment.

In the election program of the candidate for the President of the Republic of Uzbekistan from the Ecological Party of Uzbekistan, a number of proposals are put forward that will solve the problem of atmospheric air pollution.

In addition, in 2022, the amount of pollutants released into the atmosphere from vehicles in the city of Tashkent alone amounted to 403 thousand tons, while this figure for the country reached 1 million 296.9 thousand tons. These numbers alone encourage us to think seriously about the future of vehicles running on hydrocarbon raw materials in our country.

Special attention is paid to this problem in the election program. The most important initiative in this regard is to ban the sale and import of passenger cars with internal combustion engines in the country starting from 2030. At the same time, it is necessary to take into account the share of large trucks that cause air pollution, and change the transportation of goods from large trucks to railways and other types of transport that have less impact on the environment.

Such strategic goals are already on the agenda in the developed countries of the world. In particular, in Japan, it is planned to reduce emissions from vehicles to zero percent by 2050 at the expense of renewable energy sources. Great Britain wants to completely ban the sale of diesel and gasoline cars by 2030. In the US, by 2030, it is planned to replace 50% of all new cars and trucks with zero-emission vehicles.

As a result of human activity, 20 billion tons of carbon dioxide gas is released into the atmosphere every year, and more than 300 million tons of plastic waste are created. One of the main principles of the green economy is state support for sustainable production and consumption, as well as the introduction of low-carbon, resource-saving technologies.

The transition to a new economic model requires a step-by-step approach. The main stages of the transition can be seen in the example of environmental initiatives introduced by the European Union.

At the first stage, it is important to reduce investments in environmentally harmful production. Thus, many banks in Europe are stopping lending to gas projects from 2022. This not only deprives the industry of preferential government loans, but also reduces the attraction of private investors.

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One of the priorities of our republic is the need for electricity, which is becoming a global issue for all of us, and its rational use, taking measures to introduce cheap, reliable, stable and modern energy.

In order to provide the population with high-quality and continuous energy sources, it is necessary to develop public-private partnerships and attract sustainable investment projects.

The head of our state, Shavkat Mirziyoyev, during his recent visit to Navoi region, symbolically commissioned the first large solar photoelectric power plant in our country with a capacity of 100 megawatts, built in the Karmana district.

The construction of this complex started last year. As part of it, 110 million dollars of investment were used and 300 thousand solar panels were installed. With the implementation of this project, 80 mln. cubic meter of natural gas is saved and this gas goes to people's houses. Most importantly, 160,000 tons of toxic gases will be prevented from spreading into the air. It is not an exaggeration to say that this was literally the first step in the transition of Uzbekistan to a "green economy" and was a worthy gift on the eve of celebrating the thirtieth anniversary of our country's independence.

Of course, these things do not happen by themselves. It is another practical result of the farsighted policy of the leader of our country. In the Address sent to the Oliy Majlis, the President focused on the issues of energy sector development and listed the projects and plans to be implemented in this direction one by one. In particular, as economic activity and incomes of the population grow, the demand for energy resources will increase, it was emphasized that the reforms in the oil and gas and energy sectors, and the completion of the started large projects, should be completed.

In fact, many meetings and meetings have been held in recent years under the leadership of our President on the issues of fundamental reform of the energy sector in our country. Relevant laws, international agreements, a number of decrees and decisions were adopted.

In the energy sector alone, thermal and solar photoelectric power plants with a total capacity of 1,800 megawatts are expected to be put into operation by the end of this year. To date, a total of 19 projects worth 7.4 billion US dollars have been implemented in the energy sector based on public-private partnership mechanisms, of which 12 projects have been signed. As a result, the production capacity will be increased from 14,000 megawatts to 15,800 megawatts. Compared to 2016, the growth rate is 52 percent.

For information, it can be said that 2 thermal power plants with a capacity of 240 megawatts and 1 of 230 megawatts in the Qibray district of Tashkent region, 174 megawatts in the Khorezm region, 270 megawatts in the Bukhara region, 220 megawatts in Kashkadarya, and a solar power plant with a total capacity of 100 megawatts in the Samarkand region. is about to be taken down. At the same time, 38 megawatt Zarchob-2 hydropower stations and 8 megawatt Kamolot hydropower stations will be launched in Surkhandarya.

#### Conclusion

In conclusion, our state is taking all measures to support the economic reforms being carried out in our republic and to fully satisfy the population's demand for energy resources. Energy is the most important system for the economy of our country. Considering the development of "green" energy as an important factor of the "green" economy, not only system employees, but also residents and consumers are responsible for contributing to it. This is important in ensuring more effective implementation of priority tasks defined in the Address of President Shavkat Mirziyoyev.

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An important step in the transition to a "green" economy is to reduce emissions from vehicles. In 2022, the amount of emissions into the atmosphere in Uzbekistan amounted to 2,057 million tons, of which 63 percent came from vehicles and 37 percent from industrial and manufacturing enterprises. That is why we must find a solution to the problem of vehicles and the toxic gases emitted from them, which have become an integral part of our lives today.

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