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ISSUES OF ATTRACTING GREEN TECHNOLOGIES IN THE DEVELOPMENT OF THE GREEN ECONOMY IN UZBEKISTAN

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Abstract
This work covers the current issues of green economy and development of green technologies in Uzbekistan. In particular, the ongoing work and existing problems to ensure environmental sustainability, rational use of resources, introduction of renewable energy sources, emission reduction are analyzed. Technological innovations aimed at improving energy efficiency in the fields of electric power, thermal power and oil and gas industry are also mentioned. The work also took into account international experience and obligations under the Paris Agreement.

Keywords: Green economy, green technology, energy efficiency, renewable energy, environmental sustainability, Uzbekistan, Paris Agreement, carbon emissions, green investments, sustainable development.

Introduction

The issues of green economy development and sustainable development in Uzbekistan have real meaning, and the initiatives and investments carried out in this direction contribute to improving the economic, ecological and social level of society. Green technologies, on the other hand, play an important role in this process, as they provide environmentally friendly solutions such as efficient use of resources, reducing waste, introducing renewable energy sources. This thesis analyzes the main issues that need to be implemented in the field of implementation and development of green technologies in Uzbekistan.

Comprehensive measures are being implemented in the country aimed at deepening structural changes, modernization and diversification of basic sectors of the economy, as well as comprehensive socio-economic development of the regions.

On July 8-9, 2018, Tashkent hosted a conference of regional ministries of European and CIS countries on green economy aimed at improving the regulatory framework and policies on green economy, supporting innovative green investments through public-private partnerships.

At the same time, the analysis showed that in the context of climate change, there are interrelated problems and needs in ensuring an efficient, resource-efficient and environmentally friendly economy.

In particular, accelerating industrialization and population growth are significantly increasing the economy's demand for resources, as well as increasing negative anthropogenic impacts on the environment and leading to increased greenhouse gas emissions.

Low level of energy efficiency of the economy, inrational use of natural resources, slow technological upgrade, insufficient participation of small business in the implementation of innovative solutions for the development of the "green economy" prevent the country from achieving its priority national goals and objectives in the field of sustainable development.

The lack of a long-term strategy does not allow to ensure the introduction of "green" technologies and systemic measures for the transition to a "green" economy.

On five priority areas of development of the Republic of Uzbekistan in 2017-2021In the strategy of actionIn order to consistently implement the above tasks, as well as ensure the fulfillment of the obligations of the Paris Agreement (Paris, December 12, 2015) and the transition to a green economy of the Republic of Uzbekistan:

1. Establish the main objectives of the transition to a green economy of the Republic of Uzbekistan:

energy efficiency and rational use of natural resources in the economy through technological modernization and development of financial mechanisms;

embedding green criteria based on advanced international standards into public investment and expenditure priorities;

assistance in the implementation of pilot projects in the transition to a green economy through the development of public incentive mechanisms, public-private partnership and intensification of cooperation with international financial institutions;

development of a system of training and retraining of personnel related to the labor market in the "green" economy by stimulating investments in education, developing cooperation with leading foreign educational institutions and research centers;

taking measures to mitigate the negative impact of the environmental crisis in the Aral Sea;

strengthening international cooperation in the field of the green economy, including through the conclusion of bilateral and multilateral agreements.

2. The following:

a) approve in accordance with the Strategy for the transition to a green economy of the Republic of Uzbekistan for the period 2019-2030 (hereinafter referred to as the Strategy) and establish the following as priority areas of its implementation:

improving the energy efficiency of the basic sectors of the economy;

diversification of energy resources consumption and development of the use of renewable energy sources;

adapt to and mitigate the effects of climate change, increase efficiency in the use of natural resources and preserve natural ecosystems;

development of financial and non-financial mechanisms to support the green economy;

What is green technology?

Green electronics, environmental technology, etc. The idea applies in part to the materials used in the manufacture of computers, cell phones, televisions, and dozens of other electrical devices. For example, the plastic we see in all of these cable wires is often burned to reach the precious copper in it, and in the process, hazardous chemicals are released into the air. This can lead to the development of acid rain and damage to the environment.

Despite the fact that it is cheaper to use toxic materials in the construction of devices, electronics manufacturers are being asked to invest in environmentally friendly materials.

Another important component of green electronics manufacturing is the reduction of energy and carbon emissions used in the manufacturing process, from the collection of materials to the ships used to transport them to stores. See what processes the smartphone goes through before it reaches your hands. Carbon emissions and labor laws are different in each country, and should be located in different countries in the process of electronic product manufacturing and logistics.

So what makes a device green electronics or green technology? These machines are designed to minimize energy consumption incrementally and have a low environmental impact. This does not mean that they absorb less electricity than electrical outlets. Truly green electronics involve materials that use less energy than traditional methods and even use renewable and natural materials and use manufacturing processes.

In order for electronics to be green and eco-friendly and to receive the eco label, it must meet the following criteria and pass various tests;

Reduce or eliminate materials with negative environmental impact

Choice of materials

Design for the end of life

Life Cycle Extension

Anergicani tejash

Life Control End

Corporate Performance

Treatment

Basic sectors of the economy improving energy efficiency

1. **In the field of electric power:**

Reconstruction and modernization of power generation facilities of operating power plants through the introduction of high-efficiency technologies on the basis of steam-gas and gas turbine units;

improvement and modernization of the configuration of trunk power networks to improve the stability of the energy system;

implementation of organizational and technical measures, including optimization of electric grid regimes, compensation of reactive power and network schemes;

increasing the level of automation of technological processes, reducing the volume of electricity consumed for transportation and distribution;

complete equipping of electricity consumption systems with automatic control and metering devices.

2. **In the field of thermal energy:**

introduction of new technologies for the development of thermal energy, including cogeneration technologies in central boilers, the technology of coal steam-turbine power units with extremely supercritical indicators of steam;

modernization and reconstruction of old-fashioned equipment of boiler houses;

heat recovery of the exhaust gases of turbocompressor installations;

optimization and modernization of the location of heating networks;

the use of modern, heat-tight materials in the reconstruction and modernization of heating networks;

Automation, dispatching and optimization of the system of production and transportation of heat energy with a view to the number of consumers;

providing consumers with modern meters;

The use of heliocollectors for heating water in boilers.

3. **In the oil and gas industry:**

Reduction of losses in the production, processing, transportation and distribution of natural gas due to the introduction of effective technologies for control over the loss of hydrocarbon resources (SCADA) by means of compressor stations, low- and medium-pressure gas distribution networks, as well as gas transportation systems;

introduction of modern technologies for gas supply accounting and distribution;

reduction of greenhouse gas emissions during oil and oil products processing and storage;

reduction of greenhouse gas emissions from the utilization of oil-additive gases and their combustion as a result of the introduction of deep refining processes;

introduction of alternative energy sources at oil and gas production facilities;

Heat recovery from the exhaust gases for electricity generation.

4. **In the chemical industry:**

modernization of facilities for the production of ammonia, nitric acid and mineral fertilizers, and the creation of new facilities with high energy efficiency;

• use technologies of heat utilization of chemical processes with a large energy consumption volume for electricity production;

introduction of industrial use of large-scale man-made waste.

5. In transport sector:

formation of a comprehensive development policy aimed at reducing transport costs and ensuring the effective functioning of the transport sector, the development of "green" transport in accordance with long-term urban development plans and environmental safety measures;

expand the production and use of motor vehicles, electric vehicles, hybrid vehicles and gas-powered vehicles with improved energy efficiency and environmental characteristics that meet Euro-4 and higher standards;

production of motor fuels with improved characteristics;

continue to renew the vehicle fleet, develop programs that encourage the disposal of old cars and the purchase of new, more environmentally friendly cars;

creation and improvement of efficient public transport systems (increase in the share of public transport with improved characteristics);
creation and development of new transport and logistics systems, development of road infrastructure;
strengthening state control over the environmental status of used vehicles.

6. **In the field of building materials production:**
increase in the use of secondary resources and large-scale man-made waste of industrial industries (energy, metallurgy, chemical industry) in the production of building materials;
Introduction of innovative energy-saving technologies for production of cement, brick, lime, aerated concrete products using the method of autoclave, hot residents, roofing materials, wood-edged tiles;
introduction of advanced technologies for cement production (dry method) with the use of heat recovery technologies and technological processes for generating electricity.

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