

## EMPLOYMENT AND HUMAN CAPITAL DEVELOPMENT IN THE CONTEXT OF A GREEN ECONOMY

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**Abstract:** This article examines issues related to employment and the development of human capital in the context of the green economy. The green economy is an approach that both protects the environment and promotes economic growth. The paper focuses on the growth of human capital through the creation of new jobs, development of professional skills, and the implementation of green technologies.

**Keywords:** green economy, employment, human capital, sustainable development, ecological innovations, green jobs.

**Introduction.** In recent years, issues of environmental protection and sustainable economic development have become globally significant. Against this backdrop, the concept of a "green" economy is receiving increasing attention. A green economy ensures economic growth without harming the environment and supports sustainability. This economic model directly affects employment levels and the quality and development of human capital.

The transition to a green economy presents both opportunities and challenges in the labor market. For Uzbekistan, strategic government planning and retraining programs are essential for the successful implementation of this transition. The benefits of a green economy can be fully realized by creating new jobs and adapting the existing workforce to new economic conditions.

In 2019, the President of Uzbekistan approved Resolution PQ-4477 "On the Approval of the Strategy for Transition to a Green Economy for 2019–2030." This strategy focuses on increasing energy efficiency, developing renewable energy sources, and implementing environmentally friendly technologies. These initiatives aim to create new jobs and promote economic growth.

Today, environmental issues and climate change are driving a reassessment of economic systems globally. Traditional production models negatively impact the environment, leading many countries to accelerate their transition to green economies. The green economy not only addresses environmental problems but also creates opportunities for job creation and human capital development.

### **The green economy is based on several key principles:**

- Efficient and rational use of resources;
- Environmental protection;
- Measures to combat climate change;
- Development of sustainable production and consumption culture;
- Implementation of clean technologies.
- These principles lead to new directions in the labor market and alter the qualitative demand for human capital.

**Green Jobs and Employment Transformation.** Green jobs refer to employment in sectors that ensure environmental sustainability, such as renewable energy, waste recycling, green transportation, and energy-efficient construction.

New professions and specializations are emerging, including environmental science, alternative energy, and ecological engineering, requiring a new generation of skilled professionals.

Modernization of vocational education is also essential. Vocational training and retraining centers must incorporate eco-technological knowledge.

In the context of the green economy, the development of employment and human capital are complementary processes. Environmentally based economic growth not only creates new jobs but also enhances the quality of human capital. Therefore, education, skill development, and innovation require special attention in the transition process.

**Table 1**

**Employment growth in green economy sectors  
(2020–2024, thousand people)**

Year	Solar energy	Wind energy	Green construction	Waste recycling	Total green jobs
2020	5,2	3,1	6,8	2,5	17,6
2021	6,4	4,0	7,5	3,2	21,1
2022	7,9	4,8	8,6	4,1	25,4
2023	9,1	5,7	9,4	4,9	29,1
2024	10,5	6,5	10,1	5,8	32,9

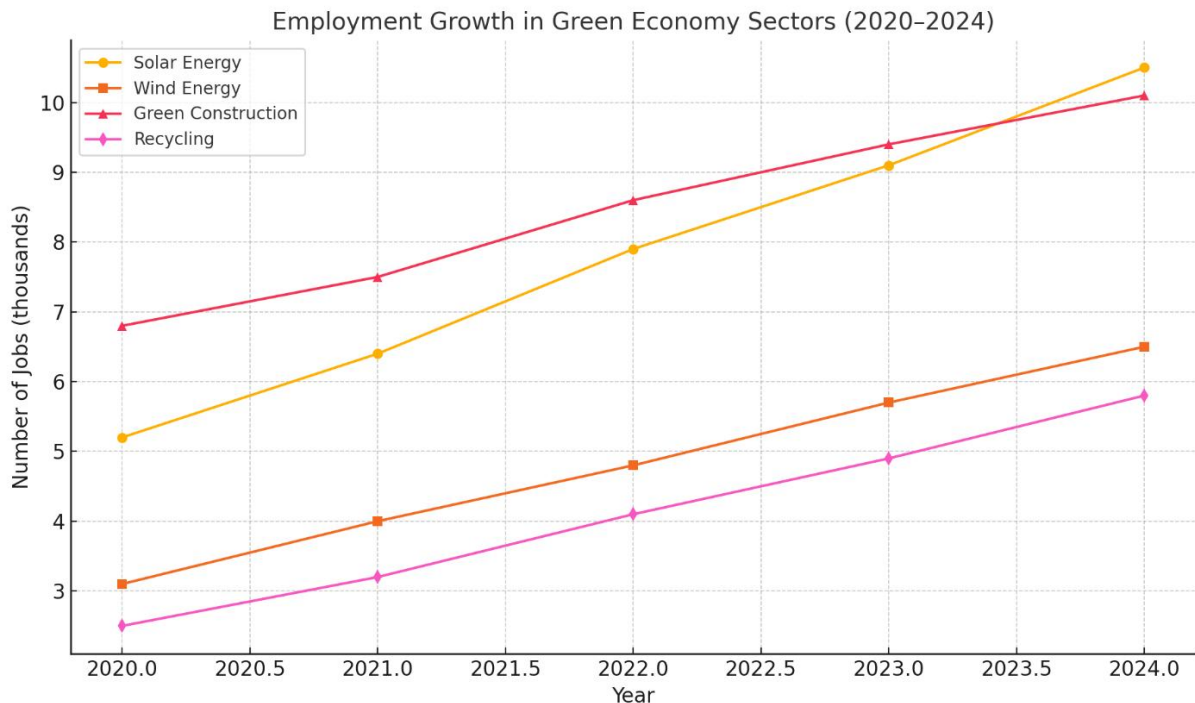


Diagram 1. Employment growth in the "green" economy in Uzbekistan in 2020–2024.

### Green Economy and Employment Strategy in Uzbekistan

Uzbekistan has prioritized the transition to a green economy as part of its national policy.

#### Recent developments include:

- Investment in green energy projects such as solar, wind, and bioenergy;
- Implementation of ecological standards in production processes;
- Integration of green jobs into employment strategies.
- Additionally, programs such as “Green Uzbekistan” aim to raise public awareness of environmental culture.

The transition to a green economy brings both new opportunities and certain challenges in the labor market. According to the World Bank, decarbonization and the shift to green policies can affect people's lives and livelihoods, such as through job losses in certain sectors or declining incomes. Thus, retraining and upskilling programs are essential to adapt to labor market changes.

#### Human Capital and the Green Economy

Human capital refers to individuals' contributions to the economy through knowledge, skills, health, and experience. In a green economy, human capital includes:

Environmental literacy: Every citizen should develop ecological culture and responsibility;

Innovative thinking: Specialists capable of using new approaches and technologies are needed;

Social activity and commitment to sustainable development: Human capital quality involves economic, social, and ethical components.

#### The development of human capital in the green economy involves:

1. Education and training: Preparing a new generation of specialists through programs focused on ecological problems and green technologies.

2. Innovation and research: Scientific centers and universities must contribute to the development of green technologies.
3. New professions: There is growing demand for environmental engineers, renewable energy experts, and waste management specialists.

**Conclusions and Recommendations.** Expanding employment and developing human capital in the green economy can be achieved through:

1. Developing vocational training programs in ecological fields;
2. Introducing innovative technologies and preparing personnel capable of working with them;
3. Providing subsidies and incentives for green professions;
4. Increasing investment in healthcare, education, and culture to improve human capital quality.

The development of the green economy boosts employment through the creation of new job opportunities. Transitioning to a green economy requires human capital development through renewed training programs, expanded ecological knowledge, and adaptation to new technologies. Supporting research and innovation can also enhance human capital.

Employment and human capital development in the green economy are strategic priorities. Creating green jobs, modernizing the education system, and supporting ecological innovations through state-private sector collaboration are essential. Only through these measures can sustainable economic growth and environmental balance be ensured.

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