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THE IMPORTANCE OF THE GREEN ECONOMY IN 2025: ANALYSIS AND PROSPECTS.

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Abstract: Green economy has become a crucial global priority in 2025 as nations strive to balance economic growth with environmental sustainability. The year 2025 has been declared the "Year of Environmental Protection and a Green Economy" by President Shavkat Mirziyoyev, emphasizing the urgent need for sustainable development. Uzbekistan has unveiled ambitious plans to raise $10 million through carbon credit trading as part of its 2025 state program, which aligns with the country's long-term "Uzbekistan – 2030" strategy. This paper explores the significance of transitioning towards a green economy, highlighting the key strategies and policies necessary for sustainable growth. The study presents an analysis of current green economic initiatives, evaluates their effectiveness, and discusses future challenges and opportunities in the field. In 2025, the European Commission will intensify efforts to promote the circular economy by updating key directives. China will reach peak greenhouse gas emissions, marking a significant milestone in the global energy transition. Artificial intelligence is increasingly used to tackle environmental challenges, but it also presents new issues. The findings contribute to a deeper understanding of how businesses, governments, and individuals can collaborate to foster a greener, more sustainable future.

Key words: *Green economy, sustainable development, environmental protection, renewable energy, climate change, carbon neutrality, green policies, Uzbekistan, ecological transition, clean technology.*

In recent years, the concept of a green economy has gained momentum as environmental concerns and climate change impact global economic policies. [1] The shift towards a sustainable economic model aims to reduce carbon footprints, enhance resource efficiency, and promote social equity. [2] The President of Uzbekistan noted that air and water pollution, soil erosion, desertification, and excessive use of fossil

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fuels contribute to global warming, an increase in natural disasters, and harm to public health. In response, Uzbekistan launched the national initiative "Yashil Makon" three years ago, established the Central Asian University for the Study of the Environment and Climate Change in Tashkent, and initiated two UN resolutions on environmental protection. [3] Additionally, Uzbekistan's 2025 program outlines significant green economy initiatives, including expanding renewable energy to 26% of total power generation, launching 16 green power plants with a combined capacity of 3.5 GW, and implementing small-scale solar panel installations in 35,000 households and 27,000 private and social facilities. [4]

International developments show that in 2025, the European Commission will continue implementing its circular economy strategy under the Green Deal 2.0. New legislative initiatives, such as the Circular Economy Act, the Ecodesign for Sustainable Products Regulation, and the Directive on the Right to Repair, aim to establish a market for secondary materials, reduce waste, and enhance product reparability. A new Packaging Regulation is also expected, setting recycling targets for 2030. China, the world's largest emitter of greenhouse gases, plans to reach peak emissions by 2025. [5] The rapid expansion of solar energy and electric vehicles plays a crucial role in decarbonizing the country's economy. However, coal still dominates the energy mix, requiring significant government measures to reverse this trend. In 2025, artificial intelligence will take on a new role in environmental sustainability. Analysts predict its increasing application in climate risk forecasting, optimization of renewable energy sources, and resource management. However, AI training requires substantial energy consumption, posing additional environmental challenges.

The 2020s began with optimism for rapid climate progress. The temporary reduction in global emissions due to the pandemic appeared to spark real momentum in climate awareness and policy ambitions, culminating in the COP26 agreement in Glasgow in 2021, which pledged to phase down coal consumption and fossil fuel subsidies. However, as global priorities shifted, momentum slowed. [6] By the mid-2020s, greenhouse gas emissions were projected to reach record highs by 2024, emphasizing the urgency of action. Extreme weather events and record global temperatures have underscored the need for immediate intervention. While progress in renewable energy, clean technology, and sustainable policies offers hope, efforts remain insufficient to fully address the pressing climate challenges of this decade.

Methods: This study employs a mixed-methods approach, including a literature review of recent publications on green economy policies, case studies from different countries, and an analysis of statistical data on environmental impact and

economic performance. Qualitative data were gathered from policy reports, while quantitative data were sourced from environmental agencies and economic institutions to assess the effectiveness of green initiatives.

Results: The findings indicate that countries that have implemented green economy strategies have experienced a reduction in carbon emissions, improved energy efficiency, and economic resilience. Renewable energy investments have shown positive economic and environmental impacts, while sustainable agricultural practices have led to better resource conservation. In Uzbekistan, "green" energy is becoming one of the key drivers of the economy, further reinforcing the importance of sustainable development. The government has introduced preferential tariffs for electricity generated from solar, wind, and waste recycling, alongside investments in energy-saving technologies. By the end of 2026, 3,000 small hydropower plants with a total capacity of 164 MW are also expected to be operational. However, challenges such as policy implementation gaps and financial constraints remain significant barriers to large-scale adoption. In 2025, the European Union will implement new regulatory measures to accelerate the circular economy. The Circular Economy Act will establish a market for secondary materials, while the Ecodesign for Sustainable Products Regulation and the Directive on the Right to Repair will promote product longevity and waste reduction. Additionally, the new Packaging Regulation will set recycling targets for 2030. China is expected to reach peak greenhouse gas emissions due to the rapid expansion of solar energy and electric vehicles, which now account for 30% of the domestic market. However, coal still dominates the country's energy mix, requiring further government action to ensure long-term emission reductions. Artificial intelligence is becoming an essential tool for environmental sustainability, enhancing climate risk forecasting, optimizing renewable energy management, and improving waste monitoring. However, its development comes with high energy demands, raising concerns about its overall environmental impact.

Duscussion: The transition to a green economy requires a coordinated effort from governments, businesses, and individuals. Policy incentives, technological advancements, and international cooperation play key roles in accelerating the shift. While developed nations have made significant progress, developing countries face challenges in financing green initiatives. Uzbekistan, in collaboration with neighboring states, has launched a Regional Climate Strategy, demonstrating the importance of regional cooperation in addressing climate challenges. Additionally, the government is working on a long-term carbon neutrality strategy and will publish a five-year Nationally Determined Contribution (NDC) to reduce atmospheric emissions,

including methane emissions from livestock and natural gas extraction. The program also includes green urban development strategies for major tourist cities such as Tashkent, Samarkand, Bukhara, and Khiva, as well as master plans for districts like Amudarya, Chimbay, Mirishkor, Gijduvan, and Romitan. As climate change consequences continue to manifest in 2025, transforming the inevitability of these effects into renewed urgency among world leaders will be critical. The question remains whether 2025 will mark an irreversible turning point for sustainability efforts. While definitive progress may not yet be achieved, one certainty is clear: the window for decisive action is closing, and each passing year brings the world closer to a point where action is no longer optional but imperative.

Despite new regulatory measures, the success of the EU’s circular economy will depend on investment and market readiness. Establishing a unified market for secondary materials and ensuring compliance with recycling and repair regulations require strong financial and logistical support. China’s plan to reach peak emissions by 2025 is a significant milestone, but it does not guarantee a long-term reduction. The country remains heavily reliant on coal, and without sustained policy efforts and investments in clean energy, emissions could stagnate rather than decline. Artificial intelligence presents a dual challenge. While it offers powerful solutions for climate risk forecasting, resource management, and waste reduction, its high energy consumption raises concerns about sustainability. Balancing AI’s benefits with its environmental footprint will require innovations in energy-efficient computing and responsible deployment.

Conclusion: A green economy is not just an environmental necessity but also an economic opportunity. By prioritizing sustainable development, nations can achieve long-term economic growth while preserving natural resources for future generations. The declaration of 2025 as the "Year of Environmental Protection and a Green Economy" highlights the urgency of these efforts. Continued research, policy support, and investment in green technologies will be essential to ensuring a successful global transition. The future of the green economy depends on the coordinated efforts of all sectors of society – governments, businesses, and citizens. International cooperation and innovation in the field of clean technologies can accelerate the transition to sustainable development.

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YASHIL IQTISODIYOTDA QUYOSH PANELLARINING ROLI

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Annotatsiya: Quyosh panellari yashil iqtisodiyotda qayta tiklanadigan energiyaning eng istiqbolli manbalaridan biridir. Shuningdek shamol turbinalari yoki gidroelektr stansiyalari kabi qayta tiklanadigan energiyaning boshqa turlariga nisbatan bir qator afzalliklarga ega bo’lib ob-havo sharoitlariga kunning vaqtiga yoki geografik joylashuviga bog'liq bo’lmagan hamda past texnik xizmat ko'rsatish xarajatlariga va uzoq ishlash muddatiga ega hisoblanadi. [1] Quyosh panellari innovatsiyalarni rag’batlantirish, xalqaro bozorda raqobatbardoshlikni oshirish, qishloq va chekka hududlarni elektrlashtirish shuningdek aholining hayot sifatini yaxshilash va ijtimoiy taraqqiyotni rivojlantirishda muhim o’ringa egadir.

Kalit so’zlar: fotovoltaik, quyosh paneli, elektr, ko’rsatkich, nol senariysi, quvvat ulushi, record daraja, prognoz

Quyosh panellari atrof-muhitga zararli ta'sir ko'rsatmasdan quyosh nurini elektr energiyasiga aylantirib beraoladi. Quyosh panellari binolarning tomlariga, to'xtash joylariga, ochiq joylarga va hatto kosmosga o'rnatilishi mumkin. Quyosh panellarining afzalligi shundaki, ular qayta tiklanadigan manbadan - quyosh energiyasidan elektr energiyasini olish imkonini beradi. Quyosh panellari yorug'likni elektr tokiga aylantiradigan fotovoltaik hujayralardan iborat bo’lib quyosh panellari binolarning tomlariga, ochiq joylarga yoki maxsus inshootlarga o'rnatilishi mumkin. Quyosh panellari boshqa energiya turlariga nisbatan bir qator afzalliklarga ega, masalan: