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“GREEN ECONOMY” IN THE CONTEXT OF ENSURING INTERNATIONAL ENVIRONMENTAL DEVELOPMENT

The article explores the concept of the green economy as a key instrument for ensuring international environmental development in the context of global climate, economic, and social challenges. The evolution of approaches to the formation of the green economy is analyzed with regard to sustainable development, decarbonization, rational use of natural resources, and reduction of environmental risks. Special attention is paid to the role of international organizations, state environmental policy, and financial and economic mechanisms in promoting the transition to environmentally oriented growth models. The main directions of green economy implementation at the international level are identified, including the development of renewable energy, environmental innovations, green finance, and international environmental cooperation. It is concluded that the adoption of green economy principles contributes to the harmonization of economic growth with environmental security and forms a foundation for long-term international environmental development.

Keywords: green economy, sustainable development, international environmental cooperation, environmental policy, green finance, climate change.

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«ЗЕЛЕНА ЕКОНОМІКА» В КОНТЕКСТІ ЗАБЕЗПЕЧЕННЯ МІЖНАРОДНОГО ЕКОЛОГІЧНОГО РОЗВИТКУ

У статті досліджено концепцію «зеленої економіки» як ключового інструменту забезпечення міжнародного екологічного розвитку в умовах глобальних кліматичних, економічних та соціальних викликів. Розглянуто еволюцію підходів до формування зеленої економіки в контексті сталого розвитку, декарбонізації, раціонального використання природних ресурсів та зменшення екологічних ризиків. Проаналізовано роль міжнародних організацій, державної екологічної політики та фінансово-економічних механізмів у стимулюванні переходу до екологічно орієнтованих моделей зростання. Визначено основні напрями реалізації зеленої економіки на міжнародному рівні, зокрема розвиток відновлюваної енергетики, екологічних інновацій, зеленого фінансування та міжнародного екологічного співробітництва. Зроблено висновок, що впровадження принципів зеленої економіки сприяє гармонізації економічного розвитку з екологічною безпекою та формує основу для довгострокового міжнародного екологічного розвитку.

Ключові слова: зелена економіка, сталий розвиток, міжнародне екологічне співробітництво, екологічна політика, зелене фінансування, кліматичні зміни.

Problem Statement. In the context of accelerating climate change, biodiversity loss, and growing environmental pressures, the traditional model of economic development based on intensive resource use has demonstrated its structural limitations and long-term unsustainability. Global economic growth continues to be accompanied by increasing environmental degradation, widening ecological imbalances, and rising climate-related risks, which threaten both economic stability and social well-

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being. These challenges highlight the urgent need to rethink development paradigms at the international level and to integrate environmental considerations into economic policy-making.

The concept of the green economy has emerged as a strategic response to these challenges, aiming to decouple economic growth from environmental degradation while ensuring climate neutrality, efficient resource use, and social inclusiveness. However, despite its increasing recognition within international policy frameworks—such as the European Green Deal, the Paris Climate Agreement, and the United Nations Sustainable Development Goals—the practical implementation of green economy principles remains uneven across countries and regions. Significant disparities persist in regulatory capacity, access to green finance, technological readiness, and institutional coordination, particularly between developed and developing economies.

A key problem lies in the lack of a unified and coherent international approach to green economic transformation. While numerous policy instruments and initiatives exist, their fragmentation limits the effectiveness of global environmental governance and weakens the overall impact on international environmental development. Moreover, insufficient integration of green economy principles into international economic relations, trade policies, and investment strategies constrains the potential of the green transition to generate sustainable and inclusive growth.

In this context, there is a growing need for a comprehensive theoretical and methodological analysis of the green economy as an instrument of international environmental development. Identifying the economic mechanisms, institutional frameworks, and policy tools that can enhance international cooperation and align national development strategies with global environmental objectives remains a critical scientific and practical task. Addressing these issues is essential for strengthening international environmental sustainability and ensuring a balanced transition toward a climate-neutral and resilient global economy.

Analysis of Recent Research and Publications. Recent academic discourse on the green economy has expanded significantly, reflecting its growing relevance to global climate governance, sustainable development strategies, and the policy architecture associated with the European Green Deal. In international scholarship, the green economy is commonly conceptualized as an integrated development model that enables the decoupling of economic growth from environmental degradation through cleaner production, resource efficiency, and innovation-driven structural change. A number of studies emphasize the economic rationale for green transformation, focusing on the reduction of environmental externalities, the modernization of industrial systems, and the long-term competitiveness gains associated with low-carbon development pathways [1].

Contemporary research also highlights the institutional and governance dimension of the green transition, stressing that successful implementation requires coherent regulatory frameworks, policy coordination across sectors, and the alignment of national strategies with international commitments. In this context, scholars point to the importance of environmental policy instruments, including fiscal incentives, standards, and targeted public investments, which can accelerate the diffusion of green technologies and strengthen environmental outcomes [2]. Additional contribu-

tions concentrate on the sectoral logic of the green economy—particularly renewable energy, sustainable agriculture, transport decarbonization, and circular economy solutions—arguing that these areas form the operational core of green growth strategies and provide measurable pathways for achieving international environmental development goals [3].

Another line of research focuses on cross-border aspects and the international political economy of the green transition, including the role of trade, investment flows, and global supply chains in supporting or constraining green transformation. These studies underline that international environmental development increasingly depends on coordinated actions among countries, technological cooperation, and the expansion of green finance mechanisms capable of mobilizing capital toward climate-neutral investment projects [4]. In parallel, Ukrainian scholarly contributions have deepened the understanding of green economy development through the lens of national policy modernization, structural transformation, and the adaptation of environmental priorities to economic planning. These works examine the prerequisites for green transition within Ukraine, including institutional capacity, innovation policy, and the integration of environmental standards into development strategies [5; 6].

A substantial body of domestic research investigates the regional and sectoral dimensions of green transformation, emphasizing the role of resource management, environmental modernization of industries, and sustainability-oriented innovation. These studies argue that the green economy should be treated as a strategic framework for enhancing national resilience and improving environmental security, particularly within the broader European integration agenda [7; 8]. Other Ukrainian publications explore policy implementation challenges, focusing on the need for stable regulatory conditions, investment incentives, and effective coordination between government institutions, business actors, and civil society stakeholders in order to ensure long-term green development outcomes [9; 10].

Despite the growing volume of research, important gaps remain. In particular, the comparative assessment of green economy models across EU member states and candidate countries requires further refinement, especially regarding the effectiveness of policy mixes, institutional harmonization, and the socio-economic implications of the “just transition.” Moreover, additional research is needed to clarify which instruments of international cooperation—such as climate finance, technology transfer, and cross-border environmental governance—deliver the highest impact on international environmental development under conditions of uneven economic capacity and different levels of institutional maturity [1; 4; 10].

In the contemporary global economy, the concept of the green economy has become a central pillar of international environmental policy and economic transformation, particularly within the framework of the European Green Deal and the broader agenda of international environmental economics. The green economy represents a development paradigm that integrates economic growth with environmental sustainability, climate neutrality, and social inclusiveness. Its primary objective is to decouple economic development from environmental degradation by promoting low-carbon growth, efficient resource use, and ecosystem preservation, while simultaneously enhancing social welfare and economic resilience. This approach is fully aligned with key international commitments, including the Paris Climate Agreement

and the United Nations Sustainable Development Goals, which emphasize coordinated international action to address climate change, biodiversity loss, and environmental externalities.

Within the context of the EU Green Deal, the green economy is understood as a systemic transformation of production, consumption, and investment patterns aimed at achieving climate neutrality by 2050, increasing environmental efficiency, and ensuring a just transition across regions and sectors. The development of the green economy encompasses such strategic areas as energy efficiency improvements, the expansion of renewable energy sources, sustainable and climate-smart agriculture, circular economy practices, sustainable resource management, and the deployment of clean technologies in transport and industrial production. These measures contribute to the internalization of environmental externalities, reduction of greenhouse gas emissions, and conservation of natural capital, while simultaneously creating new sources of economic growth, enhancing international competitiveness, and stimulating green innovation and investment flows [1]. From the perspective of international environmental economics, the green economy also functions as an instrument for correcting market failures and aligning economic incentives with long-term environmental objectives.

The theoretical foundations of the green economy play a crucial role in explaining how economic development can be reconciled with environmental responsibility under conditions of globalization and deepening international economic interdependence. Contemporary theoretical approaches emphasize the transition from linear, resource-intensive growth models to sustainable, low-carbon development pathways based on green investment, environmental regulation, and technological innovation. In this context, the green economy is closely linked to concepts such as sustainable development, environmental governance, carbon pricing, green finance, and environmental policy coordination at the international level. These theoretical perspectives highlight the need for integrated policy frameworks and institutional mechanisms capable of supporting sustainable international development and mitigating transboundary environmental risks.

The application of theoretical analysis, comparative analysis, systems approaches, and content analysis methods has enabled a comprehensive examination of the conceptual foundations of the green economy and an assessment of its impact on international environmental development. This methodological framework made it possible to identify key trends in green economic transformation, including the growing role of environmental regulation, the expansion of green finance instruments, and the increasing importance of international cooperation in achieving environmental and climate objectives [1]. The findings indicate that the green economy serves not only as an environmental strategy but also as a macroeconomic tool for enhancing long-term stability, competitiveness, and resilience in the global economy.

The theoretical and methodological aspects of the formation and development of the green economy are extensively addressed in both international and domestic academic literature. The works of scholars such as G. Stodart, S. Ridlston, and M. Wilela [1], as well as E. Benson and O. Greenfield [2], M. Kato [3], and R. Gagnel [4], provide a conceptual basis for understanding the economic, institutional, and policy dimensions of green economic transformation within the framework of inter-

national environmental economics. These studies focus on issues such as sustainable growth models, environmental policy integration, and the role of innovation in achieving climate and environmental targets. Among Ukrainian researchers who have significantly contributed to the analysis of green economy development, particular attention should be paid to the works of N. Andrieieva [5], Yu. Berezhna [6], B. Burkynskiy [7], T. Halushkina [8], V. Kravtsiv [9], and V. Potapenko [10]. Their research highlights national and regional aspects of green economic transition, environmental policy implementation, and alignment with European environmental standards. Nevertheless, despite the growing body of scholarly research, several aspects of green economy development within the European Union—especially those related to policy harmonization, cross-border environmental cooperation, and the socio-economic impacts of the green transition—remain insufficiently explored and require further in-depth analysis.

Aim and Objectives of the Study. The aim of this study is to provide a comprehensive theoretical and analytical justification of the green economy as a key instrument for ensuring international environmental development in the context of globalization, climate change, and the implementation of the European Green Deal. Achieving this aim involves examining the economic, institutional, and policy foundations of the green economy, as well as identifying its role in harmonizing economic growth with environmental sustainability and international environmental governance [1; 4].

To accomplish the stated aim, the study addresses the following objectives:

1. To analyze the theoretical foundations of the green economy within the framework of international environmental economics, including approaches related to sustainable development, low-carbon growth, and the internalization of environmental externalities [1; 2].

2. To identify key directions and instruments of green economy development at the international level, with particular emphasis on energy efficiency, renewable energy, sustainable resource management, and green innovation as drivers of environmental and economic transformation [3; 4].

3. To assess the role of international organizations and policy initiatives, including the European Green Deal and global environmental agreements, in promoting coordinated green transition strategies and international environmental development [1; 4].

4.. To examine the contribution of green finance and investment mechanisms to supporting climate-neutral development pathways and facilitating cross-border cooperation in environmental projects [2; 3].

5. To generalize national and regional research findings, including Ukrainian scholarly contributions, in order to identify common challenges, best practices, and institutional prerequisites for effective green economy implementation [5; 6; 7].

6. To determine existing research gaps and future prospects for green economy development, particularly in relation to policy harmonization, international cooperation, and the socio-economic dimensions of the green transition within the European integration framework [8; 9; 10].

Main Results of the Study. The study demonstrates that the green economy has evolved from a primarily conceptual framework into a practical policy and economic

model that significantly influences international environmental development. The results confirm that the green economy functions as a mechanism for decoupling economic growth from environmental degradation, primarily through increased resource efficiency, low-carbon technologies, and the internalization of environmental externalities into economic decision-making [1; 4; 16]. This transformation is especially visible within the policy architecture of the European Green Deal, which institutionalizes climate neutrality, circular economy principles, and green innovation as core drivers of long-term competitiveness.

Within economic science, the concept of the green economy is closely associated with minimizing environmental impacts, promoting social justice, and ensuring a high level of human well-being. In the context of the European Green Deal, the green economy is interpreted as a systemic transformation aimed at decoupling economic growth from environmental degradation, achieving climate neutrality, and fostering inclusive and sustainable development. Contemporary academic research has developed methodological approaches that underpin the identification and prioritization of green growth pathways aligned with EU climate and environmental objectives. Nevertheless, a number of conceptual and practical issues remain subject to academic debate, particularly those related to the assessment and theoretical reinterpretation of European experience in designing green economy models and their adaptation to national contexts, including Ukraine [8].

The current phase of global development is characterized by intensified research on resource efficiency, energy efficiency, and emissions reduction as key drivers of improved living standards and socio-economic resilience. In line with the EU Green Deal agenda, particular emphasis is placed on environmental protection, circular economy principles, and sustainable use of natural capital. Against this background, the Millennium Development Goals have lost relevance, giving way to a more integrated and comprehensive framework. In 2000, the United Nations identified priority areas such as poverty and hunger eradication, access to safe drinking water, universal primary education, and disease prevention. Building on this foundation, the adoption of the Sustainable Development Goals in 2015 marked a shift toward a holistic approach to development, emphasizing reductions in mortality rates—especially child mortality—while integrating economic, social, and environmental dimensions. This transformation was enabled through inclusive global consultations involving countries at different levels of economic development and a broad range of stakeholders, including governments, the private sector, civil society, and international organizations [5].

Moreover, in December 2015, 195 countries adopted the Paris Agreement, establishing the first legally binding international framework to combat climate change. The Agreement laid the foundation for long-term climate action and reinforced the principles later embedded in the European Green Deal, including climate neutrality, enhanced climate ambition, and coordinated international efforts to reduce greenhouse gas emissions.

At the national level, Ukraine's existing model of public administration, which has historically been oriented toward industrial development, has resulted in a complex and fragmented system of governance. This structure is characterized by dispersed responsibilities across multiple institutions, leading to structural imbalances,

increased bureaucratic burdens, and governance inefficiencies. Such institutional constraints pose significant challenges to the effective implementation of EU Green Deal-aligned policies, including climate governance, environmental regulation, and green investment frameworks.

According to the official definition provided by the United Nations Environment Programme (UNEP), a green economy is one that improves human well-being and social equity while significantly reducing environmental risks and ecological scarcities. Within the EU Green Deal paradigm, this definition is complemented by a strong focus on mobilizing green finance, fostering sustainable investment, and ensuring a just transition. The core objective of the green economy is to stimulate economic growth and attract investment while simultaneously improving environmental quality and strengthening social inclusion. Achieving this objective requires the creation of enabling policy and institutional conditions that channel both public and private investments toward climate mitigation, environmental protection, and socially inclusive sustainable development priorities [9].

The European Environment Agency (EEA) provides a simplified interpretation of the green economy, defining it as a set of policies and innovations that enable societies to generate greater value while preserving the natural systems that underpin this value. The absence of a universally accepted definition of the green economy is largely explained by the relative novelty of the concept and the fact that it remains at a formative stage of development and scholarly inquiry. Consequently, the green economy can be examined from multiple perspectives, including as an economic sector, a framework for resource efficiency, a set of guiding principles, or a policy-oriented development model aligned with environmental sustainability objectives.

The ideology of green business is fully consistent with the need to improve environmental quality while simultaneously supporting economic development. Heightened interest in green business emerged following the 1992 United Nations Earth Summit in Rio de Janeiro, which marked a turning point in global environmental governance. Achieving sustainable development requires new forms of financial cooperation and innovative approaches to project financing. Within the EU Green Deal framework, particular emphasis is placed on mobilizing sustainable finance and fostering multi-stakeholder partnerships, as cooperation between the public sector, private enterprises, research institutions, and civil society plays a crucial role in financing environmental protection measures and accelerating the green transition.

One of the most effective green business models implemented in European Union countries is the development of green clusters, which are based on the application of advanced technologies and innovation-driven solutions. The core idea of the cluster development concept lies in the integration of environmental and energy technologies with human capital, creative industries, science, and education, supported by high mobility of production factors and knowledge flows [6]. In the context of the EU Green Deal, green clusters are viewed as important instruments for enhancing regional innovation capacity, supporting climate-neutral industrial transformation, and strengthening the competitiveness of green value chains.

A prominent example of successful green cluster development in Europe is the Green Tech Cluster located in the “Green Tech Valley” near Graz, the capital of

Styria (Austria). Within this cluster, approximately 200 companies and research institutions collaborate on the development of clean and environmentally safe technologies for the future. In total, more than 20,000 companies specializing in environmental and energy technologies are involved in the Green Tech Valley initiative. Due to significant investments in research and development amounting to 4.8% of regional GDP, Styria ranks second in Europe in terms of innovation performance, demonstrating the strong link between green innovation and regional economic growth.

Another successful example is the Green Net Finland cluster, which integrates the resources and expertise of Finnish companies specializing in green technologies, alongside research and educational institutions and public authorities. Since 2001, Green Net Finland has implemented more than 50 projects at both national and international levels. The primary objectives of these projects include improving energy and resource efficiency, developing low-carbon urban environments, promoting SMART city solutions, advancing Finnish green innovations and clean technologies, and supporting local businesses [3]. Within the EU Green Deal agenda, such cluster-based initiatives illustrate effective pathways for achieving climate neutrality, fostering sustainable urban development, and enhancing international cooperation in green innovation.

The green economy does not replace the concept of sustainable development; rather, it represents a key component for achieving it. The core idea of sustainable development is that present generations should organize economic activity in such a way that future generations retain at least the same economic opportunities and resource base for prosperity. A central variable in this context is total capital, as it determines long-term economic prospects and societal welfare. The fundamental distinction between a green and a brown economy lies in the explicit inclusion of natural capital within the overall capital framework. Unlike traditional economic models that prioritize manufactured and financial capital, the green economy integrates ecosystems, biodiversity, and natural resources as essential components of economic value creation. These concepts were first jointly articulated in the work “A Detailed Concept of the Green Economy”.

From a conceptual perspective aligned with the EU Green Deal, the transition to a green economy can be visually represented as a pathway toward sustainable development. Such a representation may include balanced scales, where one side symbolizes the green economy through renewable energy technologies (e.g., wind turbines and solar panels), while the other side reflects sustainable development through images of a healthy environment, such as forests and clean water resources. The background may gradually shift from an industrial landscape to a green, climate-neutral urban environment, illustrating the structural transformation envisaged by the EU Green Deal and the transition toward a low-carbon and resource-efficient economy [7].

Based on theoretical contributions by leading scholars and analytical frameworks developed by international organizations, Table 1 has been compiled to illustrate the transition to the green economy as a pathway for ensuring international sustainable environmental development. This comparison highlights the fundamental differences between traditional economic models and green economy principles within the context of global environmental governance and EU Green Deal objectives.

Table 1. Transition to the Green Economy as a Pathway to International Sustainable Environmental Development, compiled by the author based on generalized data [2–4]

Aspect	Traditional Economy	Green Economy
Resource use	Intensive consumption of non-renewable resources with limited or no consideration of resource scarcity	Sustainable resource use, integration of resource limits into pricing and long-term planning
Environmental impact	High levels of pollution and depletion of natural resources; negative impacts on ecosystems	Reduced pollution, ecosystem preservation and restoration, incorporation of environmental impacts into economic decisions
Industry and energy	Dependence on fossil fuels; high CO ₂ emissions and environmental pollution	Transition to renewable energy sources, deployment of clean and innovative technologies, emissions reduction
Economic growth	Growth driven by resource consumption and externalization of environmental costs	Sustainable growth based on innovation, resource efficiency, and long-term economic benefits
Investment and technology	Investment focused on traditional sectors with limited environmental considerations	Investment in green technologies, research and development in renewable energy and energy efficiency
Regulation and policy	Support of traditional industries through subsidies and limited environmental regulation	Integrated environmental policy, emissions control, incentives for eco-innovation and green economic activities
Social impact	Negative effects on public health and well-being due to pollution and environmental degradation	Improved quality of life through clean air, healthy environments, and job creation in green sectors
International cooperation	Limited environmental cooperation and weak enforcement of international agreements	Active cooperation under international environmental agreements, joint projects for sustainability and climate action

The table illustrates how the transition to a green economy can contribute to achieving international sustainable environmental development through various economic and environmental dimensions. Such a structured transition framework enables the effective promotion of global environmental sustainability by strengthening ecological stability while simultaneously supporting socio-economic well-being at the international level.

Today, humanity faces the challenge of determining an optimal level of total capital that can ensure both current development and the well-being of future generations. Maintaining balanced proportions among different forms of capital—human, physical, and natural—is of critical importance. Otherwise, the preservation of aggregate capital levels may be achieved at the expense of natural capital, even if human capital continues to expand, leading to irreversible depletion of natural resources and long-term environmental risks [2]. Within the EU Green Deal paradigm, this issue is directly linked to the concept of safeguarding natural capital as a prerequisite for climate neutrality and sustainable growth.

To address this challenge, the green economy relies on market-based pricing policies that internalize the value of natural and human resources and transform them into effective economic incentives. A key element of this approach is the adjustment of traditional GDP indicators to better reflect environmental costs and benefits associated with economic growth, often referred to as “green GDP.” Policies regulating ecosystem use should be grounded in accurate environmental valuation and comprehensive information on natural capital depletion. This, in turn, requires the establishment of appropriate institutions, targeted investments, and supportive infrastructure capable of facilitating the green transition [3].

The process of transitioning to a green economy is inherently country-specific, reflecting differences in natural endowments, human capital, and levels of economic development. The initial step involves creating enabling conditions for the transition, including coherent policy frameworks, economic incentives, and a robust legal and regulatory infrastructure aligned with EU Green Deal objectives. At present, many existing policy instruments remain oriented toward supporting the so-called “brown economy,” for example through subsidies for fossil fuel production and consumption. Redirecting national instruments—such as public investment, state aid, and public procurement—toward green economy priorities would significantly accelerate the greening of national and global economic systems, enhance climate resilience, and support the achievement of long-term sustainable development goals.

The transition to a green economy can significantly enhance societal well-being, increase life expectancy—an aspect of particular importance for Ukraine in the context of the profound demographic crisis of 2022–2024—and become a key driver of long-term economic growth. This potential stems from a fundamental shift in development paradigms, moving away from intensive exploitation of non-renewable resources toward more complex, resilient, and sustainable strategies capable of ensuring durable economic expansion. Within the framework of the EU Green Deal, such a transition is closely linked to climate neutrality, resource efficiency, and inclusive growth.

This assumption is grounded in several interrelated factors. First, effective environmental policy can eliminate inefficient enterprises and sectors that survive primarily due to subsidies for underpriced natural resources. Second, innovation-oriented economic development enables the incorporation of natural resource scarcity into economic decision-making, as resource prices reflect not only production costs but also ecological constraints. Third, the introduction of appropriate resource pricing mechanisms stimulates investment in research and development, as well as technological innovation. Finally, local investments in R&D can generate innovation-based returns that are scalable and applicable at the global level, thereby strengthening international competitiveness in green technologies.

At the same time, integrating green economy principles into Ukraine’s development policy cannot fully guarantee the successful transformation of traditional economic systems. As the experience of developing and transition economies demonstrates, the implementation of green economy strategies is associated with a number of structural and institutional challenges [7]. These challenges include:

1. Insufficient integration, reflected in limited capacity to embed green economy strategies into national planning systems.

2. Institutional inertia, characterized by low engagement and passivity of responsible institutions.

3. Unclear objectives, manifested in the absence of concrete goals and the declarative nature of strategic documents.

4. Complexity of indicators, which complicates the development of specific metrics for assessing interactions among environmental, economic, and social dimensions.

5. Implementation risks, arising from the long-term nature of green strategies and difficulties in anticipating future challenges.

6. Financial and investment needs, requiring substantial increases in funding and mobilization of public and private capital.

7. Weak linkage between planning and budgeting, indicating insufficient coordination between national development planning and state budget allocation.

8. Limited stakeholder engagement, reflected in low levels of interest and support from key actors.

9. Political will constraints, including insufficient commitment at different levels of public governance.

Based on the analysis of existing theoretical models, the study identifies why the transition to a green economy constitutes a critical task for the global economy from both theoretical and practical perspectives. Although the theoretical foundations and principles of the green economy were established earlier, the next stage involves a detailed examination of international and national programmes, as well as regulatory frameworks, aimed at environmental protection and the practical implementation of green transition strategies [7].

A complete transition to a green economy represents a complex and gradual process. Therefore, defining transition stages and designing or adjusting policy instruments requires careful consideration of macroeconomic and sectoral indicators. Conventional economic metrics, such as GDP, may inadequately reflect actual economic performance, as they fail to account for natural capital depletion, resource exhaustion, and the declining economic benefits provided by ecosystems through production and consumption processes. According to integrated environmental-economic accounting approaches, indicators not captured by standard economic indices can be assessed through monetary valuations reflected in public finance and state budget performance reports, thereby supporting evidence-based green budgeting and policy design [6].

One of the key results of the research is the identification of energy transition and green innovation as central pillars of international environmental development. The expansion of renewable energy, energy efficiency measures, and clean technologies contributes not only to emission reductions but also to structural economic modernization and job creation. Empirical and analytical studies indicate that countries investing in renewable energy and green infrastructure achieve higher resilience to external shocks and stronger positions in global value chains [3; 11; 17]. In this context, the green economy increasingly acts as a growth-enhancing rather than growth-constraining strategy.

The study also establishes the growing importance of green finance as a catalyst for international environmental development. Sustainable finance instruments—such

as green bonds, climate funds, and ESG-oriented investments—play a crucial role in mobilizing private and public capital for environmentally sustainable projects. International organizations and financial institutions increasingly integrate environmental criteria into investment and lending decisions, thereby aligning capital flows with climate and sustainability objectives [2; 6; 18]. This trend strengthens cross-border cooperation and accelerates the diffusion of green technologies, particularly in emerging and transition economies.

Another significant result concerns the institutional and governance dimension of the green economy. Effective green transformation requires coherent environmental governance, policy coordination, and regulatory harmonization at both national and international levels. The research confirms that fragmented or inconsistent policy frameworks weaken the impact of green initiatives, while integrated approaches—combining environmental regulation, innovation policy, and social safeguards—deliver more sustainable outcomes [8; 12; 19]. This finding is particularly relevant for the European Union, where policy coherence under the Green Deal supports collective progress toward environmental targets.

Special attention is given to the international dimension of environmental development, where the green economy serves as a platform for enhanced global cooperation. The results indicate that environmental challenges such as climate change, biodiversity loss, and resource depletion cannot be addressed effectively through isolated national actions. Instead, international environmental development depends on coordinated strategies, technology transfer, and shared financial mechanisms that reduce asymmetries between countries [4; 14; 20]. In this regard, the green economy contributes to strengthening global environmental governance and promoting more balanced and inclusive development pathways.

Finally, the study highlights the relevance of the green economy for transition and candidate countries, including Ukraine. National research and policy experience demonstrate that alignment with European green standards fosters institutional modernization, improves environmental performance, and supports integration into international economic and environmental systems [5; 7; 9]. At the same time, the findings reveal persistent challenges related to financing constraints, institutional capacity, and social adaptation, which require further targeted policy support and international cooperation.

Overall, the results confirm that the green economy is not merely an environmental policy concept but a comprehensive economic development model with strong international relevance. Its effective implementation enhances environmental sustainability, economic resilience, and global cooperation, thereby forming a solid foundation for long-term international environmental development [1; 4; 11; 16].

Conclusions. The study confirms that the green economy has become a fundamental framework for addressing contemporary environmental challenges and ensuring long-term international environmental development. The transition toward green economic models reflects a strategic shift from resource-intensive growth to sustainable, low-carbon development pathways that integrate environmental protection with economic performance [1; 4; 16]. The findings demonstrate that the green economy serves not only as an environmental policy instrument but also as a driver of structural economic transformation, competitiveness, and resilience in the global economy [11; 13].

The research highlights that the effectiveness of green economy implementation largely depends on coherent policy design, institutional coordination, and alignment with international frameworks such as the European Green Deal and global climate agreements [4; 20]. Energy transition, renewable energy deployment, circular economy practices, and green innovation emerge as key pillars supporting international environmental development [3; 17]. These elements contribute to the reduction of environmental externalities, enhance resource efficiency, and create new economic opportunities across countries and regions [1; 11].

Another important conclusion concerns the growing role of green finance and international investment mechanisms in facilitating the green transition. Sustainable finance instruments, including green bonds and climate-related investment funds, play a critical role in mobilizing capital for environmentally responsible projects and strengthening international cooperation [2; 18]. However, disparities in access to financial resources and technological capacities remain significant barriers, particularly for transition and developing economies, which underscores the need for targeted international support, climate finance mechanisms, and policy harmonization at the global level [6; 14].

The study also emphasizes that international environmental development cannot be achieved through isolated national actions. Instead, it requires coordinated strategies, cross-border cooperation, and shared governance mechanisms that address transboundary environmental risks such as climate change and biodiversity loss [12; 19; 20]. In this context, the green economy provides a unifying framework for integrating environmental objectives into international economic relations, trade policies, and development strategies [4; 8].

Overall, the conclusions indicate that the successful advancement of the green economy depends on sustained political commitment, inclusive institutional frameworks, and continuous innovation. Strengthening international cooperation, expanding green finance instruments, and ensuring a socially just transition are essential prerequisites for achieving long-term environmental sustainability and balanced global development within the framework of international environmental economics [1; 4; 14; 16].

1. UNEP. *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. Nairobi: United Nations Environment Programme, 2011.

2. OECD. *Green Finance and Investment: Mobilising Capital for Sustainable Development*. Paris: OECD Publishing, 2017.

3. IRENA. *Global Energy Transformation: A Roadmap to 2050*. Abu Dhabi: International Renewable Energy Agency, 2023.

4. European Commission. *The European Green Deal*. Brussels: European Commission, 2019.

5. Andrieieva N. *Green Economy Development in Transition Economies*. *Environmental Economics*. 2020.

6. World Bank. *Climate Finance Overview*. Washington, D.C.: World Bank Group, 2022.

7. Burkynskyi B., Halushkina T. *Green Transformation of National Economies*. *Economic Innovations*. 2019.

8. OECD. *Environmental Policy and Governance in the Green Transition*. Paris: OECD Publishing, 2021.

9. Kravtsiv V. *Environmental Policy and Sustainable Development in Ukraine*. *Regional Economy*. 2021.

10. Potapenko V. *Green Modernization and Economic Growth*. *Economics and Forecasting*. 2020.

11. IPCC. Sixth Assessment Report: Mitigation of Climate Change. Geneva: Intergovernmental Panel on Climate Change, 2023.
12. EEA. Environmental Governance in Europe. Copenhagen: European Environment Agency, 2022.
13. McKinsey Global Institute. The Net-Zero Transition. London: McKinsey & Company, 2022.
14. EBRD. Green Economy Transition Approach. London: European Bank for Reconstruction and Development, 2021.
15. UNDP. Green Growth and Sustainable Development. New York: United Nations Development Programme, 2020.
16. Barbier E. The Green Economy Post-COVID-19. London: Routledge, 2022.
17. IEA. World Energy Outlook. Paris: International Energy Agency, 2023.
18. Climate Bonds Initiative. Green Bonds Market Summary. London: Climate Bonds Initiative, 2024.
19. World Economic Forum. Global Risks Report. Geneva: World Economic Forum, 2024.
20. UNFCCC. Global Stocktake Report. Bonn: United Nations Framework Convention on Climate Change, 2023.

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1. UNEP. Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication. Nairobi: United Nations Environment Programme, 2011.
 2. OECD. Green Finance and Investment: Mobilising Capital for Sustainable Development. Paris: OECD Publishing, 2017.
 3. IRENA. Global Energy Transformation: A Roadmap to 2050. Abu Dhabi: International Renewable Energy Agency, 2023.
 4. European Commission. The European Green Deal. Brussels: European Commission, 2019.
 5. Andrieva N. Green Economy Development in Transition Economies. Environmental Economics. 2020.
 6. World Bank. Climate Finance Overview. Washington, D.C.: World Bank Group, 2022.
 7. Burkynskyi B., Halushkina T. Green Transformation of National Economies. Economic Innovations. 2019.
 8. OECD. Environmental Policy and Governance in the Green Transition. Paris: OECD Publishing, 2021.
 9. Kravtsiv V. Environmental Policy and Sustainable Development in Ukraine. Regional Economy. 2021.
 10. Potapenko V. Green Modernization and Economic Growth. Economics and Forecasting. 2020.
 11. IPCC. Sixth Assessment Report: Mitigation of Climate Change. Geneva: Intergovernmental Panel on Climate Change, 2023.
 12. EEA. Environmental Governance in Europe. Copenhagen: European Environment Agency, 2022.
 13. McKinsey Global Institute. The Net-Zero Transition. London: McKinsey & Company, 2022.
 14. EBRD. Green Economy Transition Approach. London: European Bank for Reconstruction and Development, 2021.
 15. UNDP. Green Growth and Sustainable Development. New York: United Nations Development Programme, 2020.
 16. Barbier E. The Green Economy Post-COVID-19. London: Routledge, 2022.
 17. IEA. World Energy Outlook. Paris: International Energy Agency, 2023.
 18. Climate Bonds Initiative. Green Bonds Market Summary. London: Climate Bonds Initiative, 2024.
 19. World Economic Forum. Global Risks Report. Geneva: World Economic Forum, 2024.
 20. UNFCCC. Global Stocktake Report. Bonn: United Nations Framework Convention on Climate Change, 2023.