THE PRIORITIES OF RA "GREEN ECONOMY" IN CURRENT CONDITIONS

Karen Armo Nersisyan
Davit Armenak Petrosyan

Introduction. The economic uncertainties that emerged from the global financial and economic crisis and are deepening as a result of the COVID-19 pandemic and geopolitical tensions are pushing for a change in the key vectors of the development of global economic thought. In this context, the idea of stability takes on a dominant role. In this transitional phase, the sustainable development goals of the United Nations serve as a fundamental guideline, under which the idea of the "Green economy" is proposed.

The "Green" economy, according to a universally accepted approach, is a low-carbon and resource-efficient economy that promotes social justice and increases levels of population well-being while minimizing environmental damage.

The processes taking place at the global and regional levels require the implementation of coordinated actions from the governments of the states, which will be aimed both at promoting economic growth and protecting the environment, neutralizing the negative socio-economic impact, deepening the gap between developing and developed countries and eliminating trade and investment barriers.

The purpose of the article is to analyze the results of the measures taken by the RA government in the path of transition to a "Green economy" and identify the priorities under current conditions. To achieve the stated goal, **the following problems** were solved during the research: the conceptual provisions of the "Green economy" and the existing approaches to them were studied, the leading experience of the "Greening" of the economy was studied, the measures aimed at the transition of the "Green economy" of the RA government were evaluated.

Literature review. Green economy, green growth, green taxes, and similar concepts have been in circulation in different contexts for almost a century. The concept of the current green economy originates from the UN "Sustainable Development Goals". Although it is interpreted differently by international organizations, governments, and the private sector, the most comprehensive definition is given by the United Nations Environment Program as "an economy that promotes increased levels of well-being and social justice while reducing emissions and environmental pollution". The United Nations identifies 16 necessary principles for the development of a green economy, including legal regulation, country sovereignty, environment protection, renewable

energy sources, promotion of technological innovations, etc[1]. The OECD emphasizes the role of technological development and digitalization in the transition of countries to the "Green Economy" model. According to it, technological innovations and digitalization should lead to the reduction of the existing technological development gap between countries, which will be an objective basis for the transition to a green economy[2].

Savchenko and Borodina propose their classification of the "UN Principles of Sustainable Development", under which the green economy is considered in terms of the social, environmental, economic, and general growth[3].

Komarovskaya analyzes the policies of state administration and local self-government bodies aimed at the greening of the economy, following the example of Moscow. Studying the "Green" energy and environmental infrastructures, the transport system, green areas, emission management, population awareness, and literacy, she highlights the importance of the latter and the need for a systemic approach to the transition to a green economy[4].

Kudryashova proposes to evaluate the establishment of the green economy by the ratio of green sectors of the economy and sectors rich in emissions[5].

Caprotti and Bailey analyze the features of the green economy's scalability, governance model change, and practical application, concluding that an alternative theory is needed[6].

Yandel analyzes the role of green taxes, paying particular attention to "Pigouvian taxes". According to him, the application of green taxes is not due to environmental, but purely economic considerations, which, according to him, does not contribute to the improvement of the environmental situation or green growth[7].

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[1] "The future we want", Outcome document of the UN Conference on Sustainable Development, Rio de Janeiro, Brazil, 20-22 June 2012, pages 14-18, source: https://sustainabledevelopment.un.org/rio20/futurewewant, last accessed: 02.10.2023.

[2] Measuring Distance to the SDG Targets 2019: An Assessment of Where OECD Countries Stand, Paris: Org. Econ. Co-op. Dev., 2017, https://www.oecd.org/sdd/measur-ing-distance-to-the-sdgs-targets.htm

[3] "Green and Digital Economy for Sustainable Development of Urban Areas», A. B. Savchenko, T. L. Borodina, ISSN 2079-9705, Regional Research of Russia, 2020, Vol. 10, No. 4, pp. 583–592. © Pleiades Publishing, Ltd., 2020, էջ 585-587, 591

[4] "Formation of a Green Economy in Moscow: Opportunities and Prospects" Natalia V. Komarovskaia, Industry 4.0 Exploring the Consequences of Climate Change, Palgrave, Macmillan, https://doi.org/10.1007/978-3-030-75405-1

[5] "Prospects for the Transition of the EAEU to a Green Economy: Experience of the European Union for Green Growth of the Eurasian Economic Union and Conditions of Cooperation Between the EAEU and the EU" Yulia S. Kudryashova, Industry 4.0 Exploring the Consequences of Climate Change, Palgrave, Macmillan, https://doi.org/10.1007/978-3-030-75405-1

[6] CAPROTTI, F. and BAILEY, I. (2014): 'Making sense of the green economy', Geografiska Annaler: Series B, Human Geography 96 (3): 195–200.

[7] The Political Economy of Green Taxation in OECD Countries CRISTINA E. CIOCIRLAN, Pennsylvania State University, Harrisburg, USA, BRUCE YANDLE yandle@clemson.edu Clemson University, Clemson, SC, USA; Bozeman, Montana,

Karpovich, Dyakonova, Pozharskaya, and Grigorenko, by analyzing the role of the use of ICT and special software packages in the economic development of the region, conclude that editorial and publishing, educational and electronic legal information systems contribute the most to green growth. Based on a simulation regression model, they predicted that the growth in these sectors by 20% by 2025 will lead to an economic growth of up to 26.78% in the considered regions[1].

Guevara and Montoya, analyzing the experience of Brazil, concluded that the formation of a green economy requires close cooperation between the public and private sectors, from institutional changes and regulatory mechanisms to the improvement of the social environment. In this process, they emphasize the role of NGOs and private sector representatives as the main engine of greening of the economy[2].

Galstyan, Tadevosyan, Tatosyan, Badadyan, and Shahinyan, analyze the applicability of the "Green City" concept using the example of Yerevan, emphasize the need for the mechanism of "green procurement as green financing", evaluation of the steps implemented, management in green directions, including energy, transport, urban development, industry, waste processing[3]. Analyzing the process of greening the RA economy, Avetisyan highlights the optimization of environmental taxes and their approximation to the real economic value of the resource/damage[4].

Summarizing the literature review, it can be stated that the goals of the "Green Economy" set by the UN, OECD, and other international organizations are indicative in nature, while each country develops its own policy for the realization of these goals. Studies on the green economy are also carried out based on the economic characteristics of each country.

Methodology. Comparative-analytical methods were implemented to evaluate the process of greening the RA economy. The basis for the assessment were the indicators published by the VC, the Energy Trilemma Index published by the World Energy Organization, and the global indices of green growth and green economy.

Analyses. The beginning of the "greening" process of the Armenian economy can be considered the Rio Assembly in 2012, when, in the national economy report, Armenia outlined the transition from an export-oriented economic policy to a sustainable and inclusive economic growth policy, in other words, syncing the economic policy with

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[1] Digital Growth Points of the Region's, Green Economy in Industry 4.0: Finance and Security Issues Oleg G. Karpovich, Olga S. Diakonova, Elena L. Pozharskaya, and Vladimir V. Grigorenko

[2] Raul Gouvea & M.J.R. Montoya (2014) Building an equitable green economy: a Brazilian perspective, International Journal of Environmental Studies, 71:2, 182-199, DOI: 10.1080/00207233.2014.898372

[3] Galstyan, Tadevosyan, Tatosyan, Badadyan, and Shahinyan, "Green City" strategy development and implementation problems (on the example of Yerevan city) / H. Galstyan and others: - Yer. Economist, 2023.- 150 pages.- ("Amberd" series No, 61, pages 128-130

[4] Ecological-economic problems of green economy development in Armenia, S. Avetisyan, page 26.

the UN Sustainable Development Program[1]. Over the past decade, a number of legislative and strategic documents have been adopted aimed at sustainable economic development and mitigating the negative impact on the environment[2]. In 2023 the draft decision of the Government of the RA "On approving the green and sustainable economic development strategy" was also presented for discussion (still in the discussion stage though). The RA Government together with the World Bank, the European Union, and the United Nations Development Program, launched the "Growth and Recovery for Armenia's Empowerment, Rearmament and Prosperity" platform in June 2022 in support of Armenia's prospective sustainable development, green growth and recovery. The purpose of the "Green Armenia" platform is to combine and optimize policies and investment initiatives aimed at Armenia's transition to a green economy. The third meeting of the dialogue platform held in July 2023 was also aimed at raising the issues related to the improvement of air quality in Armenia, including the need to introduce a complex air monitoring system.

There is still no universally accepted indicator for assessing the level of greening in the economy. Various indices such as the Global Green Economy Index and the Global Green Growth Index are regularly published by various international organizations. The most common indicator characterizing the level of the green economy, through which the process is evaluated in many countries, is the Global Green Economy Index (GGEI), which has been calculated since 2005 until now. It shows how to assess the level of different aspects of the green economy and measures the performance of the green economy of 160 countries around the world using 18 indicators[3].

Four main parameters are used to calculate the GGEI:
- climate change and social justice,
- "decarbonization" of the sector or reduction of carbon emissions,
- markets and investments in ESG (Environmental, Social, and Corporate Governance) with which companies evaluate sustainable development management,
- a healthy environment.

The GGEI for RA has been calculated since 2005. In 2022, according to the data, Armenia was in 104th place. Moreover, according to the approaches used for the calculation of this indicator, compared to the countries of the region, Armenia is inferior to Belarus, Kazakhstan, and Ukraine (Figure 1).

[1] RIO+20 National Assessment Report

[2] Source: https://www.e-draft.am/projects/6062/justification, last accessed 10/10/2023.

[3] Source: https://dualcitizeninc.com/global-green-economy-index/, last accessed 05/10/2023.
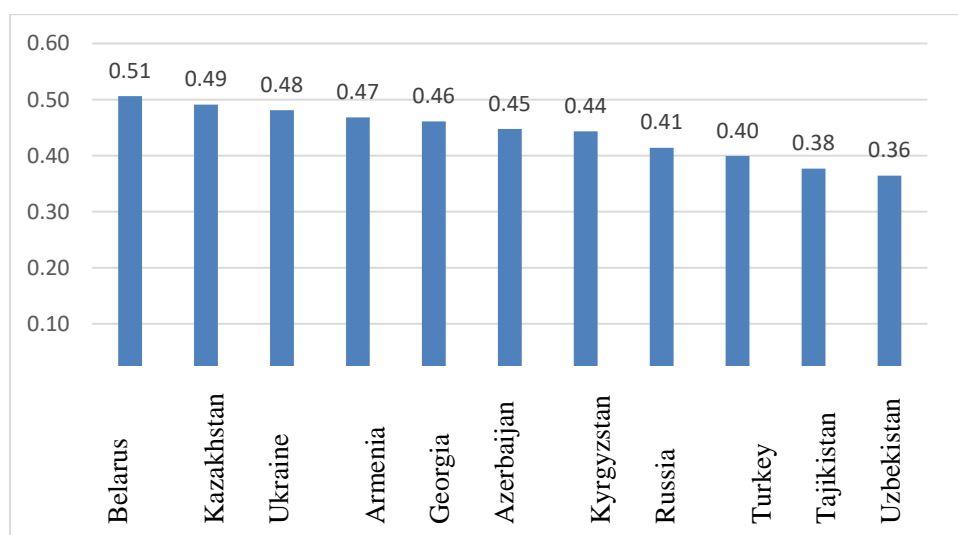
Figure 1. **The GGEI values for chosen countries in 2022[1]**

The Green Growth Index is developed based on the UN Sustainable Development Goals, the provisions of the Paris Climate Agreement, and the Aichi Biodiversity Goals. The calculation of the index is carried out with indicators of four main categories:

1. Sustainability and efficiency of resource use, which is an aggregation of efficiency and sustainability indicators of the use of energy, water, land, and other material resources.
2. Protection of natural capital, which is an aggregation of environmental, biogas emissions reduction, biodiversity, ecosystem protection, cultural and social values indicators.
3. Green economic opportunities are calculated based on indicators of green investment, green trade, green labor market formation, and green innovation.
4. Indicators of access to basic services and resources, gender equality, social equality, and social protection.

The assessment is carried out on a scale of 1 to 100. The dynamics of The Green Growth Index of RA from 2008 to 2022 is presented in Figure 2.

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[1] Source: https://dualcitizeninc.com/results-from-the-2022-global-green-economy-index-ggei/, last accessed 05/10/2023.
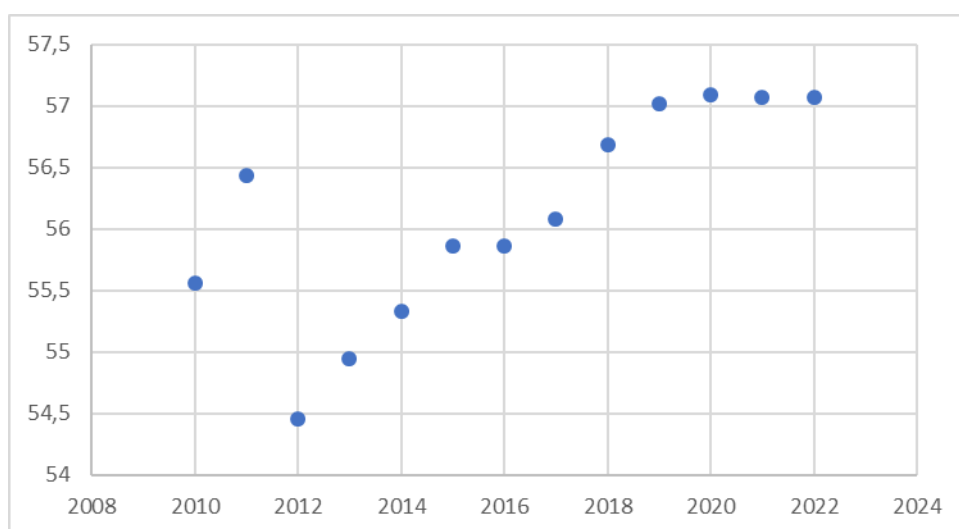
Figure 2. **The Green Growth Index of RA from 2008 to 2022**

The RA government has taken many measures in cooperation with the ADB, the International Monetary Fund, the UN Sustainable Development Program, and other organizations in the fields of energy, environmental protection, housing construction, and others. The measures undertaken by the RA Government in the field of energy include the promotion of renewable energy sources: supporting and subsidizing the construction and repair of hydropower plants, solar plants, biogas energy, wind energy, energy-efficient houses, and apartments. It should be noted that according to the energy trilemma indicator presented by the World Energy Organization, RA has improved its position. At the same time, the analysis of the components of the trilemma indicator shows that the RA energy sector is the most vulnerable from the point of view of energy security, which is due to the high degree of energy dependence. Diversification of energy sources in the direction of biogas, solar, and wind energy sources must be considered as a solution.

Carbon emissions in RA are largely due to the use of vehicles. Industrial and manufacturing emissions are relatively stable and manageable, while large-scale imports of vehicles, especially in recent years, due to the EAEU conjuncture and re-exports have led to an increase in carbon emissions from mobile sources[1]. As a solution to the problem, increasing the volume of import of vehicles with electric motors must be considered.

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[1] Source: https://statbank.armstat.am/pxweb/hy/ArmStatBank/ArmStatBank__8%20Environment__(A)%20Emissions%20of%20pollutants%20into%20the%20atmospheric%20air/EE-a1.px/?rxid=9ba7b0d1-2ff8-40fa-a309-fae01ea885bb, last accessed: 10/10/2023.
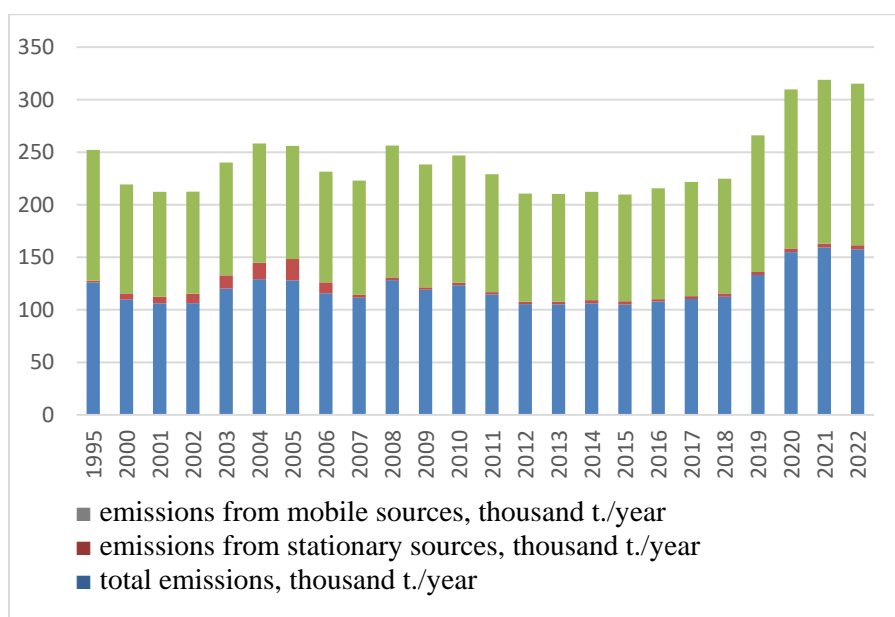
Figure 3. **Carbon emissions by emission sources**

Environmental taxes registered a downward trend in 2019-2020, which was due to the negative economic impact of the COVID-19 pandemic, as well as the postponement of tax obligations of the largest taxpayer of RA which was completed in 2021-2022[1].
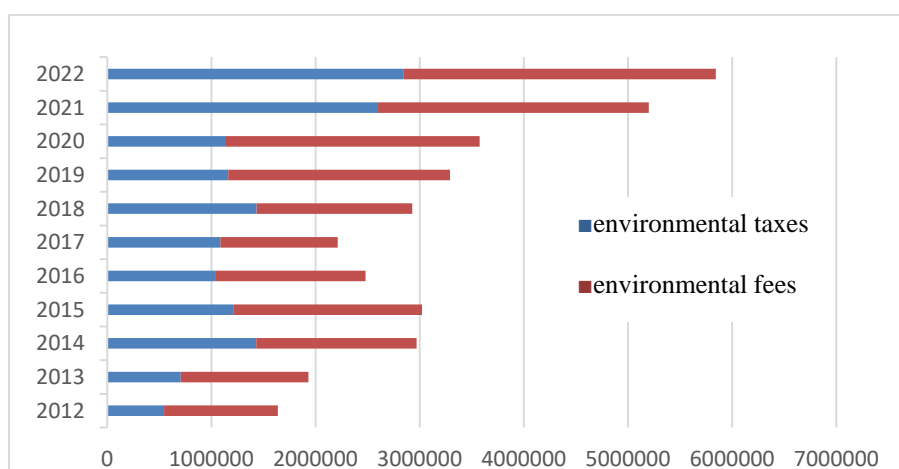

Figure 4. **Environmental taxes and fees in RA, 2012-2022[2]**

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[1] Source: https://statbank.armstat.am/pxweb/hy/ArmStatBank/ArmStatBank__8%20Environment__(A)%20Emissions%20of%20pollutants%20into%20the%20atmospheric%20air/EE-a1.px/?rxid=9ba7b0d1-2ff8-40fa-a309-fae01ea885bb, last accessed: 05/10/2023.

[2] The figure was composed by the authors according to the data of the RA Statistical Committee.

Environmental charges/fees have shown relatively stable dynamics in recent years. According to the project adopted by the government, 2% of the environmental fees, but not less than 1 billion AMD, will be directed to the community budget. The solution in the direction of tax incentives can be based on the implementation of progressive taxation measures, such as carbon taxes or the establishment of tax incentives for environmentally friendly businesses.

Conclusion. The green economy is a key ideology of world economic development. Green economy standards are defined by international organizations, and are indicative, while each country develops a greening policy for its economy based on the country's economic, political, climatic, and other characteristics. The RA government is also taking many measures in the direction of greening the economy, in particular, environmental fees, promotion of renewable energy, energy-efficient housing construction, etc. As a result of the analysis, it became clear that reducing energy dependence is an urgent problem for RA. The analysis of environmental protection indicators shows that carbon emissions are mostly due to the increase in transport emissions from mobile sources.

Scientific novelty. Based on the conducted studies and analyses, the priorities of the transition to the "green economy" of RA were identified, and the possible scenarios for their solutions were given.

References
1. CAPROTTI, F. and BAILEY, I. (2014): 'Making sense of the green economy', Geografiska Annaler: Series B, Human Geography 96 (3): 195–200.
2. Digital Growth Points of the Region's, Green Economy in Industry 4.0: Finance and Security Issues Oleg G. Karpovich, Olga S. Diakonova, Elena L. Pozharskaya, and Vladimir V. Grigorenko
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7. "Prospects for the Transition of the EAEU to a Green Economy: Experience of the European Union for Green Growth of the Eurasian Economic Union and Conditions of Cooperation Between the EAEU and the EU" Yulia S. Kudryashova, Industry 4.0 Exploring the Consequences of Climate Change, Palgrave, Macmillan, https://doi.org/10.1007/978-3-030-75405-1

8. Raul Gouvea & M.J.R. Montoya (2014) Building an equitable green economy: a Brazilian perspective, International Journal of Environmental Studies, 71:2, 182-199, DOI: 10.1080/00207233.2014.898372

9. RIO+20 National Assessment Report

10. "The future we want", Outcome document of the UN Conference on Sustainable Development, Rio de Janeiro, Brazil, 20-22 June 2012, pages 14-18, source: https://sustainabledevelopment.un.org/rio20/futurewewant, last accessed: 02.10.2023.

11. The Political Economy of Green Taxation in OECD Countries CRISTINA E. CIOCIRLAN, Pennsylvania State University, Harrisburg, USA, BRUCE YANDLE yandle@clemson.edu Clemson University, Clemson, SC, USA; Bozeman, Montana,

12. Ecological-economic problems of green economy development in Armenia, S. Avetisyan, page 26.

13. https://www.armstat.am/am/?nid=33

14. https://dualcitizeninc.com/global-green-economy-index/

15. https://dualcitizeninc.com/results-from-the-2022-global-green-economy-index-ggei/

16. https://www.e-draft.am/projects/6062/justification

ՀՀ «ԿԱՆԱՉ ՏՆՏԵՍՈՒԹՅԱՆ» ԱՌԱՋՆԱՀԵՐԹՈՒԹՅՈՒՆՆԵՐԸ ԱՐԴԻ ՊԱՅՄԱՆՆԵՐՈՒՄ

Կարեն Արմրդի Ներսիսյան
Դավիթ Արմենակի Պետրոսյան

Համառոտագիր։ Կանաչ տնտեսությունը համաշխարհային տնտեսության զարգացման ամենատարածված և առանցքային մոդելներից մեկն է։ ՀՀ-ն ի թիվս այլ երկրների ձեռնարկել է տնտեսության «կանաչացման» բազմաթիվ միջոցառումներ տարբեր ոլորտներում։ Հոդվածի **նպատակն է** բացահայտել այդ միջոցառումների կիրառման արդյունքներն ու ներկայացնել ՀՀ «կանաչ տնտեսության» առաջնահերթությունները արդի պայմաններում։

Հետազոտության **խնդիրն է** ուսումնասիրել «կանաչ տնտեսության» հայեցակարգային դրույթներն ու դրանց նկատմամբ արկա մոտեցումները, տնտեսության

«կանաչացման» առաջավոր փորձը, գնահատել ՀՀ կառավարության «կանաչ տնտեսության» անցմանն ուղղված միջոցառումները:

Նորօրյա մարտահրավերները ենթադրում են այնպիսի քաղաքականություն, որով տնտեսությունների կառավարումն ու կենսագործունեության բոլոր ոլորտները անհրաժեշտ է ներդաշնակեցնել «կանաչ սկզբունքներին», ինչը երկարաժամկետ հեռանկարում թույլ կտա ապահովել առանձին տարածքային միավորների, պետությունների և ողջ Երկիր մոլորակի կայուն ու բնականոն զարգացումը, ինչ էլ պայմանավորում է հետազոտության **արդիականությունը**: Կայուն զարգացումը՝ պայմանավորված կլիմայական փոփոխություններով, բնական ռեսուրսների ծավալների կրճատմամբ, շրջակա միջավայրի իրավիճակի վատթարացմամբ և այլ գլոբալ հիմնախնդիրներով, առավել արդիական է կապված արդյունավետ և ժամանակին լուծման հետ:

ՀՀ տնտեսության կանաչացման գործընթացի գնահատման համար կիրառվել են համեմատական-վերլուծական մեթոդները: Գնահատման համար հիմք են հանդիսացել ՎԿ կողմից հրապարակվող ցուցանիշները, Էներգետիկայի համաշխարհային կազմակերպության կողմից հրապարակվող էներգետիկ տրիլեմա ցուցանիշը, կանաչ աճի և կանաչ տնտեսության համաշխարհային ինդեքսները:

Գիտական նորույթ: Կատարված ուսումնասիրությունների և վերլուծությունների հիման վրա բացահայտվել են ՀՀ «կանաչ տնտեսության» անցման առաջնահերթությունները, տրվել են դրանց լուծման հնարավոր սցենարները:

Բանալի բառեր. կանաչ տնտեսություն, շրջակա միջավայր, արտանետումներ, բնապահպանական հարկեր, էներգետիկա

ПРИОРИТЕТЫ «ЗЕЛЕНОЙ ЭКОНОМИКИ» РА В СОВРЕМЕННЫХ УСЛОВИЯХ

Карен Арноевич Нерсисян
Давит Арменакович Петросян

Аннотация. Зеленая экономика – одна из самых популярных и ключевых моделей глобального экономического развития. РА, в числе других стран, предприняла множество мер по «озеленению» экономики в различных сферах. Цель статьи – раскрыть результаты применения этих мер и представить приоритеты «зеленой экономики» РА в современных условиях. Задача исследования - изучить концептуальные тезисы «зеленой экономики» и существующие подходы к ним, ведущий опыт «экологизации» экономики, оценить меры правительства РА, направленные на переход к «зеленой экономике». Вызовы сегодняшнего дня предполагают такую политику, посредством которой необходимо гармонизировать управление экономикой и всеми сферами жизни с «зелеными принципами», что в долгосрочной перспективе позволит обеспечить стабильное и нормальное развитие отдель-

ных территориальных единиц, государств и всего мира, что и определяет актуальность исследований. Устойчивое развитие в связи с изменением климата, истощением природных ресурсов, ухудшением состояния окружающей среды и другими глобальными проблемами более актуально при эффективном и своевременном решении.

Сравнительно-аналитические методы были использованы для оценки процесса экологизации экономики РА. В основу оценки легли показатели, публикуемые Статистическим комитетом, индекс энергетической трилеммы, публикуемый Всемирной энергетической организацией, а также мировые индексы зеленого роста и зеленой экономики.

Научная новизна. На основе проведенных исследований и анализов были определены приоритеты перехода к «зеленой экономике» РА и приведены возможные сценарии их решения.

Ключевые слова: зеленая экономика, окружающая среда, выбросы, экологические налоги, энергетика

THE PRIORITIES OF RA "GREEN ECONOMY" IN CURRENT CONDITIONS

Karen Armo Nersisyan
Davit Armenak Petrosyan

Abstract. "The Green Economy" is one of the most popular and key models of global economic development. RA, among other countries, has taken many measures to "green" the economy in various fields. **The purpose of the article** is to reveal the results of the application of these measures and to present the priorities of the "Green Economy" of RA under current conditions.

The task of the research is to study the conceptual provisions of the "Green Economy" and the existing approaches to them, the leading experience of the "greening" of the economy, to evaluate the measures aimed at the transition of the "Green Economy" of the RA government.

Today's challenges imply such policy necessary to harmonize the management of economies and all spheres of life with "green principles", which in the long run will allow ensuring the stable and normal development of individual territorial units, states, and the entire globe, which determines **the relevance** of research. Sustainable development due to climate change, depletion of natural resources, deterioration of the environment, and other global issues, is more relevant with an effective and timely solution.

Comparative-analytical methods were used to assess the process of greening the RA economy. The basis for the assessment was the indicators published by the VC, the

energy trilemma index published by the World Energy Organization, and the global indices of green growth and green economy.

Comparative-analytical methods were implemented to evaluate the process of greening the RA economy. The basis for the assessment were the indicators published by the VC, the Energy Trilemma Index published by the World Energy Organization, and the global indices of green growth and green economy.

Scientific novelty. Based on the conducted studies and analyses, the priorities of the transition to the "green economy" of RA were identified, and the possible scenarios for their solutions were given.

Keywords: green economy, environment, emissions, environmental taxes, energy