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1. ՄԱԿՐՈՏՆՏԵՍԱԿԱՆ ԵՎ ՖԻՆԱՆՍԱԿԱՆ ՔԱՂԱՔԱԿԱՆՈՒԹՅԱՆ ՀԻՄՆԱԽՆԴԻՐՆԵՐԸ

THE STATE, BUSINESS AND SOCIETY AT THE CROSSROADS OF THE CIRCULAR ECONOMY: ARMENIA'S MAIN CHALLENGES AND PROSPECTS

MERI MANUCHARYAN

Introduction. Over the past decade, the circular economy has emerged as a development model capable of overcoming the ecological and economic limitations inherent in the linear economic system. Linear economic models (built for decades on high levels of consumption, intensive resource extraction, and single-use production) have led to rapid depletion of natural resources, intensified climate-related risks, and a continuous growth of waste. In such conditions, countries with small markets, limited resources, and high import dependence, such as Armenia, face serious challenges related to economic resilience and environmental sustainability[1]. Therefore, the study of the circular economy has become highly relevant, driven by both global and local challenges[2]. The theoretical foundations of the circular economy shaped through a combination of eco-industrial approaches, the concept of sustainable development have been extensively examined in international scholarship. Academic literature offers diverse interpretations of the concept, methodological frameworks, and policy instruments aimed at ensuring efficient use of materials and energy, transforming production and consumption systems, and preventing waste generation. However, most international studies focus on EU member states, Western Europe, or industrial hubs in Asia, while the context of small economies such as Armenia remains significantly underexplored. This highlights the low level of scholarly attention devoted to Armenia in the field of circular economy research and the existence of a substantial knowledge gap. Addressing this gap, the present study aims to analyze Armenia's trajectory toward a circular economy by assessing the country's current state, major challenges and opportunities, and the interaction between state, businesses, and the society throughout this process. The study intends to present Armenia's key indicators, compare them with international benchmarks, identify policy and institutional constraints, evaluate stakeholder participation, and formulate context-specific recommendations tailored to Armenia's needs. To achieve this objective, several research tasks were be addressed: determining the stage of Armenia's transition toward a circular economy, identifying

[1] Manucharyan M.G., Food security issues in the economic security system of the Republic of Armenia. BIO Web Conf. 2021 Jan; 36: p. 08004. DOI: 10.1051/bioconf/20213608004

[2] Manucharyan M., Climate change impacts on sustainable agriculture: Evidence from Armenia, Unconventional Resources, vol. 6, p. 100159, 2025. https://doi.org/10.1016/j.uncres.2025.100159

the structural and infrastructural barriers that hinder progress, assessing the current policy and economic instruments applied, and analyzing the role of public behavior and business preparedness. The scientific evaluation of these issues enables the formation of a comprehensive understanding that serves both theoretical and practical purposes, supporting the development of more coherent and effective public policy.

Literature Review. The theoretical foundations of the circular economy have been shaped under the influence of diverse scientific disciplines, encompassing eco-industrial systems, sustainable development approaches, value chain management theories, and comprehensive models of resource efficiency. In contemporary scholarly discourse, interpretations of the circular economy are varied; however, their deliberate differences underscore the concept's interdisciplinary nature and its applicability across different levels of the economy. The Ellen MacArthur Foundation has played a pivotal role in the development of the ideological and theoretical foundations of the circular economy, being among the first to formulate a systemic approach that conceptualizes it as an economic model based on the closure of material flows, reuse, repair, and recycling[3]. In the Foundation's works, the circular economy is presented not only as an environmental instrument but also as an innovative economic model capable of ensuring economic growth without increasing resource consumption.

The ideological basis of the circular economy receives new interpretations in the works of Murray, Skene, and Haynes, where it is conceptualized as an interdisciplinary approach with not only ecological but also socio-economic and ethical implications[4]. The authors emphasize that the effectiveness of the circular economy depends on the extent to which economic systems can balance value creation, resource conservation, and social responsibility. Their study reaffirms that the circular economy is not merely a technological or environmental solution, but a comprehensive transformation of the economic system, requiring new business models, management practices, and policy approaches. The significance of their work lies in highlighting the multidimensional nature of the transition to a circular economy, illustrating the interconnectedness of economic benefits, social impacts, and ecological sustainability.

Gaisdorfer and co-authors have examined the wide diversity of circular economy definitions and note that the existence of 114 different definitions reflects its multilayered nature, as well as the broad potential for both scholarly and practical application[5]. The authors propose a consolidated definition, according to which the circular economy aims to reduce resource use, limit waste generation, and enhance the efficiency of materials and energy through mechanisms of material flow closure,

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[3] Ellen MacArthur Foundation. (2015). Towards a Circular Economy: Business Rationale for an Accelerated Transition.

[4] Murray, A., Skene, K., & Haynes, K. (2017). *Journal of Business Ethics, 140*(3), 369–380. DOI: 10.1007/s10551-015-2693-2.

[5] Geissdoerfer, M., Savaget, P., Bocken, N. M. P., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? *Journal of Cleaner Production, 143*, 757–768. DOI: 10.1016/j.jclepro.2016.12.048

slowing, and narrowing. This approach allows the circular economy to be viewed not merely as an environmental policy but also as a pathway for transforming economic and governance systems. The diversity of circular economy definitions has been thoroughly examined in the work of Kircher, Reike, and Hekkert, where the authors systematized 114 definitions circulating in the field and offered an integrated analysis[2]. The value of this work lies in its exposition of the multifaceted approaches to the circular economy (CE) within the scientific field and the underlying theoretical distinctions. The authors note that most interpretations of CE focus on improving resource efficiency, reducing waste, and ensuring closed material loops; however, many overlook social and political dimensions, limiting a comprehensive understanding of the concept. The work of Kirchherr and colleagues is particularly significant because it outlines the methodological foundations necessary for subsequent practical measurement of CE and for the formulation of informed policy[6]. The economic foundations of the circular economy are extensively explored in Stahel's work, which emphasizes the concept of a "performance economy" in the context of CE[7]. According to Stahel, value is generated not through the rapid circulation of new products but through extending the life cycle of existing goods via repair and reuse. This theory is particularly relevant for countries with limited resource bases, as it reduces dependence on external markets and enhances domestic economic resilience. Certoun highlights the "industrial symbiosis" model within the circular economy, which is based on the principle that the waste of one enterprise can serve as a production resource for another[8]. This approach enables the creation of closed industrial cycles, reduces raw material costs, and improves ecological indicators. Industrial symbiosis has become a key instrument in the industrial policies of Europe, China, and North America. The social and behavioral aspects of the transition to a circular economy are discussed in Hobson's study, which emphasizes that changes in consumer behavior are a key prerequisite for the effectiveness of circular economy initiatives[9]. Hobson notes that the adoption of circular practices is often constrained by factors such as convenience, cost, time, and habitual behavior. These observations are particularly important for countries where societal engagement plays a critical role in the implementation of circular economy policies. Issues of public engagement and social acceptance have been examined by Whitmarsh, who demonstrates that the effectiveness of sustainability-oriented policies depends not only on institutional and regulatory capacities but also on public awareness, behavioral readiness, and underlying value

[6] Kirchherr, J., Reike, D., & Hekkert, M. (2017). *Resources, Conservation & Recycling, 127*, 221–232. DOI: 10.1016/j.resconrec.2017.09.005

[7] Stahel, W. R. (2016). The circular economy. *Nature, 531*(7595), 435–438. DOI: 10.1038/531435a

[8] Chertow, M. R. (2000). Industrial Symbiosis: Literature and Taxonomy. *Annual Review of Energy and the Environment, 25*(1), 313–337. DOI: 10.1146/annurev.energy.25.1.313

[9] Hobson, K. (2016). Closing the loop or squaring the circle? Locating generative spaces for the circular economy. Progress in Human Geography, 40(1), 88–104. https://doi.org/10.1177/0309132514566342

orientations that shape societal responses to environmental change[10]. This approach allows the circular economy to be considered not only from an economic perspective but also from a social science standpoint, highlighting the critical importance of the socio-political dimension of policy implementation. Kirchherr and colleagues view the circular economy as a multidimensional phenomenon that requires a comprehensive methodology for assessment, incorporating economic, social, and environmental indicators[11]. Their study is particularly relevant for countries that do not yet have official CE monitoring systems, such as Armenia. Publications by the OECD also play a significant role in the development of circular economy policy. The organization considers the CE as a tool for economic innovation, job creation, improving the investment environment, and enhancing resource efficiency, while simultaneously addressing the barriers that may limit the effectiveness of CE policies in different countries[12]. OECD recommendations are widely applied by governments in policy planning and the reform of economic governance.

Methodology. This study is based on a multi-level analysis of secondary data. The comparison of Armenian and international datasets, the use of descriptive statistics, content analysis of policy and regulatory documents, and comparative evaluation were performed in the scope of the study. Data collection relied on Armenia's official statistical sources, state programs and policy documents relevant to the circular economy, as well as studies published by international organizations such as the European Union, OECD, UNDP, and the World Bank. These sources enabled an assessment of Armenia's position within global value and resource-use chains.

An important component of the methodological approach was the integration of international indicators used to assess circular economy performance:

- circular material use rates,
- levels of recycling,
- the maturity of policy instruments,
- the readiness of supporting infrastructure.

These indicators made it possible to evaluate how Armenia is positioned relative to leading countries and regional peers. The analysis also incorporated a comprehensive approach to evaluating circularity, drawing on established international frameworks that examine the closing, slowing, and narrowing of resource loops. Together, these methodological tools allowed for an assessment not only of material flow dynamics but also of the institutional and governance characteristics shaping Armenia's transition toward a circular economy.

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[10] Whitmarsh, L., Capstick, S., Moore, I., Köhler, J., & Le Quéré, C. (2020). Use of aviation by climate change researchers: Structural influences, personal attitudes, and information provision. Global Environmental Change, 65, 102184. https://doi.org/10.1016/j.gloenvcha.2020.10218

[11] Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions.
Resources, Conservation and Recycling, 127, 221–232. https://doi.org/10.1016/j.resconrec.2017.09.005

[12] OECD. (2019). Business Models for the Circular Economy.

Analysis. Armenia is currently at an early stage in the formation of a circular economy, a situation driven by limited data availability, institutional gaps, behavioral constraints, and insufficient economic incentives. Although in recent years the state has initiated reforms in waste management, including the construction of regional landfills, the introduction of the Extended Producer Responsibility (EPR) system, and several municipal waste-separation programs, these efforts still do not constitute a comprehensive circularity framework. Unlike international practice, Armenia lacks an official monitoring mechanism through which the key indicator of "circular material use" could be calculated. In the absence of accurate statistics, available estimates indicate that household waste recycling does not exceed 3-5% (as of 2022), per-capita annual waste generation amounts to approximately 380-400 kg, and waste separation operates in only about 30 settlements (Table 1). The number of recycling enterprises is limited to 20-30, most of which process plastics, paper, glass, and metals. The EPR system currently covers only three product streams: tires, batteries, and electronic equipment. These figures demonstrate that Armenia has not yet established the full resource-flow management chain required for a functioning circular economy[13].

For a more comprehensive assessment of Armenia's current situation, it is necessary to place it in an international context. According to the Circularity Gap Report 2023, published by the Circle Economy Foundation, the global material circularity rate remained very low, amounting to only 7.2% in 2023[14]. According to the same study, this rate was 9.1% in 2020 and 8.6% in 2018, suggesting that the global economy continues to operate predominantly under a linear model. Data from the OECD and Eurostat show that the material circularity rate reaches approximately 34% in the Netherlands, 22% in France, 21% in Italy, with an EU average of 12.8%. By comparison, Japan has a circularity rate of around 6%, Turkey 3%, and the United States and Canada less than 2%[15]. Armenia does not calculate this indicator, representing an institutional gap that limits the ability to evaluate and guide state policy. Armenia's primary challenges are structural and encompass not only deficiencies in physical infrastructure but also political, behavioral, and economic barriers. International experience indicates that the key prerequisites for a transition to a circular economy include not only recycling capacities but also the coherence, integration, and predictability of public policy. Empirical studies based on material flow analysis demonstrate that circular systems can function effectively only when comprehensive accounting mechanisms, consistent data frameworks, and supportive regulatory structures are in place[16]. In the context of Armenia, these

[13] Republic of Armenia Ministry of Territorial Administration and Emergency Situations. (2022–2023). Reports on community programs.

[14] Circle Economy Foundation. (2023). Circularity Gap Report 2023: The global economy is only 7.2% circular. https://www.circularity-gap.world/2023

[15] Eurostat (2022), OECD Data; Circle Economy

[16] Haas, W., Krausmann, F., Wiedenhofer, D., & Heinz, M. (2015). How circular is the global economy? An assessment of material flows, waste production, and recycling in the European Union and the world. *Journal of Industrial Ecology, 19*(5), 765–777. https://doi.org/10.1111/jiec.12244

components have yet to be fully developed. Behavioral aspects also remain underdeveloped. Studies by Hobson indicate that the main barriers to adopting circular behaviors are related to convenience, trust, costs, and habitual practices[17]. In Armenia, these challenges are particularly pronounced due to insufficient public awareness regarding reuse, repair, sharing, and other high-value circular practices. Furthermore, at the community level, comprehensive waste segregation infrastructure is lacking, and long-established linear consumption patterns slow the adoption of new circular models.

Table 1

The main CE indicators of Armenia[18]

Indicator	Value	Description
Recycling rate	3–5 %	No official data
Waste creation per capita	380–400 kg	Growing trend
Waste sorting in communities	~30	Mainly in big communities
Product categories covered under the Food Security Doctrine	3	Limited
Recycling companies	20–30	Individual

The state's role in this environment is multifaceted. The government acts as a coordinator by setting legislative requirements, establishing strategic priorities, and creating economic incentives. Initiatives such as the "National Waste Management Strategy" and the implementation of the Extended Producer Responsibility (EPR) system represent positive steps. However, stricter regulation is needed, alongside the development of ecological tax policies, the promotion of investment in recycling, and the full integration of green public procurement mechanisms. Data from the European Commission show that countries implementing comprehensive green procurement systems have artificially increased recycling demand and effectively stimulated behavioral change[19].

The business environment plays a particularly important role in the circular economy. Companies transitioning to circular models can reduce costs, increase material efficiency, and create new revenue streams. According to the approach proposed by Murray, Skene, and Haynes, the transition to a circular economy requires the comprehensive management of a product's entire life cycle, including eco-design, reparability, extended product lifespan, and closed material loops. In Armenia, many of

[17] Hobson, K. (2016). *Progress in Human Geography.* DOI: 10.1080/03091325.2015.1064501

[18] Author's compilation based on official statistics, national policy documents, and international reports .
Statistical Committee of the Republic of Armenia. (2023). *Environment and natural resources of Armenia*.
Ministry of Environment of the Republic of Armenia. (2022). *National Waste Management Strategy of the Republic of Armenia for 2022–2035*.
AUA Acopian Center for the Environment. (2020). *Waste Governance in Armenia* (Final Report). Retrieved from https://ace.aua.am/wp-content/uploads/2020/08/WGA-Report-Eng.pdf

[19] European Commission (2020). Circular Economy Action Plan

these practices are not yet implemented, primarily due to limited investment, a small domestic market, and technological constraints. The application of industrial symbiosis is also limited, despite its potential to substantially reduce raw material costs[20].

Table 2

Comparative assessment of Armenia's institutional readiness [21] [22]

Assessment area	Armenia	EU	Description
CE monitoring	No	Yes	Main limitation
EPR framework	Limited	Wide	14 directions in EU
Behavior	Low	Average	Awareness is limited
Development of CE models	Low	Belove average	Eco design is absent
Infrastructure	Above average	High	Partially ready

The Table 2 demonstrates that differences in circularity levels between countries are driven not only by economic development but also by the maturity of public policy, infrastructure, and monitoring systems. In the EU, countries with high circularity scores implemented clear data collection mechanisms and comprehensive Extended Producer Responsibility (EPR) systems early on, whereas in developing countries these processes are still in the formative stage. In the case of Armenia, the absence of measurable indicators reflects an institutional gap that limits the effectiveness of policy decisions. Therefore, a graphical comparison is necessary to illustrate the depth of these structural differences.

The Figure 1 illustrates that countries with high circularity rates are the same ones that, according to the Table 2, possess comprehensive monitoring systems and effective policy instruments. The circularity levels of the Netherlands (34%), France (22%), and Italy (21%) confirm that integrated policymaking and systematic data processing directly determine the degree of circularity. In contrast, countries lacking a coordinated approach, such as Turkey (3%), the United States (below 1.5%), and Armenia, where circularity remains non-measurable, demonstrate significantly weaker performance. For Armenia, this disparity carries two major implications. First, it highlights the urgent need to establish a national monitoring system, as policy evaluation and the formulation of measurable targets are impossible without a reliable data foundation. Second, it shows that transitioning toward a circular economy requires not only infrastructure development but also the combined implementation of economic incentives and behavioral change initiatives: elements that are characteristic of the countries exhibiting high circularity levels.

[20] Chertow, M. (2000). *Annual Review of Energy and the Environment.* DOI:10.1146/annurev.energy.25.1.313

[21] Eurostat. (2022). Circular material use rate by country.

[22] Circle Economy. (2023). *Circularity Gap Report 2023*. DOI: 10.5281/zenodo.7550288

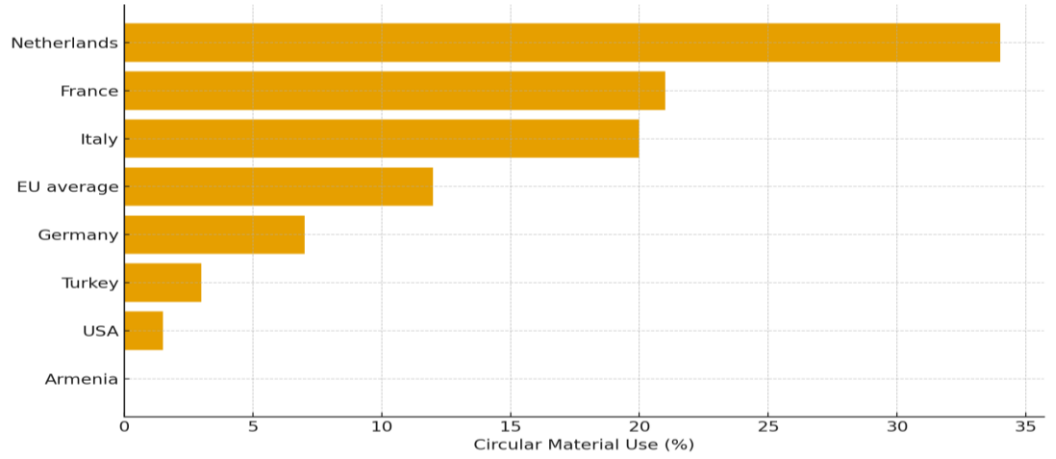

Figure 1. Comparative assessment of circular material use across countries [23] [24]

Thus, the numerical comparison presented in the table, together with the visual representation in the graph, illustrates Armenia's current territorial, institutional, and economic constraints in the circular economy transition. It also underscores the priority directions that should guide future policy development.

Table 3

Cross country comparison of Circular Material Use[25] [26] [27]

Country	Circular Material Use Rate (%)
The Netherlands	34 %
France	22 %
Italy	21 %
EU average	12.8 %
Japan	6 %
Turkey	3 %
US	1.5 %
Armenia	No data

The Table 3 data clearly demonstrates that the level of circular material use varies significantly across countries, largely depending on data-collection systems, infrastructure development, and policy incentives. Countries with high circularity rates have established comprehensive monitoring mechanisms and fully functioning Extended Producer Responsibility frameworks, while those with medium or low levels lack such integrated systems. The absence of an official indicator for Armenia reflects

[23] Eurostat. (2022). Circular material use rate by country.
[24] Circle Economy. (2023). *Circularity Gap Report 2023*. DOI: 10.5281/zenodo.7550288
[25] Eurostat. (2022). Circular material use rate by country (CMU indicator).
[26] OECD. (2021). Material Flow Accounts and Resource Efficiency Dataset.
[27] Circle Economy. (2023). *Circularity Gap Report 2023*. DOI: 10.5281/zenodo.7550288

existing institutional gaps and highlights the policy directions essential for advancing the circular economy transition.

Accordingly, Armenia's main barriers to circularity are structural, including the absence of a national monitoring system, limited waste separation practices, low recycling rates, insufficient eco-design initiatives, the lack of innovative business models, and constraints in public behavioral readiness. At the same time, international evidence shows that transitioning to a circular economy carries substantial economic potential, as demonstrated in the EU, where it is estimated to generate a 0.9% increase in GDP and nearly 700,000 new jobs by 2030[28]. Armenia possesses substantial development potential, provided that policy coordination is strengthened, the scope of Extended Producer Responsibility is expanded, investments are actively promoted, and behavioral change among the population is supported. The circular economy has the capacity to become one of the key pillars of Armenia's economic resilience, competitiveness, and sustainable development.

Conclusion. Armenia's transition toward a circular economy is currently at an early stage, shaped by weak institutional frameworks, partial infrastructure availability, and significant gaps in data collection and monitoring. The analysis shows that existing initiatives, such as the National Waste Management Strategy, the Extended Producer Responsibility (EPR) system, and limited waste-separation programs, do not yet provide the level of coherence required for functioning circular value chains. A large share of material flows continues to exit the economy, while the recycling sector operates in a fragmented and sectoral manner, lacking integrated state coordination.

International comparisons demonstrate that countries that have achieved high levels of circularity typically possess well-defined policy frameworks, monitoring mechanisms, and economic incentives for greening the economy. The absence of such systems in Armenia restricts both policy evaluation and long-term economic planning. In this context, institutional strengthening, the establishment of unified data-collection mechanisms, and the introduction of measurable circularity indicators are essential for tracking progress and aligning national developments with global standards.

Within these developments, it becomes necessary to outline policy recommendations that can serve as actionable directions for fostering a circular economy in Armenia.

- First, a comprehensive monitoring system must be created to ensure the accounting of material flows and to integrate data from municipal, governmental, and private actors. Such a mechanism would facilitate evidence-based policymaking and lay the foundations for a data-driven economy.
- Second, the EPR system should be expanded to include packaging, paper products, automotive oils, and other high-volume waste streams, thereby reducing landfill disposal and creating a stable market for secondary raw materials.

[28] OECD (2019). Business Models for the Circular Economy

- Third, the state should promote private-sector engagement through subsidies, tax incentives, and financial instruments supporting green investments, enabling the development of the recycling industry and the emergence of innovative business models.

- Fourth, to address behavioral challenges, nationwide education and awareness campaigns are needed to encourage waste separation and the adoption of reuse practices. Finally, effective interagency coordination is required within the governance system to ensure coherence across strategies and actions, making the transition to a circular economy systemic rather than fragmented.

Overall, the development of a circular economy has the potential to become a unifying direction for strengthening Armenia's environmental security, economic competitiveness, and social well-being. However, its successful implementation depends on coordinated transformations in governance, policy design, and societal behavior. Only through evidence-based policymaking, aligned policy instruments, investment stimulation, and public participation can Armenia progress from a linear economic model toward an efficient, resilient, and fully functional circular economy.

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10. Manucharyan M.G., Food security issues in the economic security system of the Republic of Armenia. BIO Web Conf. 2021 Jan; 36: p. 08004. DOI: 10.1051/bioconf/20213608004

11. Manucharyan M., Climate change impacts on sustainable agriculture: Evidence from Armenia, Unconventional Resources, vol. 6, p. 100159, 2025. https://doi.org/10.1016/j.uncres.2025.100159
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ՊԵՏՈՒԹՅՈՒՆԸ, ԲԻԶՆԵՍԸ ԵՎ ԲՆԱԿՉՈՒԹՅՈՒՆԸ ՇՐՋԱՆԱԶԵՎ ՏՆՏԵՍՈՒԹՅԱՆ ԽԱՉՄԵՐՈՒԿՈՒՄ. ՀԱՅԱՍՏԱՆԻ ՀԻՄՆԱԿԱՆ ՄԱՐՏԱՀՐԱՎԵՐՆԵՐԸ ԵՎ ՀԵՌԱՆԿԱՐՆԵՐԸ

ՄԵՐԻ ՄԱՆՈՒՉԱՐՅԱՆ

Համառոտագիր

Շրջանաձև տնտեսության ձևավորումը Հայաստանում ստանում է ռազմավարական նշանակություն, քանի որ երկրի տնտեսական և բնապահպանական համակարգերը շարունակում են գործել հիմնականում գծային ռեսուրսային արտադրական մոդելի շրջանակներում: Հոդվածում վերլուծվում է Հայաստանի անցումը շրջանաձև տնտեսության՝ գնահատելով պետության, բիզնեսի և հասարակության փոխազդեցությունը, ինչպես նաև բացահայտելով հիմնական կառուցվածքային, ինստիտուցիոնալ և վարքագծային խոչընդոտները: Ուսումնասիրության մեթոդաբանությունը հիմնված է համադրման և նկարագրական վերլուծության վրա՝ կիրառելով միջազգային վիճակագրական տվյալներ, ազգային աղբյուրներ և պետական քաղաքականությանը վերաբերվող փաստաթղթեր:

Հետազոտության նպատակն է վերլուծել Հայաստանի շրջանաձև տնտեսության ուղղությունը՝ գնահատելով երկրի ներկայիս վիճակը, հիմնական

մարտահրավերներն ու հնարավորությունները, ինչպես նաև պետության, բիզնեսի և հասարակության միջև փոխազդեցությունը այս գործընթացի ընթացքում: Ուսումնասիրության նպատակն իրականացնելու համար դրվել են հետևյալ խնդիրները. ներկայացնել Հայաստանի հիմնական ցուցանիշները, համեմատել դրանք միջազգային չափանիշների հետ, բացահայտել քաղաքականության և ինստիտուցիոնալ սահմանափակումները, գնահատել շահագրգիռ կողմերի մասնակցությունը և ձևակերպել համատեքստին հատուկ առաջարկություններ՝ հարմարեցված Հայաստանի կարիքներին:

Արդյունքները ցույց են տալիս, որ Հայաստանը գտնվում է շրջանաձև տնտեսության ձևավորման նախնական փուլում. բնութագրվում է թափոնների վերամշակման ցածր մակարդակով, Արտադրողի Ընդլայնված Պատասխանատվության սահմանափակ կիրառմամբ, մոնիթորինգի համակարգի բացակայությամբ և հասարակության թույլ ներգրավվածությամբ: Միաժամանակ միջազգային փորձը վկայում է զգալի չիրացված ներուժի մասին՝ ռեսուրսների արդյունավետ օգտագործման և տնտեսության դիմադրողականության բարձրացման տեսանկյունից: ՀՀ-ում Շրջանաձև տնտեսության անցումը պահանջում է տվյալահեն քաղաքականություն, ենթակառուցվածքների արդիականացում, տնտեսական խթանների կիրառում և պետություն-բիզնես-հասարակություն համագործակցության ամրապնդում:

Բանալի բառեր. շրջանաձև տնտեսություն, թափոնների կառավարում, նյութական հոսքեր, պետական քաղաքականություն, Արտադրողի Ընդլայնված Պատասխանատվություն, կայուն զարգացում

ГОСУДАРСТВО, БИЗНЕС И НАСЕЛЕНИЕ НА ПЕРЕКРЁСТКЕ ЦИРКУЛЯРНОЙ ЭКОНОМИКИ: КЛЮЧЕВЫЕ ВЫЗОВЫ И ПЕРСПЕКТИВЫ АРМЕНИИ

МЕРИ МАНУЧАРЯН

Аннотация

Переход к циркулярной экономике приобретает стратегическое значение для Армении, поскольку экономические и экологические системы страны продолжают функционировать в рамках линейной модели использования ресурсов. В статье анализируется процесс формирования циркулярной экономики в Армении через призму взаимодействия государства, бизнеса и населения, а также выявляются ключевые институциональные, структурные и поведенческие барьеры. Методология исследования основана на сравнительном и описательном анализе международных статистических баз, национальных данных и нормативно-правовых документов.

Цель исследования – анализ направления развития циркулярной экономики в Армении, оценка текущего состояния страны, ключевых вызовов и

возможностей, а также взаимодействия государства, бизнеса и общества в этом процессе. Для достижения цели исследования были поставлены следующие задачи: представить основные показатели Армении, сравнить их с международными стандартами, выявить политические и институциональные ограничения, оценить участие заинтересованных сторон и сформулировать рекомендации, учитывающие специфику ситуации в Армении.

Результаты показывают, что Армения находится на начальной стадии перехода к циркулярной модели, характеризующейся низким уровнем переработки, ограниченным охватом системы расширенной ответственности производителя (EPR), отсутствием комплексного мониторинга и слабой вовлечённостью общества. Вместе с тем международный опыт указывает на значительный потенциал повышения ресурсной эффективности и экономической устойчивости. Делается вывод о необходимости усиления координации государственной политики, развития инфраструктуры, внедрения экономических стимулов и укрепления сотрудничества между ключевыми стейкхолдерами: государством, бизнесом и обществом.

Ключевые слова: циркулярная экономика, управление отходами, материальные потоки, государственная политика, расширенная ответственность производителя, устойчивое развитие

THE STATE, BUSINESS AND SOCIETY AT THE CROSSROADS OF THE CIRCULAR ECONOMY: ARMENIA'S MAIN CHALLENGES AND PROSPECTS

MERI MANUCHARYAN

Abstract

The transition toward circular economy is becoming strategically important for Armenia, as the country's economic and environmental systems continue to operate within a predominantly linear resource-use model. This study examines Armenia's progress toward circularity by analyzing the interaction between the state, business, and society, while identifying key structural, institutional, and behavioral barriers. The research methodology is based on comparative and descriptive analysis, using international statistical data, national sources, and government policy documents.

The aim of the study is to analyze the direction of the circular economy in Armenia, assessing the current state of the country, key challenges and opportunities, as well as the interaction between the state, business and society during this process. To achieve the study's goal, the following tasks were set: to present the main indicators of Armenia, compare them with international standards, identify policy and institutional constraints, assess stakeholder participation and formulate context-specific recommendations tailored to the needs of Armenia.

The results show that Armenia is at the initial stage of forming a circular economy: characterized by a low level of waste recycling, limited use of Extended Producer Responsibility, lack of a monitoring system and weak public engagement. At the same time, international experience indicates significant unrealized potential in terms of efficient use of resources and increasing the resilience of the economy. The transition to a circular economy in Armenia requires data-based policies, modernization of infrastructure, application of economic incentives and strengthening state-business-society cooperation.

Keywords: circular economy, waste management, material flows, public policy, Extended Producer Responsibility, sustainability, economic resilience