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Research on the conceptual foundations of innovative financing instruments for territorial communities' infrastructure: green bonds

Abstract. The article examines the conceptual foundations for the development of the green bond market in Ukraine as a tool for financing the reconstruction of territorial communities' infrastructure, particularly under martial law conditions.

Problem Statement. The relevance of the topic is determined by the urgent need to attract new financial resources to restore infrastructure facilities destroyed as a result of military actions, which have caused significant economic and social losses.

Unresolved aspects of the problem. Considering the high cost of reconstruction, it is necessary to find innovative financing mechanisms, and green bonds can serve as an important instrument for raising capital to implement such projects.

Purpose of the Article. The purpose of the study is to analyze the state of the green bond market in Ukraine and to substantiate ways to improve their efficiency in financing investment projects at the local community level. The object of the study is the practice of using green bonds to finance municipal infrastructure projects, particularly in the energy, transport, and environmental sectors. The methodological basis of the research includes the analysis of legal and regulatory acts governing the issuance of green bonds in Ukraine, as well as the study of international experience in this field.

Presentation of the Main Material. The article highlights the factors that constrain the development of this financial instrument, such as martial law, economic instability, inflationary processes, low market liquidity, and insufficient investor confidence. The importance of improving the regulatory framework, providing state guarantees, increasing information transparency, and engaging international financial institutions to stimulate the green bond market is emphasized.

Conclusions. The research results confirm that Ukraine has already established a necessary legal and regulatory environment for the issuance of green bonds; however, their practical implementation remains limited. The authors propose the development of a new edition of the Concept for the Green Bond Market Implementation for 2025–2030, which should include the preparation of pilot projects involving municipalities, international donors, and financial institutions. The practical value of the study lies in formulating proposals for using green bonds to finance environmental, energy-efficient, security, and socially significant projects, which will contribute to the sustainable development of territorial communities and enhance their financial autonomy.

Keywords: green bonds, infrastructure financing, financial and credit instruments, investment projects and programs, sustainable development.

Formulas: 0, **Figures:** 2, **Tables:** 1, **References:** 17.

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Introduction. The military actions on the territory of Ukraine have led to significant problems related to reduced budget revenues, the destruction of critical infrastructure, internal migration, relocation of enterprises, and other challenges.

According to estimates by international financial institutions, the amount of funds required for the reconstruction of infrastructure facilities is approximately USD 524.0 billion [10]. The most severely affected critical infrastructure is located in the Donetsk, Zaporizhzhia, Kyiv, Luhansk, Kharkiv, and Kherson regions. Out of the total direct damage to municipal infrastructure, the losses of the frontline regions (Donetsk, Kharkiv, Luhansk, Zaporizhzhia, and Kherson) amount to USD 116.0 billion, or 66.0% of the total losses [9].

Given the current situation, state and regional authorities, local self-government bodies, and non-governmental organizations are making efforts to find and attract new financial instruments for the reconstruction of infrastructure facilities destroyed by shelling.

Modern social and environmental criteria set by today's challenges must be implemented in accordance with European standards and values.

In this context, the practice of developing the green bond market attracts particular attention, as it has become a promising tool in the global economy for generating financial resources and facilitating municipal investment[13].

In both global and European trends, green bonds are viewed as an alternative to bank loans for addressing local-level needs [2,12].

The organization of green bond issuance in Ukraine serves as a key factor in implementing investment programs and projects related to the restoration of the energy, transport, and other sectors of the national and municipal economies.

This issue has gained additional relevance due to recent amendments to budget legislation concerning the planning and implementation of public investment projects at the regional and local levels [15]. The foundation for financing such projects is a medium-term plan of priority public investments in the region, which provides for the formation of a unified portfolio of public investment projects of the territorial community and determines the estimated funding volumes across sectors, as well as the sources and mechanisms of financial support for sectoral and industry-specific projects.

Considering the territorial goals of sustainable development, the establishment of a regional-level green bond market would not only ensure financial flows for implementing public investment projects but also promote the introduction of resource-efficient, energy-efficient, and innovative technologies aimed at addressing environmental and climate challenges.

Literature review. The analysis of trends in the development of green bonds, their role in the financial market, main advantages of their use, and challenges related to their issuance have been explored by Ukrainian researchers O. Hrubliak and A. Oleksyn [5]. The legal and regulatory framework for the introduction of the green bond market, the conceptual model of green bonds in Ukraine, and the specifics of their issuance have been examined by energy efficiency and conservation practitioner A. Frolov [4]. The gradual development of the green bond segment as a new means of attracting investors to the issuance of these financial instruments is emphasized by Klymenko O. and Mala S. [7].

Despite the theoretical and practical contributions of scholars and practitioners to the

implementation of green bonds, this segment of the financial market in Ukraine remains at an early stage of formation and development.

The prospective growth of the green bond market is hindered by factors associated with a high level of unpredictability under martial law, which negatively affects the national economy. The investment attractiveness of green bonds is further limited by financial sector instability, inflationary pressures, losses of financial assets, and the low level of market participant activity.

Minimizing the risks caused by these factors requires the implementation of innovative approaches aimed at improving the regulatory framework, ensuring the stability of financial institutions, strengthening investor confidence, enhancing the investment climate, increasing the liquidity of the securities market, and motivating participants involved in the green bond issuance process.

The Government of Ukraine has proposed a methodology for identifying sources and mechanisms of financial support for investment programs and projects implemented at both the national and local levels. However, the issuance of green bonds as a potential source of debt financing for such programs and projects has not yet been provided for.

Purpose, objectives and research methods. The purpose of the article is to highlight the level of implementation and development of the green bond market in Ukraine and to substantiate proposals for improving the effectiveness of their use by territorial communities.

Research results. Ukrainian legislation concerning green bonds is based on the provisions of the Concept for the Introduction and Development of the Green Bond Market in Ukraine, which defines the strategic directions for their development to finance environmentally oriented projects in various sectors of the economy, including energy, transport, housing and utilities, land use, industry, and ecosystem restoration [1].

The development of the green bond market is supported by the Law of Ukraine "On Capital Markets and Organized Commodity Markets," which officially recognizes green bonds as a distinct type of security.

The rules for attracting investments through the issuance of green bonds are established by the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine Regarding the Simplification of Investment Attraction and the Introduction of New Financial Instruments."

The main powers and functions of participants in the green bond market are specified by the National Securities and Stock Market Commission. This regulatory body has developed recommendations for implementing or financing environmentally oriented projects through the issuance of green bonds. The Commission has also defined the key features of the green bond model that comply with the standards of the European Union and the Green Bond Principles of the International Capital Market Association.

Thus, Ukraine has established a legal and regulatory environment for the implementation of green bonds, including the adoption of several legislative and regulatory acts that incorporate best international practices in green bond development and create favorable conditions for their issuance.

According to the conducted research, Ukraine supports a policy of sustainable energy development and promotes the use of green bonds to restore energy sources and finance environmental projects.

The Concept for the Introduction and Development of the Green Bond Market in Ukraine envisaged a series of measures to be implemented during 2022–2023, aimed at:

- improving the regulatory and legal framework (with the aim of simplifying the financing procedure for the modernization of national economy sectors);
- clearly delineating the functions of state authorities in coordinating actions related to the planning and organization of green bond issuance;
- enhancing the management of the securities market associated with the issuance of green bonds.

The projected issuance of green bonds was expected to amount to USD 433 million in 2021, USD 216 million in 2022, and USD 173 million in 2023 [14]. In fact, in 2021, NEC "Ukrenergo" raised financing through the issuance of green bonds on the London Stock Exchange totaling USD 825 million [14].

Data on the issuance of green bonds in 2022–2023 are not reported in the media, although, according to the State Agency for Energy Efficiency and Energy Saving of Ukraine, green bonds at the national and local levels have been used to implement energy-efficient technologies and solar power plants, as well as programs for the development of recreational infrastructure and park maintenance [3]. Data on the issuance of green bonds in Ukraine in 2024 and the reporting period of 2025 are also not available.

Examining the actual development of green bonds in the international market makes it clear that green bonds represent one of the promising sources of financing for public investment projects and programs in Ukraine, significantly impacting the satisfaction of the needs of local communities.

In Ukraine, sources and mechanisms of investment instruments used to finance investment programs and projects at both national and local levels are shown in Figure 1.

Sources by origin	Own sources		enterprise profit retained for its use, depreciation deductions, issuance of shares; own funds of budgetary institutions
	Attracted sources	Debt	loans (borrowings) from foreign states and international financial institutions; issuance of government bonds, local borrowing bonds, infrastructure bonds; loans (borrowings) from local self-government bodies (reimbursable financial aid)
		Grants	grants, donations, charitable and voluntary contributions provided by legal entities and individuals
Budgetary sources	State support		state and local guarantees; public-private partnership; state stimulation of industrial parks; state support for investment projects
	State target funds		state road fund; state fund for radioactive waste management; state fund for water management development; state fund for inland waterways; state fund for decarbonization and energy efficiency
By degree of participation	Direct financing mechanisms		direct expenditures from the state or local budgets; subsidies from local or state budgets; own revenues of enterprises and budgetary institutions
	Private financing mechanisms		attracted financial resources from individuals or legal entities; concession or non-concession agreements; public-private partnership
By nature	Non-reimbursable financial support		own funds of enterprises and budgetary institutions; direct expenditures from local or state budgets; subsidies from state or local budgets; grant agreements, charitable contributions
	Reimbursable financial support		loans (borrowings); concession or non-concession agreements; preferential debt financing without or with local government guarantees; local borrowings
	Mixed financial support		concession or non-concession agreements; co-financing; public-private partnership

Figure 1 - Sources and mechanisms of financing public investment projects and programs.
Source: Compiled by the authors based on [7]

When analyzing the mechanisms of financial support for public investment projects, it should be noted that the consequences of the military actions on the territory of Ukraine have led to negative results in the financial performance of business entities and a significant reduction in internal sources directed by enterprises toward their development.

Given the current situation, to ensure sustainable sectoral functioning of the economy, state authorities and local self-government bodies are actively attracting debt and grant financing sources, which include loans and borrowings from foreign states, international financial institutions, domestic commercial banks, and local self-government bodies, as well as government bonds, local loan bonds, grants, donations, charitable and voluntary contributions, etc.

Particular attention should be paid to the practice of local councils providing repayable financial assistance (loans) to taxpayers, which does not involve charging interest for the use of such loans. For instance, in 2025, to repay debt obligations to the Clean Technology Fund and the European Bank for Reconstruction and Development under the investment projects "Second Urban Infrastructure Development Project" and "Ukraine District Heating Energy Efficiency Project", the municipal enterprise Kharkiv Heating Networks received repayable financial assistance from the budget of the Kharkiv City Territorial Community in the amount of UAH 260.0 million, while the municipal enterprise Kharkivvodokanal received UAH 245.0 million.

Considering the global support of Ukraine by international financial institutions (the World Bank, the International Finance Corporation, the European Investment Bank, the European Bank for Reconstruction and Development, etc.), which pay considerable attention to introducing the circulation of green bonds in the securities market, the use of green bonds at the municipal level should be regarded as an investment opportunity for the reconstruction of critical infrastructure facilities.

As research findings indicate (Table 1), during 2021–2025, a significant number of investment programs and projects in various sectors of the national economy are expected to be financed through loans and grants from foreign states and international financial institutions.

Table 1. Investment Programs and Projects Implemented at the National and Regional Levels Funded by Foreign States and International Financial Institutions

№ з/п	Creditor	Areas of Investment Projects (Industry/ Sector)	Loan (Credit) Amount, million UAH					
			2021	2022	2023	2024	2025	2021-2025
1	2	3	4	5	6	7	8	9
1.	International Bank for Reconstruction and Development	Energy	1645,5	600,4	3 449,8	3 758,6	1906,7	11361,0
		Transport infrastructure	2200,1	884,9				3085,0
		Healthcare	1287,6	1 151,1	2 751,1	3 835,4	884,9	9910,1
		Social sphere	400,0	1 460,0	963,4	1 267,5	1 151,1	5242,0
		Urban infrastructure	516,7	1 690,1	5 045,3	542,5	153,7	7948,3
		Education	24,7	9,7	243,7	1 825,6	1 690,1	3793,8
2.	European Bank for Reconstruction and Development	Transport infrastructure	1860,0	3 901,1	8841,6	4444,5	3226,6	22273,8
		Energy	467,1	524,1	769,5	190,4		1951,1
3.	European Investment Bank	Energy	1063,1	874,3	3659,4	1460,2	405,4	7462,4
		Transport infrastructure	1207,1	5572,0	13171,2	13859,5	7007,5	40817,3
		Ukraine's recovery	1372,5	2085,5	11691,1	9408,8	16975,2	41533,1
		Energy efficiency		1,7	576,0	3 158,8	1 596,4	5332,9
		Education	110,0	200,2	2620,8	1292,8	2 446,6	6670,4

Table 1. (continued)

4.	Council of Europe Development Bank	Healthcare					1 939,5	1939,5
		Compensation for destroyed housing					462,2	462,2
5.	KfW Development Bank (Germany)	Energy	884,3	1679,5	1728,6	1379,7	622,7	6294,8
		Energy efficiency		86,7	257,0	338,4	865,1	1547,2
6.	Nordic Environment Finance Corporation (NEFCO)	Education	130,3	249,8	756,0	215,3	122,3	1473,7
7.	Government of the Republic of Poland	Procurement of unmanned aerial systems			310,2	315,9	215,2	841,3
		Border road infrastructure	226,0	226,0	3165,5	480,6	1079,4	5177,5
8.	Japan International Cooperation Agency (JICA)	Energy	500,0	122,8	10,2	10,2	11,4	654,6
9.	Government of the French Republic	Public safety	4993,8	3363,2	5642,5	2642,7	2 289,0	18931,2
		Energy	150,0	309,4	1118,3	89,6	2225,5	3892,8
		Healthcare					1297,0	1297,0
		Transport infrastructure				1 602,9	1 830,0	3432,9
10.	Government of the United Kingdom of Great Britain and Northern Ireland	Ukraine's defense capacity		67 565,1	99 450,0	7 707,0	118 425,6	293147,7
		Healthcare	830,2	207,9				1038,1
		Transport infrastructure		10,0	1 115,9	866,3	949,8	2942,0
11	Government of the Republic of Austria	Healthcare			1347,0	1 457,6		2804,6
12	Eximbank of Hungary	Transport infrastructure	28,2	28,2				56,4
		TOTAL	24 530,2	94 764,6	173 797,6	62 159,7	178 038,0	433290,1

Source: Compiled by the authors based on sources [13–17].

The largest volumes of attracted financing are observed in projects and programs related to the development of the energy sector, municipal and urban infrastructure, passenger transport and motor roads, Ukraine's recovery, strengthening the country's defense capacity, creating a maritime border protection system, aviation security, and civil protection.

Attention should also be drawn to projects aimed at improving the reliability of electricity supply, modernization of transmission substations, construction of high-voltage power lines, and the implementation of energy efficiency measures in local communities.

Issues related to implementing measures in the heating, water supply, and wastewater sectors, improving the transport and operational condition of motor roads, and developing metro systems in Kharkiv and Dnipro remain particularly relevant.

Strategically important are projects and emergency credit programs for Ukraine's recovery, which provide financing for works related to eliminating the consequences of hostilities, shelling, and the destruction of municipal infrastructure.

Discussion. Based on the nature and purpose of the measures under individual programs and projects financed through loans and grants, it is advisable (taking into account the martial law) to develop a new edition of the Concept for the Introduction of the Green Bond Market in Ukraine for 2025–2030. This document should provide for the preparation and organization of pilot projects for the issuance of green bonds aimed at the restoration of municipal infrastructure, with issuers including foreign states, international financial institutions, donor and credit organizations, domestic banks, funds, and associations.

At the same time, it is proposed to issue green bonds in areas that have a direct impact on the environmental situation — such as the reconstruction of electricity, heat supply, water supply, and wastewater systems, as well as the purchase of environmentally friendly transport (electric buses). In addition, bonds may finance projects that do not directly affect environmental conditions but contribute to energy-efficient and rational use of energy resources.

Given current realities, the most promising projects for territorial communities in this area are those related to the restoration of destroyed housing and utility infrastructure, the creation of autonomous heating and water supply systems, and the installation of cogeneration power units.

At the same time, under conditions of warfare, territorial communities face urgent programs and projects that address citizens' basic needs for physical safety against external threats, such as the construction and reconstruction of civil protection shelters, radiation-proof shelters, and dual-use facilities. Other essential projects include those aimed exclusively at protecting infrastructure in the fuel and energy sector and in life support systems (heat supply, hot and drinking water supply, centralized sewage, waste collection and disposal).

The dynamics of budget expenditures of the Kharkiv City Territorial Community for urgent programs and projects are presented in Figure 2.

Volume of Expenditures for the Implementation of Urgent Programs and Projects of the Kharkiv City Territorial Community

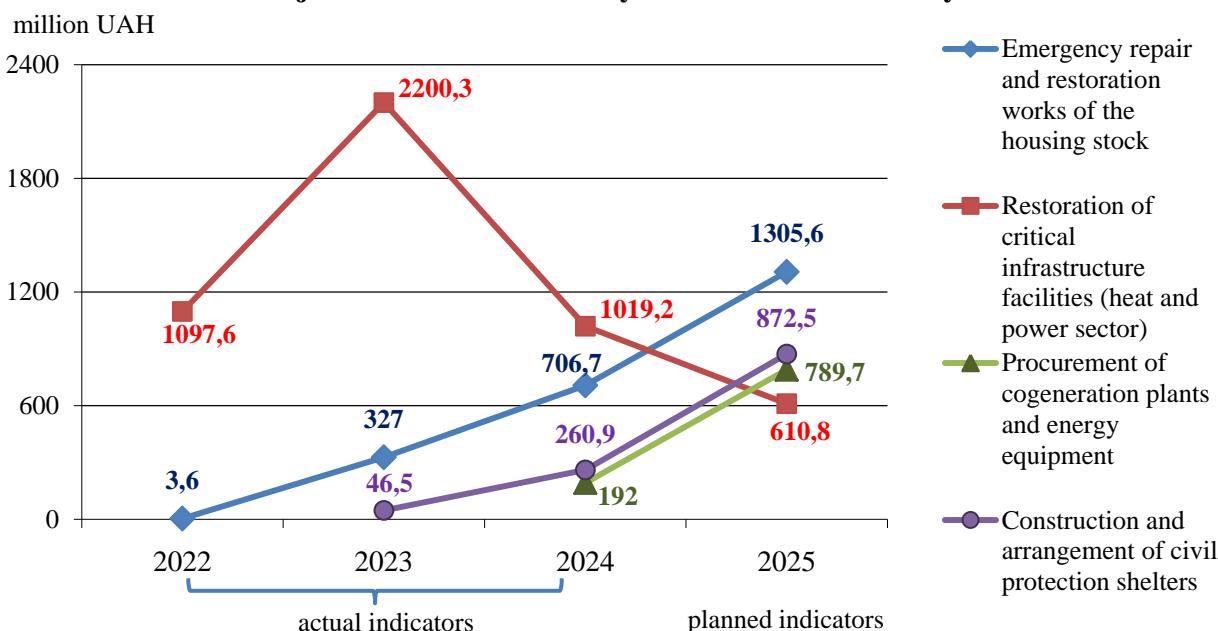


Figure 2 – Volume of Expenditures for the Implementation of Urgent Programs and Projects of the Kharkiv City Territorial Community

Source: Compiled by the authors based on [6].

It is also necessary to pay attention to the support of territories with a high level of security risk (these are the regions of Sumy, Dnipropetrovsk, Kharkiv, and Mykolaiv). State support for the restoration of infrastructure in these territorial communities is insufficient (11.2% of the total

amount of required financial resources), grant assistance for business creation and development accounts for 17.9%, and assistance in solving the housing problem (the Affordable Mortgage eOselya program) - 4.5% [8].

In order to support investment programs and projects for the recovery of territories with a high level of security risk, it is proposed to establish a Fund for the Support of High-Risk Territories, the funds of which should be directed toward providing grants to business entities and financing development projects, improving housing accessibility, and implementing economic and tax incentive measures, taking into account the eRecovery program and other programs implemented at the national level.

The sources of financing for the Fund for the Support of High-Risk Territories should include funds from the state and local budgets, international financial assistance (loans, grants, voluntary donations), and other sources not prohibited by law.

In this context, it is considered that increasing the financial resources of territorial communities for the implementation of urgent programs and projects, as well as for supporting territories with a high level of security risk, is possible through the issuance of "special" or "individual" green bonds, the use of which provides for targeted financing of priority facilities.

Conclusions. Based on the above, it can be concluded that the introduction of green bonds into Ukraine's financial market contributes to the growth of financial resources for territorial communities, which can use green bonds to finance investment programs and projects in energy and energy efficiency, municipal infrastructure and public transport development, the restoration of essential facilities, and the construction of civil protection shelters.

However, the practical foundations of the effectiveness of green bonds as a financial and credit instrument indicate an underutilization of their regulatory potential, the skillful combination of which would significantly promote the implementation of investment programs and projects at the local level [11].

A logical continuation of the development of the green bond market involves improving the regulatory and organizational framework, which should provide for the implementation of state policy aimed at:

- further state regulation of the issuance of both traditional green bonds and "special" or "individual" green bonds, based on the needs of territorial communities to reduce the financial resource deficit;
- attracting various categories of issuers and investors to the green bond market to finance promising plans for the development of alternative energy sources, municipal infrastructure, civil protection facilities, and other urgent programs and projects;
- applying economic incentive mechanisms for participants in the green bond market through tax benefits and concessional lending, state support, and simplified procedures for issuing green bonds;
- developing methodological foundations for the preparation and issuance of green bonds by various issuers at the local level, providing for state guarantees regarding the payment of interest and the principal amount of debt on municipal bonds;
- providing free advisory assistance for the preparation of documentation for the issuance of green bonds.

References

1. Cabinet of Ministers of Ukraine. On approval of the Concept for the introduction and development of the green bond market in Ukraine (Resolution No. 175-r). Retrieved from: <https://zakon.rada.gov.ua/laws/show/175-2022-%D1%80#Text> [in Ukrainian].
2. Federation of Canadian Municipalities. (2020). Local economic development: Models, resources and financing tools. Partnership for Local Economic Development Project. Retrieved from: <https://decentralization.gov.ua/news/12875?page=427> [in Ukrainian].
3. Frolov, A. (n.d.). Green bonds in Ukraine as a mechanism for attracting investment in renewable energy and energy efficiency projects. Ministry of Energy and Environmental Protection of Ukraine. Retrieved from: <https://old.saee.gov.ua/sites/default/> [in Ukrainian].

4. Frolov, A. (2025). Stratehia emisii zelenykh oblihatsii dlia finansuvannia povoiennoho staloho rozvytku [Strategy of issuing green bonds for financing post-war sustainable development]. *Acta Academiae Berengasiensis. Economics*, 8, 477–494. Retrieved from <https://doi.org/10.58423/2786-6742/2025-8-477-494> [in Ukrainian].
5. Hrubliak, O., & Oleksyn, A. (2024). Green bonds as an instrument for attracting investments into environmental projects. *Galician Economic Bulletin*, 6(91). DOI: https://doi.org/10.33108/galicianvisnyk_tntu2024.06 [in Ukrainian].
6. Kharkiv City Council. (2023). *Programme for Recovery and Sustainable Development of the Kharkiv City Territorial Community for 2024–2026*. *Decision of the Kharkiv City Council* No. 418/23 of December 22, 2023. Retrieved from: <https://www.city.kharkov.ua/uk/document/prohramy-vidnovlennya-ta-rozvytku.html> [in Ukrainian].
7. Klymenko, O., & Mala, S. (2020). “Green” bonds as a promising tool for attracting investments in environmental projects in Ukraine. *Economic Bulletin of the University*, 45, 52–60. DOI: <https://doi.org/10.31470/2306-546X-2020-45-52-60> [in Ukrainian].
8. Ministry of Finance of Ukraine. On approval of the Methodology for determining sources and mechanisms of financial support for public investment projects and programs (Order No. 131). Retrieved from: <https://zakon.rada.gov.ua/laws/show/z0541-25#Text> [in Ukrainian].
9. National energy company "Ukrenergo." (n.d.). *Eurobonds-2026*. Retrieved from: https://ua.energy/pro_kompaniyu/dlya-investoriv/vevroobligatsiyi-2026/ [in Ukrainian].
10. National Institute of Strategic Studies. Assessment of Ukraine's needs for recovery and reconstruction. Retrieved from: <https://www.niss.gov.ua/doslidzhennya/> [in Ukrainian].
11. Piskunov, R., & Daudova, G. (2021). Implementation of the financial mechanism in the conditions of transformational processes at the local level. *Financial and Credit Activity: Problems of Theory and Practice*, 2(33), 249–258. DOI: <https://doi.org/10.18371/fcaptp.v2i33.206723> [in Ukrainian].
12. Rats, O., & Alfimova, A. A. (2023). Zeleni oblihatsii yak perspektyvnyi finansovyi instrument bankivskoho investuvannia v Ukrayini [Green bonds as a promising financial instrument of banking investment in Ukraine]. *Upravlinnia rozvytkom*, 21(1). Retrieved from <https://doi.org/10.57111/devt/1.2023.08> [in Ukrainian].
13. Skoryk, M., Kupriianova, A., & Lishchyna, A. (2025). Finansuvannia munitsypalnykh stalykh initiatyv cherez zeleni oblihatsii: potentsial mistsevykh hromad [Financing municipal sustainable initiatives through green bonds: the potential of local communities]. *Stalyi rozvytok ekonomiky*, 3(54), 136–142. Retrieved from <https://doi.org/10.32782/2308-1988/2025-54-20> [in Ukrainian].
14. Trading Economics. (n.d.). *Poland GDP*. Retrieved from: <https://tradingeconomics.com/poland/gdp>
15. Verkhovna Rada of Ukraine. *Budget Code of Ukraine* No. 2456-VI. Retrieved from: <https://zakon.rada.gov.ua/laws/show/2456-17#Text> [in Ukrainian].
16. Verkhovna Rada of Ukraine. (2020, December 15). *Pro Derzhavnyi biudzhet Ukrayny na 2021 rik* [On the State Budget of Ukraine for 2021] (Law No. 1082-IX). Retrieved from <https://zakon.rada.gov.ua/laws/show/1082-20#Text> [in Ukrainian].
17. Verkhovna Rada of Ukraine. (2021, December 2). *Pro Derzhavnyi biudzhet Ukrayny na 2022 rik* [On the State Budget of Ukraine for 2022] (Law No. 1928-IX). Retrieved from <https://zakon.rada.gov.ua/laws/show/1928-20#Text> [in Ukrainian].
18. Verkhovna Rada of Ukraine. (2022, November 3). *Pro Derzhavnyi biudzhet Ukrayny na 2023 rik* [On the State Budget of Ukraine for 2023] (Law No. 2710-IX). Retrieved from <https://zakon.rada.gov.ua/laws/show/2710-20#Text> [in Ukrainian].
19. Verkhovna Rada of Ukraine. (2023, November 9). *Pro Derzhavnyi biudzhet Ukrayny na 2024 rik* [On the State Budget of Ukraine for 2024] (Law No. 3460-IX). Retrieved from <https://zakon.rada.gov.ua/laws/show/3460-20#Text> [in Ukrainian].
20. Verkhovna Rada of Ukraine. (2024, November 19). *Pro Derzhavnyi biudzhet Ukrayny na 2025 rik* [On the State Budget of Ukraine for 2025] (Law No. 4059-IX). Retrieved from <https://zakon.rada.gov.ua/laws/show/4059-20#Text> [in Ukrainian].

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Дослідження концептуальних засад інноваційних інструментів фінансування інфраструктури територіальних громад: зелені облігації

Анотація. У статті досліджуються концептуальні засади розвитку ринку зелених облігацій в Україні як інструменту фінансування відновлення інфраструктури територіальних громад, зокрема в умовах воєнного стану.

Постановка проблеми. Актуальність теми зумовлена необхідністю залучення нових фінансових ресурсів для відновлення зруйнованих об'єктів інфраструктури внаслідок воєнних дій, які привели до значних економічних і соціальних втрат.

Нерозв'язані аспекти проблеми. Враховуючи високу вартість відновлення, необхідно знаходити нові способи фінансування, і зелені облігації можуть стати важливим інструментом для залучення капіталу на реалізацію таких проектів.

Мета статті. Метою дослідження є аналіз стану ринку зелених облігацій в Україні та обґрунтування шляхів підвищення ефективності їх застосування для фінансування інвестиційних проектів на рівні територіальних громад. Об'єктом дослідження є практики використання зелених облігацій для фінансування муніципальних інфраструктурних проектів, зокрема в енергетичному, транспортному та екологічному секторах. Методологічною основою роботи є аналіз нормативно-правових актів, що регулюють випуск зелених облігацій в Україні, а також дослідження міжнародного досвіду у цій сфері.

Виклад основного матеріалу. Стаття висвітлює фактори, що обмежують розвиток цього фінансового інструменту, серед яких воєнний стан, економічна нестабільність, інфляційні процеси, низька ліквідність ринку та недостатня довіра інвесторів. Підкреслюється важливість удосконалення нормативно-правової бази, забезпечення державних гарантій, а також підвищення рівня інформаційної підтримки та залучення міжнародних фінансових інституцій для активізації ринку зелених облігацій.

Висновки. Результати дослідження підтверджують, що в Україні створено необхідне правове середовище для випуску зелених облігацій, проте їхнє практичне застосування залишається обмеженим. Запропоновано розробити нову редакцію Концепції запровадження ринку зелених облігацій на 2025-2030 роки, яка має передбачати підготовку пілотних проектів із залученням муніципалітетів, міжнародних донорів та фінансових інституцій. Практична цінність роботи полягає у формуванні пропозицій щодо використання зелених облігацій для фінансування екологічних, енергоефективних, безпекових та соціально значущих проектів, що сприятиме сталому розвитку територіальних громад і підвищенню їх фінансової самостійності.

Ключові слова: зелені облігації, фінансування інфраструктури, фінансово-кредитні інструменти, інвестиційні проекти та програми, сталий розвиток.

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Список літератури

1. Про схвалення Концепції запровадження та розвитку ринку зелених облігацій в Україні. Розпорядження Кабінету Міністрів України від 23.02.2022 р. №175. URL: <https://zakon.rada.gov.ua/laws/show/175-2022-%D1%80#Text>
2. Практичний посібник «Місцевий економічний розвиток: моделі, ресурси та інструменти фінансування». Федерація канадських муніципалітетів / Проект міжнародної технічної допомоги «Партнерство для розвитку міст», 2020 рік. URL: <https://decentralization.gov.ua/news/12875?page=427>
3. Фролов А. Зелені облігації в Україні як механізм залучення інвестицій в проекти відновлюваної енергетики та енергоефективності. Міністерство Держенергоефективності України. URL: <https://old.saee.gov.ua/sites/default/>
4. Фролов А. Стратегія емісії зелених облігацій для фінансування повоєнного сталого розвитку. Acta Academiae Berengasiensis. Economics. 2025. № 8. С. 477–494. DOI: <https://doi.org/10.58423/2786-6742/2025-8-477-494>
5. Грубляк О., Олексин А. Зелені облігації як інструмент залучення інвестицій в екологічні проекти. *Галицький економічний вісник*. 2024. № 6 (91). DOI: https://doi.org/10.33108/galicianvisnyk_tntu2024.06.
6. Харківська міська рада. Програма відновлення та сталого розвитку Харківської міської територіальної громади на 2024–2026 роки : затв. рішенням Харківської міської ради від 22.12.2023 № 418/23. Харків : XMP, 2023. 147 с. URL: <https://www.city.kharkov.ua/uk/document/prohramy-vidnovlennya-ta-rozvytku.html>
7. Клименко О., Мала С. «Зелені» облігації як перспективний інструмент залучення інвестицій в екологічні проекти в Україні. *Економічний вісник університету*. 2020. Випуск № 45. С. 52–60. DOI: <https://doi.org/10.31470/2306-546X-2020-45-52-60>
8. Про затвердження Методики визначення джерел і механізмів фінансового забезпечення публічних інвестиційних проектів та програм публічних інвестицій. Наказ міністерства Фінансів України від 28.02.2025 №131. URL: <https://zakon.rada.gov.ua/laws/show/z0541-25#Text>
9. Національна енергетична компанія «Укренерго». Єврооблігації-2026. URL: https://ua.energy/pro_kompaniyu/dlya-investoriv/yevroobligatsiyi-2026/
10. Оцінка потреб України на відновлення та відбудову. Національний інститут стратегічних досліджень. URL: <https://www.niss.gov.ua/doslidzhennya/>
11. Піскунов Р.О., Даудова Г.В. Реалізація фінансового механізму в умовах трансформаційних процесів на місцевому рівні. *Фінансово-кредитна діяльність: проблеми теорії та практики*, 2021. 2(33), 249–258. DOI: <https://doi.org/10.18371/fcaptv.v2i33.206723>
12. Рап О., Алфімова А. А. Зелені облігації як перспективний фінансовий інструмент банківського інвестування в Україні. Управління розвитком. 2023. Т. 21, № 1. DOI: <https://doi.org/10.57111/devt/1.2023.08>
13. Скорик М., Купріянова А., Ліщина А. Фінансування муніципальних сталих ініціатив через зелені облігації: потенціал місцевих громад. Сталий розвиток економіки. 2025. № 3 (54). С. 136–142. DOI: <https://doi.org/10.32782/2308-1988/2025-54-20>
14. Trading Economics. Poland GDP. URL: <https://tradingeconomics.com/poland/gdp>
15. Бюджетний кодекс України від 08.07.2010 №2456-VI. URL: <https://zakon.rada.gov.ua/laws/show/2456-17#Text>.
16. Про Державний бюджет України на 2021 рік. Закон України від 15.12.2020 №1082-IX. URL: <https://zakon.rada.gov.ua/laws/show/1082-20#Text>
17. Про Державний бюджет України на 2022 рік. Закон України від 02.12.2021 №1928-IX. URL: <https://zakon.rada.gov.ua/laws/show/1928-20#Text>
18. Про Державний бюджет України на 2023 рік. Закон України від 03.11.2022 №2710-IX. URL: <https://zakon.rada.gov.ua/laws/show/2710-20#Text>
19. Про Державний бюджет України на 2024 рік. Закон України від 09.11.2023 №3460-IX. URL: <https://zakon.rada.gov.ua/laws/show/3460-20#Text>
20. Про Державний бюджет України на 2025 рік. Закон України від 19.11.2024 №4059-IX. URL: <https://zakon.rada.gov.ua/laws/show/4059-20#Text>

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