DIRECTIONS FOR ENHANCING INTERNATIONAL COOPERATION TO IMPROVE THE INVESTMENT ATTRACTIONNESS OF UKRAINE'S ENERGY ENTERPRISES IN THE CONTEXT OF NATIONAL ECONOMIC DEVELOPMENT

Abstract. The article examines directions for enhancing international cooperation to improve the investment attractiveness of Ukraine's energy enterprises. It is noted that the formation of an enterprise's investment attractiveness is a complex process that begins with the identification and classification of factors affecting this entity. The authors present a schematic representation of these factors, which are divided into external, internal, and industry-specific. It is emphasized that international cooperation plays a key role in shaping the investment attractiveness of enterprises, offering a wide range of opportunities for growth and development. The authors analyze the current state of international cooperation in Ukraine's energy sector within the context of the national economy, identifying the main barriers and opportunities for attracting foreign direct investment. Special attention is paid to the impact of these processes on Ukraine's national economy. The threats to the national economy in the energy sector, especially during wartime, are highlighted. The focus
is on the restoration of Ukraine's energy infrastructure following Russian attacks, and measures are proposed to create a favorable investment climate in the sector. It is noted that to ensure Ukraine's energy independence, it is necessary to develop energy efficiency and ensure decentralized generation of energy from renewable sources. An important mechanism in this regard is cross-border cooperation, which ensures the stability of energy systems through the effective operation of partner countries' electricity markets. The conclusion is drawn that to ensure the sustainability of investments in the energy sector, the implementation of an effective industrial policy by the state is necessary. For the Ukrainian economy, as for all of Europe, the process of reindustrialization is critically important. Increasing energy efficiency and ensuring investment protection play a crucial role in the stable development of the energy sector. The article also discusses the role of state support in creating a favorable investment climate. The research results can be used to form recommendations for improving the investment attractiveness of energy enterprises within the context of national economic policy.

**Keywords:** international cooperation, investment attractiveness, foreign direct investment, energy enterprises, post-war recovery of Ukraine, international security & national economy.

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енергетичних підприємств України. Зазначено, що формування інвестиційної привабливості підприємства є складним процесом, який починається з виявлення та класифікації факторів впливу. Наведено авторську схему зазначених факторів, які поділяються на зовнішні, внутрішні та галузеві. Зазначено, що міжнародне співробітництво відіграє ключову роль у формуванні інвестиційної привабливості підприємств, пропонуючи широкий спектр можливостей для зростання та розвитку. Автори аналізують поточний стан міжнародного співробітництва в енергетичному секторі України в контексті національної економіки, визначають основні бар’єри та можливості для залучення прямих іноземних інвестицій. Особлива увага приділяється впливу цих процесів на національну економіку України.

Зазначено, що міжнародне співробітництво в енергетичному секторі України в контексті національної економіки, визначають основні бар’єри та можливості для залучення прямих іноземних інвестицій. Особлива увага приділяється впливу цих процесів на національну економіку України. Наведено загрози національній економіці у сфері енергетики, особливо у воєнний період. Зосереджено увагу на відновленні енергетичної інфраструктури України внаслідок російських атак та запропоновано заходи для створення сприятливого інвестиційного клімату в галузі. Зазначено, що для забезпечення енергонезалежності України необхідно розвивати енергоефективність та забезпечити децентралізовану генерацію енергії з відновлюваних джерел. Важливим механізмом при цьому зазначається транскордонне співробітництво, яке забезпечує стабільність енергетичних систем шляхом ефективної роботи ринків електроенергії країн-партнерів. Зроблено висновок, що з метою забезпечення стійкості інвестицій в енергетичний сектор, необхідно впровадження ефективної індустріальної політики держави. Для української економіки, як і для всієї Європи, критично важливим є процес реіндустріалізації. Підвищення енергоефективності та забезпечення захисту інвестицій відіграють ключову роль у стабільному розвитку енергетичного сектору. У статті також розглядається роль державної підтримки у створенні сприятливого інвестиційного клімату. Результати дослідження можуть бути використані для формування рекомендацій щодо покращення інвестиційної привабливості енергетичних підприємств у контексті національної економічної політики.

Ключові слова: міжнародне співробітництво, інвестиційна привабливість, прямі іноземні інвестиції, енергетичні підприємства, повоєнне відновлення України, міжнародна безпека та національна економіка.

Problem Statement. One of the factors contributing to the spread of international cooperation among countries has been the process of globalization, which has allowed companies the opportunity for barrier-free capital expansion across borders. International cooperation significantly impacts the investment attractiveness of enterprises by providing opportunities to attract foreign investments. However, cooperation in the energy sector plays a crucial role due to...
the increasing rates of energy consumption. Limited fuel reserves have a significant impact on the development of international cooperation in the energy sector, which holds particular importance for the Ukrainian economy today. In such circumstances, investigating the factors influencing the investment attractiveness of enterprises is of interest. Hence, the mentioned topic is relevant.

Analysis of recent research and publications. The theoretical and informational basis of the research consists of fundamental principles of economic theory and international economics, materials from scientific-practical conferences, statistical data from official websites of national and international organizations, research results from analytical groups, as well as the works of scholars: I.V. Napadovska [1], Ya.Ye. Zadorozhna, L.P. Dyadechko [2], O.V. Korotkova [3], I. Shcherbatenko, O. Horbachova [4], E. Albert, V. Malingre [5], Y. Li [6], N. Chernenko [7], H. M. Tereshchenko, N. B. Pron, O. Yu. Anisimova [8], S. L. Sorcaru, F. M. Nuta, S. C. Topliceanu, A. M. Ambrozie [9], and others.

Scientists are making efforts to improve the methodology for evaluating the investment attractiveness of energy enterprises, and in today's conditions, it is extremely important for the national economy of Ukraine to continue researching this topic in the context of international cooperation impact. Considering the significant scientific achievements of economists in this area, it should be noted that the problems of searching for new approaches to enhance international cooperation to increase the investment attractiveness of Ukraine's energy enterprises in the context of national economic development require further scientific research.

The aim of the article is to improve the theoretical and methodological foundations and develop practical recommendations for expanding directions of international cooperation in the energy sector aimed at increasing the investment attractiveness of domestic enterprises.

Presentation of the main research material. The national economy of Ukraine, significantly influenced by a complex geopolitical situation and dependence on energy imports, faces numerous threats in the energy sector, particularly under the legal regime of martial law (restrictions on energy resource supplies, attacks on energy infrastructure, and other negative impacts on the country's energy security). To ensure the stability and development of existing energy capacities, it is necessary to continuously invest capital in the enterprises' fixed assets, directing their overall focus towards innovation. In contemporary conditions, the innovative development of enterprises should be primarily regarded as innovation-driven investment. Each innovation necessitates investment, and investment projects should be assessed based on their innovation orientation.

Forming the investment attractiveness of an enterprise is a complex process that begins with the identification and classification of factors influencing this
essence. In the academic community, there are a variety of perspectives on these factors, and it is important to consider their classification for a more comprehensive understanding of investment attractiveness. The list of factors that affect the investment attractiveness of enterprises to varying degrees is provided in Figure 1.

This classification of factors influencing investment attractiveness allows for considering them in three aspects: external, internal, and industry-specific influence. External and internal factors significantly impact the investment attractiveness of an enterprise. External factors, such as economic and socio-political stability, resource availability, infrastructure, and regulatory framework, determine the enterprise's ability to attract investors. Meanwhile, internal factors, such as production process efficiency, development strategy, financial stability, and corporate governance, shape the internal environment of the enterprise. It is important to note that industry-specific characteristics, such as market potential, competitiveness, and technological development, add an additional dimension to investment attractiveness. Analyzing these factors is necessary for forming the enterprise's strategy and attracting investments.

International cooperation plays a key role in shaping the investment attractiveness of an enterprise, offering a wide range of opportunities for growth and development. This process involves interactions with foreign partners, governments, international organizations, and investors, which will have diverse impacts on the company's activities, from expanding market access to integrating innovative technologies.

Within such cooperation, enterprises have the opportunity not only to enter new markets but also to significantly enhance their production, managerial, and technological capacities. International cooperation stimulates knowledge and experience exchange and, most importantly, provides access to new sources of financing. Such interaction fosters not only cultural and technological exchange but also enhances trust levels between enterprises and their foreign partners, thereby reducing barriers to entry into new markets and providing a more stable foundation for long-term investments. International cooperation defines key aspects of the investment landscape, significantly influencing factors important to investors.
At this stage, Ukraine has decided to focus efforts on building a new energy system rather than restoring the old one, so international investors and developers understand the prospects better than anyone else. Ukraine has the opportunity to improve its positions in the investment attractiveness rankings accordingly. The reconstruction is carried out as part of a single project aimed at ensuring short-term and cost-effective restoration of energy capacities, compared to new construction or expansion of existing enterprises. Technical upgrades and modernization are implemented without increasing production areas in accordance with the enterprise's
technical development plan to enhance technical standards and improve the technical and economic characteristics of equipment and installations.

It should be noted that the lifecycle of investment projects in the power industry, depending on their types and characteristics, is of significant duration. For example, for thermal and hydroelectric power stations, it ranges from 25 to 30 years, while for hydroelectric power stations, it is 40-50 years. At the same time, different investments vary significantly in size. Specific investments are formed based on expenses for construction or preservation of the facility, as well as expenditures for maintaining the enterprise over the period of renewing fixed assets.

From the analysis of Ukrainian electricity exports trends for the period from 2016 to 2022, one can conclude about a significant reorientation of sales markets, indicating the flexibility and adaptation of the Ukrainian energy sector to changes in the international market. According to the Forbes Ukraine ranking, the power industry ranked 5th among 15 sectors in 2023. Its contribution to the country's GDP is estimated at 4.2%, while the industry's share in exports is only 1%, specifically $0.6 billion USD [11]. Among the largest private companies in the power sector, only two are generating companies: "DTEK Energy" and Kharkiv TEC-5, the latter of which has been destroyed by russian missile strikes. At the same time, over 70% of electricity generating capacity is in state ownership. Private businesses primarily control the most profitable electricity supply and distribution.

To ensure stability of investments in the energy sector, an effective industrial policy of the state is necessary. For the Ukrainian economy, the process of reindustrialization is also important, as it is for the whole of Europe. Increasing energy efficiency of the economy and protecting investments are crucial for the stable development of the energy sector. Investments in the restoration of damaged and destroyed energy infrastructure objects in Ukraine are made through financial assistance from other countries. For example, in 2022, the European Investment Bank transferred $590 million for these purposes, while the World Bank allocated a $200 million grant in the spring of the same year.

The energy sector of Ukraine requires significant investments to restore full functioning. Support from international organizations such as the European Bank for Reconstruction and Development (EBRD) is important to ensure the continuation of providing vital energy services. The Bank prioritizes the provision of working capital and grants to two leading state-owned energy companies, Naftogaz and Ukrenergo. Ukrenergo received two unsecured guarantees for emergency working capital financing. The first guarantee, in the amount of €35.625 million, was provided by the European Fund for Sustainable Development (EFSD) of the EU, and the second, amounting to €48.6 million, by the United Kingdom. Additionally, the EBRD Shareholder Special Fund contributed an additional €1.875 million [12]. Most countries have focused their efforts on supporting Ukraine's energy infrastructure, especially during the difficult times of war. For instance, thanks to
the contribution of the United States to the Crisis Response Special Fund, Ukrenergo received €150 million for emergency restoration of the power grid. Additionally, the Netherlands provided €70 million in the form of an investment grant. Moreover, the European Bank for Reconstruction and Development signed three guarantees to support Naftogaz's gas purchases, including from Canada (€36.5 million), Germany (€50 million), and France (€50 million). The agreement with Norway for 2 billion Norwegian kroner provides Naftogaz with a grant for additional critical gas purchases [8].

To ensure Ukraine's energy independence, it is necessary to develop energy efficiency and decentralized energy generation from renewable sources. Transboundary cooperation is an important mechanism that ensures the stability of energy systems through the effective functioning of electricity markets among partner countries. Joint construction of energy infrastructure requires cost sharing among participating countries, taking into account advantages such as price reductions for consumers and avoidance of environmental risks.

In the context of the global transition to green energy, competition for rare metals and critical minerals is intensifying. Ukraine, which possesses significant reserves of 117 out of the world's 120 most common minerals, could become a key supplier of metals essential for the development of clean technologies in the EU. It is expected that by 2030, global demand for these critical minerals will increase by 3.5 times. Specifically, Ukraine holds reserves of 21 out of 30 critical minerals, which are the foundation of the new industrial revolution and green transformation [13]. EU support can facilitate the implementation of ambitious projects in Ukraine, covering the entire value chain from extraction to processing and recycling of these elements. Additionally, the Ukrainian government officially approved a list of subsoil areas for production sharing agreements in 2023, opening opportunities for EU investors to participate in strategic projects [14]. Attracting investments from Europe requires transparency in processes and the absence of corruption at the local level. The EU, in turn, has an interest in creating supply chains independent of China and integrating Ukraine into the European hydrogen market.

As part of the European hydrogen strategy, Ukraine was identified as a priority partner in 2020, with plans to create large hydrogen production capacities [15]. These efforts include the construction of electrolyzers with a capacity of 10 GW for the production of green hydrogen, which will enable the country to achieve energy independence and climate neutrality [16]. Assessing the investment potential, it is worth noting that Ukraine ranks 47th out of 110 in the ranking of the most attractive countries for investment in "green" energy in 2023 according to the Climatescope by Bloomberg [17]. When determining the ranking, market achievements, historical data on the implementation of environmentally friendly technologies, and the pace of investment growth in this sector are taken into account. The development of green energy in Ukraine is a promising direction for international cooperation, as
innovative projects are usually more successfully implemented in the field of sustainable development.

Renewable energy projects should be conducted in accordance with contemporary principles, with a focus on the implementation of "green" technologies and adherence to new standards. The EU is already actively transitioning to the use of only energy-efficient construction technologies. The "Triple Zero" principle, which mandates zero energy consumption, zero emissions, and zero waste, is enshrined in the EU directive on building energy efficiency [18].

Another important condition for the success of recovery is the implementation of necessary reforms, including in the energy sector, combating corruption, ensuring transparency, and the rule of law, which are key to attracting foreign investments and project financing [19]. Liberalization of the energy sector in accordance with high corporate governance standards and compliance with European norms is necessary to attract private capital, which will finance the reconstruction and decarbonization of the energy industry in line with EU goals for carbon neutrality.

The application of international cooperation mechanisms will contribute to creating an appropriate investment climate, which is important for attracting the necessary financial and technological resources. It will ensure a systematic approach to attracting international resources, allowing for effective planning and implementation of projects to restore the energy sector and promote sustainable development of the Ukrainian energy system and its integration into the international energy space.

As noted, the implementation of measures aimed at rebuilding and developing Ukraine's energy sector is possible only with significant investment support. To increase the investment attractiveness of the energy sector, it is necessary to: implement EU regulatory acts into Ukrainian legislation regulating the energy sector; establish transparent and stable investment policies guaranteeing investor rights protection; develop innovative technology parks in the energy sector and support public-private partnerships; ensure healthy competition in the energy resource market and access to infrastructure for all industry participants; encourage the involvement of foreign investors through digitization and participation in various digital platforms for finding partners; implement measures to prevent the transfer of capital of energy companies to offshore zones; develop mechanisms for creating energy reserves to balance demand and supply during crisis situations or unexpected circumstances.

Currently, the activity of companies in the energy sector requires significant support from the government in creating favorable conditions for their operation. Establishing an effective institutional environment will allow companies to attract investment for their development, which will improve the quality of services for consumers and implement new technological solutions.

**Conclusions.** The definition and justification of methods to enhance the investment attractiveness of Ukrainian enterprises, particularly in the energy sector, necessitate a comprehensive approach that incorporates international cooperation.
The measures include the application of regulatory policies, the initiation of international energy projects, and the development of innovative activities. Given the strategic significance of the energy sector, it is imperative to develop and implement measures that not only foster investment but also ensure sustainable growth and stability. This requires a multifaceted approach that incorporates the principles of reindustrialization, the green economy, and the adoption of green technologies. By doing so, the energy sector can align with global trends and meet international standards, thereby enhancing its competitiveness and resilience. Adaptation of capacities to EU technical standards requires innovative and technological updating taking into account the legislative norms of EU countries. Furthermore, these measures should be designed to create a favorable investment climate, attract foreign and domestic investors, and promote long-term economic development. Strategic management of enterprises in the energy sector, based on transparency and openness, will positively affect the competitiveness of enterprises and the confidence of investors, significantly improving opportunities for the development of the national economy. By aligning with global best practices and fostering international partnerships, Ukrainian enterprises of the energy sector have to enhance their competitive edge and secure the necessary investments to drive forward the national economy. The authors aim to continue their scientific investigations in the specified areas of further research.

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