



GENERAL PROBLEMS OF THE MODERN RESEARCH AND INNOVATION POLICY

<https://doi.org/10.15407/scine19.05.003>

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THE INNOVATION AND INVESTMENT PARADIGM OF ACQUIRING SUBSOIL USE RIGHTS IN THE CONDITIONS OF THE POST-WAR RECOVERY OF UKRAINE'S ECONOMY

Introduction. *By 2022, the share of the subsoil use accounted for 5.6% of Ukraine's GDP and provided jobs for more than 200,000 people. In the conditions of post-war recovery, Ukraine will need new approaches to the development of investment-attractive economic and legal mechanisms in this area, given that our country possesses extremely valuable natural resources, the use of which in the post-war conditions of economic recovery for overcoming the recession-related problems is of global importance. In addition, both foreign private businesses and countries have shown interest in the use of Ukrainian subsoil resources.*

Problem Statement. *The main, problems associated with the formation of the post-war system of subsoil use rights in the modern economic conditions are as follows: insufficient investment potential of the mining industry; conflicts and non-compliance of the applicable national legislation with the requirements of EU directives; extreme underdevelopment of subsoil use investment projects for the creation of industries with a high added value.*

Purpose. *The purpose is to study the condition the prospects of the economic and legal mechanism for the use of subsoils in the conditions of the post-war recovery of Ukraine, based on the symbiosis of innovation and investment attractiveness and ecological and social orientation of this sphere.*

Material and Methods. *General scholarly research and special legal methods of research of economic and legal phenomena and categories; the study of economic relations in the mining industry with the use of the system analysis and the formal legal method.*

Citation: Heyets, V. M., Ustymenko, V. A., and Kirin, R. S. (2023). The Innovation and Investment Paradigm of Acquiring Subsoil Use Rights in the Conditions of the Post-War Recovery of Ukraine's Economy. *Sci. innov.*, 19(5), 3–17. <https://doi.org/10.15407/scine19.05.003>

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Results. *The relations and the state of the regulatory legal framework that governs the subsoil use relations have been analyzed. Problematic issues in the mechanism of providing subsoil plots for use have been identified and ways to address them have been proposed. The need to improve the legal support of the permit system and investment mechanisms for the use of subsoil in the conditions of the post-war recovery of Ukraine's economy in certain areas has been justified.*

Conclusions. *An innovative investment paradigm of subsoil use, which serves as an impetus for law-making activities and further scholarly research has been proposed.*

Keywords: subsoils, use rights, special license, investments, and post-war recovery.

The projected revenues of the Government Budget of Ukraine in 2022 (hereinafter referred to as the Government Budget) worth UAH 1,210 billion [1] included the two types of proceeds from the use of subsoil, namely: 1) rent for the use of subsoil for the extraction of minerals (hereinafter referred to as mineral resources) worth UAH 65.76 billion; 2) fee for issuing special licenses for the use of subsoil (hereinafter referred to as the special license) and proceeds from the sale of such special licenses worth UAH 0.4 billion. Totally, in 2022, the revenues from the use of subsoil accounted for almost 5.5% of the revenues of the government budget.

However, the full-scale armed aggression of the Russian Federation against Ukraine has destroyed the projections for tax revenues from the use of subsoil. Moreover, numerous mining industry facilities have been damaged, ruined, closed, flooded or seized, territories with promising areas of reserves and mineral resources of the national subsoil fund have been occupied. The damage as estimated by the State Environmental Inspectorate of Ukraine in accordance with approved methods as of December 1, 2022, exceeds UAH 1.4 trillion [2]. That is, only in the field of environment and natural resources, Ukraine has already lost more than the annual government budget. Given the damage and losses caused in the temporarily occupied territories, this amount is much bigger.

Among many domestic researchers who somehow have studied the economic and legal problems of subsoil use, we should note O. Yu. Makarenko, I. M. Kozyakov, N. R. Kobetska, O. O. Surilova, N. O. Maksimentseva, M. G. Maksimentsev, I. B. Machuska, M. I. Orlenko, I. D. Andrievsky, V. S. Mishchenko, M. G. Afanasyeva, and others.

Foreign researchers have contributed to studying this urgent problem, as well. In his research, V. Vivoda has identified the social, political, and economic factors, as well as nine areas of risks, which investors should consider before investing in the mining sector. They include high sunk costs, a limited term of the deposit, a long period of achieving financial profit, and the consequences of mining, etc. [3].

K. Tienhaara has examined the relationship between foreign direct investment in the mineral sector and environmental regulation in developing countries. The author claims that in recent years, global investments in minerals have been showing the two main trends: 1) increased competition between developing countries to attract investments in minerals; 2) development and dissemination of a standard set of legal protection means for investors into mineral resources, including access to international arbitration, prohibition of expropriation without compensation, and obligations regarding the stability of the regulatory regime [4].

According to B. Li, the measure to solve the main problem of financing difficulties in China's mining industry is the diversification of the financing structure of the capital market of Chinese mining assets, which is achieved by creating a private capital financing platform and a direct investment fund involving private or international capital in the mining sector [5].

Using the example of investment in the mining sector in Botswana, the authors have made an overview of the mining sector, its management, attractiveness to investors and how its activities affect national development. They have analyzed the performance of the sector in terms of the three

main stakeholder groups: government, investors in the mining value chain, and civil society. Discrepancies between declared and actual government policy and practice have been identified [6].

It is obvious that the attention of researchers, practitioners and legislators to the issues of the right to use subsoil indicates the great importance of this direction of research. On the other hand, the content of the available developments and proposals gives reason to assert that, currently, there is sufficient potential in further scholarly research, which is caused by the need to modernize the investment mechanism in the field of subsoil use in the conditions of the post-war recovery of the economy.

Given the above, the purpose of this research is to study the status and prospects for developing the sphere of acquisition of the right to use subsoil in the conditions of the post-war recovery of Ukraine's economy, based on the symbiosis of investment attractiveness and innovative, ecological and social orientation of this sphere. To do this, it is necessary to analyze and identify problematic issues of the legal framework that ensures the regulation of licensing relations in the field of subsoil use; to formulate proposals for the improvement of the legal support of the licensing system and investment mechanisms for the use of subsoil in the conditions of the post-war innovation-driven recovery of the economy of Ukraine, while focusing on the reconstructive path of its renewal, the generation of a high added value, and the low-carbon development. The sequence of the research is determined by the logic of setting the above objectives, the structure and content of the requirements of the applicable subsoil, mining, geological, economic, investment and tax legislation, as well as the practice of its application for the further innovation-driven development of the economy.

The process of improving the legislation on subsoil as a whole and its licensing block in particular has been permanently on the agenda of government authorities since the independence of modern Ukraine, inasmuch as this sphere real-

ly plays an important role not only for the country's economy. Currently, almost all types of subsoil use have a significant social and ecological impact on the respective regions, which increased after the start of the hostilities and further after the full-scale armed aggression of the Russian Federation. Therefore, the issue of developing such a legal mechanism for obtaining subsoil for use should be raised now, which would maximally contribute to the attraction of investments in the post-war recovery of the country's economy in the framework of its innovation-driven development. So, we propose to consider the most significant components, the reform of which is not only possible, but also expedient in terms of existing domestic conditions, European experience, and authors' initiatives.

1. Communication between stakeholders. The authorities, investors, researchers, and practitioners should have permanent means of communication that would allow them to quickly identify and solve urgent problems in the field of subsoil use. At the end of 2018, the BRDO Effective Regulation Office published a Green Book on regulation of access to oil and gas-bearing subsoil [7]. Such an initiative is considered as a means of stimulating professional discussions about current problems and ways to solve them. In particular, it has been indicated that the problems of market participants in the field of distribution of subsoil use rights include [7, 52–71] as follows: non-market mechanism of the right to use subsoil; discretionary distribution of subsoil use rights; several parallel systems of obtaining the right to use the subsoil, which interfere with each other; manipulations with licenses for the use of subsoil by local authorities for obtaining additional benefits, etc.

Platforms for dialogue should also be round tables, seminars, conferences, hearings, etc. For a more thorough consideration of a certain issue, it is important to choose the most specific problem with the involvement of a wide range of stakeholders and the mandatory formation of the final document. In addition, one of the forms of com-

munication is consultations and clarifications on issues related to licenses, which are given by State Geodesy specialists in the Single window of the subsurface user. Therefore, the dialogue of stakeholders should be considered as an advisory, auxiliary measure in the process of reforming the mechanism of acquiring the right to use the subsoil, the purpose of which is to highlight problematic issues for investors, to analyze and discuss them with the involvement of third parties, and to formulate proposals to authorized government bodies.

2. Recodification of legislation. In 2020, the Ministry of Environment, in cooperation with specialists of the EU Project, started working on the next new edition of the Code of Ukraine on the Subsoil (hereinafter referred to as the Subsoil Code). The draft was expected to be registered in the parliament by the end of the year. At the same time, the main narratives underlying this process were as follows [8]: reform of subsoil use is a priority of the government; the code is a unified document that ensures transparency and equal access to subsoil use; applicable regulatory acts in the field of subsoil use are morally outdated and de facto do not solve the problems of the industry, etc.

However, because of both objective and subjective reasons, the draft code was not submitted to the parliament either. On June 1, 2021, a draft law on the amendment of the applicable natural gas, mining, and oil and gas legislation was adopted in the first reading [9], but has not been further considered yet. Similarly, the recommendation of the Verkhovna Rada of Ukraine to the CMU regarding the acceleration of the development and introduction of other draft laws in the mineral sector [10] has not been fully implemented in practice.

The experts of the analytical center DiXi Group have analyzed the draft subsoil code [11] and prepared proposals for it, pointing to [12]: the lack of provisions regarding compliance with the requirements of the Standard of the Initiative for the Transparency of Extractive Industries and the implementation of national legislation regarding the disclosure of contracts between mining cor-

porations and the government, including product sharing agreements (hereinafter referred to as PSA) and investment agreements in accordance with Clause 168 of draft code; the draft does not take into account the institutional component in this area and contains non-unified terminology.

In addition, the National Agency for the Prevention of Corruption (hereinafter referred to as the NAPC) has identified potentially corruption-inducing factors, which makes it impossible to adopt the draft subsoil code in its proposed version [13]. Thus, the NAPC has drawn attention to the imperfect mechanism of determining the e-trading system administrator, the operator of the e-site and the organizer of the e-auction, as well as to the presence, in the subsoil code draft, exceptions to the general rule for obtaining a license without auction, etc.

There is also a question regarding the codification technique of the developers of the new version of subsoil code. For example, it seems unjustified to put the requirements for geological information and those for environmental impact assessment in one section. The placement of the article on the State Fund for the Development of SMEs of Ukraine in the same section seems even more illogical [11, Clause 180]. Thus, the adoption of the submitted version of subsoil code draft is considered premature and requires a careful consideration of the above comments. In the current conditions, a more realistic measure for the prompt improvement of the investment climate in the field of subsoil use in the period of its post-war recovery is adopting a law on amendments to the applicable subsoil code and ensuring the protection of the rights of investors against changes in the legislation for the period of validity of the license obtained in accordance with the procedure as established by the applicable law. Such amendments have been partially implemented in the Law on Amendments to Certain Legislative Acts of Ukraine Regarding the Improvement of Legislation in the Field of Subsoil Use as adopted by Verkhovna Rada and signed by the President of Ukraine on 24.12.2022.

3. Digital transformation. On 07/23/2021, by his decree the President of Ukraine put into effect the decision of the National Security and Defense Council of Ukraine [14], the implementation of which, among other things, contributes to improving the process of data exchange between government bodies for the purpose of monitoring and controlling the use of subsoil. At the end of 2021, the system of monitoring the use of subsoil was presented in the Office of the President as part of the information and analytical system of the SOTA Main Situation Center of the country. As of December 14, 2021, in Ukraine, there were 3,070 effective licenses, including 581 ones with the share of government corporations. These licenses belong to 1046 communities, their holders are 2061 legal entities and 64 individual entrepreneurs. In 2020, the holders paid UAH 51.4 billion rent payment [15]. Therefore, modernization and simplification of access to geological data is one of the priorities of the government's reform of the sphere of subsoil use. To this end, it has been proposed to provide administrative services online, in an automated and transparent manner, including through digitizing the entire GI that may be necessary for subsoil users and all stakeholders. The pilot project *Electronic Cabinet of the Subsoil User* [16] has been being implemented. The procedure for its operation has been approved by the resolution of the Ministry of Environment [17]. In particular, applications in an e-form shall be submitted through the subsoil user e-cabinet that is to be integrated with the single ecological platform *Eco System* [18] that, among other things, contains the e-subsoil module.

During the martial law, the government introduced key changes for businesses that work or plan to work in the field of subsoil use [19]: the cost of GI and license fee have been established to be estimated in automatized manner; the requirement to sign license agreement with the use of an e-signature has been established; the license validity for the period of martial law has been established to be extended automatically. In addition, the State Geological Survey has implemented: the

Catalog of geological information [20]; the Interactive Map of Minerals and the Interactive Map of Strategic Minerals (hereinafter referred to as the SM) developed by *Geoinform of Ukraine* have been available for public; the State Geological Portal has been initiated to be filled with online services [21]; the investor guide (*Investment atlas of a subsurface user*) has been created. Its purpose is to familiarize the subsurface user with objects ready for investment [22]. At the beginning of 2021, the atlas contained information on 220 sites and mineral deposits. Each site is a lot for e-auction. In particular, the list includes 22 sites with reserves of hydrocarbon raw materials (oil, gas, condensate), seven sites with titanium ores, and three sites with gold ores [23].

Certainly, the given resources with interactive content are a comfortable digital tool that helps to attract investments in the industry. Openness, convenience, reliability, and availability of digital services in a unified information system for the use of subsoil are the principles that shall be disclosed in the legislation in an unambiguous and comprehensible version for investors, which complies with EU regulations. The essence of the innovation and investment component of the subsoil use reform, in our opinion, is the integration of economic, legal, technical, and technological mechanisms. It is believed that the first component shall be based on ensuring compliance with the principles of transparency of information not only about payments for subsoil use by economic entities and about the use and management of minerals of national importance by the government and territorial communities, but also about the results and consequences of their activities. The content of the second mechanism should be based on the build back better principle that provides for using not only the best practices of Green Mining, but also the establishment of priority nomination of subsoil areas by entities that own and implement production technologies with added value for the territory of Ukraine, in the process of post-war recovery of the economy of Ukraine. In addition, a block of inter-resource information

relations (weather, land, water, nature reserves, etc.) shall be included in the digitization process.

4. International partnership. The strategic partnership between the EU and Ukraine regarding raw materials and batteries was officially launched on July 13, 2021, with the signature of the Memorandum of Understanding that establishes the political framework. The Partnership Roadmap defines specific actions and measures. The first of them, approved for 2021–2022, provides for the use of the European Raw Materials Alliance (ERMA) and the European Battery Alliance (EBA) platforms. The partnership of Ukraine and the EU in the raw materials industry, based on the terms of the above-mentioned Memorandum, is an important stage, because critical mineral raw materials (hereinafter referred to as CMM), in particular in the context decarbonization, have a huge potential in Ukraine for the development of a green economy and the creation of new business opportunities and workplaces.

Due to expanding the production of “minerals of the future” and fuel and energy minerals, increasing exports, as well as reducing imports of mineral raw materials, the potential for effective use of Ukraine’s subsoil may exceed USD 400 billion in the next 10 years. The comprehensive development of CMM may attract USD 10 billion investments to Ukraine as early as at the first stage [24]. At the same time, one should keep in mind the strategic goal that is creating a modern innovative industry 4.0-based economy in Ukraine and generating a high level of added value in the country.

While implementing the provisions of the Memorandum, in the fall of 2022, Ukraine took part in the international Conference on Raw Materials Security of Europe, during which the future of European raw materials policy was discussed and the directions of EU countries’ cooperation in the development of Ukrainian CMM deposits were outlined. In particular, the State Geological Survey presented a list of more than 30 yet unlicensed areas for exploration and production of CMM, which were included in the Investment Atlas of the subsoil user. A beta version of the interactive

online map of CMM in Ukraine, which contains information on more than 1,000 objects, has been created. Ukraine has been ready to disclose and provide online access to geological information on construction minerals in order to speed up the post-war reconstruction of infrastructure and social facilities in the country. The most important thing for Ukraine is to make the production of ore minerals more environmentally friendly with the involvement of advanced technologies (Green Mining) and to minimize the carbon footprint [25]. Innovative materials and technologies localized in the country should contribute to this.

In addition, the State Geological Survey and the Polish Geological Institute – National Research Institute signed a Memorandum of Understanding in the field of geology and mineral resources. Priority in cooperation will be given to the areas of digitization and management of GI in accordance with EU standards, regulation of activities with geothermal energy sources, unification of legislation, involvement of experts into a feasibility study of the prospects for the development of Ukrainian deposits of CMM, while preparing for the green transition [26].

In our opinion, one of the important factors that is expedient to propose for Ukraine is the use of both the legal experience of the leading European mining countries in the implementation of the main EU legal norms in the field of mining and geological relations and the technological experience of the most advanced economies in relation to support of innovative, high-tech industries that use mineral raw materials.

5. Post-war recovery. The National Council for the Recovery of Ukraine from the Consequences of the War, created by presidential decree [27], has the three main objectives: 1) to develop a plan of measures for the post-war recovery and development of Ukraine; 2) to define and to develop proposals for priority reforms; and 3) to prepare strategic initiatives, draft legal acts, the adoption and implementation of which are necessary for the effective operation and recovery of Ukraine in the war and post-war periods.

At the Ukraine Recovery Conference (Switzerland, Lugano, July 4–5, 2022), there was presented the Ukraine Recovery Plan based on the principle “A strong European country is a magnet for foreign investments”, which includes the build back better approach, the transition to green economy; the stimulation of private investments and entrepreneurship, etc. [28]. The final Declaration has confirmed Ukraine’s intention to create an effective coordination platform for relations with partners, organizations and international financial institutions on a bilateral and multilateral basis for the preparation and implementation of the submitted Plan [29]. In this context, also it is worth to mention the national programs of the Plan, which are related to the field of subsoil use, in particular, “Reconstruction of a clean and protected environment”, “Energy independence and the Green Course”.

However, according to the authors of analytical note [30], the current vision of the government and international partners of Ukraine’s post-war recovery does not contain sufficient and effective green elements, in the absence of which, the post-war recovery can prevent certain sectors from modernization, green course, and sustainability for a long time.

In economic terms, the post-war recovery of the subsoil use can be tracked based on the data of the Government Budget for 2023 [31]. According to it, in the next year, the projected revenues from the rent for the subsoil use amount to UAH 93.36 billion that is almost UAH 28 billion more than in 2022. The rent for the use of the subsoil for extraction is expected to increase as follows: by UAH 9.57 billion for oil; by UAH 73.95 billion for natural gas; and by UAH 3.20 billion for gas condensate. That is, 93% of tax revenues from subsoil use are to be received from hydrocarbon extraction. UAH 0.4 billion is expected to come from the license fee [31].

So, it is obvious that the Government Budget 2023 is not based on the capacity of those objects that have been transferred or are in operation (industrial development), rather than on expanding

use of promising mineral reserves and resources of the State Subsoil Fund. Therefore, from the point of view of their investment attractiveness, it has been proposed to stimulate the circulation of licenses. However, the draft law submitted to the parliament, designed to regulate this type of relationship, is considered debatable [32]. After all, on the one hand, stimulating the circulation of “dormant” licenses is extremely relevant, while, on the other hand, the wording “stimulating the circulation of licenses” seems incorrect, since the draft law is only about the introduction of new national and local taxes.

The *Mining Front* project created to restore the war-ravaged mining infrastructure in Ukraine to remedy the consequences of the Russian invasion, is very timely. Its purpose is to provide donor financial and material assistance to Ukrainian mining corporations that suffered from hostilities, on a voluntary, non-commercial, equal and mutual basis [33]. However, it should be incorporated into the post-war recovery algorithms of Ukraine’s innovative, high-tech, low-carbon economy.

6. License variability. The deregulation of the existing licensing system in Ukraine in the field of subsoil use continues in the oil and gas industry. In 2018, it was simplified by the law [34], by means of amendments regarding the mining right-of-way, GI management, extension of the validity period of license, land plots, procedure for launching the deposit development, etc. Such steps regarding the deregulation of the field of subsoil use were declared by the government a necessary component of a free and independent market and a means of eliminating possible lobbying of the interests of certain participants in the market and the prevention of corruption.

At the same time, the problem of canceling “dormant” licenses still remains unsolved. For example, companies that received a license for a certain subsoil area, in some cases have not carried out the necessary works for a long time, disabling others from using this subsoil area. Such practice unfairly limits the access of other investors to such minerals. In addition, the license cancellation pro-

cedure is insufficiently regulated and long-term, because of the lack of relevant powers in the State Geological Survey and undefined deadlines for appeal reviews of court decisions regarding the license cancellation [35, 75].

In this aspect, it is considered expedient to introduce the internationally recognized principle of “use or drop” into the legislation of Ukraine, regarding the licenses, which facilitates the use of the subsoil by the most effective holder who plans realizing the investment potential in the post-war Ukraine for building a high-tech innovation economy.

Separate attention should be paid to the proposals identically given in two draft laws aimed at improving legislation in the field of subsoil use (simplification of subsoil use), namely [36, 37]: 1) complex (end-to-end) license; 2) mining right-of-way only for underground facilities; 3) disposal of a license by its holder, etc. However, in our opinion, these drafts also need to be refined.

Given that the procedure for obtaining certificate on a mining right-of-way practically duplicates for obtaining a license, in terms of the number and content of the documents to be submitted by applicant, it has been suggested to consolidate all information at this stage of the licensing mechanism and to cancel the above mentioned act for the development of any critical mineral deposit, including on the terms of PSA. Such elimination of one of the licensing tools will definitely help to facilitate the mining business. Also, in the conditions of post-war recovery, it has been proposed to consider the option of granting a complex license that covers all types of subsoil use. This is considered relevant for mining facilities that have been affected by the military actions and the further exploitation of which will be based on the possibility of using those types of resources or their combination, which have the optimal investment potential, such as mineral raw materials, underground resources, geological resources, and geoenery.

In addition, the legislator shall eliminate the subject-object conflict between the procedures for obtaining a license in auction, non-auction conditions, and on PSA conditions by legislatively

defining the criteria by which the relevant groups are formed and differentiated: 1) business entities that are eligible to participate in the specified procedures for obtaining a license; 2) business entities that are eligible to participate in the procedures for initiating or nominating subsoil plots; 3) subsoil lots that may be subject of the initiation or nomination procedures. In this way, a correlation of national and investment interests should be established, which would make it impossible for unscrupulous investors to acquire the right to use subsoil areas, especially those containing minerals of strategic importance for the sustainable development of the economy and the national defense capability. The term “unscrupulous subsoil user” is proposed to be understood as a business entity that has committed any actions in the mining business, which contradict or breach the conditions of licenses, agreements, contracts, rules, auction, trade and other fair business practice, in particular, illegal use of business reputation of a business entity, creating obstacles for business entities in the process of using the subsoil and achieving illegal advantages in this activity, illegal collection, disclosure and use of commercial secrets, provision of false or misleading data in documents, reproofs and/or claims from authorized bodies, as well as other unscrupulous actions. This and other information that shows the applicant’s (investor’s) financial, economic, and innovation capabilities, qualification level, professional experience and environmental and social consequences of previous activities are suggested to be recorded and accumulated in its mining history (passport, rating). The specified criteria are proposed to be implemented, as relevant requirements, in the legislation of Ukraine.

7. Protection of investments. The applicable Subsoil Code (Part 2, Article 13), while defining the subject composition of subsoil user, unequivocally associates investors, as one of its types, with the use of subsoil under the terms of PSA. At the sub-legal level, investment in the subsoil use is mentioned in the Procedure for Issuing Licenses, where it is stated that the implementation

of investment projects is among the purposes of the use of subsoil that may be specified in the license. Therefore, there are no provisions in the subsoil legislation, which reflect the principle of creating equal conditions for access to the subsoil use.

At the same time, the stability of legislation is an important factor for the protection of investor rights. In particular, such conditions are secured by Part 5 of Art. 11 of the Law on ensuring transparency in extraction industries. The PSA Law guarantees the application of the legislation in force at the time of making agreement regarding the rights and obligations of the investor, as defined by PSA, during the term of its validity. Investment legislation contains similar guarantees in the case of changing legislation [38, Art. 8]. In addition, according to Art. 2 of the Foreign Investment Regime Law, the right to carry out economic activities, including the right to use the subsoil and natural resources, granted in accordance with legislation or contracts, the value of which in convertible currency is confirmed in accordance with the laws (procedures) of the investor's country or international trade practice, belong to one of the types in which foreign investments can be made [38]. Therefore, the existing ban on the alienation of licenses, as established in Art. 16 of the Criminal Code, as well as in Art. 14 of the Oil and Gas Law, is an obvious obstacle for the investor. The state guarantees of investment protection related to the application of rent rates for the use of subsoil for the natural gas extraction are established in the Internal Revenue Code of Ukraine, as well.

Investment projects in the field of subsoil use with significant investments deserve special attention, because, firstly, their regime is established by the respective law [39]. Secondly, Art. 5 of the same law states that government support may be given for the implementation of investment projects with significant investments on the territory of Ukraine in the extraction business for the purpose of further processing and/or enrichment of minerals (except hard and brown coal, crude oil and natural gas). There are the following forms of government support: tax (exemption

from certain taxes and fees; customs (exemption from import duty of new equipment); land (preferential right of land use for the implementation of an investment project); infrastructure (construction of adjacent infrastructure facilities at the expense of government funds, local budgets).

Another urgent problem should be securing the equality of investors regarding the protection of their rights in terms of the acquisition and realization of the right to use the subsoil. We mean, first of all, the need to extend state guarantees not only to foreign, but also to domestic investors, since permanent changes in the national legislation can put the latter in unequal conditions with foreign subsoil users and, as a result, complicate or totally prevent them from implementing the investment project. Such a situation does not correspond to the modern understanding of investment protection, as defined in Art. 19 of the law [40].

Finally, as a specific means of protecting investments in the conditions of the war unleashed by the Russian Federation, which challenged both the Ukrainian economy and the economic environment in a global dimension, military insurance should be considered the basis for attracting investments. For example, the National Council for the Recovery of Ukraine offers donors to implement one of the concepts of such insurance before the end of the war. Currently, the experience of other countries in military risk insurance has been being studied. Although this is not a cheap insurance, it shall be in place if we want to attract investments to the country [41].

In particular, Ukraine and the Multilateral Investment Guarantee Agency (MIGA) have agreed to launch a pilot project of investment insurance during hostilities. According to the Ministry of Economy, MIGA that belongs to the World Bank group has been ready to offer Ukraine a pilot project worth USD 30 million. Initially, it is planned to take one investment project and to elaborate all the nuances of guarantees for foreign investors in this project [42].

Therefore, the guarantees of protection of investment rights in the field of subsoil use existing

in the national legislation are proposed to be classified as follows: 1) stable and favorable legislation; 2) admissible control; 3) resolving disputes exclusively by judicial procedure; 4) rent preferences; 5) government aid (tax, customs, currency, land, infrastructure, etc.); 6) circulation of licenses; 7) equality of investors; and 8) military risk insurance. The specified system of guarantees should become legally binding in the status of principles and norms that ensure investment rights and freedoms in the field of subsoil use by properly regulating the procedure for their implementation and protection.

8. Mining history (rating). The applicable subsoil legislation establishes qualification requirements for subsoil users in a specific way. The Subsoil Code does not provide them at all, while the Licensing Procedure contains them in the annex, in the context of document submission, for licensing without auction, for only one type of subsoil use, which is the construction and operation of facilities for underground storage of oil and gas. As practice has shown, licenses are often obtained by an auction winner who does not have the ability to carry out a certain type of subsoil use, but wants to invest for making profit from license resale instead of using the subsoil. Such a gap in the legislation prevents qualified investors to carry out economic activities on a promising subsoil area, since it has already been put into use.

For example, in Poland, only the corporations who have received positive feedback as part of the qualification procedure aimed at the preliminary selection of entities that do not pose a threat to national security, are eligible to get licenses for geological exploration and extraction of hydrocarbons. The corporations who intend to obtain the status of a licensed operator shall have the appropriate experience [7, 122].

This positive European experience definitely deserves support and appropriate implementation in domestic subsoil legislation. In addition, given that both economic and environmental security is components of national security, emphasis should be placed on the danger of building a resource-based economy.

In particular, considering the question of how rich countries became rich and why poor countries remain poor, Erik S. Reinert [43] emphasizes that historically proved answer is about export of raw materials and import of finished products. By creating a processing base, protecting the economy with a protectionist customs policy, and banning the export of raw materials, advanced economies did not become resource colonies.

For Ukraine, this experience can be implemented in the following directions: 1) prohibiting (restricting) export of unprocessed mineral raw materials from Ukraine; 2) increasing the customs duty on the import of foreign products manufactured of minerals that are available in Ukraine; 3) subsidizing and applying preferential taxation of a complex of mining, mining and processing and related industries that produce value-added products; 4) abolishing customs duties on the export of finished industrial products from Ukraine; 5) government support and preferential taxation of a complex of research institutions, innovation and investment technology parks; 6) long-term attraction of investments in the manufacture of products with the use of critical raw materials.

Therefore, in the field of subsoil use, it has been proposed to legislate a priority nomination of subsoil plots to the corporations that own and implement manufacturing technologies with added value on the territory of Ukraine.

The government efforts to prevent the participation or disruption of the auction by sanctioned persons (the requirement to submit information about the ultimate beneficial owner) or unscrupulous corporations (the establishment of a minimum guarantee fee) are certainly necessary, but not sufficient to ensure modern balanced requirements for the subsoil use.

At the same time, the assessment of the applicant's ability to fulfill his obligations under the license and agreements on the use of subsoil is a fairly common procedure in the world, because it concerns, first of all, mineral resources that play and will continue to play an important role in sustainable and green economy.

The global credit rating agency *DBRS Morningstar* carries out its own evaluation of the world's mining companies according to corporate credit ratings, highlighting the understanding of the ratings, the evaluation process, the methodology, and the criteria [44].

Another indicator of the applicant's qualifications can be considered the Resource Governance Index (RGI) that measures the quality of management of the extraction sector in resource-producing countries around the world [45].

Therefore, information about the applicant's previous mining experience, the number and quality of the investment projects it has completed in the field of subsoil use contributes not only to a more professional attitude towards the property of the Ukrainian people, but also strengthens the security component of the economic, ecological, social, regional relations, etc. When formulating the definition of "mining history", we suggest to proceed from the existing concept of credit history [46, Art. 3].

CONCLUSIONS

It has been proposed to improve the legislative framework for licensing in the sphere of subsoil use in the post-war recovery period based on the symbiosis innovation and investment attractiveness and environment and social friendliness. The main results of the research are as follows:

1. It has been proposed to improve the legal framework of the licensing system and investment mechanisms for the use of subsoil in the conditions of the post-war recovery of Ukraine's economy in the following areas:

- ◆ stakeholder communication: stimulation of professional discussions, round tables, seminars, conferences, hearings, discussions, consultations, etc.;
- ◆ recodification of legislation: review and adoption of a codified act on subsoil is considered premature and requires further elaboration, while operational improvement of the investment climate is possible by amending the applicable legislation;

- ◆ digital transformation: the introduction of resources with interactive content is a comfortable digital tool that contributes to the attraction of investments in the industry. Information about both the subjects and objects of these relations, as well as the results and consequences of activities should be transparent and accessible;
- ◆ international partnership: the use of both the legal experience of the leading European mining countries in the implementation of EU directives, as well as the technological experience in support and implementation of high-tech production using mineral resources, innovative materials and technologies localized in the country;
- ◆ post-war recovery: the need to stimulate the circulation of "dormant" licenses, to create mechanisms for donor financial and material assistance to Ukrainian mining corporations that suffered as a result of hostilities, as a built-in component of the post-war recovery algorithm of the innovation-driven, high-tech, low-carbon economy of Ukraine;
- ◆ license variability: the implementation of the internationally recognized principle of "use or drop" regarding the issued licenses in the legislation of Ukraine, as well as the elimination of subject-object conflicts between the licensing procedures, in order to facilitate the use of the subsoil by the license holder that shall plan the investments given the purpose of building high-tech, innovation-driven economy of Ukraine;
- ◆ protection of investments: there has been formed a system of guarantees, which should become legally binding in the status of principles and norms that ensure investment rights and freedoms in the field of subsoil use by proper regulation of the procedure for their implementation and protection;
- ◆ mining history (rating): information about the applicant's previous mining experience, the number and quality of the investment projects he has completed in the field of subsoil use contributes not only to a more professional attitude towards the property of the Ukrainian people, but also strengthens the security compo-

ment of the economic, ecological, social, regional relations.

2. The classification of guarantees of protection of investment rights in the field of subsoil use in the national legislation has been developed: 1) stable and favorable legislation; 2) admissible control; 3) resolving disputes exclusively by judicial procedure; 4) rent preferences; 5) government support (tax, customs, currency, land, infrastructure, etc.); 6) circulation of licenses; 7) equality of investors; and 8) military risk insurance. The specified system of guarantees should become legally binding in the status of principles and norms that ensure investment rights and freedoms in the field of subsoil use by properly regulating the procedure for their implementation and protection.

3. The definition of “mining history” as a set of information identifying a self-employed person or a corporate entity (including a foreign corporate entity) that applies for obtaining, extending the term of validity, reissuing, renewing the validity of a license for the use of subsoil resources, as well as information on fulfillment of obligations under previous licenses and transactions in the field of subsoil use (project activity), and other open information, in accordance with the subsoil and extraction industry

legislation. This is the way to establish the correlation of the interests of the government and the investors, which disable unscrupulous investors to acquire the right to use subsoil areas, especially those containing minerals, which are of strategic importance for the sustainable development of the economy and the defense capability of the state.

4. The innovation and investment component of reforming the sphere of subsoil use has been substantiated. Its essence is the integration of economic, legal, technical, and technological mechanisms. The first component is based on ensuring compliance with the principles of transparency of information not only about payments for subsoil by business entities, the use and management of minerals by government and local authorities, but also about the results and consequences of their activities. The content of the second mechanism is based on the principle of build back better, which provides for the use of the best practices of Green Mining and the establishment of priority nomination of subsoil areas to the corporations that own and implement production technologies with added value on the territory of Ukraine in the process of post-war recovery of Ukraine’s economy.

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Received 03.01.2023

Revised 01.05.2023

Accepted 01.05.2023

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ІННОВАЦІЙНО-ІНВЕСТИЦІЙНА ПАРАДИГМА НАБУТТЯ ПРАВА КОРИСТУВАННЯ НАДРАМИ В УМОВАХ ПОВОЄННОГО ВІДНОВЛЕННЯ ЕКОНОМІКИ УКРАЇНИ

Вступ. До 2022 року частка сфери користування надрами становила 5,6 % обсягу ВВП України та забезпечувала робочими місцями понад 200 тис. осіб. В умовах повоєнного відновлення країні необхідні нові підходи до розробки інвестиційно привабливих економіко-правових механізмів в цій сфері, враховуючі, що вона володіє цінними природними ресурсами, використання яких у повоєнних умовах відновлення економіки та подолання проблем виходу з рецесії має глобальне значення. Зацікавленість виявили і закордонні партнери.

Проблематика. Основними проблемами, пов'язаними із формуванням повоєнної системи права користування надрами в сучасних економічних умовах є: недостатній інвестиційний потенціал гірничодобувної галузі; наявність колізій та невідповідність вимогам норм ЄС чинного національного законодавства; вкрай недостатній розвиток інвестиційних проєктів надрокористування зі створення виробництва з високим ступенем доданої вартості.

Мета. Дослідження стану та обґрунтування перспектив економіко-правового механізму користування надрами в умовах повоєнного відновлення України, заснованого на симбіозі інноваційно-інвестиційної привабливості та еколого-соціальної спрямованості цієї сфери.

Матеріали й методи. Використано загальнонаукові та спеціальноюридичні методи дослідження економіко-правових явищ та категорій; дослідження гірничих та господарських відносин виконано методом системного аналізу та формальноюридичного методу.

Результати. Проведено аналіз відносин та стану нормативно-правової бази, що забезпечує регулювання користування надрами. Виявлено проблемні питання у механізмі надання ділянок надр у користування та запропоновано шляхи їх розв'язання. Обґрунтовано необхідність вдосконалення правового забезпечення дозвільної системи та інвестиційних механізмів користування надрами в умовах повоєнного відновлення економіки України за окремими напрямками.

Висновки. Запропонована інноваційно-інвестиційну парадигма надрокористування стане поштовхом у законодавчій діяльності та наукових дослідженнях.

Ключові слова: надра, право користування, спеціальний дозвіл, інвестиції, повоєнне відновлення.