I. Litvinova,

PhD in Economics, Associate Professor, Associate Professor of the Department of Environmental Technologies, Ecology and Life Safety of Simon Kuznets Kharkiv National University of Economics (Kharkiv)

ORCID ID: 0000-0003-0137-9158

DOI: 10.32702/2306-6806.2020.4.191

IMPLEMENTATION OF REGULATORY ACTS ON THE REFORM OF THE COAL INDUSTRY OF UKRAINE IN THE CONTEXT OF THE USE OF ENVIRONMENTAL TECHNOLOGIES

I. M. Літвінова,

к. е. н., доцент, доцент кафедри природоохоронних технологій, екології та безпеки

життєдіяльності, Харківський національний економічний університет імені С. Кузнеця, м. Харків

ІМПЛЕМЕНТАЦІЇ НОРМАТИВНИХ АКТІВ ЩОДО РЕФОРМУВАННЯ ВУГІЛЬНОЇ
ПРОМИСЛОВОСТІ УКРАЇНИ В КОНТЕКСТІ ВИКОРИСТАННЯ ПРИРОДООХОРОННИХ
ТЕХНОЛОГІЙ

The article presents the results of monitoring regulations on the reform of the coal industry and coal regions of Ukraine in the context of the use of environmental technologies. It is established that all legal acts use different interpretations regarding the reform of the coal industry and coal regions of Ukraine in the context of the environmental technologies use, namely: modernization, transformation, restructuring, reconversion, reindustrialization, and decarbonization. These definitions had the following meaningful content: reforming the coal-mining complex; reforming property relations with improving the industry management system; reforming the coal industry's scientific institutions; reconstruction of objects; reconstruction of coal enterprises in order to avoid inefficient projects in projects; reconstruction of the mine fund; development of industrial and social sphere of coal enterprises of the branch; enterprise reconstruction; technical re-equipment and modernization of coal mining enterprises; reconstruction and technical re-equipment; optimization of the structure of state-owned enterprises of the coal industry; the reconversion (re-industrialization) of coal regions; technical measures for updating the mine fund; prospect of further development and break-even level of production and economic activity of Ukrainian mines; reorganization of enterprises in terms of concentration of all personnel, financial and material resources on prospective mines; decarbonization of national and global economies; decarbonization of energy. It is established that the complex of legal acts on regulation of reform in the coal industry in Ukraine includes a number of programs and normative documents that are mostly declarative and do not provide for overcoming social problems in the coal regions of Ukraine. However, today's global challenges call for the introduction of the concept: just transformation is a model of development that envisages a decent life and fair earnings for all workers and communities affected by the process of active energy transition to decarbonize economy and the use of environmental technologies.

У статті подано результати моніторингу нормативних актів щодо реформування вугільної промисловості та вугільних регіонів України в контексті використання природоохоронних технологій. Встановлено, що у всіх нормативно-правових актах використовуються різні тлумачення щодо реформування вугільної промисловості та вугільних регіонів України в контексті використання природоохоронних техно-

логій, а саме: модернізація, трансформація, реструктуризація, реконверсія, реіндустріалізація, декарбонізація. Ці дефініції мали таке змістовне наповнення: реформування шахтовуглебудівного комплексу; реформування відносин власності з удосконаленням системи управління галуззю; реформування наукових установ вугільної галузі; реконструкції об'єктів; реконструкція підприємств вугільної промисловості з метою уникнення в проектах неефективних рішень; реконструкція шахтного фонду; розвиток виробничої та соціальної сфери вугільних підприємств галузі; реконструкції підприємства; технічного переоснащення та модернізації вугледобувних підприємств; реконструкції та технічне переозброєння; оптимізація структури державних підприємств вугільної промисловості; реконверсії (реіндустріалізації) вугільних регіонів; технічні заходи з оновлення шахтного фонду; перспективу подальшого розвитку та беззбиткового рівня виробничо-господарської діяльності шахт України; реорганізація підприємств у частині концентрації усіх кадрових, фінансових та матеріальних ресурсів на перспективних шахтах; декарбонізації національних та глобальної економік; декарбонізація енергетики. Встановлено, що комплекс нормативно-правових актів щодо регулювання реформи у вугільній галузі в Україні включає низку програм та нормативних документів, які мають переважно декларативний характер та не передбачають подолання соціальних проблем у вугільних регіонів України. Проте сучасні світові виклики вимагають впровадження такого поняття: справедлива трансформація — модель розвитку, що передбачає гідне життя та чесний заробіток для всіх працівників і спільнот, на яких вплине процес активного енергетичного переходу до декарбонізованої економіки та використання природоохоронних технологій.

Key words: regulations, reform, coal industry, just transformation

Ключові слова: нормативні акти, реформування, вугільна промисловість, справедлива трансформація.

THE PROBLEM FORMULATION IN GENERAL FORM AND ITS RELATION TO THE IMPORTANT SCIENTIFIC OR PRACTICAL TASKS

The changes in approaches to the formulation of states' energy policy are taking place in the world: the transition from the outdated model of the energy sector functioning, dominated by large producers, fossil fuels, inefficient networks, imperfect competition in the markets of natural gas, electricity, coal to a new model in which creating a more competitive environment, equalizing development opportunities and minimizing the dominance of one of the types of energy production or sources and / or routes of fuel supply. At the same time, it is preferable to improve energy efficiency and the use of energy from renewable and alternative sources. Climate change prevention and adaptation is also one of the priorities of global energy development. This poses new economic and technological challenges for Ukraine, but at the same time opens up new opportunities for finding and implementing innovative developments in the field of production, processing of fossil fuels, production, transformation, supply and consumption of energy, which necessitates the use of environmental technologies in particular in the coal industry.

AN ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS THAT FINDING THE SOLUTION TO THIS PROBLEM AND WHICH THE AUTHOR RELIES ON, IDENTIFYING PREVIOUSLY UNRESOLVED PARTS OF GENERAL PROBLEM ADDRESSED BY THE ARTICLE

Ukraine uses a variety of energy sources, such as oil, natural gas, and coal, for its own use, nuclear and hydropower, wind and sun energy and more. Traditionally, the most sought after in Ukraine are fossil resources: natural gas and coal, which together account for more than 60% of the national energy balance. At the same time, in recent years, due to the changes in the price environment, technologies and global trends, the share of other types of energy in consumption has been gradually increasing. Moreover, today there is reason to expect their further growth with a corresponding decrease in the share of fossil fuels in the energy balance of the country.

The problems of reforming the coal industry and coal regions of Ukraine in the context of the environmental technologies use have been raised over the last twenty years, as evidenced by the good implementation of regulations on the reform of the coal industry and coal regions of Ukraine in the context of the environmental technologies use. Among modern regulations, the following should be mentioned: Energy Strategy of Ukraine for the period up to 2035 "Security, Energy Efficiency, Competitiveness" [1], Concept for Reforming and Development of the Coal Industry for the period up to 2020 [2], Concept of "green" energy transition of Ukraine by 2050 Law of Ukraine "On the Main Principles (Strategy) of the State Environmental Policy of Ukraine up to 2030" [4] and others [5—10].

However, all regulations use different interpretations regarding the reform of the coal industry and coal regions of Ukraine in the context of the environmental technologies use, namely: modernization, transformation, restructuring, reconversion, re-industrialization, which needs to be explored carefully.

FORMULATION OF THE ARTICLE OBJECTIVES (FORMULATION OF THE TASK)

Generalization of the current regulatory acts for reforming (modernization, transformation, restructuring, reconversion, reindustrialization) of the coal industry and coal regions of Ukraine in the context of the use environmental technologies use.

Presentation of the main research material with full justification of the scientific results obtained. The existing set of regulations for the regulation of coal reform includes a number of programs and regulations that are mainly declarative in nature and distinct in the process of reforming the coal industry and overcoming social problems.

In order to carry out a thorough analysis of the substantive content and content of the normative legal acts of Ukraine regarding the reform of the coal industry and coal regions of Ukraine, their monitoring should be conducted, Table 1.

It will allow to emphasize the particular stresses in the reform of the coal industry in Ukraine at different periods

Table 1. Chronology of implementation of regulations on reforming (modernization, transformation, restructuring, reconversion, re-industrialization) of the coal industry and coal regions of Ukraine

Year	Name of legislative act	Goal	Modernization, transformation, restructuring, reconversion, reindustrialization of the coal industry and coal regions of Ukraine
2001	Ukrainian Coal Program [5]	Improving the efficiency of the coal industry and achieving the amount of coal needed to meet national needs economy	Reforming the coal mining complex; reforming property relations with improving the industry management system; the revival of the role of science in the development of the coal industry and the reform of the scientific institutions of the coal industry. Creating conditions for defining a mine (cut, technological complex in the coal mining sub-sector) as the main link for reforming property relations in the coal industry. To develop and approve the procedure for creating new jobs for the workers who are made redundant in the process of reforming the industry, and to identify the sources and amounts of their financing based on the strategy of socio-economic development of the regions
2012	SECTORAL AGREEMENT between the Ministry of Energy and Coal Mining of Ukraine, other state bodies, owners (associations of owners) active in the coal industry, and all-Ukrainian trade unions of the coal industry [6]	The agreement is a legal document containing mutual obligations of Parties, the parties to the Agreement, aimed at ensuring the efficient operation of the industry and meeting the economic and social interests and needs of workers	The Ministry of Energy and Coal Industry undertakes: 7.1. With the involvement of industry science to carry out technical and economic expertise of technical and working projects of construction and reconstruction of the Enterprises facilities of the coal industry in order to avoid in the projects of inefficient decisions. 7.2. In order to ensure the stable functioning and development of the industry when calculating the cost of production and the amount of government support, regardless of ownership, under the conditions specified by law, to provide: a) capital investments for the reconstruction of the mine fund, the development of industrial and social sphere of the coal industry enterprises; b) unevenness of the mining and geological enterprises; c) the cost of implementing the social and labor guarantees provided for by the applicable law and this Agreement. 7.3. To decide with the participation of all-Ukrainian coal industry unions in the Government for the Enterprises of the branch, regardless of ownership, under the conditions specified by the law, the question: determine the amount of state support, while taking into account the cost of maintaining capacity, restoration of sewage treatment, the purchase of equipment and the social sphere; financing of capital construction of coal enterprises from the state budget; financing from the state budget for the reconstruction of industrial facilities on the basis of scientific and design decisions to support and increase the capacity, capital construction of residential, social and household objects, stipulated by the resolutions of the Cabinet of Ministers of Ukraine; financing from the state budget of restructuring the coal and peat mining industry; providing state support for prime costs at least twice a month, namely up to 7 and 23; financing from the state budget of mining and rescue activities. 11.4. Workers, including the trade unions, which during the period of restructuring, reconstruction of the Enterprise were dismissed from it under Art. 40, paragraph 1 of the Labor Code of Ukraine, which have the pre-emptive right to enter the work of reconstruction, restructured enterprise. 13.5. To carry out preliminary supervision over the course of construction, reconstruction and technical re-equipment of economic objects for the purpose of ensuring observance of rules and norms of labor and environmental protection during the period of operation
2017	CONCEPT of reforming and developing of the coal industry for the period up to 2020 [2]	Complex solution of the coal industry functioning problems, implementation of systematic measures for utilization of its potential for growth of coal production, increase of efficiency and transfer of coal industry to the non-subsidized and self-supporting mode of activity while simultaneously solving environmental and social problems of mining regions and creating favorable mining regions conditions for the privatization of mines	Effective reform of the coal industry, namely: optimization of non-core assets of coal mining enterprises; enhancing the investment attractiveness of coal mining enterprises; defining the mechanism of social protection of dismissed workers and solving environmental problems; accelerating the pace of mine preparation for privatization; determining concrete measures to reduce the cost of finished commodity coal products; bringing commodity coal prices to an economically sound level. This option will allow to take measures for elimination of loss-making mines, to bring coal enterprises to break-even level of work with production potential for ensuring energy security of the country, to create conditions for real attraction of private investments in development of coal-mining enterprises with their subsequent privatization. The main risk in the application of this approach is the dependence of the period of technical re-equipment of prospective and liquidation or conservation of coal-mining enterprises on stable and full financing. During the reform of the state-owned enterprises of the coal industry it is envisaged to distribute the mine fund into the following groups: prospective mines that have a significant amount of industrial coal reserves and the ability to reach a break-even level of work as soon as possible; non-prospective mines, which are divided into two sub-groups: - mines subject to conservation (in case of absence of the buyer during the privatization and provided the feasibility study to restore their activity in the short run at a profitable level without involvement of state support) of the mine with low technical and economic indicators, high level of the mine fund wear, a considerable amount of capital investments necessary for bringing the mine to a break-even level of work and great volume of coal reserves; mines to be eliminated are the mines that are running out of residual industrial reserves or are unable to break even
2017	Energy STRATEGY of Ukraine for the period up to 2035 "Security, Energy Efficiency, Competitiveness" [1]	The restructuring of the coal industry will be accompanied by a set of measures to mitigate the social and environmental consequences of the elimination / conservation of coal mines and the social reconversion of mine closure regions in line with best European practices	In order to optimize the structure of state-owned enterprises of the coal industry, by order of the Ministry of Energy and Coal Industry from 17.05.2018 № 260 added 21 SE "National Coal Company. Pursuant to the orders of the Ministry of Energy and Coal from 07.11.2018 №№ 551-556, 558-568 and 22.12.2018 № 562, the reorganization of coal-mining enterprises is carried out by joining them to SE "National Coal Company". In order to approve the list of mines subject to privatization, the Ministry of Energy and Coal Industry confirmed the privatization of 2 coal mining facilities that were included in the list of small-scale privatization objects to be privatized in 2018, according to the order of the State Property Fund from 27.03.2018 № 447. In addition, the State Enterprise "Coal Company "Krasnolimanskaya" is included in the list of large-scale privatization of state-owned property subject to privatization in 2018, according to the order of the Cabinet of Ministers of Ukraine from 10.05.2018 №358. Also, the list of small-scale privatization objects subject to privatization in 2018, according to the order of the Fund from 27.03.2018 №447, includes an object of unfinished construction - Mine № 10 "Novovolynska" On October 31, 2018, the working meeting was held with the participation of representatives of the European Commission, the Ministry of Energy and Coal Industry of Ukraine; the Association of Ukrainian Cities, DTEK, city and town mayors to take into account the views of all interested parties on the reconversion (reindustrialization) of coal regions of Ukraine. As a result of the meeting, city and town mayors and members of the public supported the initiative to create a permanent Platform, which should include representatives of local authorities, local self-government, public organizations, etc. interested in the process of coal conversion The closure / conservation measures for the loss-making state-owned mines will be completed by 2025 and a social and environmental mitigation plan will be adopted for each site. This work should take into account (with the involvement of large-scale international assistance) the best global experience in mitigating social consequences, including, in particular, severance pay, advisory assistance to dismissed staff, vocational training and retraining. A set of measures to mitigate the social impact of the coal industry restructuring will be implemented in close connection with the social conversion programs of mine closure / conservation areas, which must also be prepared and implemented with large-scale international assistance. In line with European best practices, such programs include the organization of public works on infrastructure reconstruction, job creation, advisory and financial support for business initiatives, the creation of business incubators, and the introduction of temporary special economic activity regimes in mine closure areas

Year	Name of legislative act	Goal	Modernization, transformation, restructuring, reconversion, reindustrialization of the coal industry and coal regions of Ukraine
2017	PROCEDURE for selection of investment projects in the coal sector for which state support / assistance in the form of the state guarantees is provided [7]	Defines the mechanism of investment projects selection aimed at the development of the coal industry, the list of documents submitted for selection and the selection criteria	Selection is carried out on a competitive basis by the tender commission of the Ministry of Energy and Coal Industry (hereinafter referred to as the commission), taking into account the results of the state examination conducted in accordance with Article 15 of the Law of Ukraine "On Investment Activity"
2018/2019	BUDGET PROGRAM "Coal Restructuring" [8]	Providing the necessary level of financial support to the state coal-mining enterprises for the needs of the restructuring of the mines, carrying out their technical re-equipment and ensuring a stable and full payment of salaries to the miners, which will enable full financing of measures for the reform of the coal industry in the budget period	Budget Program (CCPCC) 2401590 "Restructuring of the coal industry" will allow to carry out separate technical measures for updating of the mine fund, to pay the expenses for the consumed electricity and to pay in full and in full the salaries to the miners with repayment of the existing debt
2018/2019	THE ORDER for use of funds provided in the state budget for the restructuring of the coal industry [9]		Measures for technical re-equipment and modernization of coal mining enterprises
2020	The Concept of «green» energy transition of Ukraine by 2050 [3]	Transformation of approaches to the development of energy in the world in the context of its greening and decarbonisation with special attention to the problems of combating climate change and achieving the global Sustainable Development Goals	Seven key strategic components: maximizing energy efficiency; maximum deployment of renewable energy sources (hereinafter - RES) and electrification; transition to environmentally friendly transport, introduction of a "circular" economy (closed-loop economy); development of "smart" networks and communications; expanding bioenergy and natural carbon sequestration technologies; absorption of other CO2 emissions through carbon capture, storage and reuse technologies. The development of RES combined with energy efficiency measures making it the most powerful decarbonisation tool for the national and global economies. The decarbonisation of energy will be accompanied by its decentralization and the development of distributed generation, which will lead to a rapid increase in the number of energy objects, connections and complications of energy systems. Managing such systems will require a fundamentally new technology platform, the creation of "smart" networks built on the basis of digital technologies and information and communication systems. Decarbonisation in the sectors of production and supply of energy will contribute to reducing losses in the transportation of natural gas, electricity and heat, which will require significant modernization of backbone and distribution networks, localization of energy supply and more. In decarbonisation conditions, a necessary step will be to forecast infrastructure development needs and optimize existing transportation, distribution, storage of petroleum products, gas, electricity, and heat. Decarbonisation and greening of transport. State aid for fuel extraction may be permitted only for energy decarbonisation measures and / or measures that will contribute to the achievement of strategic goals for energy security and the achievement of Ukraine's energy independence, with a mandatory assessment of compliance with EU law and principles of the EU acquis

of the country's development in relation to the global development trends. Therefore, depending on the period of the national economy development, the coal industry was modernized, transformed, restructured, reconverted or re-industrialized.

CONCLUSIONS TO THIS RESEARCH AND PROSPECTS FOR FURTHER EXPLORATION IN THIS AREA

Thus, the monitoring of the current regulations on the reform of the coal industry and coal regions of Ukraine made it possible to conclude that for the last twenty years in Ukraine the legal and regulatory support included such terms as: reforming, modernization, transformation, restructuring, reconversion, re-conversion decarburization. These definitions had the following meaningful content: reforming the coal-mining complex; reforming property relations with improving the industry management system; reforming the coal industry's scientific institutions; reconstruction of objects; reconstruction of the coal industry enterprises in order to avoid inefficient projects in the projects; development of industrial and social sphere of coal enterprises of the branch; enterprise reconstruction; technical re-equipment and modernization of coal mining enterprises; reconstruction and technical re-equipment; optimization of the structure of state-owned enterprises of the coal industry; reconversion (re-industrialization) of coal regions; technical measures for updating the mine fund; prospect of further development and break-even level of production and economic activity of Ukrainian mines; reorganization of enterprises in terms of concentration of all personnel, financial and material resources on prospective mines; decarburization of national and global economies; decarburization of energy.

However, today's global challenges require the introduction of the concept: just transformation is a model of development that provides a decent life and fair earnings for all workers and communities affected by the process of active energy transition (elimination of production capacity, enterprises, etc.). An important principle of effective equitable transformation is a broad social dialogue between all stakeholders: the representatives of public authorities and local self-government, civil society, science, media and business. The state, when developing the necessary national support strategies, should understand the needs of people living in these territories and dependent on mono-production. In their turn, the representatives of the regions should clearly define the list of their needs and specific models of their satisfaction.

Prospects for further exploration in this area should be developed in the development of the state program of fair transformation of coal regions of Ukraine.

Література:

1. Енергетична стратегія України на період до 2035 року "Безпека, енергоефективність, конкурентоспроможність". URL: <https://zakon.rada.gov.ua/laws/show/605-2017-p>
2. Концепція реформування та розвитку вугільної промисловості на період до 2020 року. URL: <https://zakon.rada.gov.ua/laws/show/733-2017-p#n84>
3. Концепція "зеленого" енергетичного переходу України до 2050 року. URL: <https://menr.gov.ua/news/34424.html>
4. Закон України "Про Основні засади (стратегію) державної екологічної політики України на період до 2030 року". URL: <https://zakon.rada.gov.ua/laws/show/2697-19>

5. Програма "Українське вугілля". URL: <https://zakon.rada.gov.ua/laws/show/1205-2001-p>

6. Галузева угода між Міністерством енергетики та вугільної промисловості України, іншими державними органами, власниками (об'єднаннями власників), що діють у вугільній галузі, і всеукраїнськими профспілками вугільної промисловості URL: <http://mpe.kmu.gov.ua/minugol/doccatalog/document?id=222288>

7. Порядок відбору інвестиційних проектів у вугільній галузі, для реалізації яких надається державна підтримка/допомога у формі державних гарантій. URL: <https://zakon.rada.gov.ua/laws/show/742-2017-p>

8. Бюджетна програма "Реструктуризація вугільної галузі". URL: https://ips.ligazakon.net/document/xi00907a?an=3&ed=2019_12_18

9. Порядок використання коштів, передбачених у державному бюджеті для реструктуризації вугільної галузі. URL: <https://www.kmu.gov.ua/npas/pro-zatverdzhennya-poryadku-vikoristannya-koshtiv-peredbachenih-u-derzhavnomu-byudzheti-dlya-restrukturyzatsiyi-vugilnoyi-galuzi>

10. Колективний договір між адміністрацією Міністерства енергетики та вугільної промисловості України і Первинною профспілковою організацією працівників Міністерства енергетики та вугільної промисловості України на 2017—2021 роки. URL: http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245189291&cat_id=193804

11. Сприяння модернізації вугільної промисловості в процесі структурної трансформації економіки старопромислових регіонів. URL: <https://niss.gov.ua/doslidzhennya/regionalniy-rozvitok/schodo-spriyannya-modernizatsiyi-vugilnoi-promislovosti-v-procesi>

References:

1. Cabinet of Ministers of Ukraine (2019), "Ukraine's energy strategy for the period up to 2035 "Security, energy efficiency, competitiveness"", available at: <https://zakon.rada.gov.ua/laws/show/605-2017-p> (Accessed 26 Feb 2020).

2. Cabinet of Ministers of Ukraine (2017), "The concept of reform and development of the coal industry for the period up to 2020", available at: <https://zakon.rada.gov.ua/laws/show/733-2017-p#n84> (Accessed 25 Feb 2020).

3. Ministry of energy and environment protection of Ukraine (2020), "The concept of "green" energy transition of Ukraine to 2050", available at: <https://menr.gov.ua/news/34424.html> (Accessed 26 Feb 2020).

4. Verkhovna Rada of Ukraine (2019), The Law of Ukraine "About the Fundamental Principles (Strategy) of the State Environmental Policy of Ukraine for the Period up to 2030", available at: <https://zakon.rada.gov.ua/laws/show/2697-19> (Accessed 27 Feb 2020).

5. Cabinet of Ministers of Ukraine (2001), "The Ukrainian Coal Program", available at: <https://zakon.rada.gov.ua/laws/show/1205-2001-p> (Accessed 20 Feb 2020).

6. Ministry of Energy and Coal Mining of Ukraine (2001), "Sectoral agreement between the Ministry of Energy and Coal Industry of Ukraine, other state bodies, owners (associations of owners) active in the coal industry, and all-Ukrainian trade unions of the coal industry", available at: <http://mpe.kmu.gov.ua/minugol/doccatalog/document?id=222288> (Accessed 22 Feb 2020).

7. Cabinet of Ministers of Ukraine (2017), "Procedure for selection of investment projects in the coal sector for which state support/assistance in the form of state guarantees is provided", available at: <https://zakon.rada.gov.ua/laws/show/742-2017-p>. (Accessed 22 Feb 2020).

8. Verkhovna Rada of Ukraine (2019), "Budget program "Restructuring of the coal industry"", available at: https://ips.ligazakon.net/document/xi00907a?an=3&ed=2019_12_18 (Accessed 19 Feb 2020).

9. Cabinet of Ministers of Ukraine (2019), "Procedure for using the funds provided in the state budget for the

restructuring of the coal industry", available at: <https://www.kmu.gov.ua/npas/pro-zatverdzhennya-poryadku-vikoristannya-koshtiv-peredbachenih-u-derzhavnomu-byudzheti-dlya-restrukturyzatsiyi-vugilnoyi-galuzi> (Accessed 27 Feb 2020).

10. Ministry of Energy and Coal Mining of Ukraine (2017), "Collective Agreement between the Administration of the Ministry of Energy and Coal Industry of Ukraine and the Primary Trade Union Organization of Employees of the Ministry of Energy and Coal Industry of Ukraine for 2017 - 2021", available at: http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245189291&cat_id=193804 (Accessed 20 Jan 2020).

11. Dolia, I.M. and Kokora, N.V. (2012), "Promoting the modernization of the coal industry in the process of structural transformation of the economy of the old industrial regions", available at: <https://niss.gov.ua/doslidzhennya/regionalniy-rozvitok/schodo-spriyannya-modernizatsiyi-vugilnoi-promislovosti-v-procesi> (Accessed 27 Feb 2020).

Стаття надійшла до редакції 02.04.2020 р.

АГРОСВІТ

www.agrosvit.info

Передплатний індекс: 23847

Виходить 24 рази на рік

Журнал включено до переліку наукових фахових видань України з ЕКОНОМІЧНИХ НАУК (Категорія «Б»)

Спеціальності – 051, 071, 072, 073, 075, 076, 292