SUMMARY
Of the PhD Thesis the specialty: «6D030100-Jurisprudence»
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« Problems of legal support of balance traditional and alternative energy in transition Republic of Kazakhstan to the "green economy »

Relevance of the research topic. At present, the role and importance of relations in the energy sector of the economy, their balanced development and effective regulation are growing.

The whole history of the development of human civilization is a process of energy transformation of the world. In this regard, it should be noted that only technically it is impossible to relate to energy. One must understand the philosophy of energy. After all, energy penetrates into all spheres, our whole life is saturated with energy. Our psychological dependence on energy is extremely strong.

In fact, the importance of energy in human life cannot be overestimated. As the famous scientist Zh. I. Alferov rightly notes, “today there is no more important problem for humanity than the energy one. The preservation of civilization depends on its decision. ”

According to experts, energy issues are a long-term constant in world politics. The topic of reliability of energy supply is becoming a major issue on the agenda of world politics; many, if not most modern states, associate the prospects of their physical survival with this problem.

The specifics of the products of the energy sector - in all its manifestations - led to the recognition by the energy industry of the functions of the basic, backbone industry and the basis of state economic security as a complex multifactor category that characterizes the ability of national economies to expand reproduction in order to balance the needs of their own people to withstand destabilizing factors (internal and external), as well as to ensure competitive ty in the global economic system.

In Kazakhstan, the energy sector is one of the leading links in the country's socio-economic life. The Republic of Kazakhstan is developing to a large extent due to energy exports.

One of the priority areas for the development of the electric power industry and solving environmental problems in Kazakhstan is the use of renewable energy resources and the implementation of energy and resource conservation programs. The course taken by our state is clearly stated in the program and political documents. So, in the Message “New Development Opportunities in the Conditions of the Fourth Industrial Revolution” of the President of the Republic of

Kazakhstan - the Leader of the nation N. A. Nazarbayev to the people of Kazakhstan dated January 10, 2018 emphasizes: “It is important to increase the requirements for energy efficiency and energy saving of enterprises, as well as environmental friendliness and efficiency of energy producers themselves.”

The exhibition “EXPO-2017” held in Astana showed how progress is rapidly moving in the field of alternative, “clean” energy.

Globally, in 2016 there was a record increase in renewable energy capacities (150 GW), especially solar photovoltaic installations and ground-based wind farms (wind farms), thanks to strong political support for the construction, on the one hand, and the improvement of technologies and lower capital costs, especially solar power plants (SES), on the other. Renewable energy accounted for more than half of the increase in generating capacity in the world, and it is expected that until 2040 RES will be the fastest growing new source of energy in the global electricity industry.

The state is taking comprehensive measures to increase the share of energy from renewable sources, for which the Law of the Republic of Kazakhstan “On Supporting the Use of Renewable Energy Sources” was adopted in 2009. Ambitious goals are set: the share of alternative and renewable electricity should reach 50% by 2050.

The incentive to use RES is also the fact that Kazakhstan has committed to reduce its emissions by 15% compared to the level of 1992. This goal will be difficult to achieve only by reducing the energy intensity of the economy. Thus, the role of renewable energy sources will be essential for Kazakhstan.

At the same time, at the present stage of Kazakhstan's development, alternative energy cannot sufficiently meet the country's energy needs. As noted by many foreign researchers, the role of traditional energy is still significant. "You can have high hopes for energy conservation, for the development of alternative energy – solar and wind, but all this will not meet the growing needs of the world."

In addition, there are some negative factors for the introduction of such technologies: low flow density (specific power) and variability in time of most of these energy sources, which causes their high cost, an increase in specific investment compared to traditional power plants. Thus, the Committee on science and technology in England, having analyzed the prospects for the development of such energy sources, came to the conclusion that their use on the basis of modern technologies is at least two to four times more expensive than the construction of nuclear power plants[10]. Thus, alternative energy can replace traditional energy only in the part of distributed energy (that is, where it is impractical to conduct Central energy supply-remote villages or regions. In such places, subject to availability of resources – sun, wind, or biological resources the alternative energy facilities will be more effective). Replacing traditional energy with alternative energy is a matter of economic feasibility.

In this situation, the solution is to develop an optimal balance of traditional and alternative energy.

The development of public relations in the field of energy, as well as the emergence of new objective and subjective factors that affect this sphere, inevitably entail the need to activate the scientific and legal understanding of it.

The dynamic development of the energy sector in Kazakhstan necessitates continuous improvement of the legal framework, which should ensure a balance of interests of all participants in public relations in the energy sector.

All this shows that further improvement of the legal mechanism for ensuring the balance of traditional and alternative energy in the transition of the Republic of Kazakhstan to the "green economy" depends on the continuation of basic scientific research in this area. This implies the need to find ways to balance the interests of the subjects of energy relations.

In this regard, the study of the legal balance of traditional and alternative energy as the key blocks of the energy industry is becoming highly relevant.

The above-mentioned questions and circumstances of legal validity determined the relevance and scientific value of the dissertation research. These factors served as the basis for choosing the topic, developing the directions of the dissertation research, its specifics, structure and methodology.

The degree of development of the topic. The problem of ensuring the balance of traditional and alternative energy is one of the least studied areas in Kazakhstan's legal science.

Comprehensive studies that reveal the systemic issues of the legal mechanism for ensuring the balance of traditional and alternative energy at the present stage of socio-economic development were not undertaken, which determined the scientific novelty and significance of the results of the study.

Some issues related to the topic of this dissertation were investigated in the Kazakh legal science, including the works of Bekisheva S. D., Erkinbayeva L. K., Mukasheva A. A.

In addition, there are currently a number of scientific studies, as well as special works, including the curriculum, in which attempts are made to understand and explain the phenomenon of energy law and its content. Among them are the works of P. G. Lakhno, M. I. Kleandrov, A. p. Vershinin, V. V. Bushuev, S. S. Zankovsky, S. S. Siliverstov, S. A. Svirkov, V. F. Popondopulo, O. A. gorodov, S. V. Matiyashchuk.

The legal problems of energy are also reflected in a number of dissertation studies. Among them it is necessary to allocate dissertations on competition of a scientific degree of the candidate of legal Sciences S. V. Matiyashchuk, S. S. Siliverstova, O. A. Dvinina, E. O. Mamedova, S. O. Retslov, E. V. Kudryashov, S. N. Novikova.

In foreign natural resource and environmental law science, the key theoretical positions in the field of energy security are contained in the works of such well-known legal scientists as S. A. Bogolyubov, M. M. Brinchuk, G. E. Bystrov, M. I. Vasiliev, O. L. Dubovik, N. G. Zhavoronkov, O. S. Kolbasov, V. V. Petrov, Yu. G. Shpakovsky and other authors.

The work and theoretical research of such specialists in the field of General security issues and its legal regulation as S. V. Matiyashchuk, N. A. Malar, A. I. Stakhov, L. A. Tsisar and others are also studied. As for Kazakhstan scientists, the basics of ecological and energy security have been developed here (Baideldinov D. L., bekisheva S. D., abdraimova M. Zh.); legal Institute of compensation for environmental harm (Abdraimov B. Zh.); legal aspects of subsoil use (elyubaev Zh. S., Mukhitdinov N. B., Maulenov K., Moroz S. P.); the essence and content of economic mechanisms of land relations (Bekturganov A. E., Dusipov E. sh.,

Kosanov Zh. K., Khadzhiev A. H., Kholmuminov Zh. T.); legal aspects of water security (Mukasheva A. A.), organizational and legal support of agricultural relations and food security (Erkinbayeva L. K.), legal bases of veterinary safety (Kalymbek B.), etc..

The object of the dissertation - the object of the research is a set of social relations arising from the use of traditional and renewable energy sources in the context of environmental and energy security.

As a subject of dissertation research-the subject of research is the legal norms regulating this sphere of legal relations, law enforcement practice, as well as scientific research in the field under study.

The goals and objectives of the thesis the aim of the study is the solution of urgent scientific and practical problems of improving the legal mechanism of ensuring the balance of traditional and alternative energy based on the concept of transition of Kazakhstan to "green economy".

Achieving this goal involves the following tasks:

- definition of the concept, subject and method of energy law, as well as the concept of environmental and energy security;
- analysis and generalization of foreign experience in legal regulation of traditional and alternative energy development;
- analysis of legal regulation of energy markets functioning within the framework of the Eurasian Economic Union;
- identification of weaknesses, gaps and contradictions in the current legislation of RK governing the balance of traditional and alternative energy in the context of transition of Kazakhstan to "green economy»;
- development of proposals to improve the legislation of the Republic of Kazakhstan in the development of alternative energy, energy efficiency and energy saving;
- development of a set of measures for the development of legal support for the balance of traditional and alternative energy in the transition of the Republic of Kazakhstan to a green economy.

Methodological basis of the study. The methodological basis of the dissertation research is the General scientific dialectical method of knowledge as a way of objective and comprehensive research of reality and its dynamics.

The following scientific methods were used during the research: formal-logical, historical-legal, system-analytical, comparative-legal and concrete-sociological.

The normative basis of the study is the provisions of the current legislation of the Republic of Kazakhstan, international treaties and standards, acts of international organizations, collective agreements, social partnership agreements. In the preparation of the thesis, the author relies on statutory provisions of the Constitution, laws and regulations, international treaties ratified by Kazakhstan, the energy legislation of some foreign countries (EEU, OECD).

Scientific novelty of the research. The scientific novelty of the dissertation research is due to the fact that it is the first comprehensive study of the legal

mechanism for ensuring the balance of traditional and alternative energy in the transition of the Republic of Kazakhstan to a green economy.

The author attempts to formulate a modern concept of energy law in Kazakhstan taking into account modern energy relations. For the first time at the dissertation level, scientifically based conclusions about the prospects for further development of the Energy code of the Republic of Kazakhstan, taking into account current legislation and law enforcement practice, are proposed.

Scientific novelty consists in the development of recommendations and proposals for improving environmental and energy legislation, in terms of environmental protection in the construction, placement and use of nuclear power plants, small hydroelectric power plants, biogas plants, wind farms, as well as a set of measures for the development of traditional and alternative energy of the Republic of Kazakhstan.

The implementation of the results of the dissertation research will ensure the use of both traditional and renewable energy resources and the implementation of energy and resource conservation programs taking into account the interests of environmental protection, life and health of the population of Kazakhstan. In addition, the significance of this research is predetermined by the importance of the renewable energy sector, which is currently a promising and attractive investment direction for the development of the energy sector.

The main provisions of the dissertation submitted for defense. Based on the study of various positions of scientists that have developed in the legal doctrine, existing international acts and legal acts, the author comes to the following conclusions:

1. The analysis of doctrinal and legal sources allowed to formulate the author's definitions of the concepts of energy law, energy relations and environmental and energy security.

Energy law is a complex branch of law, which is a system of legal norms regulating public relations arising in connection with the production and use of energy resources, ensuring energy security and functioning of energy markets in the economy.

The complex nature and nature of energy law is justified, since its subject is formed around a single system of production, distribution, consumption and management of energy resources, the ownership of their regulatory legal norms can not be determined in favor of only public or only private law.

Energy law as a complex education is not an incorporated collection of diversified norms, but a legally meaningful phenomenon.

The subject of energy law is energy relations, which are understood as social relations that develop in the process of economic activity of subjects of energy markets, related to the production and use of energy resources.

The method of energy law is a combination of methods of imperative and dispositive legal regulation, public law and private law principles.

Energy security – the state of protection of the population, objects of social and cultural significance, industry and transport from threats to reliable energy

supply, provided that environmental protection and industrial safety for a long period in normal and emergency conditions.

Environmental and energy security – a system of institutions and conditions that ensure the state of protection of the environment and energy infrastructure, achieving coordination of the interests of the subjects of environmental and energy relations and the interests of economic sectors, effective activities to maintain optimal conditions of the environmental system and sustainable development of the individual and society.

2. The dissertation analyzes the conceptual apparatus of the legislation of the Republic of Kazakhstan regulating the development and use of traditional and alternative energy. A detailed study of the intersectoral nature of the categories found in legal acts allowed us to formulate the author's definition of a number of special concepts, such as:

- "biomass-the total mass of biological origin»;
- "biogas is a gas produced as a result of fermentation of organic waste of livestock and crop production, as well as household waste»;
- "wind power plant-a complex of various structures and equipment, the use of which allows you to convert wind energy into electricity»;
- "geothermal energy – thermal energy generated by the splitting of radionuclides as a result of physical and chemical processes in the earth's interior" (heat of soil, groundwater, rivers and water bodies)»;
- "small hydropower is an energy industry based on the conversion of hydrodynamic water energy for installations with a capacity of up to thirty-five megawatts into electrical energy»;
- "solar power plant-a complex of various structures and equipment, the use of which allows you to convert wind energy into electricity."

3. Currently in Kazakhstan there is no single strategic document that forms the basis of state energy policy and defining key parameters and benchmarks in the area of ensuring the country's energy security taking into account requirements of ecological safety and balance traditional and renewable energy. In this regard, the development and adoption of the Doctrine of environmental and energy security of the Republic of Kazakhstan is justified.

4. Peculiarities of legal regime of renewable energy is still not reflected in the number of relevant legislation: the Environmental code of Kazakhstan, the Water code of the RK, Law of RK "On supporting the use of renewable energy." In the latter, which is the main one for regulating the use of renewable energy sources, there are practically no rules governing the use of solar energy and small hydropower.

The diversity of energy sources and especially their use must find its legal reflection in the Environmental code of Kazakhstan, Law RK "On supporting the use of renewable energy." For this purpose, proposals have been developed to improve the Kazakh legislation.

5. The thesis shows that currently in the scientific literature and legislation there is no clear classification of energy sources on the grounds of alternative, traditional, inexhaustible and renewable, which leads to confusion in the

development of state programs and other measures to stimulate certain energy sectors and disorganization of the state strategy in this area.

The author has developed a unified classification of energy sources, which, despite its conditional nature, at the legislative and administrative levels will allow more specifically to address the issues of stimulating entities using alternative energy sources and the practical implementation of the concept of sustainable development.

Natural resources should be divided into exhaustible and inexhaustible (the latter mainly include water and climate resources). Exhaustible, in turn, must be divided into renewable (plant and animal products) and non-renewable (mineral resources of the subsoil). Renewable resources are natural resources that can regenerate themselves after being partially withdrawn for consumption.

Traditional energy sources should include the oil, natural gas, coal and their derivatives that dominate the world energy balance today, and non-traditional (or otherwise "alternative") sources - not yet so much used in the national economy energy sources.

6. Digitalization processes are of great importance for the effective functioning of energy markets. In the current legislation of the Republic of Kazakhstan, there are practically no rules governing the use of digital technologies in the energy sector. In this regard, it is proposed to develop a legal framework that will determine the use of digital technologies in the operation of energy systems and energy facilities.

7. Modern state of energy relations between Kazakhstan necessitated the development and adoption of the Energy code of the Republic of Kazakhstan with the aim of providing systematization of legal regulation of energy relations and ensuring a balance between the different types of energy, taking into account the transition of Kazakhstan to "green economy".

Theoretical and practical significance of the study. The theoretical significance of the study is that its provisions together form a holistic understanding of the legal mechanism for ensuring the balance of traditional and alternative energy.

The conclusions formulated as a result of the study complement and develop the science of energy law, as well as environmental law.

Theoretical provisions and conclusions can be used in the educational process for teaching academic disciplines: "Energy law" and "Environmental law".

The practical significance of the research is focused on solving topical problems of energy and environmental law. The significance of this work lies in the possibility of using its results in training courses for practitioners, master's and doctoral studies, as well as serve as a basis for further scientific controversy and new research, in the preparation of educational and practical manuals, educational and methodological recommendations on the subject under study.

The results of this research can be used in law-making and law-enforcement activities of state bodies, further development and improvement of the current legislation.

Approbation of the results of the dissertation.

The dissertation was performed at the civil law disciplines of the Kazakh humanitarian and legal innovation University, where it was also discussed.

The results of the research were approved through the publication of scientific articles in scientific publications, participation in conferences of various levels, preparation of educational and methodological material for teaching the discipline "Environmental law".

Publications.

The main provisions of theoretical and methodological nature, and specific research results were reported at international and regional scientific and practical conferences and published in legal periodicals, including journals included in the RSCI database. The rules, conclusions and suggestions of the author set out in the dissertation are reflected in the works published in the following journals: According to the rule On the Ministry of education and science of the Republic of Kazakhstan, the author's articles are published in scientific publications that are included in the list of scientific publications (hereinafter - the list of publications) approved by the authorized body:

- The Problem of Providing Legal Groundwork for the Balance of Traditional and Alternative Energy Development in the Context of Kazakhstan’s Shift to Green Energy // - Journal of Advanced Research in Law and Economics, University of Craiova, Romania. IX, Issue 5(35), Fall 2018. - P. 1716-1728.

- TO THE QUESTION OF THE CONCEPTUAL DEVICE OF THE LAW OF THE REPUBLIC OF KAZAKHSTAN "ON SUPPORT OF THE USE OF RENEWABLE ENERGY SOURCES" // Journal ANNOUNCEMENTS OF UNION OF SCIENTISTS – SLIVEN Announcements of Съюза на учените Union of Scientists Sliven, vol. 33 (1), 2018. - P.143-145.

- «Международно-правовые идеи регулирования энергетических отношений» // Вестник Кыргызского национального университета имени Жусупа Баласагына Ежеквартальный научно-образовательный и информационный журнал Специальный выпуск. (S) – 2019.- С.277-281.

- «Жаңартылатын энергия көздерін пайдалануды қолдау туралы» Қазақстан Республикасы заңының түсінік аппараты туралы мәселе // Қазақстанның ғылымы мен өмірі, халықаралық ғылыми журнал. - 2018.- №4 (62) – 40-43 б.

- История и становление правового регулирования энергетических отношений // Наука и жизнь Казахстана, международный научный журнал. - 2019. - №7/1 – С.72-75.

- Қазақстан Республикасының «жасыл экономикаға» көшу тұжырымдамасы дәстүрлі және балама энергетиканың тепе – теңдігінің негіз құраушы факторы ретінде // Қазақстанның ғылымы мен өмірі, халықаралық ғылыми журнал. - 2019. - №8/3 – 58-61б.

- «Зеленая экономика» и экологическая функция государства // Вестник Казахского гуманитарно-юридического инновационного университета. – 2018. - № 2 (38). - С.32-35.

- ЕАЭО шеңберінде энергетикалық қатынастарды құқықтық реттеу // Қазақ инновациялық гуманитарлық -заң университетінің хабаршысы. – 2018 - № 4 (40). – 46-49 б.

- Шет мемлекеттерінің жаңартылатын энергия көздерін пайдалану мен дамыту саласындағы уәкілетті органдарына салыстырмалы құқықтық талдау // Қазақ инновациялық гуманитарлық -заң университетінің хабаршысы. - 2019. - № 1 (41). – 38-41б.

- Жаңартылатын энергия көздерін пайдалану мен дамыту саласындағы шет мемлекенттердің уәкілетті органдарына салыстырмалы құқықтық талдау // Сборника материалов IV Международной научно-практической конференции «Членство в ВТО: перспективы научных исследований и международного рынка технологий» г. Ванкувер, Канада, 23-25 октября - 2019. – II том. - Р.37-42.

- Қазақстан Республикасында эколого – энергетикалық қауіпсіздікті қамтамасыз етудің құқықтық реттеу мәселесі // V Международная научно-практическая конференция «Менеджмент качества: поиск и решения» г. Сан-Франциско (Калифорния, США) 27-29 ноября 2019. С. 46-52.

- Қазақстан Республикасында энергетикалық қатынастар саласын қамтамасыз ету мәселелері // Қазақстанның ғылымы мен өмірі, халықаралық ғылыми журнал. - 2019. – 12/1 - Б. 84-88.

Structure and scope of the dissertation work. The dissertation consists of notations and abbreviations, an introduction, three sections, eight divisions, a conclusion and a list of sources used.