

**NORMATIVE AND LEGAL FRAMEWORK FOR THE DEVELOPMENT  
OF RENEWABLE ENERGY SOURCES IN THE REPUBLIC OF  
KAZAKHSTAN**



**DOI:10.24411/2588-0209-2018-10009**

**UDC621.311.24(083) (574)**

A.N. Yeleukulova

The article considers the current regulatory and legal framework in the Republic of Kazakhstan, its influence on the development of renewable energy sources and the factors that determined its development. The influence of legislation on the development and use of renewable energy in the country was analyzed.

**Keywords:** regulatory and legal framework, renewable energy sources, energy, energy saving policy, the Concept of industrial and innovative development, the Concept on the transition of Kazakhstan to a "green economy".

One of the significant priorities of Kazakhstan's development strategy is the transition to environmentally safe and sustainable development. The United Nations Conference on Environment and Sustainable Development (Rio de Janeiro, 1992), which documents the policies of all countries to ensure sustainable development and preserve the environment, contributed the development of sustainable natural resource and environmental policy in Kazakhstan. The Declaration on environment and development formed the rights and obligations of all countries to ensure further

development, and the adopted Agenda 21 established a sustainable development agenda that took into account socio-economic and environmental requirements.

Taking into account the ecological situation in the Republic, the Government developed the Decree of the Republic of Kazakhstan in 1996 "About measures for implementation of energy saving policy in the Republic of Kazakhstan" [1]. For achieving these goals, the measures were developed to implement the Energy Saving Program.

The continuation of the energy saving policy in the country was the adoption of the Law of the Republic of Kazakhstan "About Energy Saving" on December 25, 1997 No. 210-I. Regulating public relations in the field of energy saving with the aim of creating conditions for the effective use of fuel and energy resources and environmental protection [2]. Renewable energy resources were identified as a priority area for energy development and environmental problems. In order to fulfill the international obligations undertaken by Kazakhstan under the United Nations framework Convention on climate change in 2003, the government of Kazakhstan adopted a Resolution "on the development of wind power" [3].

The first step in accelerating the development of wind power was the project proposal for the construction of a pilot wind power plant with a capacity of 5 MW in the area of the Dzungarian gate in the mountainous area in the Alma-Ata region on the border with China. The use of wind energy is determined by the following motives:

- contribution to energy independence;
- implementation of international obligations to reduce Greenhouse Gas emissions;
- widespread distribution of renewable energy resources;
- development of the world market of equipment and services;
- comparability of electricity costs from wind power station and with traditional energy;
- financial support of projects.

According to the project of the United Nations Development Program (UNDP) and the Ministry of Energy and Mineral Resources (MEMR) on wind energy, the first wind atlas of Kazakhstan was developed. On the territory of Kazakhstan with an area of 2.7 million square kilometers with an mid- annual wind speed over 7 m / s, it is possible to generate about 1,000 TWh per year. With the view to future, the cost of wind power is projected to be lower than the cost of traditional electricity.

Creation of energy and ecological security of the country is provided in the Strategy of industrial innovative development of the Republic of Kazakhstan for 2003-2015. For solving this problem, there were taken the measures to introduce environmentally pure technologies and create conditions for the sustainable and rational use of renewable resources. The Concept of industrial and innovative development of Kazakhstan for 2015-2019 says that "in order to maximize the mutual interests of the economy and the environment, it is necessary to change the export policy, develop high-tech industries, create industries that are less capacious in the use of natural resources and cause minimal damage to the environment" [4].

The basic instrument of the state environmental and economic policy in the period ahead will be the implementation of measures to reduce pollution, create conditions for stabilizing its quality, which will create the basis for environmentally sustainable development of society. And the proposed measures are directed at implementing structural reforms in the field of environmental management, excluding the use of resources and the creation of closed technological cycles with the integrated use of raw materials and wastes will allow producing competitive products, utilizing valuable components and at the same time reducing the burden on the environment. The developed action plan for the implementation of the Strategy of industrial and innovative development of the Republic of Kazakhstan until 2015 will determine the state foreign and internal policy, legal and economic mechanisms directed at preserving the environment, rational use of natural resources and thereby ensure sustainable development of the state.

Achieving environmental safety is possible with the integration of economic and environmental policies. The provisions of environmental safety should be implemented with reference to scenario versions of forecasts and programs of social economic development of the Republic, taking into account the time horizon required for the full cycle of reproduction of certain types of natural resources. Legal and normative regulation; economic and financial mechanisms; environmental management system; scientific, technical and information support as an element of a single technological cycle of reproduction are considered as conditions that ensure the implementation of environmental safety.

Further regulation of the electric power industry is implementing the Law of the Republic of Kazakhstan "About Electric Power Industry" in order to maximize the demand of energy consumers and ensure a reliable and stable functioning of the electric power complex of the Republic of Kazakhstan [5].

Ensuring long-term ecological sustainability of the Republic is a factor of special importance of the state natural resource and ecological policy.

Transition to sustainable development is an urgent necessity for the Republic of Kazakhstan. Economic growth through the exploitation of natural resources can occur only at a certain stage. In modern conditions, more progressive mechanisms are required for growth and development. The accepted Concept of the Transition of the Republic of Kazakhstan to sustainable development for 2007-2024 determines the vision of principles, purposes, objectives and basic mechanisms for achieving sustainability in all spheres of the country life [6]. In this regard, it is necessary that economic, environmental, social and political factors of development are integrated into a single process aimed at improving the life quality of Kazakhstan population. In order for Kazakhstan to be among the most competitive and developed countries in the world in terms of quality of life by 2024, it is necessary to increase the efficiency of resource use, increase life expectancy, and ensure an increase in the environmental sustainability index. The target development parameters established in the Concept served as the basis for indicative planning for the development of the

country generally, industries, regions and economic entities in particular. Key parameters for achieving environmental quality and a favorable level of environmentally sustainable development were also envisaged in the Concept of Ecological Safety of the Republic of Kazakhstan for 2004-2015 [7]. The concept gave new impulses in the development of the legislative process in the sphere of ecology, on the basis of which there was a restructuring of solving problems related to environmental management.

The concept of environmental safety forms the directions of activities to ensure and maintain a favorable environment and sustainable economic development, prevention of natural disasters and industrial accidents. International experience demonstrates that a basis of the successful solution of environmental problems and prevention of environmental disasters is greening of social and economic system of any state. Environmental safety as an integral part of national security is an indispensable condition for sustainable development and serves as a basis for preserving natural systems and maintaining the appropriate quality of the environment.

One of the means to achieve the prevention of environmentally harmful effects for economic and other activities is the improvement of the management system, in particular the scientific justification of the ecological and economic mechanism of renewable energy sources.

In order to reduce the energy intensity of the economy and the impact of the sector of electricity and heat production on the environment, the Law of the Republic of Kazakhstan "About Support for the use of Renewable Energy Sources" was adopted [8]. For creating favorable conditions of production of electric and thermal energy with use of renewable the main directions are defined.

The use of renewable energy in Kazakhstan depends largely on legislation. The adopted legislation in the country has an impact and forms support for the development of renewable energy sources (Table 1).

Table 1. Analysis of the mutual influence of the current legislation on the development and use of Renewable Energy Sources in Kazakhstan.

Legislative acts, by-laws and other documents	Influence on other factors
Resolution of the Republic of Kazakhstan dated 19.04.1996 "On Measures for the Implementation of Energy Saving Policy in the Republic of Kazakhstan"	Use of fuel and energy resources
Law of the Republic of Kazakhstan of December 25, 1997 No. 210-I. "On energy saving"	Effective use fuel and energy resources in the republic of kazakhstan. and environmental protection
Law of the Republic of Kazakhstan as of January 8, 2003 No. 373-II "On state support of investments"	Providing investment preferences to legal entities
Resolution of the Republic of Kazakhstan of August 25, 2003 No. 857 of 2003 "On the development of wind energy".	Development of wind energy
Law of the Republic of Kazakhstan dated July 9, 2004 No. 588-II "On Electric Power Industry"	Regulation of transmission and consumption of electrical and thermal energy.
The concept of transition of the Republic of Kazakhstan to sustainable development for the period 2007-2024 of November 15, 2006 No. 216	Preparation of incentive conditions for the effective use of RES.
Law of the Republic of Kazakhstan as of 4.07.2009 No. 165-IV "On Support for the Use of Renewable Energy Sources"	Establishment of the basis of public relations in the field of stimulating the use of RES for the production of

	electrical and / or thermal energy.
Decree No. 60 of the Government of the Republic of Kazakhstan of 24.01.2008 "Strategy for the Effective Use of Energy and Renewable Resources of the Republic of Kazakhstan for Sustainable Development until 2024"	Effective use of Renewable Energy Sources. Implementation of state measures to stimulate the use of RES, energy and resource saving technologies
Decree of the President of the Republic of Kazakhstan of 4 June 2013 No. 579 "Concept of innovative development of the Republic of Kazakhstan to 2020"	Conducting scientific research in the field of energy and resource saving;
Law of the Republic of Kazakhstan No. 541-IV of 13.01.2012 "On energy saving and increasing energy efficiency"	Energy saving and increasing energy efficiency
The Decree of the President of the Republic of Kazakhstan dated 30.05.2013 "The Concept on the Transition of Kazakhstan to the" Green Economy "	Implementation of tools for transition to a "green economy".
Decree of the Government of the Republic of Kazakhstan of 24.01.2008 "Strategy for the effective use of energy and renewable resources of the Republic of Kazakhstan for sustainable development until 2024.	Formation of economic mechanisms for the transition to the use of renewable resources and energy sources
Decree of the Government of the Republic of Kazakhstan No. 1497 of December 31, 2013 "Concept of industrial and innovative development of the Republic of Kazakhstan for 2015-2019	Formation of branches on the basis of RES, the widespread dissemination of positive experience
The Address of the President of the Republic of Kazakhstan from December 4, 2012, Strategy "Kazakhstan-2050":	Transition to "breakthrough" energy technologies. Improving the innovative potential of Kazakhstan economy.

UNECE Environmental Bridge Partnership Program, 2011	Promotion of measures to ensure "green" growth in the region
The Decree of the President of the Republic of Kazakhstan dated May 30, 2013 No. 577. The concept of the transition of the Republic of Kazakhstan to a "green economy".	Approaches and provision for the transition of the Republic of Kazakhstan to the "green economy".
The message of the President of the Republic of Kazakhstan to the people of Kazakhstan dated November 30, 2015 "Kazakhstan in the new global reality: growth, reforms, development"	Improving the innovative potential of Kazakhstan economy.

Source : [1-10]

Thus, regulation of the electric power industry in the Republic of Kazakhstan is provided by the legislation of the Republic of Kazakhstan. Taking into account the legislative base in the electric power industry, Kazakhstan needs a support mechanism through the introduction of obligations on the use of renewable energy sources for electricity generation [10].

## References

1. Decree of the Government of the Republic of Kazakhstan of 19.04.1996. On measures to implement energy-saving policies in the Republic of Kazakhstan.
2. Law of the Republic of Kazakhstan "On Energy Saving" of December 25, 1997 No. 210-I
3. Resolution of the Government of the Republic of Kazakhstan of August 25, 2003 N 857 "On the development of wind energy"
4. Decree of the Government of the Republic of Kazakhstan No. 1497 of December 31, 2013 "Concept of industrial and innovative development of the Republic of Kazakhstan for 2015-2019"
5. Law of the Republic of Kazakhstan dated 9.07.2004 No. 588-II "On Energy"



6. Decree of the President of the Republic of Kazakhstan of November 15, 2006 No. 216 "Conception of transition of the Republic of Kazakhstan to sustainable development for 2007-2024"

7. Decree of the President of the Republic of Kazakhstan dated December 3, 2003 No. 1241. "Conception of Ecological Safety of the Republic of Kazakhstan for 2004-2015"

8. Law of the Republic of Kazakhstan dated 4.07.2009. No. 128-V "On Support for the Use of Renewable Energy Sources"

9. <https://www.zakon.kz> (Date of circulation August 18, 2015)

10. The message of the President of the Republic of Kazakhstan to the people of Kazakhstan dated November 30, 2015 "Kazakhstan in the new global reality: growth, reforms, development"

*About the authors:*

**Aina N.Yeleukulova**, master of Economic Sciences, senior lecturer, JSC Astana university (Republic of Kazakhstan, Astana, Abai Avenue 13.  
ORCID: <https://orcid.org/0000-0003-3350-5657>, [aina\\_11\\_70@mail.ru](mailto:aina_11_70@mail.ru)