

ISSN 2224-5294

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

АБАЙ АТЫНДАҒЫ ҚАЗАҚ ҰЛТТЫҚ
ПЕДАГОГИКАЛЫҚ УНИВЕРСИТЕТІНІҢ

Х А Б А Р Л А Р Ы

ИЗВЕСТИЯ

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК
РЕСПУБЛИКИ КАЗАХСТАН

КАЗАХСКИЙ НАЦИОНАЛЬНЫЙ
ПЕДАГОГИЧЕСКИЙ УНИВЕРСИТЕТ ИМ. АБАЯ

NEWS

OF THE NATIONAL ACADEMY OF SCIENCES
OF THE REPUBLIC OF KAZAKHSTAN

ABAY KAZAKH NATIONAL
PEDAGOGICAL UNIVERSITY

ҚОҒАМДЫҚ ЖӘНЕ ГУМАНИТАРЛЫҚ
ҒЫЛЫМДАР СЕРИЯСЫ



СЕРИЯ ОБЩЕСТВЕННЫХ
И ГУМАНИТАРНЫХ НАУК



SERIES OF SOCIAL AND HUMAN SCIENCES

4 (320)

ШІЛДЕ – ТАМЫЗ 2018 ж.

ИЮЛЬ – АВГУСТ 2018 г.

JULY – AUGUST 2018

1962 ЖЫЛДЫҢ ҚАҢТАР АЙЫНАН ШЫҒА БАСТАҒАН

ИЗДАЕТСЯ С ЯНВАРЯ 1962 ГОДА

PUBLISHED SINCE JANUARY 1962

ЖЫЛЫНА 6 РЕТ ШЫҒАДЫ

ВЫХОДИТ 6 РАЗ В ГОД

PUBLISHED 6 TIMES A YEAR

Б а с р е д а к т о р

ҚР ҰҒА құрметті мүшесі
Балықбаев Т.О.

Р е д а к ц и я а л қ а с ы :

экон. ғ. докторы, проф., ҚР ҰҒА академигі **Баймұратов У.Б.**; тарих ғ. докторы, проф., ҚР ҰҒА академигі **Байпақов К.М.**; филос. ғ. докторы, проф., ҚР ҰҒА академигі **Есім Г.Е.**; фил. ғ. докторы, проф., ҚР ҰҒА академигі **Қирабаев С.С.**; эк. ғ. докторы, проф., ҚР ҰҒА академигі **Қошанов А.К.**; эк. ғ. докторы, проф., ҚР ҰҒА академигі **Нәрібаев К.Н.** (бас редактордың орынбасары); филос. ғ. докторы, проф., ҚР ҰҒА академигі **Нысанбаев А.Н.**; заң ғ. докторы, проф., ҚР ҰҒА академигі **Сәбікенов С.Н.**; заң ғ. докторы, проф., ҚР ҰҒА академигі **Сүлейменов М.К.**; эк. ғ. докторы, проф., ҚР ҰҒА академигі **Сатыбалдин С.С.**; тарих ғ. докторы, проф., ҚР ҰҒА академик **Әбжанов Х.М.**; тарих ғ. докторы, проф., ҚР ҰҒА корр. мүшесі **Әбусейтова М.Х.**; тарих ғ. докторы, проф., ҚР ҰҒА академик **Байтанаев Б.А.**; филол. ғ. докторы, проф., ҚР ҰҒА корр. мүшесі **Жақып Б.А.**; фил. ғ. докторы, проф., академик НАН РК **Қалижанов У.К.**; филол. ғ. докторы, проф., ҚР ҰҒА академик **Қамзабекұлы Д.**; тарих ғ. докторы, проф., ҚР ҰҒА академик **Қожамжарова Д.П.**; тарих ғ. докторы, проф., ҚР ҰҒА академик **Қойгелдиев М.К.**; фил. ғ. докторы, проф., ҚР ҰҒА корр. мүшесі **Құрманбайұлы Ш.**; тарих ғ. докторы, проф., ҚР ҰҒА корр. мүшесі **Таймағанбетов Ж.К.**; социол. ғ. докторы, проф., ҚР ҰҒА корр. мүшесі **Шәукенова З.К.**; фил. ғ. докторы, проф., ҚР ҰҒА корр. мүшесі **Дербісәлі А.**; саяси. ғ. докторы, проф., **Бижанов А.К.**, тарих ғ. докторы, проф., **Кабульдинов З.Е.**; фил. ғ. докторы, проф., ҚР ҰҒА корр. мүшесі **Қажыбек Е.З.**

Р е д а к ц и я к е ң е с і :

Молдова Республикасының ҰҒА академигі **Белостечник Г.** (Молдова); Әзірбайжан ҰҒА академигі **Велиханлы Н.** (Азербайджан); Тәжікстан ҰҒА академигі **Назаров Т.Н.** (Тәжікстан); Молдова Республикасының ҰҒА академигі **Рошка А.** (Молдова); Молдова Республикасының ҰҒА академигі **Руснак Г.** (Молдова); Әзірбайжан ҰҒА корр. мүшесі **Муратов Ш.** (Әзірбайжан); Әзірбайжан ҰҒА корр. мүшесі **Сафарова З.** (Әзірбайжан); э. ғ. д., проф. **Василенко В.Н.** (Украина); заң ғ. докт., проф. **Устименко В.А.** (Украина)

«Қазақстан Республикасы Ұлттық ғылым академиясының Хабарлары. Қоғамдық және гуманитарлық ғылымдар сериясы». ISSN 2224-5294

Меншіктенуші: «Қазақстан Республикасының Ұлттық ғылым академиясы» РҚБ (Алматы қ.)

Қазақстан республикасының Мәдениет пен ақпарат министрлігінің Ақпарат және мұрағат комитетінде 30.04.2010 ж. берілген № **10894-Ж** мерзімдік басылым тіркеуіне қойылу туралы куәлік

Мерзімділігі: жылына 6 рет.

Тиражы: 500 дана.

Редакцияның мекенжайы: 050010, Алматы қ., Шевченко көш., 28, 219 бөл., 220, тел.: 272-13-19, 272-13-18, <http://nauka-nanrk.kz>, social-human.kz

© Қазақстан Республикасының Ұлттық ғылым академиясы, 2018

Типографияның мекенжайы: «Аруна» ЖК, Алматы қ., Муратбаева көш., 75.

Главный редактор

Почетный член НАН РК

Т.О. Балыкбаев

Редакционная коллегия:

докт. экон. н., проф., академик НАН РК **У.Б. Баймуратов**; докт. ист. н., проф., академик НАН РК **К.М. Байпаков**; докт. филос. н., проф., академик НАН РК **Г.Е. Есим**; докт. фил. н., проф., академик НАН РК **С.С. Кирабаев**; докт. экон. н., проф., академик НАН РК **А.К. Кошанов**; докт. экон. н., проф., академик НАН РК **К.Н. Нармбаев** (заместитель главного редактора); докт. филос. н., проф., академик НАН РК **А.Н. Нысанбаев**; докт. юр. н., проф., академик НАН РК **С.Н. Сабиткенов**; докт. юр. н., проф., академик НАН РК **М.К. Сулейменов**; докт. экон. н., проф., академик НАН РК **С.С. Сатубалдин**; докт. ист. н., проф., академик НАН РК **Х.М. Абжанов**; докт. ист. н., проф., чл.-корр. НАН РК **М.Х. Абусеитова**; докт. ист. н., проф., академик НАН РК **Б.А. Байтанаев**; докт. фил. н., проф., чл.-корр. НАН РК **Б.А. Жакып**; докт. фиол. н., проф., академик НАН РК **У.К. Калижанов**; докт. фил. н., проф., академик НАН РК **Д. Камзабекулы**; докт. ист. н., проф., академик НАН РК **Д.П. Кожамжарова**; докт. ист. н., проф., академик НАН РК **М.К. Койгельдиев**; докт. фил. н., проф., чл.-корр. НАН РК **Ш. Курманбайулы**; докт. ист. н., проф., чл.-корр. НАН РК **Ж.К. Таймаганбетов**; докт. социол. н., проф., чл.-корр. НАН РК **З.К. Шаукенова**; д. фил. н., проф., чл.-корр. НАН РК **А. Дербисали**; доктор политических наук, проф., **Бижанов А.К.**; доктор ист. наук, проф., **Кабульдинов З.Е.**; доктор фил. н., проф., член-корр. НАН РК **Қажыбек Е.З.**

Редакционный совет

академик НАН Республики Молдова **Г. Белостечник** (Молдова); академик НАН Азербайджанской Республики **Н. Велиханлы** (Азербайджан); академик НАН Республики Таджикистан **Т.Н. Назаров** (Таджикистан); академик НАН Республики Молдова **А. Рошка** (Молдова); академик НАН Республики Молдова **Г. Руснак** (Молдова); чл.-корр. НАН Азербайджанской Республики **Ш. Мурадов** (Азербайджан), член-корр. НАН Азербайджанской Республики **З.Сафарова** (Азербайджан); д. э. н., проф. **В.Н. Василенко** (Украина); д.ю.н., проф. **В.А. Устименко** (Украина)

Известия Национальной академии наук Республики Казахстан. Серия общественных и гуманитарных наук. ISSN 2224-5294

Собственник: РОО «Национальная академия наук Республики Казахстан» (г. Алматы)

Свидетельство о постановке на учет периодического печатного издания в Комитете информации и архивов

Министерства культуры и информации Республики Казахстан № 10894-Ж, выданное 30.04.2010 г.

Периодичность 6 раз в год

Тираж: 500 экземпляров

Адрес редакции: 050010, г. Алматы, ул. Шевченко, 28, ком. 219, 220, тел. 272-13-19, 272-13-18,

www.nauka-nanrk.kz / social-human.kz

© Национальная академия наук Республики Казахстан, 2018 г.

Адрес типографии: ИП «Аруна», г. Алматы, ул. Муратбаева, 75

Chief Editor

Honorary member of NAS RK
Balykbayev T.O

Editorial board:

Doctor of economics, prof, academician of NAS RK **Baimuratov U.B.**; doctor of history, prof, academician of NAS RK **Baipakov K.M.**; doctor of philosophy, prof, academician of NAS RK **Esim G.E.**; doctor of philology, prof, academician of NAS RK **Kirabayev S.S.**; doctor of economics, prof, academician of NAS RK **Koshanov A.K.**; doctor of economics, prof, academician of NAS RK **Naribayev K.N.** (deputy editor-in-chief); doctor of philosophy, prof, academician of NAS RK **Nyssanbayev A.N.**; doctor of law, prof, academician of NAS RK **Sabikenov S.N.**; doctor of law, prof, academician of NAS RK **Suleymenov M.K.**; doctor of economy, prof, academician of NAS RK **Satybaldin S.S.**; doctor of history, prof, academician of NAS RK **Abzhanov H.M.**; doctor of history, prof, corresponding member of NAS RK **Abuseitova M.H.**; doctor of history, prof, academician of NAS RK **Baitanaev B.A.**; doctor of philology, prof, corresponding member of NAS RK **Zhakyp B.A.**; doctor of philology, prof, academician of NAS RK **Kalizhanov U.K.**; doctor of philology, prof, academician of NAS RK **Hamzabekuly D.**; doctor of history, prof, academician of NAS RK **Kozhamzharova D.P.**; doctor of history, prof, academician of NAS RK **Koigeldiev M.K.**; doctor of philology, prof, corresponding member of NAS RK **Kurmanbaiuly Sh.**; doctor of history, prof, academician of NAS RK **Taimaganbetov J.K.**; doctor of sociology, prof, corresponding member of NAS RK **Shaukenova Z.K.**; doctor of philology, prof, corresponding member of NAS RK **Derbisali A.**; doctor of political science, prof **Bizhanov A.K.**; doctor of History, prof **Kabuldinov Z.E.**; doctor of philology, prof, corresponding member of NAS RK **Kazhybek E.Z.**

Editorial staff:

Academician NAS Republic of Moldova **Belostechnik.G** (Moldova); Academician NAS Republic of Azerbaijan **Velikhanli N.** (Azerbaijan); Academician NAS Republic of Tajikistan **Nazarov T.N.** (Tajikistan); Academician NAS Republic of Moldova **Roshka A.** (Moldova) Academician NAS Republic of Moldova **Rusnak G.** (Moldova); Corresponding member of the NAS Republic of Azerbaijan **Muradov Sh.** (Azerbaijan); Corresponding member of the NAS Republic of Azerbaijan **Safarova Z.** (Azerbaijan); Associate professor of Economics **Vasilenko V.N.** (Ukraine), Associate professor of Law **Ustimenko V.A.** (Ukraine)

News of the National Academy of Sciences of the Republic of Kazakhstan. Series of Social and Humanities. ISSN 2224-5294

Owner: RPA "National Academy of Sciences of the Republic of Kazakhstan" (Almaty)

The certificate of registration of a periodic printed publication in the Committee of information and archives of the Ministry of culture and information of the Republic of Kazakhstan N **10894-Ж**, issued 30.04.2010

Periodicity: 6 times a year

Circulation: 500 copies

Editorial address: 28, Shevchenko str., of. 219, 220, Almaty, 050010, tel. 272-13-19, 272-13-18,
[www:nauka-nanrk.kz](http://www.nauka-nanrk.kz) / social-human.kz

© National Academy of Sciences of the Republic of Kazakhstan, 2018

Address of printing house: ST "Aruna", 75, Muratbayev str, Almaty

NEWS

OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN

SERIES OF SOCIAL AND HUMAN SCIENCES

ISSN 2224-5294

Volume 4, Number 320 (2018), 112 – 119

JEL 338.242.2

G.S. Dyusembekova¹, D.S. Aiguzhinova², D.M. Khamitova³

¹S. Toraighyrov Pavlodar State university, Pavlodar, Kazakhstan;

²S. Toraighyrov Pavlodar State university, Pavlodar, Kazakhstan;

³Pavlodar State Pedagogical University, Pavlodar, Kazakhstan

gulsara.dyusembekova@mail.ru; dinara.aiguzhinova@mail.ru; dariga1979@mail.ru

**USE OF RENEWABLES AS FACTOR OF DEVELOPMENT OF
NATIONAL ECONOMY OF THE REPUBLIC OF KAZAKHSTAN**

Abstract. The paper represents the analysis of modern data and information of the development of renewable energy sources (RES) and energy efficiency in the Republic of Kazakhstan. The purpose of this article is to identify trends in the development of alternative energy sources that are economically feasible at the current stage of the development of the energy complex and allow providing sustained growth in the national economy of the Republic of Kazakhstan. Analytical publications, interviews with experts, and other open sources of information were used as sources of secondary data. The conducted research allows formulating a number of conclusions. The Republic of Kazakhstan has a significant potential for the development of alternative energy. However, it shares in total energy production, remains rather low and the available capacities of the RES facilities are not fully utilized. In the context of aggravation of global environmental problems, depletion of traditional types of energy and raw material resources; it has proved necessary to create new energy system, based on RES. The Government of the Republic of Kazakhstan needs to develop a long-term concept of rendering sustainable energy services. In addition, it is necessary to implement a set of measures to strengthen the enabling environment, including higher investments into renewable facilities. One of the most promising mechanisms for supporting the RES sector is the introduction of an auction system for selecting RES projects, which will help solve problems with planning and control of the budget to support RES.

Key words: energy efficiency, energy saving, gross domestic product, energy intensity, renewable energy sources (RES), alternative energy, solar energy, wind power, biofuels, energy potential.

It is impossible to create steady model of economic development without solution of questions of energy efficiency. According to the Government of the Republic of Kazakhstan, the policy of the effective and balanced consumption of energy contains growth of consumption and significantly reduces impact on the environment. Any efforts in this area will promote modernization of manufacturing sector, power industry, housing and communal services, and the transport sector by encouragement of introduction of new technologies and innovations. In this regard the government of Kazakhstan has chosen energy saving and energy efficiency as the main priorities of national power policy, in spite of the fact of the considerable energy country resources and developed power infrastructure. The government has set a goal to reduce power consumption of GDP non less than by 40% by 2020 (The Decree of the President of the Republic of Kazakhstan, May 30, 2013, No. 577).

In November, 2011 Kazakhstan has suggested in the agenda of UN conference on sustainable development discussion of global power ecological strategy of sustainable development in the 21-st century. The eponymous book, written by the President of Kazakhstan Nursultan Nazarbayev, offers an explanation to strategy and describes practical ways of its realization (Nazarbayev 2011). The ultimate goal of this strategy is to reach optimum level of satisfaction of needs of all countries in energy and other natural resources due to complex improvement of use of the renewable energy sources in the middle of the 21-st century (RES).

Now in the Republic of Kazakhstan was adopted several programs, directed to increase the renewables (R) in electricity generation. In 2013 the Concept of transition to “green economy”, which has been fixed by the strategic development plan till 2020 subsequently, has been accepted. According to this document, the share of RES in electric power total production by 2020 has to be increased up to 3%, and by 2030 the share of RES has to make 30%.

However, despite a number of legislative initiatives and measures of the general policy of increase in energy efficiency of the Republic of Kazakhstan needs further improvement, according to the best international practice.

Despite rather high stock of traditional types of fuel, creation of the new power system, based on renewables, is quite important. Kazakhstan, owing to natural data, has enormous potential on introduction RES, whether it be the solar power stations (SPS), hydroelectric power stations (HPS), or the wind power stations (WPS).

Experts allocate two main reasons for the accelerated development of renewables in the Republic of Kazakhstan. First, there is an urgent need of reduction of emissions of greenhouse gases and other pollutants, which main producer is fuel and energy complex of Kazakhstan, generally burned fossil fuel, coal, oil and gas. Secondly, the deficiency of energy grows that can become the limiting factor for further economic growth. The relevance of development of alternative power engineering on the basis of renewables is caused by complexity of the current situation in power branch of the country, including extremely high wear of infrastructure: 70% - the generating capacities, 65% - electrical networks, 80% - thermal networks (The review of state policy of the Republic of Kazakhstan in the field of energy saving and increase in energy efficiency) (The review of state policy of the Republic of Kazakhstan in the field of energy, saving and increase in energy efficiency). Access to power supply still is a problem for more than 8 million residents of the Republic of Kazakhstan. At the same time with growth of economic activity also electricity consumption growth is observed, and certain regions of RK still remain power scarce.

T.L. Afonso and other authors wrote: “The understanding of fragility and non-environmental friendliness of the traditional resources and also conjuncture of their pricing became an initial incentive of development of RES” [1]. The review of literature on problems of use of renewables has shown disappearance of very different power sources under the general term RES [2].

From one hand, long ago large hydropower was successfully operated; from the other hand, rather new types, such as solar power, wind, geothermal sources and even absolutely exotic energy of waves of the ocean [3]. The most common forms of use of renewables are energy of the sun, wind, biomass, hydraulic power, geothermal energy and biofuel [4]. A rich source of renewable energy is wind power. The movements of wind rotation of the earth, generally due to Coriolis’s effect are carried out due to heat from the sun, and [4]. The solar power is the excellent choice in the growing market of RES, environmentally friendly source, doesn’t produce greenhouse gases [5]. As a renewable source of energy, solar technologies are used in power production (solar batteries) or in production of heat and heating of water (solar thermal) [5]. J. Freeman notes: “Energy of biomass is renewable and steady power source, received from organic substances, which can be used for power production and other types of energy” [6]. Through photosynthesis process, the chlorophyll, which is present at plants, absorbs energy from the sun by transformation present carbon dioxide in the atmosphere and waters in carbohydrates. When these plants are burned, the same energy is released in air; they have taken from the sun. For production of fuel from biomass such materials as manure, forest blockages, scrap of timber, mulch, sewage, the separate cultures and some types of waste are used [7]. The hydropower uses water flow for electricity generation. By one of forms of hydroelectric power station it is created due to the movement of water via turbines in a dam.

N. Kelsey has stressed: “The geo power is power source, that doesn’t emit greenhouse gases, which are dangerous to the person and the environment. The term “geothermal” means the earth and heat” [8]. This conclusion quickly indicates definition of geothermal energy, which uses heat from under the Earth’s surface to generate energy. Energy in the earth was formed at disintegration of minerals and the woods many years ago. One of the main advantages of use of renewables is demand smaller costs of service, than traditional generators of energy [9]. Energy production with use of renewable sources makes the minimum impact on the environment as there is practically no release of pollutants, such as, for example carbon dioxide [10]. Enough researches are devoted to questions of justification of economic feasibility of

introduction of RES. Many experts agree in opinion that projects in the field of renewables can bring economic benefits for many regions as the majority of projects far away from the large city centers and suburbs of the capital [11].

Besides the listed advantages of development of RES, experts allocate also the number of shortcomings. The first lack of renewables is difficult for generate and make a large number of the electric power in comparison with traditional generators of fossil fuel [12]. It means that society has to reduce energy consumption, or just build more power objects of RES. Many experts note that for the solution of power problems it is necessary to observe balance of various power sources [13].

Other lack of renewables is reliability of deliveries. Renewables often depends on weather conditions (Banswar at al. 2017b) [3]. So, for example, for hydro generators the rain is necessary to fill dams for providing with flowing water, wind generators need wind to rotate blades, solar collectors need the clear sky and the sun to accumulate heat and the electric power.

Despite such rough rates of development of RES, remain very many skeptics doubting stability of this trend. The main argument consists that energy of RES is commercially noncompetitive, and projects with its use are unstable in the long term (Saavedra at al. 2018). That the “green” energy is too expensive in comparison with traditional, also develops it only thanks to the state support (Parida at al. 2016) [13].

The power consumption of GDP is the most widespread indicator of economic efficiency of use of energy. It pays off as the relation of primary consumption of energy (coal, oil, gas and other energy resources) to real GDP of the country.

The Republic of Kazakhstan is included into ten countries with the highest rates of power consumption of economy (figure 1).

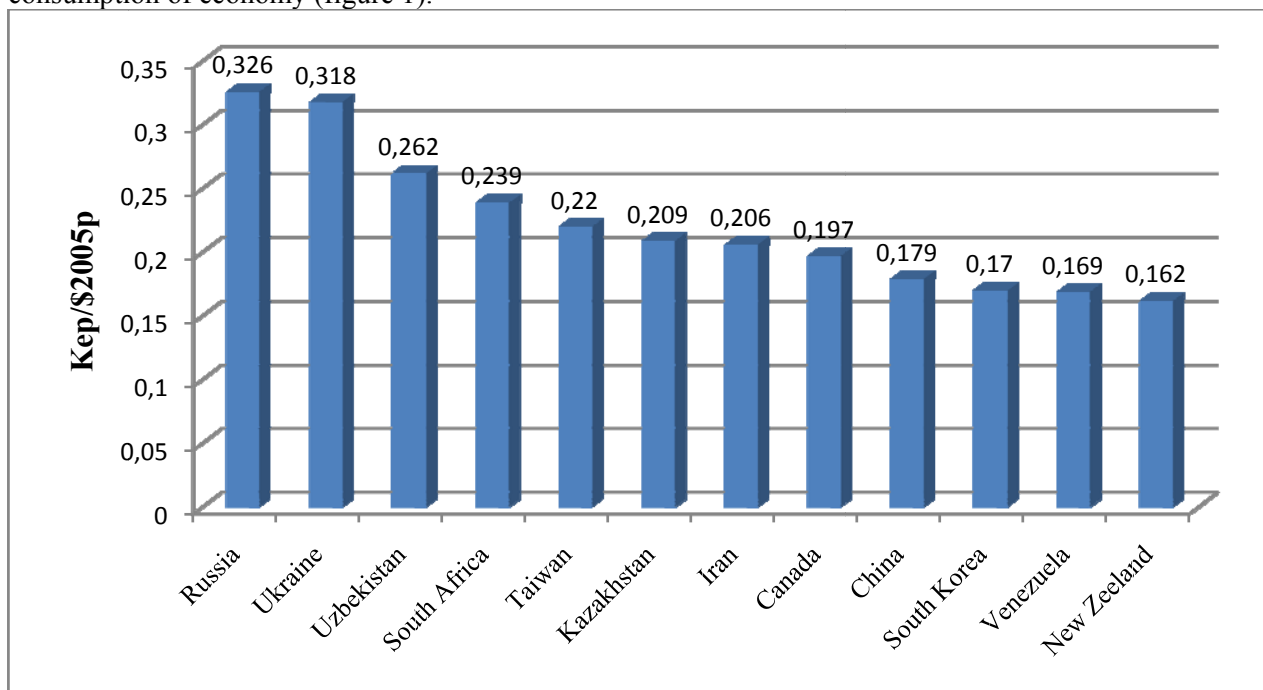


Figure 1 - Indicators of power consumption of GDP, kcp/of \$2005 p (Statistical year-book of world power of 2017)

In general, the power consumption of GDP of the country shows the tendency to decrease energy consumption per capita grows. High power consumption of GDP in Kazakhstan we can explain by the number of the natural reasons:

- severe sharply continental climate, long and cold winter;
- prevalence of power-intensive sectors of economy in structure of GDP;
- extensive populated areas;
- considerable extent of transport infrastructure (oil and gas pipelines, power lines, line water).

According to expected balances of electric energy and power for 2017-2023, the deficiency of the electric power in the Republic of Kazakhstan will be 13,7 billion kWh. Access to clean types of fuel and

technologies for household heating, lighting and cooking is still the problem for inhabitants of the region. Many villagers still show high dependence on solid fuel in houses as other types of fuel are remote.

The government of the Republic of Kazakhstan and the international donors continue to advance decisions in the field of renewables by means of initiatives of improvement of quality of access to energy. Transition from the pilot projects financed by donors to large-scale introduction of renewables for improvement of quality of access to energy to RK remains difficult. Despite 100% coefficient of electrification of the country, quality of power supply from the point of view of reliability, availability and stability remains one of the main problems of access to energy. The leadership of the Republic of Kazakhstan pursues active state policy on development of the renewables (R), which is directed to acceptance of system measures and existing strategic interests of Kazakhstan. Renewables are positioned in recent years by the country as one of priority vectors of development of power complex.

By expert estimates, the Republic of Kazakhstan has the essential potential of development of alternative power engineering. So, the potential of wind power is estimated at 920 billion kWh per year that 10 times exceeds the current consumption of electric energy in the country. Hydro capacity of Kazakhstan is estimated at 62 billion kW, 70% of the current consumption in the country.

As for the potential of solar energy in the southern regions of the country, it is about 2500-3000 thousand sundial per year. In January 1, 2017 50 enterprises, using RES with a total power of 295,7 MW work in the country (hydroelectric power station - 139,8; VES - 98,2; SES - 57,3; biogas installation - 0,35). For 2016 rated capacities of renewable sources in Kazakhstan have increased by 18%.

In 2016 4 RES projects with a total power of 50,39 MW were realized; in 2017 was planned to put into operation 12 objects of RES with the rated volume of 114,25 MW. Rated capacity of wind station has increased from 37% to 98,2 MW, solar stations from 0,4% to 57,3 MW, the thermal power plant on biomass was left without changes - 0,4 MW, and the power of small hydroelectric power stations has grown from 14% up to 139,9 MW.

For the last five years the share of RES in the total amount of generation has increased from 0,5% to 0,98% (figure 2).

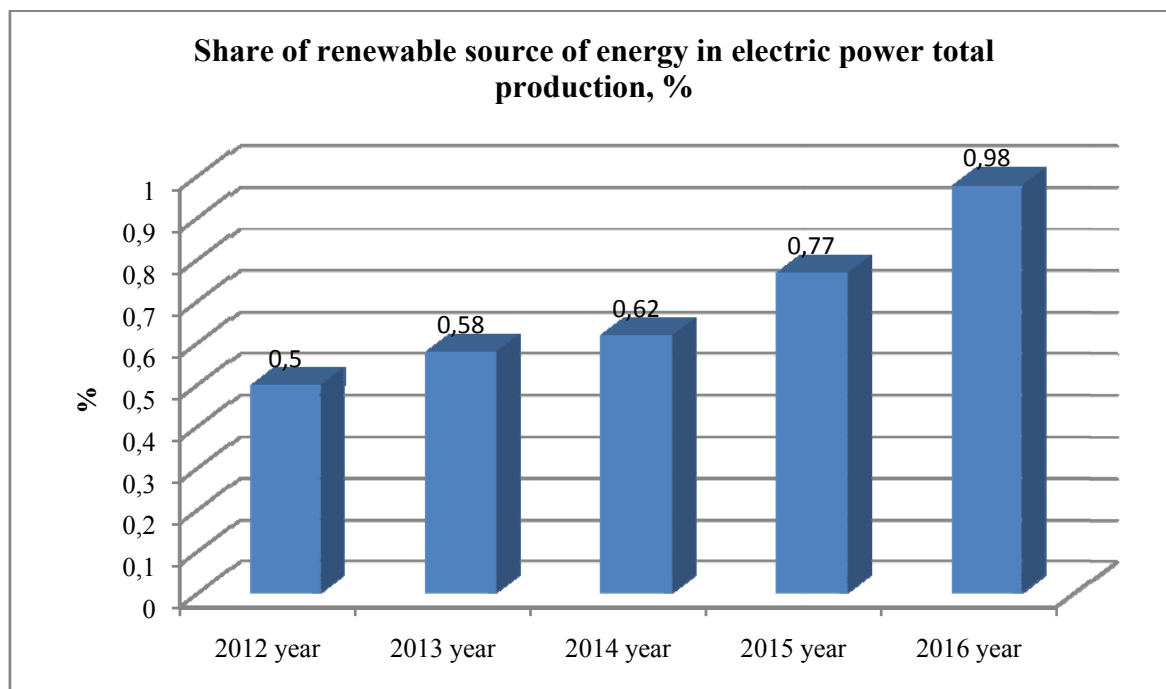


Figure 2 - Share of renewable source of energy in electric power total production in the Republic of Kazakhstan, %

In five years the electric power volume developed by RES has increased by 2,4 times (figure 3).

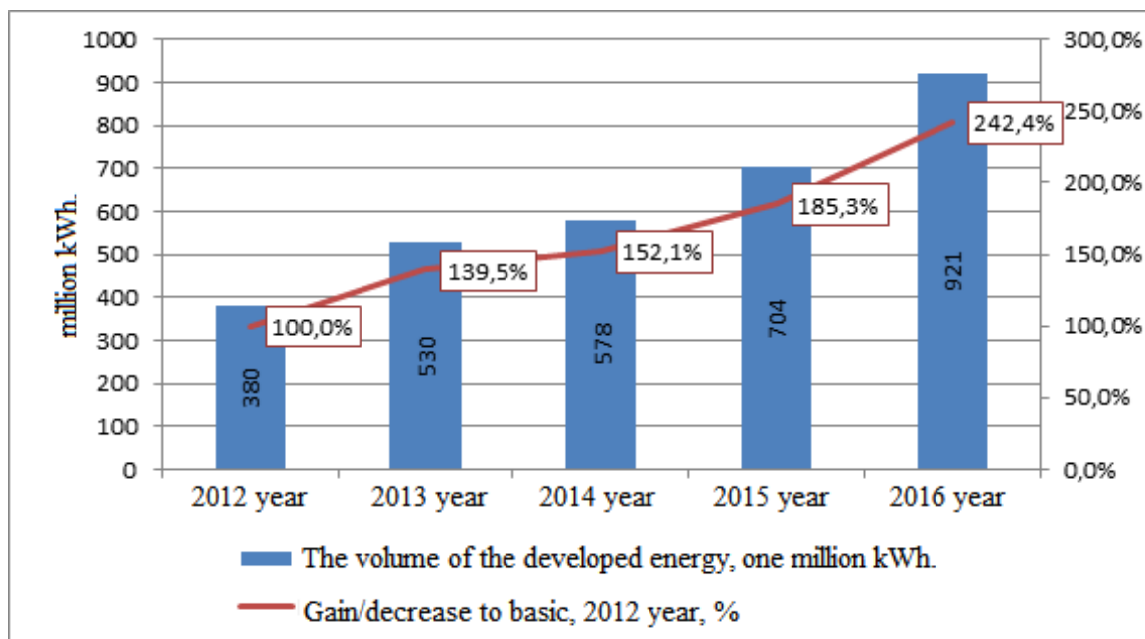


Figure 3 - Dynamics of volumes of the developed electric power of renewable source of energy in RK in 2012-2016 years

Kazakhstan receives other 99% of the electric power from traditional sources: 79% - fuel power plants, 8% gas-pipe and 12% of hydroelectric power station. By the estimates given by the program of partnership “Green Bridge” theoretically the power of all water resources of the country make 170 billion kWh a year from which only 7149, 4 million kWh – only insignificant part now used. Recently in Kazakhstan there are three large hydroelectric power stations: Bukhtarminsky, Ust-Kamenogorsk and Shulbinsky work. Besides, the 300 MW Moynaksky hydroelectric power station – the first station since independence of the country.

Along with large hydroelectric power stations, such as Bukhtarminsky, Ust-Kamenogorsk and Shulbinsky, in the Republic of Kazakhstan small hydroelectric power stations which in 2016 have developed 577,2 million kWh - 10% more intensively develop, than in 2015.

During 2012-2016 production of wind energy has increased more than 100 times. In 2016 wind power stations have developed 275 million kWh, that is twice more than production in 2015 (table 1).

Table 1 - Indicators of electricity generation of RES of RK in 2012-2016.

Indicator	2012 year	2013 year	2014 year	2015 year	2016 year
The electric power made by wind power stations, one thousand kWh	2665	4546,9	13300,8	131722,3	274982,8
The electric power made by solar power stations, one thousand kWh	21	775,8	1268,3	46171	88403,1
The electric power made by hydroelectric power stations one thousand kWh	763726,6	773073,6	826283,1	926919,0	11620764

According to the plan by 2020 there were planned to start 13 objects of VES of the general power 793 MW in the following cities: Almaty, Zhambyl, Kostanay, North Kazakhstan, Akmola, Karaganda and Aktyubinsk regions. The largest object of VES with power of 300 MW is planned to start in the village of Badamsha of Kargalinsky district of the Aktyubinsk region. Implementation of large-scale projects on construction of wind station of new generation needs to introduce the latest construction technologies in order to create the new markets. The Republic of Kazakhstan, realizing the RES small projects, loses these advantages. In 2016 solar power stations have increased development for 92% - to 88,4 million kWh, bio power plants have increased energy production by 4 times, having generated 1,9 million kWh. For the last 10 years the cost of solar energy fell from 1,0 to 0,025 US dollars. It has been reached at the expense of economy of scale, reduction in cost of technologies and transition to market the mechanism.

By 2020 it is planned to put into operation only 4 objects of SES with a general power of 77 MW. The service projects connected with production of the equipment for solar power, the national plan of action for sustainable development of power aren't provided. Experts consider that green power sources become more and more competitive, and soon in power branch there will come the turning point. The existing electro generating capacities – state district power plant, combined heat and power plant – have physically and morally become outdated [14].

One of the central moments in consecutive transition to green economy is the energy efficiency. Now on an indicator of power consumption of GDP Kazakhstan is in number of the countries with the highest values [15].

Experts in power at Stanford University notes, that use of wind power, solar, geothermal and water (hydropower, tidal and wave) energy for electrization of all sectors of economy - considerably will reduce energy consumption, mortality from air pollution, will create millions of jobs (Shakeel at al. 2017) [16], stabilizes energy costs and will keep trillions of dollars on health care. For sustainable development of RK it is necessary to provide access to inexpensive, reliable, steady and modern power sources and to reduce the volume of emissions of greenhouse gases in the energy sector. Increase in efficiency and reduction of emissions will be important for achievement of the ecological purposes.

Experts emphasize importance of creation of new power system, which will be based on renewables, though the economy of Kazakhstan has sufficient stock of traditional types of fuel. There are two main reasons.

First, there is an urgent need of reduction of emissions of greenhouse gases and other pollutants, which main producer is fuel and energy complex of Kazakhstan, which is generally burned fossil fuel, namely coal, oil and gas. Secondly, the deficiency of energy grows and that can be the limiting factor for further economic growth.

Creation of the new energy market assumes development and acceptance of full range of normative documents, including national norms in the field of interaction and trade, and also use of the advanced foreign practice. It will allow adjusting and supporting open dialogue on energy security, introduction of technologies and realization of effective policy between the manufacturing countries, transitors and consumers of energy resources.

As relevant problems of further development of RES in the Republic of Kazakhstan is possible to allocate:

1. To choose and realize the RES effective projects and to attract the best investors with advanced technologies;
2. To lower load from RES of national economy.

Kazakhstan should increase investments into the projects of creation of power infrastructure for increase in energy efficiency and integration of renewables. For creating favorable conditions for investments the Government of RK should develop the long-term concept of rendering steady power services supporting use of the norms, which are based on the principles of rationality and allowing producers and consumers to react to the changing energy market [17].

Future power system demands new technologies and new professional skills. Research and development, commercial introduction of new technologies, attraction of the capital and also management skills are important during transition period. It demands expansion of the international cooperation and exchange of experience.

The role of the international cooperation, strategic partnership and effective functioning of the energy markets and regional corridors is very essential. Exchange of experience and technologies, increase in cross-border investments will accelerate transition.

Introduction of the auction mechanism of support of the sector can become the effective tool of the solution of tasks at implementation of the RES projects. The difference of this mechanism from the mechanism on the basis of the fixed tariffs and green certificates is that: first support only to the suppliers of the electric power selected on competitive basis from RES is carried out. Secondly, the level of tariff is defined not administratively [18].

It is necessary to study the international experience of holding auctions on RES, particularly, to investigate types of contracts and types of auctions on RES, to define characteristics of demand (an

auction product), to study staging and frequency of holding auctions, qualification requirements to participants of an auction [19].

Use of auctions will allow exercising control of rates of development of RES, to plan the budget for its support and also to define tariff for purchase of the electric power from RES on competitive basis [20].

In the conclusion it should be noted, that the conducted research of tendencies of the development of renewables in the Republic of Kazakhstan allows to formulate the following. The high power consumption of GDP of RK, exhaustion of renewable power sources dictates need of development and use of renewables. The Republic of Kazakhstan has the essential potential of development of alternative power engineering. However, their share in the general energy production is still insignificant, and the available capacities of objects of RES are used not rather full.

REFERENCES

- [1]. Afonso, T.L., Marques, A.C., and Fuinhas, J.A. (2017), Strategies to make renewable energy sources compatible with economic growth. *Energy Strategy Reviews*, 18, 121-126.
- [2]. Banshwar, A., Sharma, N.K., Sood, Y.R., and Shrivastava, R. (2017a), Renewable energy sources as a new participant in ancillary service markets. *Energy Strategy Reviews*, 18, 106-120.
- [3]. Banshwar, A., Sharma, N.K., Sood, Y.R., and Shrivastava, R. (2017b), Real time procurement of energy and operating reserve from Renewable Energy Sources in deregulated environment considering imbalance penalties. *Renewable Energy*, 113, 855-866.
- [4]. Chilvers, J., Foxon, T.J., Galloway, S., Hammond, G.P., Infield, D., Leach, M., Pearson, P. JG, Strachan, N., Strbac, G., and Thomson, M. (2017), Realising transition pathways for a more electric, low-carbon energy system in the United Kingdom: Challenges, insights and opportunities. *Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy*, 231(6), 440-477.
- [5]. Choukri, K., Naddami, A., and Hayani, S. (2017), Renewable energy in emergent countries: lessons from energy transition in Morocco. *Energy, Sustainability and Society*, 7(1), 25.
- [6]. Freeman, J., Guarracino, I., Kalogirou, S.A., and Markides, C.N. (2017). A small-scale solar organic Rankine cycle combined heat and power system with integrated thermal energy storage, *Applied Thermal Engineering*, 127, 1543-1554.
- [7]. Grondys, K. (2017), The assessment of the implementation of the concept of sustainable development on the european energy market. *Proceedings of the 9th International Scientific Symposium on Electrical Power Engineering, Elektroenergetika 2017*, 99-103.
- [8]. Kelsey, N., Meckling, J. (2018), Who wins in renewable energy? Evidence from Europe and the United States. *Energy Research and Social Science*, 37, 65-73.
- [9]. Limberger, J., Boxem, T., Pluymaekers, M., Bruhnc, D., Manzella, A., Calcagno, P., Beekman, F., Cloetingh, S., and van Wees, J.-D. (2018), Geothermal energy in deep aquifers: A global assessment of the resource base for direct heat utilization. *Renewable and Sustainable Energy Reviews*, 82(1), 961-975.
- [10]. Mehtre, V.V., Desai, S.G., and Bankar, D.S. (2016), Analysis of a Doubly Fed induction generator based wind farm, *Proceedings - 2016 IEEE International Conference on Technological Innovations in ICT for Agriculture and Rural Development, TIAR 2016*, 7801228, 139-145.
- [11]. Mohd Udaiyappan, A.F., Abu Hasan, H., Takriff, M.S., and Sheikh Abdullah, S.R. (2017), A review of the potentials, challenges and current status of microalgae biomass applications in industrial wastewater treatment. *Journal of Water Process Engineering*, 20, 8-21.
- [12]. Nayar, C.M.A. (2018), Renewable energy, an essential element in India's energy security (electricity). *Lecture Notes in Electrical Engineering*, 440, 43-49.
- [13]. Parida, A., Choudhury, S., Chatterjee, S., and Chatterjee, D. (2016), A cost effective trade-off based renewable power augmented energy efficient load model for manufacturing industries for demand side management. *Cogent Engineering*, 3(1), Date Views: 12.10.2017 <https://www.cogentoa.com/article/10.1080/23311916.2016.1239299.pdf>.
- [14]. Pokharel, R., Grala, R.K., and Grebner, D.L. (2017), Woody residue utilization for bioenergy by primary forest products manufacturers: An exploratory analysis. *Forest Policy and Economics*, 85, 161-171.
- [15]. Saavedra, M. M. R., Fontes, C.H. O., Freires, F. G. M. (2018), Sustainable and renewable energy supply chain: A system dynamics overview. *Renewable and Sustainable Energy Reviews*, 82, 247-259.
- [16]. Shakeel, S.R., Takala, J., and Zhu, L.-D. (2017), Commercialization of renewable energy technologies: A ladder building approach. *Renewable and Sustainable Energy Reviews*, 78, 855-867.
- [17]. Статистический Ежегодник мировой энергетики 2017. Date Views: 12.10.2017 <https://yearbook.enerdata.ru/coal-lignite/coal-world-consumption-data.html>.
- [18]. Vidadili, N., Suleymanov, E., Bulut, C., and Mahmudlu, C. (2017), Transition to renewable energy and sustainable energy development in Azerbaijan. *Renewable and Sustainable Energy Reviews*, 80, 1153-1161.
- [19]. Vivas, F.J., De las Heras, A., Segura, F., and Andújar, J.M. (2018). A review of energy management strategies for renewable hybrid energy systems with hydrogen backup. *Renewable and Sustainable Energy Reviews*, 82, 126-155.
- [20]. Weitzel, T., Glock, C.H. (2018), Energy management for stationary electric energy storage systems: A systematic literature review. *European Journal of Operational Research*, 264(2), 582-606.

Г.С. Дюсембекова¹, Д.С. Айгужинова², Д.М. Хамитова³

ЖАҢАРТЫЛАТЫН ЭНЕРГИЯНЫҢ КӨЗДЕРІН ПАЙДАЛАНУ ҚАЗАҚСТАН РЕСПУБЛИКАСЫНЫҢ ҰЛТТЫҚ ЭКОНОМИКАСЫН ДАМУ ТҰРАҚТЫ ФАКТОРЫ РЕТІНДЕ

Аннотация. Жұмыста Қазақстан Республикасындағы жаңартылатын энергия көздері мен энергиялық тиімділіктің жағдайы туралы ақпараттар мен заманауи деректер талдауы келтірілген. Бұл зерттеу жұмысы өз алдына ҚР ұлттық экономикасында тұрақты өсуге мүмкіндік беретін және энергетикалық кешенді дамытудың қазіргі кезеңінде экономикалық тұрғыдан мүмкін болатын баламалы энергия көздерін дамытудың бағыттарын анықтау мақсатын қояды. Қосымша ақпараттар ретінде сараптамалық, аналитикалық басылымдар мен материалдар және басқа да ашық ақпарат көздері пайдаланылды. Жүргізілген зерттеу жұмыстары келесі қорытындыларды жасауға мүмкіндік береді: Қазақстан Республикасы баламалы энергетиканы дамыту үшін айтарлықтай әлеуетке ие. Дегенмен, олардың жалпы энергия өндірісіндегі үлесі өте төмен болып қалып отыр, ал жаңартылатын энергия көздерінің қол жетімді қуаты толық пайдаланылмайды. Қазіргі кезде ЖЭК-не негізделген жаңа энергетикалық жүйені құру қажеттігі туындап отыр. Қазақстан Республикасының Үкіметі тұрақты энергетикалық қызметтерді ұсыну үшін ұзақ мерзімді тұжырымдаманы әзірлеуі қажет. Бұдан басқа, қолайлы ортаны нығайту бойынша шаралар кешенін іске асыру қажет, оның ішінде, жаңартылатын энергия көздеріне белсенді инвестициялар. ЖЭК секторын қолдаудың перспективалық тетіктерінің бірі - ЖЭК-ны қолдау үшін бюджетті жоспарлау және бақылау мәселелерін шешуге көмектесетін ЖЭК жобаларын таңдау үшін аукциондық жүйені енгізу.

Түйін сөздер: энергиялық тиімділік, энергияны үнемдеу, ЖІӨ, энергиялық сыйымдылығы, жаңартылатын энергия көздері (ЭКЖ), баламалы энергия, күн энергиясы, жел энергиясы, биоотын, энергетический потенциал.

УДК 338.242.2

Г.С. Дюсембекова¹, Д.С. Айгужинова², Д.М. Хамитова³

¹ Павлодарский университет им.С. Торайгырова, Павлодар, Казахстан;

² Павлодарский университет им.С. Торайгырова, Павлодар, Казахстан;

³ Павлодарский государственный педагогический университет, Павлодар, Казахстан

ИСПОЛЬЗОВАНИЕ ВОЗОБНОВЛЯЕМЫХ ИСТОЧНИКОВ ЭНЕРГИИ КАК ФАКТОРА РАЗВИТИЯ НАЦИОНАЛЬНОЙ ЭКОНОМИКИ РЕСПУБЛИКИ КАЗАХСТАН

Аннотация. В статье представлен анализ современных данных и информация о состоянии возобновляемых источников энергии и энергоэффективности в Республике Казахстан. Настоящее исследование ставит своей целью выявить направления развития альтернативных источников энергии, экономически оправданных на современном этапе развития энергетического комплекса и позволяющих обеспечить устойчивый рост национальной экономики РК. В качестве источников вторичной информации были использованы экспертные и аналитические публикации, экспертные материалы и иные открытые источники информации. Проведенное исследование позволяет сформулировать следующие выводы. Республика Казахстан обладает существенным потенциалом развития альтернативной энергетики. Однако, их доля в общем производстве энергии остается достаточно низкой, а имеющиеся мощности объектов ВИЭ используются не в полной мере. В настоящее время возникла необходимость в создании новой энергетической системы, базирующейся на ВИЭ. Правительству РК необходимо выработать долгосрочную концепцию оказания устойчивых энергетических услуг. Кроме того, необходимо реализовать комплекс мер по укреплению благоприятной среды, в т.ч. более активного инвестирования в объекты ВИЭ. Одним из перспективных механизмов поддержки сектора ВИЭ являются внедрение аукционной системы отбора проектов ВИЭ, которая будет способствовать решению проблем с планированием и контролем бюджета на поддержку ВИЭ.

Ключевые слова: энергоэффективность, энергосбережение, энергоёмкость, ВВП, возобновляемые источники энергии (ВИЭ), альтернативная энергетика, солнечная энергия, ветроэнергетика, биотопливо, энергетический потенциал.

Information about authors:

Dyussebekova G.S. - doctor PhD, department of state management, business and law, chair of management and politology, S. Toraihyrov Pavlodar State university, Kazakhstan, Pavlodar;

Aiguzhinova D.S. - candidate of economic sciences, department of state management, business and law, chair of finance and account, S. Toraihyrov Pavlodar State University, Kazakhstan, Pavlodar;

Khamitova D.M. - candidate of economic sciences, department of philology and history, chair of social humanitarian disciplines, Pavlodar State Pedagogical University, Kazakhstan, Pavlodar

МАЗМҰНЫ

<i>Беспяева Р.С., Бугубаева Р.О., Мануэль Ф. Грела.</i> Инновациялық маркетингтік технология негізінде туризм саласын дамыту (ағылшын тілінде).....	5
<i>Сейтова В., Г. Исатаева, Роланд Гизе.</i> Ауыл шаруашылығындағы инновациялық жүйелердің дамуы: әдістемелік тәсілдер (ағылшын тілінде).....	15
<i>Дубина И.Н., Тургинбаева А.Н., Домалатов Е.Б.</i> Инновациялық қызметтегі мемлекеттік-жеке меншік серіктестігінің үлгісін таңдау (ағылшын тілінде).....	21
<i>Кашук Л.И., Мусалимова Б.Т., Симонов С.Г.</i> Жергілікті аймақтың жоғары оқу орындарын қаржыландыру үлгісін жүзеге асыру тәжірибесі, кадрлық саясаты (ағылшын тілінде).....	30
<i>Мынжанова Г.Т., Сайлаубеков Н.Т.</i> Қазақстанның қазіргі кездегі даму жағдайында жоғарғы білім беру саласының адам ресурстарын талдау (ағылшын тілінде).....	37
<i>Абдулина Г.А., Абельданов А.Б.</i> Аймақтардың әлеуметтік-экономикалық дамуы (ағылшын тілінде).....	43
<i>Абдулина Г.А., Жолдасбекова Г.Ж.</i> Білім, ғылым және бизнестің интеграциясы: шетелдік және отандық тәжірибе (ағылшын тілінде).....	49
<i>Игиликова С.И., Малбақов М.М.</i> Қазақ тілі тарихи лексикасы құрамына кіретін «Ұлу» сөзінің мән-мағынасы туралы (ағылшын тілінде).....	57
<i>Бородина А.А., Нұрсана А.Т.</i> Жер асты суларын қорғау мен пайдалануды халықаралық құқықтық реттеу (ағылшын тілінде).....	61
<i>Дайрабаева Г.Б., Малдыбек А.Ж.</i> Түркі әлемі және дінаралық этносаралық төзімділіктің қазақстандық үлгісі (ағылшын тілінде).....	68
<i>Дайстер Ю.С., Билисбаева А.М.</i> Заңды тұлғалардың халықаралық жеке-құқықтық мәртебесін айқындау ерекшеліктері (ағылшын тілінде).....	76
<i>Досмагамбетова Д.Ж.</i> Али Шариати идеалды қоғамның теоретикалық үлгісі ретіндегі мұсылмандық қауым жайлы (ағылшын тілінде).....	83
<i>Жолдасбекова Г.Ж.</i> Заманауи жағдайда интеграциялық үдерістердің дамуы (ағылшын тілінде).....	89
<i>Сыздықова Н.</i> Шет елдердегі және қазақстандағы мемлекеттік аудиттің институционалдық негізі (ағылшын тілінде).....	97
<i>Аюпова З.К., Құсайынов Д.Ө.</i> Орталық Азия мемлекеттерінің құқықтық жүйелері.....	105
<i>Дюсембекова Г.С., Айгужина Д.С., Хамитова Д.М.</i> Жанартылатын энергияның көздерін пайдалану Қазақстан республикасының ұлттық экономикасын дамытудың факторы ретінде.....	112
<i>Иманғалиева Ш.С.</i> Қазақстандық жоғары оқу орындарындағы білім алушылардың бойына негізгі дағды-шеберліктерді дамытуда академиялық ұтқырлықтың рөлі.....	120
<i>Абрахманова Р.С., Рей И.Ю., Саябаев К.М., Алина Г.Б.</i> Ауыл туризміндегі жасыл экономика.....	127
<i>Асанова Ж.Т.</i> Қазақстан мәселелері мемлекеттік мәдениет саясатының мақсаты мен мәні.....	132
<i>Нурғабайлов М.Н., Нурпеисова А.А., Дошан А.С.</i> Экономика және туризм дамуының өндірістік аспектілері.....	136
<i>Сабирова Р.К., Джумаева А.К., Сайынова Л.Қ.</i> Өнеркәсіптік кәсіпорындардағы баға белгілеу әдістері.....	140
<i>Саналиева Л.К., Кенжеғалиева Г.Б., Идельбаева А.С.</i> Инновациялық экономикалық дамудың жаһандық факторы ретінде еліміздің интеллектуальді потенциалын салу үшін қазіргі заманғы экономикалық механикаларды зерттеу.....	144
<i>Әбсаттаров Ф.Б.</i> Құқықтық қазақстандық -азаматтық жоғарғы құқықтық мәдениетінің көрінісі : саяси аспектілері.....	148

* * *

<i>Беспяева Р.С., Бугубаева Р.О., Мануэль Ф. Грела.</i> Инновациялық маркетингтік технология негізінде туризм саласын дамыту (орыс тілінде).....	156
<i>Дубина И.Н., Тургинбаева А.Н., Домалатов Е.Б.</i> Инновациялық қызметтегі мемлекеттік-жеке меншік серіктестігінің үлгісін таңдау (орыс тілінде).....	166
<i>Абдулина Г.А., Абельданов А.Б.</i> Аймақтардың әлеуметтік-экономикалық дамуы (қазақ тілінде).....	176
<i>Абдулина Г.А., Жолдасбекова Г.Ж.</i> Білім, ғылым және бизнестің интеграциясы: шетелдік және отандық тәжірибе (қазақ тілінде).....	182
<i>Игиликова С.И., Малбақов М.М.</i> Қазақ тілі тарихи лексикасы құрамына кіретін «Ұлу» сөзінің мән-мағынасы туралы (қазақ тілінде).....	188
<i>Досмагамбетова Д.Ж.</i> Али Шариати идеалды қоғамның теоретикалық үлгісі ретіндегі мұсылмандық қауым жайлы (қазақ тілінде).....	192
<i>Жолдасбекова Г.Ж.</i> Заманауи жағдайда интеграциялық үдерістердің дамуы (қазақ тілінде).....	198

СОДЕРЖАНИЕ

<i>Беспяева Р.С., Бугубаева Р.О., Мануэль Ф. Грела.</i> Развитие сферы туризма на основе инновационных маркетинговых технологий (на английском языке).....	5
<i>Сейтова В., Исатаева Г., Роланд Гизе.</i> Развитие сельскохозяйственных инновационных систем: методические подходы (на английском языке).....	15
<i>Дубина И.Н., Тургинбаева А.Н., Домалатов Е.Б.</i> Выбор модели государственно-частного партнёрства в инновационной деятельности (на английском языке).....	21
<i>Каиук Л.И., Мусалимова Б.Т., Симонов С.Г.</i> Модель местного финансирования вузов, как инструмент повышения эффективности реализации кадровой политики регионов (на английском языке).....	30
<i>Мынжанова Г.Т., Сайлаубеков Н.Т.</i> Анализ человеческих ресурсов сферы высшего образования Казахстана на современном этапе развития (на английском языке).....	37
<i>Абдулина Г.А., Абельданова А.Б.</i> Социально-экономическое развитие регионов (на английском языке).....	43
<i>Абдулина Г.А., Жолдасбекова Г.Ж.</i> Интеграция образования, науки и бизнеса: зарубежный и отечественный опыт (на английском языке).....	49
<i>Игиликова С.И., Малбаков М.М.</i> О значении слова «Улитка» включен в список историческая лексика казахского языка (на английском языке).....	57
<i>Бородина А.А., Нурсана А.Т.</i> Международно-правовое регулирование охраны и использования подземных вод (на английском языке).....	61
<i>Дайрабаева Г.Б., Малдыбек А.Ж.</i> Тюркский мир и казахстанская модель межрелигиозной и межэтнической толерантности (на английском языке).....	68
<i>Дайстер Ю.С., Билицбаева А.М.</i> Особенности определения международного частно-правового статуса юридических лиц (на английском языке).....	76
<i>Досмагамбетова Д. Ж.</i> Али Шариати об умме как теоретической модели идеального общества (на английском языке).....	83
<i>Жолдасбекова Г.Ж.</i> Развитие интеграционных процессов на современном этапе (на английском языке).....	89
<i>Сыздыкова Н.</i> Институциональная основа государственного аудита в зарубежных странах и Казахстане (на английском языке).....	97
<i>Аюпова З.К., Кусаинов Д.У.</i> Правовые системы стран Центральной Азии.....	105
<i>Дюсембекова Г.С., Айгужина Д.С., Хамитова Д.М.</i> Использование возобновляемых источников энергии как фактора развития национальной экономики республики Казахстан.....	112
<i>Имангалиева Ш.С.</i> Роль академической мобильности в развитии ключевых навыков студентов в казахстанском вузе.....	120
<i>Абрахманова Р.С., Рей И.Ю., Саябаев К.М., Алина Г.Б.</i> Зеленая экономика в сельском туризме.....	127
<i>Асанова Ж.Т.</i> Музеи Казахстана как объект и субъект культурной политики государства	132
<i>Нургабылов М.Н., Нурпеисова А.А., Дошан А.С.</i> Прикладные аспекты развития экономики и туризма.....	136
<i>Сабирова Р.К., Джумаева А.К., Сайынова Л.Қ.</i> Методы ценообразования на промышленных предприятиях.....	140
<i>Саналиева Л.К., Кенжегалиева Г.Б., Идельбаева А.С.</i> Исследование современных экономических механизмов построения интеллектуального потенциала страны как движущего фактора инновационного развития экономики.....	144
<i>Абсаттаров Г.Р.</i> Правовой казахстанец – выражение высокой правовой культуры гражданина: политические аспекты.....	148

* * *

<i>Беспяева Р.С., Бугубаева Р.О., Мануэль Ф. Грела.</i> Развитие сферы туризма на основе инновационных маркетинговых технологий (на русском языке).....	156
<i>Дубина И.Н., Тургинбаева А.Н., Домалатов Е.Б.</i> Выбор модели государственно-частного партнёрства в инновационной деятельности (на русском языке).....	166
<i>Абдулина Г.А., Абельданова А.Б.</i> Социально-экономическое развитие регионов (на казахском языке).....	176
<i>Абдулина Г.А., Жолдасбекова Г.Ж.</i> Интеграция образования, науки и бизнеса: зарубежный и отечественный опыт (на казахском языке).....	182
<i>Игиликова С.И., Малбаков М.М.</i> О значении слова «Улитка» включен в список историческая лексика казахского языка (на казахском языке).....	188
<i>Досмагамбетова Д. Ж.</i> Али Шариати об умме как теоретической модели идеального общества (на казахском языке).....	192
<i>Жолдасбекова Г.Ж.</i> Развитие интеграционных процессов на современном этапе (на казахском языке).....	198

CONTENTS

<i>Bespayeva R.S., Bugubayeva R.O., Manuel F. Grela.</i> Development of the sphere of tourism on the basis of innovative marketing technologies (in English).....	5
<i>Vilena Seitova, Gulzhan Issatayeva, Roland Giese.</i> The development of agricultural innovation systems: methodological approaches (in English).....	15
<i>Dubina I.N., Turginbayeva A.N., Domalotov Ye.B.</i> The choice of public-private partnership in innovation (in English).....	21
<i>Kashuk L.I., Musalimova B.T., Simonov S.G.</i> Model of local financing of higher institutions, as a tool to increase efficiency of implementation of personnel policy in the regions (in English).....	30
<i>Mynzhanova G.T., Sailaubekov N.T.</i> Human resources analysis of higher education sphere in Kazakhstan at the present stage of development (in English).....	37
<i>Abdulina G.A., Abeldanova A.B.</i> Socio-economic development of the region (in English).....	43
<i>Abdullina G.A., Zholdasbekova G.Gh.</i> Integration of education, science and business: foreign and domestic experience (in English).....	49
<i>Igilikova S.I., Malbakov M.M.</i> On the meaning of the word "Snail" is included in the list historical vocabulary of the Kazakh language (in English).....	57
<i>Borodina A.A., Nursapa A.T.</i> International legal regulation of protection and use of underground waters (in English).....	61
<i>Dairabayeva G.B., Maldybek A. Zh.</i> Turkic world and kazakhstani model of interreligious and interethnic tolerance (in English).....	68
<i>Deister Y.S., Bilisbayeva A.M.</i> Peculiarities of determining the private international legal status of legal entities (in English).....	76
<i>Dosmagambetova J.</i> Ali Shariati about ummah as a theoretical model of the ideal society (in English).....	83
<i>Zholdasbekova G.Zh.</i> Development of integration processes at the present stage (in English).....	89
<i>Syzdykova N.</i> Institutional basis of the state audit in foreign countries and Kazakhstan (in English).....	97
<i>Ayupova Z.K., Kussainov D.U.</i> Legal systems of Central Asian countries.....	105
<i>Dyussebekova G.S., Aiguzhinova D.S., Khamitova D.M.</i> Use of renewables as factor of development of national economy of the republic of Kazakhstan.....	112
<i>Imangaliyeva S.</i> The role of academic mobility in students' core competences development in Kazakhstani university.....	120
<i>Abdrakhmanova R.S., Rey I.Yu., Sayabayev K.M., Alina G.B.</i> Green economy in rural tourism.....	127
<i>Asanova Zh.T.</i> Museums of Kazakhstan as object and subject of the cultural policy of the state.....	132
<i>Nurgabylov M.N., Nurpeisova A.A., Doshan A.S.</i> Applied aspects development of economics and tourism.....	136
<i>Sabirova R.K., Dzhumaeva A.K., Sayynova L.K.</i> Methods of pricing on industrial enterprises.....	140
<i>Sanaliev L.K., Kenzhegalieva G.B., Idelbayeva A.S.</i> Investigation of modern economic mechanisms for construction of the intellectual potential of the country as a moving factor of innovative economic development.....	144
<i>Absattarov G.R.</i> Legal kazakhstani - expression of high legal citizen culture: political aspects.....	148
* * *	
<i>Bespayeva R.S., Bugubayeva R.O., Manuel F. Grela.</i> Development of the sphere of tourism on the basis of innovative marketing technologies (in Russian).....	156
<i>Dubina I.N., Turginbayeva A.N., Domalotov Ye.B.</i> The choice of public-private partnership in innovation (in Russian).....	166
<i>Abdulina G.A., Abeldanova A.B.</i> Socio-economic development of the region (in Kazakh).....	176
<i>Abdullina G.A., Zholdasbekova G.Gh.</i> Integration of education, science and business: foreign and domestic experience (in Kazakh).....	182
<i>Igilikova S.I., Malbakov M.M.</i> On the meaning of the word "Snail" is included in the list historical vocabulary of the Kazakh language (in Kazakh).....	188
<i>Dosmagambetova J.</i> Ali Shariati about ummah as a theoretical model of the ideal society (in Kazakh).....	192
<i>Zholdasbekova G.Zh.</i> Development of integration processes at the present stage (in Kazakh).....	198

**PUBLICATION ETHICS AND PUBLICATION MALPRACTICE
IN THE JOURNALS OF THE NATIONAL ACADEMY OF SCIENCES
OF THE REPUBLIC OF KAZAKHSTAN**

For information on Ethics in publishing and Ethical guidelines for journal publication see <http://www.elsevier.com/publishingethics> and <http://www.elsevier.com/journal-authors/ethics>.

Submission of an article to the National Academy of Sciences of the Republic of Kazakhstan implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see <http://www.elsevier.com/postingpolicy>), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. In particular, translations into English of papers already published in another language are not accepted.

No other forms of scientific misconduct are allowed, such as plagiarism, falsification, fraudulent data, incorrect interpretation of other works, incorrect citations, etc. The National Academy of Sciences of the Republic of Kazakhstan follows the Code of Conduct of the Committee on Publication Ethics (COPE), and follows the COPE Flowcharts for Resolving Cases of Suspected Misconduct (http://publicationethics.org/files/u2/New_Code.pdf). To verify originality, your article may be checked by the originality detection service Cross Check <http://www.elsevier.com/editors/plagdetect>.

The authors are obliged to participate in peer review process and be ready to provide corrections, clarifications, retractions and apologies when needed. All authors of a paper should have significantly contributed to the research.

The reviewers should provide objective judgments and should point out relevant published works which are not yet cited. Reviewed articles should be treated confidentially. The reviewers will be chosen in such a way that there is no conflict of interests with respect to the research, the authors and/or the research funders.

The editors have complete responsibility and authority to reject or accept a paper, and they will only accept a paper when reasonably certain. They will preserve anonymity of reviewers and promote publication of corrections, clarifications, retractions and apologies when needed. The acceptance of a paper automatically implies the copyright transfer to the National Academy of sciences of the Republic of Kazakhstan.

The Editorial Board of the National Academy of sciences of the Republic of Kazakhstan will monitor and safeguard publishing ethics.

Правила оформления статьи для публикации в журнале смотреть на сайте:

www:nauka-nanrk.kz

social-human.kz

Редакторы *М.С. Ахметова, Т.А. Апендиев, Д.С. Аленов*
Верстка на компьютере *А.М. Кульгинбаевой*

Подписано в печать 10.08.2018
Формат 60x881/8. Бумага офсетная. Печать – ризограф.
13 п.л. Тираж 500. Заказ 4.