

A.B. Toxambayeva

*Ye.A. Buketov Karaganda State University, Kazakhstan
(E-mail: computer888@bk.ru)*

Factors of sustainable development of the «Green economy»

In the article a lot of attention is paid to development of the green economy in Republic of Kazakhstan. According to «Strategy-2050» of President N.A. Nazarbayev's, Kazakhstan will use renewable and alternative energy sources to create 50 % of the electric capacity generated in Kazakhstan. This is just one component of Kazakhstan's comprehensive initiative to transfer from one of the world's premier hydrocarbon energy producers to a model «green» economy. In addition to green energy creation, Kazakhstan's transition also focuses on water resource conservation, agriculture and waste management, and measures aimed at reducing carbon emissions. Therefore holding such an international event like the Expo 2017 will contribute to accelerating transition to sustainable development in the framework of the «green economy». Kazakhstan has chosen the theme «Future Energy» to promote and discover sustainable global energy solutions. It's one of the largest international meetings are conducted in Central Asia. It will be held during Astana's 20th-anniversary as the nations' capital and celebration the emergence of Independent Kazakhstan generally as an energy and communications hub of Europe. Selected theme of Expo 2017 is bright for the host country and will contribute more prosperous of the region. Kazakhstan is located in a unique and beautiful place to spend this exhibition.

Keywords: green economy, exhibition, energy solutions, development, achievements, environment, communications, natural systems, integration, production.

As is known Expo 2017 will host an International Exposition in Astana, Kazakhstan between June 10 and September 10, 2017. The Expo's theme is «Future Energy», and aims to create a global debate between countries, nongovernmental organizations, companies and the general public.

EXPO 2017 is a recognized expo, also referred to as an international specialized expo, and is part of the World's Fair system. Recognized expos are smaller versions of the Universal expos commonly referred to as World's Fairs. Recognized expos center around a particular theme and are held between World's Fairs, which occur every five years. Kazakhstan has chosen the theme «Future Energy» to promote and discover sustainable, global energy solutions.

President Nazarbayev's own comments reinforce that sentiment. «This will be a turning point for Kazakhstan: It will start a whole new chapter in economic development», the president said. «I want to emphasize the importance of the fact that for the next five years the whole world will be talking about Kazakhstan», the president said, adding that expos offer the opportunity to showcase and advance the latest technological, scientific and cultural achievements.

Hosting recognized Expos, like hosting universal World's Fairs, World Cups or the Olympics is a major coup for any nation. The events bring hundreds of millions of dollars in revenue and immeasurable international exposure to the culture and economy of the host nation. Countries launch major multi-year lobbying efforts to convince the International Exhibitions Bureau that their nation captures the zeitgeist of the moment and is best suited to represent the world and the chosen theme. Kazakhstan launched such an effort and was eventually chosen over the Belgian city of Liege, which received 45 votes.

The green economy is defined as an economy that results in reducing environmental risks and ecological scarcities, and that aims for sustainable development without degrading the environment. It is closely related with ecological economics, but has a more politically applied focus. The 2011 UNEP Green Economy Report argues «that to be green, an economy must not only be efficient, but also fair. Fairness implies recognizing global and country level equity dimensions, particularly in assuring a just transition to an economy that is low- carbon, resource efficient, and socially inclusive».

EXPO 2017 will last three months, include representatives from approximately 100 countries and is expected to draw three to five million visitors, which would make it the largest international gathering of its kind Central Asia has seen. It will be held during Astana's 20th anniversary as the nation's capital and celebrate the emergence of independent Kazakhstan and the wider region as the energy and communications hub of Europe, Asia and the Middle East since the collapse of communism. «Traditionally, EXPO exhibitions have been held in Northeast Asia, Europe and North America», BIE Secretary General Vicente Gonzalez

Loscertales said. «Holding an exhibition in the new (Central Asian) region, which is the bridge between East and West, in a young country, which has developed very good relations with European, Middle Eastern countries, former Soviet republics, as well as with all countries of the Central Asian region is an additional advantage, which also strengthens the position of Astana».

EXPO 2017's Future Energy theme will promote efforts to find sustainable energy solutions to meet growing global demand. Kazakhstan's choice of the topic reflects the recognition by the country's leaders and policymakers that even its vast reserves of natural energy resources are ultimately finite and that eventually the country, and the rest of the world, will have to make the transition to alternative energy sources and greener economies.

Therefore, Kazakhstan officials hope that by helping stimulate international discussion on sustainable green energy and economies, it will also stimulate both within their own country.

In fact, the green economy trend was launched 30 years ago when oil prices went up. Today the situation is completely different; the «black gold» became cheaper and we need to maintain the green energy development trend as a necessary part of addressing climate change. In our country, significant activities have been implemented to introduce green technologies over 10 years by such international organisations as the UNDP (United Nations Development Programme) and EU (European Union) that today clearly show efficiency and influence the quality of life. The business sector should be involved in green projects implementation so that these technologies become widespread. Our three-year experience shows that it is necessary to circulate the results and our projects implementation experience to the maximum and organise trainings aimed at teaching and introducing innovative technologies.

The main priorities in the state's transition to a green economy are:

- 1) increasing the efficiency of using of resources and their management;
- 2) the modernization of existing and construction of new infrastructure ;
- 3) improving the well-being of the population and quality of the environment through cost-effective ways to mitigate the pressure on the environment;
- 4) improve national security, including water security.

The concept of the Republic of Kazakhstan for the transition to a green economy will be implemented in three stages:

1. 2013-2020:

During this period the main priority of the government will be optimization of the resources' use of and improvement of environmental performance, as well as the creation of «green» infrastructure;

2. 2020-2030:

On the basis of the established «green» infrastructure the national economy will be transformed , focusing on the careful use of water , encouragement and stimulation of the development and widespread adoption of renewable energy technologies, as well as the construction of structures on the basis of high standards of energy efficiency;

3. 2030-2050 years:

The transition of the national economy on the principles of the so -called «third industrial revolution», requiring the use of natural resources, subject to their renewability and sustainability.

According to the Concept, the measures for the transition to a green economy will be implemented in the following areas: sustainable use of water resources , the development of sustainable agriculture and high-performance, energy saving and energy efficiency , the development of electric power industry, waste management system , reducing air pollution and the conservation and effective management of ecosystems.

Sustainable development is a process for meeting human development goals while sustaining the ability of natural systems to continue to provide the natural resources and ecosystem services upon which the economy and society depend. While the modern concept of sustainable development is derived most strongly from the 1987 Brundtland Report, it is rooted in earlier ideas about sustainable forest management and twentieth century environmental concerns.

One of the most important events in 2012 include visit to the Republic of the Commission of Experts of the International Exhibitions Bureau, headed by the Chairman of the Commission Steen Christensen. Traditionally Expo took place in north-east Asia, Europe and North America. And an exhibition in a new region, which is the bridge between the East and the West, in a young country that has good relations with the European, Middle Eastern countries, the former Soviet republics, as well as with all the countries of Central Asia - is an additional advantage, strengthening the position of Astana. And in 2017 you will celebrate the 20th anniversary of Astana. June 28, 2012 in Astana hosted an international symposium on «Energy for the future.

Sustainable development of the planet». This is one of the key events for the country in the fight for the right to host Expo – 2017 [1, 2].

The main objective of the symposium is to draw global attention to the issues of strengthening the role of renewable energy sources. Responded to the invitation of Kazakhstan the world's leading scientists. Thus, according to one of the guest speakers Director «Solar Impulse» Bertrand Piccard: «Modern technology, in the event of their promotion at the government level, would allow us to significantly reduce our dependence on fossil energy. Then not only the environment would benefit. Opening these attractive prospects for energy development, we have been able to create more jobs, increased significantly to purchasing power». A landmark event began in 2012 include the participation of the National Project EXPO 2017 World Summit «World Future Energy Summit» (WFES) on the energy of the future of Abu Dhabi. During the Forum, the Kazakh delegation visited the city of the future of solar-powered Masdar. Means the creation of the first cities on the planet with zero carbon dioxide emissions, using in their infrastructure only renewable energy sources. According to the creators of this project Masdar to become a living laboratory for companies and research organizations involved in eco-technologies, regardless of their country of location. It is in Masdar will test in practice the new inventions relating to this sphere.

Mr. Sultan Ahmed Al Jaber expressed readiness to support Kazakhstan in promoting the application of our country to host the international exhibition EXPO-2017: For Kazakhstan, such forums - the most important space for open and fruitful dialogue on development of alternative energy.

That is why the VII Eurasian Forum KAZENERGY «Peace in Times of Change: Building a sustainable energy future», National Project Expo - 2017 stands out. In the main event of the international Eurasian energy sector of Kazakhstan declares itself as a socially responsible state. For nearly two years, Kazakh diplomats presented a bid to host EXPO - 2017 abroad. As part of the advocacy of a new initiative of Kazakhstan learned in Germany, UAE, Brazil, India, South Africa, Australia and other countries have visited our politicians and diplomats.

An important factor in the success of the national project in 2017 is to support the Head of State. In the summer of 2011 at the 38th session of the Council of Foreign Ministers of the Organization of the Islamic Conference, the President of the Republic of Kazakhstan Nursultan Nazarbayev has expressed the hope that the Member States of the support Kazakhstan's bid to host the World Expo - 2017. The President noted that today a vital issue for the whole world is massive investment in energy. If we talk about the pros of this exhibition for our country, then of course they are huge. For example, the development of the infrastructure of Astana, the creation of new jobs, the development of small and medium-sized businesses in the capital.

For residents of the capital will be a huge plus development of city infrastructure related to the Expo - 2017, and as a result, the creation of new jobs. Also new is a strong impetus to the development will be small and medium enterprises of the capital and surrounding regions - especially in the field of public service, hospitality and domestic tourism. Development of domestic tourism, in turn, will lead to an increase in the inflow of foreign tourists to the city. It is expected that the exhibition will visit up to 5 million people (about 50,000 every day) from 100 countries [3, 4].

Facilities erected in the Expo - 2017, will be considered in the future Astana as a major international, exhibition and information-presentation platform. All the three months until the show will last, there will be cultural events, national days and other recreational activities. In addition to the economic, cultural and scientific development of the city, which stimulates EXPO - 2017, it carries with it also a great geopolitical importance. For the first time come to the Expo and the post-Soviet territory in Central Asia. Kazakhstan sees the show as an ideal opportunity to promote dialogue to ensure energy and environmental security, stability and prosperity on a global scale. In Kazakhstan, together with the United Nations Development Programme studied wind potential at a number of sites, the results of which is composed of wind atlas of Kazakhstan.

Kazakhstan has already set up an international database of the energy of the future, in order to demonstrate the achievements of different countries in this field at the international exhibition EXPO - 2017 in Astana. That is, today Kazakhstan is ready to exhibit some of the most interesting from the point of view of scientific novelty and practical significance of the projects. The Exhibition will bring together scientists in the world for the development of clean and renewable energy sources.

Promotion of the «green» economy in Kazakhstan is the main way and the only way to preserve sustainable development. This is due to the fact that Kazakhstan has big environmental problems that other countries have not encountered. In particular, i am talking about the Semipalatinsk nuclear test site, which was closed as a result of the popular movement of Nevada-Semipalatinsk and the President's decisions, but

the consequences of nuclear tests are still affecting them. In addition, there is a huge amount of industrial waste - more than 23 billion tons, of which about 9 billion tons are technogenic mineral formations. The problem of water also belongs here, as Kazakhstan is dependent on border water sources. Experts and environmentalists say that in the next 20-30 years Kazakhstan may face the consequences of global climate change, such as water shortage, aridity, desertification and so on. The development of a green economy will help to reduce these risks and threats [5, 6].

Sustainable development is the organizing principle for sustaining finite resources necessary to provide for the needs of future generations of life on the planet. It is a process that envisions a desirable future state for human societies in which living conditions and resource-use continue to meet human needs without undermining the «integrity, stability and beauty» of natural biotic systems.

Sustainability can be defined as the practice of maintaining processes of productivity indefinitely - natural or human made-by replacing resources used with resources of equal or greater value without degrading or endangering natural biotic systems. Sustainable development ties together concern for the carrying capacity of natural systems with the social, political, and economic challenges faced by humanity. Sustainability science is the study of the concepts of sustainable development and environmental science. There is an additional focus on the present generations' responsibility to regenerate, maintain and improve planetary resources for use by future generations.

Benefits of green economy:

- The green economy has a number of social benefits. In the spare - conviction activity we try to propensity a few positive aspects: Energy doing with slight (prenominal) impact on the environment. In the green economy ar mainly used sources of renewable cleverness and alternative nada sources. Some examples of green technologies are wind, solar, biomass, etc. Greater efficiency and less waste. Products / services of a green economy takes less energy to operate or to carry out their work. Less environmental impact. CO2 emissions are the main cause of the greenhouse effect, the resulting spheric warming (global warming) and climate change. Green economy in the production in the atmosphere emits a smaller amount of blow dioxide (CO2) for the same product.

- Create new jobs.

- The green economy creates new industries, industrial sectors, markets and jobs. By 2020 an estimated 2.8 million new jobs in the green economy. Disadvantages of the green economy

The handicap of the green economy are the following: Higher cost. Like any nascent industry also has a green economy economy of scale and essential endure high technology costs. The cost of green technologies is higher (prenominal) than traditional technologies (but polluting). Less efficient. Some green technologies have yields too low compared to their overall cost and traditional technologies. Over time the research and development improves the performance of green technologies through the application.

In 1992, the UN Conference on Environment and Development published in 1992 the Earth Charter, which outlines the building of a just, sustainable, and peaceful global society in the 21st century. The action plan Agenda 21 for sustainable development identified information, integration, and participation as key building blocks to help countries achieve development that recognizes these interdependent pillars. It emphasizes that in sustainable development everyone is a user and provider of information. It stresses the need to change from old sector-centered ways of doing business to new approaches that involve cross-sectorial coordination and the integration of environmental and social concerns into all development processes. Furthermore, Agenda 21 emphasizes that broad public participation in decision making is a fundamental prerequisite for achieving sustainable development.

Under the principles of the United Nations Charter the Millennium Declaration identified principles and treaties on sustainable development, including economic development, social development and environmental protection. Broadly defined, sustainable development is a systems approach to growth and development and to manage natural, produced, and social capital for the welfare of their own and future generations. The term sustainable development as used by the United Nations incorporates both issues associated with land development and broader issues of human development such as education, public health, and standard of living.

The transition to a Green Economy has a long way to go, but several countries are demonstrating leadership by adopting national «green growth» or «low carbon» economic strategies. And there are many examples of successful, large-scale programs that increase growth or productivity and do so in a sustainable manner. For example:

- The Republic of Korea has adopted a national strategy and a five-year plan for green growth for the period 2009–2013, allocating 2 per cent of its gross domestic product to investment in several green sectors such as renewable energy, energy efficiency, clean technology and water. The government has also launched the Global Green Growth Institute which aims to help countries (especially developing countries) develop green growth strategies.

- In Mexico City, crippling congestion led to a major effort to promote Bus Rapid Transit (BRT), a sophisticated bus system that uses dedicated lanes on city streets. Significant public investment in the BRT has reduced commuting times and air pollution and improved access to public transit for those less able to afford private cars. This remarkable success is now being replicated in cities across Mexico and has led to investment from the federal government in urban public transit for the first time.

- China now invests more than any other country in renewable energy. Its total installed wind capacity grew 64 percent in 2010. This growth is driven by a national policy that sees clean energy as a major market in the near future, and one in which China wants to gain a competitive edge.

- Namibia is managing its natural resources to generate economic, social, and environmental benefits. Local communities across the country are granted the right to use and capitalize on the benefits of using wildlife and other natural resources within the boundaries of «communal conservancies». With an economic incentive to sustainably manage these areas, food and employment is being provided for hundreds of thousands of Namibians in rural areas. More than half of the jobs are filled by women, and wildlife populations have increased.

- Businesses are increasingly leading progress toward a Green Economy. For example, the carpet company Interface FLOR is improving its competitive positioning in this normally petroleum-intensive industry by focusing on how sustainability can enhance its business model. The company is working towards a closed loop system, meaning that its waste products are also its manufacturing inputs. Its company culture reinforces its goals – when employees know they are making a difference in the world, they tend to work harder and be better at their jobs, making the enterprise more productive.

In the understandable need to maximize growth, countries across the world have down-graded environmental targets or are following policies which will make it impossible to see them met. Coal-fired power generation, for example, has made a come-back in many countries. Cheap electricity is seen as much more important than clean power [7, 8].

In many ways, it might seem strange that Kazakhstan is determined to go against this trend. We are among the world's top ten producers of oil and gas and home to the largest oil discovery in of the last four decades (the Kashagan field). Our fossil fuels have driven a ten-fold increase in our national GDP in the last 15 years, allowing us to invest heavily in modern infrastructure and the well-being and prosperity of our citizens.

International rating agency S&P Global Ratings has released a forecast on the dynamics of Kazakhstan's economic recovery in the near future. According to the assumption of international experts, this year, most likely, the republic expects zero growth, and beginning in 2017 the economy will gradually begin to recover. According to S&P Global Ratings forecasts in 2017 the economy of Kazakhstan will grow by 1.5 %, and in 2018 and 2019, GDP growth is projected at 2.2 % and 2.5 % respectively.

However, the agency believes that the economy of Kazakhstan will again show moderate growth rates starting from 2017, while GDP will growth average 2 % in 2017-2019. The forecasted dynamics of macroeconomic indicators will be supported by the growth of investment volumes and the restoration of consumption level. GDP growth also will be due by improved export performance whereas with the gradual increasing of prices for oil, also final commissioning of the Kashagan field.

According to the Committee on Statistics of the Ministry of national economy, the level of GDP per capita was 1796,2 tenge in 1993, whereas according to the results of the previous year this indicator exceeded 2 330 360 tenge, doubling in comparison with 2009. As for the real sector of the economy, the volume of industrial production during the years of Independence increased from 172 million tenge in 1991 to 14,9 trillion tenge by the end of 2015.

A huge leap is observed in the mining industry - from 18 million tenge to 7,5 trillion tenge for the same period. Stable growth dynamics without hesitation is demonstrated by the manufacturing industry, whose volume increased from 143 million tenge (1991) to 5.9 trillion by the results of the previous year. Stable dynamics of growth without hesitation is demonstrated by the manufacturing industry, whose volume increased from 143 million tenge (1991) to 5.9 trillion by the results of the previous year. The colossal growth is also observed in the country's foreign trade turnover: if in 1995 this figure was 9 billion dollars,

from which 5,2 billion – export and 3,8 billion - import, then by the end of 2015 the turnover was 76,5 billion dollars. And this is without taking of trading within the member countries of the EAEC. Strong dynamics is also observed in investments in fixed assets - 47 million tenge in 1991, after three years - already 113,2 billion. In 2002, investments exceeded the bar in 1 trillion tenge, and at the end of last year, the indicator reached 7 trillion tenge.

Kazakhstan has created all the prerequisites for an effective transition to a «green economy». The process of transition to a «green economy» is closely related to the development of Kazakhstan's innovative activity, as it is based on the introduction and using of new technologies to improve the efficiency of energy resources. An important role in the «green economy» is assigned to the process of waste management. Here is an example with the secondary use of paper and cardboard waste. Residents of the Almaty region (Chunja village) are engaged in making cardboard firewood with paper (cardboard) and water. The resulting material is used to replace firewood. This method brings a double positive economic effect: the preservation of the forest fund and the growth of savings of the population, which leads to an increase in the well-being of citizens. If this method is implemented and applied in all regions of Kazakhstan, then forest losses can be minimized.

Also, the formation of the National Sustainable Development Strategy will make it possible to move towards the creation of such a model that is aimed at reducing the level of poverty, improving the life of the population, ensuring environmental security, creating conditions for further transformation of the country's economy in the long term. The model closely connects the «green» economy and sustainable development, defining a new path of development of Kazakhstan. At the same time, ensuring the close linkage of economic, social, institutional and environmental components of sustainable development is one of the fundamental conditions for ensuring national security, as well as the most important aspect of protecting the vital interests of the state and society of the country.

Such initiatives of our country as the transition to a green economy, the formation of the National Strategy for Sustainable Development, the Green Bridge program and the holding of the international specialized exhibition EXPO-2017, the State Program for Water Management for 2014-2040 will undoubtedly become the most important Steps to realization of a new way of development of Kazakhstan.

Experts of the World Bank, authors of the report «Kazakhstan: a long way to recovery, predict that in the very near future Kazakhstan will begin to emerge from an economic impasse. According to the scenario of analysts, 2016 will be a turning point for our country, although there will be not significant GDP growth. In 2017 the GDP of the republic will begin to grow. First, it will grow to 1,9 %, and then to 3,7 % (on the condition that work will begin on the Kashagan field). True, there must be two more conditions: if the price of oil rises to \$ 50 per barrel and if in Russia and China the recession in the economy will finish.

A Green Economy can be thought of as an alternative vision for growth and development; one that can generate growth and improvements in people's lives in ways consistent with sustainable development. A Green Economy promotes a triple bottom line: sustaining and advancing economic, environmental and social well-being [9].

The prevailing economic growth model is focused on increasing GDP above all other goals. While this system has improved incomes and reduced poverty for hundreds of millions, it comes with significant and potentially irreversible social, environmental and economic costs. Poverty persists for as many as two and a half billion people, and the natural wealth of the planet is rapidly being drawn down.

It is why this week the formal countdown to the 'Future Energy' EXPO in 2017 in Astana will begin as we receive the official flag of the Bureau International des Expositions. The global event will see over 100 nations coming to our capital to showcase clean and green energy technology and promote its use worldwide.

It would be easy to dismiss our EXPO as an exhibition which lasts just a few months or even dismiss 'Future Energy' as a fashionable theme for a major oil producer to trumpet. But the reality is that it is a symbol of our nation's determination to pursue green development and play our full part in promoting sustainability around the world.

Domestically, we have already set ourselves a target of meeting at least half of our energy needs from alternative and renewable sources by 2050. We believe there is huge potential to develop wind and solar power in our country as well as to cut energy waste. We are also investing heavily in building a green technology sector to diversify and 'future proof' our economy, creating new high tech, high value employment and attracting fresh investment.

Internationally, we see EXPO 2017 as a key part of our Green Bridge initiative to bring together governments, international organizations and private business to find solutions to sustainable growth. We have to be ambitious in creating partnerships to share technology and best practices with countries throughout the world, no matter their stage of development. We will only begin to tackle climate change successfully when it can be done without putting the brakes on economic growth and the prosperity it brings for our citizens.

It is economics, not altruism, which must drive the green revolution to reduce carbon emissions. There is now a mountain of evidence showing that dealing with the impact of climate change will be much more expensive than the changes needed to slow down and halt it. As we are already seeing, the more frequent and extreme storms and droughts, the reduction in food production due to desertification and the flooding of homes and farmland near the coast all have immense costs.

Therefore, a feature distinguishing it from prior economic regimes is the direct valuation of natural capital and ecological services as having economic value and a full cost accounting regime in which costs externalized onto society via ecosystems are reliably traced back to, and accounted for as liabilities of, the entity that does the harm or neglects an asset. We need to eliminate the false choice between economic growth and sustainable development. I know the scars of the financial crisis are still raw and recovery remains uncertain. But we must also remember that the mistakes which led to the crash in the first place came from putting short-term gains before long-term security. Without putting in place the policies and investment needed for clean energy and production, we will make the same errors. It is why I hope you will join us at EXPO 2017.

References

- 1 Towards a green economy: pathways to sustainable development and poverty eradication, United Nations Environment Programme. — 2011. [Электронный ресурс]. — Режим доступа: https://www.unep.org/greeneconomy/.../unep...greeneconomy/.../green_economyreport.
- 2 Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme: to 2020 Living well, within the limits of our planet, 20.12.2013. — P. 171–200. [Электронный ресурс]. — Режим доступа: <https://www.eea.europa.eu/soer-2015/europe/consumption>.
- 3 Stiglitz J.E., Sen A. and Fitoussi J.P. Report by the Commission on the Measurement of Economic Performance and Social Progress, 2009. [Электронный ресурс]. — Режим доступа: https://en.wikipedia.org/wiki/Commission_on_the_Measurement_of_Economic_Performance_and_Social_Progress.
- 4 Sharon Beder, The Nature of Sustainable Development. — 2nd ed. — Newham: Scribe, 1996.
- 5 Послание Президента Республики Казахстан — Лидера нации Н.А. Назарбаева народу Казахстана «Стратегия «Казахстан-2050». [Электронный ресурс]. — Режим доступа: http://www.akorda.kz/ru/official_documents/strategies_and_programs.
- 6 Севостьянова И. Экономика без ущерба экологии: эксперты всерьез задумались о «зеленых» стратегиях развития / И.Севостьянова // Панорама. — 2011. — 6 мая. — № 1. [Электронный ресурс]. — Режим доступа: http://panoramakz.com/index.php?option=com_content&task=view&id=11887&Itemid=1.
- 7 Гринпис: возобновляемая энергетика развивается недостаточно быстро // Гринпис России. — 2012. — 13 нояб. [Электронный ресурс]. — Режим доступа: <http://www.greenpeace.org/russia/ru/press/>.
- 8 Гайфутдинова В. К 2030 году использование возобновляемых источников не превысит 5 % / В.Гайфутдинова // Капитал. — 2013. — 26 февр. [Электронный ресурс]. — Режим доступа: <http://kapital.kz/details/11635/k-2030-goduispolzovanie-vozobnovlyаемyh-istochnikov-ne-prevysit-5.html>.
- 9 Дияр С.К. «Зеленая» экономика – новый путь развития / С.К. Дияр, А.П. Токтабаев // Деловой Казахстан. — 2013. — 7 марта. — № 8(355). [Электронный ресурс]. — Режим доступа: <http://dknews.kz/zelenaya-ehkonomika-novyjput-razvitiya.htm>.
- 10 [Электронный ресурс]. — Режим доступа: www.stat.gov.kz.

А.Б. Токсамбаева

«ЖАСЫЛ ЭКОНОМИКАНЫҢ» ТҰРАҚТЫ ДАМУЫНЫҢ ФАКТОРЛАРЫ

Мақалада Қазақстан Республикасындағы «жасыл экономиканың» дамуына көп көңіл бөлінген. Қазақстан Республикасы Президенті Н.Ә. Назарбаевтың «Қазақстан–2050» Стратегиясына сәйкес, Қазақстанда жаңартылатын және баламалы энергия көздерін игеру үшін өндірілетін энергияның 50 %-ына не екендігі айтылған. Бұл әлемдік көміртекті энергия тасушы отын түрінен «жасыл экономика» моделіне көшудің кешенді бастамаларының бірі ғана. Қазақстанның «жасыл экономикаға» көшу шеңберінде, сондай-ақ су, ауыл шаруашылығы ресурстарын сақтау және қалдықтарды терең өндеу үшін көмірқышқыл газының тастандыларын азайтуға бағытталған іс-шараларға көңіл бөлу керектігі айтылған. Сондықтан «ЭКСПО-2017» секілді халықаралық оқиға тұрақты дамуға жедел көшуіне

мүмкіндік береді. Энергетика саласында тұрақты жаһандық шешім қабылдау үшін көрменін атауы — «Болашақ энергиясы». Бұл Орталық Азиядағы өтетін аса ірі кездесулердің бірі болмақшы. Көрме ел Астанасының 20-жылдық мерейтойын өткізу шеңберінде, сондай-ақ тәуелсіз Қазақстанның Еуропадағы энергетикалық және коммуникациялық хабы ретінде өтпекші. ЭКСПО-2017 көрменінің таңдап алынған тақырыбы қабылдаушы ел үшін айшықты мезет бола отырып, ел аймақтарының гүлдеп дамуына жағдай жасайды. Аталған көрмені өткізуге Қазақстан өте лайықты және тартымды жерде орналасқан.

Кілт сөздер: жасыл экономика, көрме, энергетикалық шешімдер, дамыту, жетістіктер, қоршаған ортаны қорғау, байланыс, табиғи жүйелер, интеграция, өндірістік.

А.Б. Токсамбаева

Факторы устойчивого развития «зеленой экономики»

В статье уделяется большое внимание развитию «зеленой экономики» в Республике Казахстан. В соответствии со Стратегией-2050 Президента Н.А. Назарбаева Казахстан имеет 50 % вырабатываемой электроэнергии, которая будет использоваться для создания возобновляемых и альтернативных источников энергии. Это лишь один из компонентов комплексной инициативы Казахстана по переходу от энергоносителей мировых производителей углеводородов к модели «зеленой экономики». Кроме того, в рамках перехода Казахстана на «зеленую экономику», а также сохранения водных ресурсов, сельского хозяйства и переработки отходов необходимо обратить внимание на меры, направленные на сокращение выбросов углекислого газа. Экспо-2017 в рамках «зеленой экономики» способствует ускоренному переходу к устойчивому развитию. Для того чтобы найти стабильные глобальные решения в области энергетики и выбрана тема выставки «Энергия будущего». Это одна из крупнейших международных встреч, проводимых в Центральной Азии. Выставка проходит в рамках празднования 20-летия Астаны в качестве столицы наций, а также празднования появления независимого Казахстана в целом в качестве энергетического и коммуникационного хаба Европы.

Ключевые слова: «зеленая экономика», выставка, решения в области энергетики, развитие, достижения, окружающая среда, коммуникации, природные системы, интеграция, производство.

References

- 1 Towards a green economy: pathways to sustainable development and poverty eradication. United Nations Environment Programme. (2011). *unep.org*. Retrieved from https://www.unep.org/greeneconomy/.../unep...greeneconomy/.../green_economyreport.
- 2 Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme: to 2020 Living well, within the limits of our planet, 20.12.2013, pp. 171–200. *eea.europa.eu*. Retrieved from <https://www.eea.europa.eu/soer-2015/europe/consumption>
- 3 Stiglitz J.E., Sen A. and Fitoussi J.P. (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress. *en.wikipedia.org*. Retrieved from https://en.wikipedia.org/wiki/Commission_on_the_Measurement_of_Economic_Performance_and_Social_Progress
- 4 Sharon Beder. (1996). *The Nature of Sustainable Development*. (2nd ed.). Newham: Scribe.
- 5 Poslanie Prezidenta Respubliki Kazakhstan — Lidera natsii N.A. Nazarbaeva narodu Kazakhstana «Stratehiia «Kazakhstan-2050» [Message of the President of the Republic of Kazakhstan-Leader of the Nation N.A. Nazarbaev to the people of Kazakhstan «Strategy «Kazakhstan-2050»]. *www.akorda.kz*. Retrieved from http://www.akorda.kz/ru/official_documents/strategies_and_programs [in Russian].
- 6 Sevostyanova, I. (2011). *Ekonomika bez ushcherba ekolohii: eksperty vserez zadumalis o «zelenykh» stratehiikh razvitiia* [Economy without damage to the environment: experts are seriously thinking about «green» development strategies]. *Panorama – Panorama*. (6 May, No. 1). *panoramakz.com*. Retrieved from http://panoramakz.com/index.php?option=com_content&task=view&id=11887&Itemid=1 [in Russian].
- 7 Hrinpis: vozobnovliaemaia enerhetika razvivaetsia nedostatochno bystro [Greenpeace: Renewable Energy is developing fast enough]. *Hrinpis Rossii – Greenpeace Russia*. (2012, 13 notabria). Retrieved from <http://www.greenpeace.org/russia/ru/press/> [in Russian].
- 8 Gayfutdinova, B. K 2030 godu ispolzovanie vozobnovliaemykh istochnikov ne prevysit 5 % [By 2030 the using of renewable sources will not exceed 5 %]. *Kapital – Capital* (2013, 26 fevralia). *kapital.kz*. Retrieved from [in Russian]. <http://kapital.kz/details/11635/k-2030-goduispolzovanie-vozobnovlyayemykh-istochnikov-ne-prevysit-5.html>
- 9 Diyar, S.K. & Toktabaev, A.R. (2013). «Zelenaia» ekonomika – novyi put razvitiia [«Green» economy – a new way of development]. *Delovoi Kazakhstan – Business Kazakhstan*, 8(355). (7 marta). Retrieved from <http://dknews.kz/zelenaya-ehkonomika-novyijput-razvitiya.htm> [in Russian].
- 10 *stat.gov.kz*. Retrieved from www.stat.gov.kz.