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## TO THE QUESTION OF NEW VECTORS OF SUSTAINABLE DEVELOPMENT OF THE ECONOMY OF THE REPUBLIC OF KAZAKHSTAN

**Abstract.** Sustainable economic development in the last two to three decades requires serious organizational and management costs for these purposes. The growing transboundary environmental impact and other negative consequences also indicate the need to strengthen international activities in the field of security and harmonize their global measures in the direction of implementing the principles of sustainable development. The basis of sustainable development of the country is the parity of relations in the triad man - economy - nature, providing the transition to this mode of interaction between nature and society, which is characterized as the epoch of noospheres. The concept of sustainable development proceeds primarily from two approaches: resource approach (the detection of the maximum permissible, maximum removal of photosynthetic products from the biosphere) and biological (identifying the capabilities of the biosphere to expand and reproduce the production of photosynthesis). This concept reflects an understanding of the close interrelationship between the environmental, economic and social problems of mankind and fact that they can only be resolved in comprehensive manner, subject to close cooperation and coordination of the efforts of all countries of the world. Thus, sustainability is the process of harmonizing the productive forces, ensuring the satisfaction of the necessary needs of all members of society, while preserving and gradually restoring the integrity of the natural environment.

**Key words:** sustainable economic development, transboundary environmental impact, global measures, epoch of noospheres, parity relations, resource approach, biological approach, harmonization of productive forces, natural environment, threats to civilization.

Sustainable economic development in the last two to three decades calls for serious organizational and management costs for these purposes. The growing transboundary environmental impact and other negative consequences also indicate the need to strengthen international security activities and to harmonize their global measures in the implementation of the principles of sustainable development. The basis of sustainable development of the country is the parity of relations in the triad man - economy - nature, providing a transition to this mode of interaction between nature and society, which is characterized as the epoch of noospheres.

The concept of sustainable development proceeds primarily from two approaches: resource approach (the detection of the maximum permissible, maximum removal of photosynthetic products from the biosphere) and biological (identifying the capabilities of the biosphere to expand and reproduce the production of photosynthesis). This concept reflects an understanding of the close interrelationship between the environmental, economic and social problems of mankind and the fact that they can only be resolved in a comprehensive manner, subject to close cooperation and coordination of efforts of all countries of the world. Thus, sustainability is the process of harmonizing the productive forces, ensuring the satisfaction of the necessary needs of all members of society while maintaining and gradual restoration of the integrity of the natural environment, creating opportunities for a balance between its potential and

the needs of people of all generations. In order to determine the perspective directions of sustainable development of the economy of Kazakhstan, we need to consider national environmental problems and identify ways of their elimination. To national environmental problems we can include the following:

- problems of desertification and land degradation;
- zones of ecological disaster;
- problems of depletion and pollution of water resources;
- problems of historical pollution;

This time it is the green industries: conservation, resource efficiency, renewable energy generation, pollution prevention, and waste minimization and recycling, that are the engine of transformation, and all businesses are coming to use their products and services. The phenomena of global warming, peak oil, and environmental dislocation, combined with the incentive and regulatory priorities in the foreign countries provide inevitability to this transformation, making it the key to a successful 21-st century economy. A new way of doing business is emerging out of this transformation- sustainable enterprise- and before long the way all businesses operate will completely change. As sustainable (green) enterprises emerge and interact with each other as suppliers and customers, and as they all become greener, a sustainable economy is developing. The new clean environmental technologies are at the heart of this economic transformation. While some businesses are specializing in producing and distributing them, all businesses are coming to use them.

Environmental gains must generate tangible economic benefits to be successful. Sustainability solutions that combine improved environmental performance and economic benefits are the key to successful climate-change mitigation/adaptation strategies. If the benefits of reduced greenhouse gas production are externalized, distant, and delayed, the motivation to make voluntary large scale reductions will eventually dissipate. Goals for reducing greenhouse gas emissions need to be translated into self-reinforcing market dynamics.

The problem of desertification and land degradation poses a real internal threat to Kazakhstan, most of which is located in the arid zone and about 66% of its territory is subject to varying degrees of desertification. It can grow into a transboundary one, since there is a probability of the transfer of pollutants by air masses over long distances as a result of dust-salt storms. Damage from degradation of pastures, lost income from erosion of arable land, secondary salinization and other causes is about 300 billion tenge.

Sustainability reports, based on the Sustainability Reporting Guidelines, address “materiality” (economic, social, and environmental impact); stakeholder inclusiveness; sustainability context; and “completeness” (scope, boundary, and time covered); and also include sector supplements and national annexes. The Guidelines can be used to benchmark organizational performance with respect to laws, norms, codes, performance standards, and voluntary initiatives; demonstrate organizational commitment to sustainable development; and compare organizational performance over time. Typically large corporations have a department with senior staff to address environmental issues, implement sustainability initiatives, and report on progress. However, smaller businesses have difficulty finding the resources to hire a single environmental officer, let alone a whole department. Environmental performance is more hit or miss with small and mid-size companies.

J.I. Alferov has stressed: “Well-executed green development projects perform extremely well financially. In fact, even though many of the leading-edge developers have strong environmental backgrounds and ideals, the financial rewards of green development are now bringing mainstream developers into the fold at an increasing pace. It is possible- indeed it is the norm- to do well financially by doing the right thing environmentally. For example, project costs can be reduced, buyers or renters will spend less to operate green buildings, and developers can differentiate themselves from the crowd getting a big marketing boost. Benefits of green development can be “reduced capital costs, operating costs, health and productivity benefits, higher perceived value and quality, staying ahead of regulations, and the satisfaction of doing the right thing” [1, P.17].

If the universities and colleges in a region do not have sustainable business education programs to address entrepreneurship and management training in relation to sustainable enterprises- cleantech and green businesses- it is important to the success of a Sustainable Economic Development Strategy to develop and implement such programs. Sustainable business education trains entrepreneurs who may then

succeed at starting up cleantech businesses. Sustainable business education is also important to educate the managers in green businesses with responsibility for environmental programs. In some areas, small business development centers also provide this type of education.

In addition, any effective business attraction program should have as its foundation a strong program for growing currently existing resident businesses. Therefore, all of the Sustainable Economy Initiatives and Green Programs outlined in the earlier sections of this paper can contribute to a Green Business Attraction and Retention Initiative. In particular, it is essential to identify the different business clusters that are already strong in the city, region and those that the city, region wishes to strengthen in order to determine the type of businesses toward which to direct an attraction and retention effort.

Zones of ecological disaster represent a real threat to the internal security of the country. So in Kazakhstan, the Aral and Semipalatinsk regions, are declared zones of ecological disaster, where due to the unfavorable ecological situation, the health of the population is significantly damaged, due to the destruction of natural ecological systems, degradation of flora and fauna.

Kazakhstan belongs to the category of countries with a large deficit of water resources. Currently, water bodies are intensively contaminated by mining, metallurgical and chemical industries, municipal services of cities and represent a real environmental threat. The rivers Irtysh, Nura, Syrdarya, Ili, and Lake Balkhash are the most polluted. Groundwater is also contaminated, which is the main source of drinking water supply for the population.

The imbalance between the anthropogenic pressure on water bodies and their ability to restore has led to the fact that environmental disadvantage has become characteristic of almost all major river basins, and insufficient financing of water management needs has caused extremely unsatisfactory technical conditions of water management facilities and serious worsening of problems supplying the population with drinking water.

T. Bigozhin has insisted, that “well-conceived Sustainable Economic Development Strategy, including the component Sustainable Economy Initiatives and Green Programs is important, but it will not be well implemented unless it is understood and embraced by businesses, government officials, employees, community groups, and residents. Building a culture of sustainability is critical to the integration of sustainability into a city, region’s businesses, not-for-profits, government agencies, and neighborhoods. The city, region can define itself as a sustainable city and residents, businesses, community organizations, and government agencies can create a city-wide culture of sustainability that reduces costs, obtains financial benefits, and contributes to a prosperous economy, while contributing to the environmental and social health of the region, the country, and the world” [2].

The transition to a carbon-constrained world will drive profound changes in every city, region. The question is whether the transition will be dominated by a potentially chaotic response to emergencies or a more orderly process of careful design, implementation, and evaluation. The premises behind the creation of a Sustainable Economic Development Strategy are that a more orderly response to this inevitable transformation can and should be managed and that this will lead to economic benefits. The Sustainable Economy Initiatives and Green Programs described above provide a menu of options for a city, region to choose from in undertaking a Sustainable Economic Development Strategy. In moving to an integrated Sustainable Economic Development Strategy it is important to recognize that the Sustainable Economy Initiatives and Green Programs have important relationships with each other and need to interact with one another in order to begin to build a sustainable economy in a city, region. For example, green businesses are markets for the products and services of cleantech businesses.

In this process, it is important to pay close attention to the business model that is built into the Sustainable Economic Development Strategy. The Strategy should not just result in costs for local, regional government agencies. It is perfectly legitimate to use a portion of increases in business license fees, property taxes, sales taxes, property transfer taxes, and income taxes directly or indirectly attributable to the Strategy as a way to pay for its expenses. However, it is also important for the Strategy to look for all of the potential sources of income and support to supplement government expenditures. Each of the Sustainable Economy Initiatives that are chosen to be incorporated in the Strategy should include an aggressive pursuit of ways to contribute income and support.

The formation of a sustainable economic development model implies reliance on high production efficiency and rational consumption based on highly productive employment, human capital quality

improvement, innovations, and environmental safety. It is important not only to recognize the existence of links between sustainable development and the corresponding economic, social and environmental processes, but also to elaborate a comprehensive long-term support program.

The incorporation of sustainable development goals into government programs and the strategic planning documents that are being prepared on the federal level in the framework of sectoral and territorial goal-setting activities can conduce to better implementation of the Spatial Development Strategy of the Republic of Kazakhstan, as envisaged in the Concept On Strategic Planning in the Republic of Kazakhstan and the List of RK Government Programs. Government programs are grouped into five strategic blocks: Balanced Development; Effective State; Innovative Development and Modernization of the Economy; New Quality of Life; National Security.

High inertia which is clearly manifest in the processes of territorial and spatial development has produced a change in the ranking of RKoblasts by their competitive capacities and investment attractiveness in the domestic market and strengthened the constraints imposed by infrastructural, administrative, and labor-related factors. The aggravation of problems in the sphere of regional development was an upshot of the combined effects of the controversial trends in the inertia-dominated national wealth distribution system and in the dynamically changing system of economic factors that shape the current market environment.

Based on an analysis of the pace of development in the context of changing general economic conditions and with due regard for the provisions stipulated in regional development programs, it has become possible to explain the specific features of each territory and to assess the risks and benefits of each region depending on the decisions adopted in the framework of government investment and social policies. The performance of regional policy mechanisms and tools is assessed on the basis of their proclaimed goals and priorities, qualitative and quantitative parameters, and the practices of dealing with the issues of lowering administrative barriers and promoting development institutions and the infrastructure needed for the support of businesses and administrative structures.

The tools employed in the assessment of investment activity effects are, as a rule, the macroeconomic indices of each territory, which in some cases are augmented by the estimates of the current situation provided by the business community. As demonstrated by Kazakhstan and international best practices, positive effects in the sphere of investment attraction depend on the ability to lower the administrative barriers. In this connection, it becomes fundamentally important to properly assess the performance of regional bodies of executive authority in terms of improving the investment and entrepreneurial climate as a factor responsible for a successful sustainable economic growth trajectory.

The traditional approach views investment activity as something that depends on the degree of industrialization in a given region, because it relies on a well-shaped investment infrastructure consisting of specialized industries and big enterprises capable of ensuring a certain critical investment volume even if the existing conditions are unfavorable. However, the modern investment and industrial policy model aims at comprehensive development of industrial and social infrastructure for sustainable growth, and relies on coordinated measures designed to efficiently use the resource potential, to alter the existing system of spatial and economic relations, and to implement new progressive forms of organizational and administrative structures.

A favorable investment climate displays certain specific features like improving the mechanisms employed in attracting investments into the regions, simplifying the procedures for doing business, creating appropriate infrastructure, borrowing available best practices, and developing proper tools for monitoring and assessing the quality of administrative performance.

The assessment of regions' economic sustainability and potential for recovery after economic crises relies on an analysis of the entire system of indices describing their investment climate, business environment, risks, and potential. Their investment climate ranking in the eyes of investors depends on a comfortable environment for doing business, and for the regions themselves it is an instrument of critical appraisal of their own activity from the point of view of available best practices in achieving a better investment climate provided by the 'leader' regions.

Kazakhstan acceded to the international agreements on the protection of the ozone layer in 1998, and now work is underway to reduce the use of ozone-depleting substances (ODS) and remove them from circulation, introduce new technologies using substances that do not destroy the ozone layer.

In accordance with the Report of the World Bank, Ecosystems of Kazakhstan are distinguished by the uniqueness of biological diversity in Central Asia and on the continent as a whole. The disappearance of plant and animal species results in a loss of diversity at the genetic level and corresponding changes in ecosystems. The main reason for the actual loss of biodiversity is the destruction and degradation of habitats, mainly destruction of forests, soil erosion, pollution of inland and marine water bodies, excessive harvesting of plant and animal species. Not so long ago, the introduction of alien species of plants and animals was also recognized as a serious cause of biodiversity loss [3].

In order to preserve biodiversity, the Republic of Kazakhstan ratified the Convention on Biodiversity in 1994 and developed a national strategy and action plan for the conservation and sustainable use of biological diversity.

In our opinion, the most effective measure of biodiversity conservation was the creation of specially protected natural areas. For instance, the area of specially protected natural areas of the republic is 13.5 million hectares, or 4.9% of the total territory, which is not enough to maintain the ecological balance of biological diversity and below the world standards, which are 10%.

Concept of Transition of the Republic of Kazakhstan to Sustainable Development for 2007-2024 researched the problem of atmospheric air pollution. The problem of atmospheric air pollution is inherent mainly in large cities and industrial agglomerations, where about half of the population lives. The most polluted are 10 cities, 8 of which - with a high level of air pollution. The reasons for the high level of air pollution in the cities are obsolete production technologies, inefficient wastewater treatment facilities, poor quality of used fuel, and poor use of renewable and non-traditional energy sources. At the same time, a significant part of the population of industrial centers lives in the zone of increased influence of harmful emissions, as more than 20% of enterprises do not have a regulatory sanitary protection zone [4].

There is no state waste management system in the republic, including monitoring, storage, processing and utilization of industrial and domestic waste, this is another problem. More than 20 billion tons of production and consumption wastes have been accumulated on the territory of Kazakhstan, including 6.7 billion tons of toxic waste, while a trend is increasing.

Emergence of emergency situations of natural and man-made nature represents a real threat to the country's environmental security. The threat is to cause damage to life, human health and the environment as a result of destructive earthquakes, landslides, mudflows, avalanches, floods, fires, industrial and other accidents at hazardous production facilities.

Significant damage to ecosystems continues to cause forest fires. In this regard, the problem of their timely detection is not solved. There are no reliable and cost-effective aviation means of combating forest fires.

The Republic of Kazakhstan needs the Program of Sustainable Development of the Economy of the Republic of Kazakhstan in the context of climate change. The purpose of this program is laying the foundation for the formation of a national socio-oriented model of economic development and satisfying the needs of the individual and society of Kazakhstan.

In addition, in our opinion, it is necessary to improve the legislation of the Republic of Kazakhstan through its systematization in the field of environmental protection; codification of the environmental legislation of the Republic of Kazakhstan (generalization, systematization and specification of norms for the preservation of the environment and natural resources).

We would also like to say about the ecologization of society through the development of environmental education and training, scientific provision, environmental advocacy and public participation with a view to forming a system of views of society aimed at achieving harmony between man and nature.

In the conclusion we must to remind, that the proposed ways and forms of implementing the sustainable development program of the Republic of Kazakhstan will allow us to complete the process of creating an environmental protection system that is consistent with the principles of sustainable development of the country and ensuring a qualitative improvement of the state of the environment in conditions of global warming. The practical implementation of such a policy should help to attract progressive support to Kazakhstan for the harmonization of its development and social order with developed democratic states.

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ҚАЗАҚСТАН РЕСПУБЛИКАСЫНЫҢ ЭКОНОМИКАСЫН  
ТҰРАҚТЫ ДАМУДЫҢ ЖАҢА ВЕКТОРЛАРЫ МӘСЕЛЕСІНЕ

**Аннотация.** Соңғы екі-үш онжылдықта тұрақты экономикалық даму осы мақсаттар үшін күрделі ұйымдастыру және басқару шығындарын талап етеді. Трансшекаралық әсері және басқа да жағымсыз салдары сонымен қатар қауіпсіздікті қамтамасыз ету саласындағы халықаралық іс-қимылдарды күшейту қажеттігін және тұрақты даму қағидаттарын жүзеге асыру бағытындағы жаһандық шараларды үйлестіру қажеттігін көрсетеді. Елдің тұрақты дамуының негізі - табиғат пен қоғам арасындағы өзара қарым-қатынастың осы режиміне көшуді қамтамасыз ететін адам-экономика-табиғат триадасындағы қатынастардың теңдігі, ол ноосфер дәуірімен сипатталады. Тұрақты даму тұжырымдамасы негізінен екі көзқарасқа негізделді: ресурстық тәсіл (биосфераның фотосинтетикалық өнімдерін максималды алынуын анықтау) және биологиялық (фотосинтездің өндірісін кеңейту және көбейту үшін биосфераның мүмкіндігін анықтау). Бұл тұжырымдама адамзаттың экологиялық, экономикалық және әлеуметтік проблемалары арасындағы тығыз өзара қарым-қатынас пен олардың тек қана тығыз ынтымақтастық пен әлемнің барлық елдерінің күш-жігерін үйлестіруге негізделген жан-жақты түрде шешілуі мүмкін екендігін көрсетеді. Осылайша, тұрақтылық - өндірісті күштерді үйлестіру, табиғи ортаны сақтап, біртіндеп қалпына келтіру кезінде қоғамның барлық мүшелерінің қажетті қажеттіліктерін қанағаттандыруды қамтамасыз ету процесі.

**Түйін сөздер:** тұрақты экономикалық даму, трансшекаралық экологиялық әсер, ғаламдық шаралар, ноосфераның дәуірі, паритеттік қарым-қатынас, ресурстық көзқарас, биологиялық көзқарас, өндіріс күштерін үйлестіру, табиғи орта, өркениетке қауіп-қатерлер.

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К ВОПРОСУ О НОВЫХ ВЕКТОРАХ УСТОЙЧИВОГО РАЗВИТИЯ ЭКОНОМИКИ  
РЕСПУБЛИКИ КАЗАХСТАН

**Аннотация.** Устойчивое экономическое развитие в последние два-три десятилетия требует серьезных организационных и управленческих расходов на указанные цели. Растущая трансграничное экологическое воздействие и другие негативные последствия свидетельствуют также о необходимости усиления международной деятельности в сфере обеспечения безопасности и создания согласованию их глобальных мер в направлениях реализации принципов устойчивого развития. Основой устойчивого развития страны является паритетность отношений в триаде человек - хозяйство - природа, обеспечивающий переход к такому способу взаимодействия природы и общества, который характеризуется как эпоха ноосфер. Концепция устойчивого развития исходит преимущественно из двух подходов: ресурсного (выявление предельно допустимого, то есть предельного изъятия из биосферы продукции фотосинтеза) и биологического (выявление способностей биосферы расширять и воспроизводить продукцию фотосинтеза). Эта концепция отражает понимание тесной взаимосвязи экологических, экономических и социальных проблем человечества и того факта, что они могут быть решены только комплексно, при условии тесного сотрудничества и координации усилий всех стран мира. Таким образом, устойчивость - это процесс гармонизации производительных сил, обеспечение удовлетворения необходимых потребностей всех членов общества при сохранении и поэтапного восстановления целостности природной среды.

**Ключевые слова:** устойчивое экономическое развитие, трансграничное экологическое воздействие, глобальные меры, эпоха ноосфер, паритетные отношения, ресурсный подход, биологический подход, гармонизация производительных сил, природная среда, угрозы цивилизации.