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АКИМАТ ВОСТОЧНО-КАЗАХСТАНСКОЙ ОБЛАСТИ  
AKIMAT OF EAST-KAZAKHSTAN REGION



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МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РЕСПУБЛИКИ КАЗАХСТАН  
MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN

Д. СЕРИКБАЕВ атындағы ШЫҒЫС ҚАЗАҚСТАН МЕМЛЕКЕТТІК  
ТЕХНИКАЛЫҚ УНИВЕРСИТЕТІ  
ВОСТОЧНО-КАЗАХСТАНСКИЙ ГОСУДАРСТВЕННЫЙ ТЕХНИЧЕСКИЙ  
УНИВЕРСИТЕТ им. Д. СЕРИКБАЕВА  
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**«Жасыл экономика – адамзат болашағы»  
Халықаралық ғылым және тәжірибелік конференциясының**

## **МАТЕРИАЛДАРЫ**

**24, 25 мамыр**

**IV бөлім**

## **МАТЕРИАЛЫ**

**Международной научно-практической конференции  
«Зеленая экономика – будущее человечества»**

**24, 25 мая**

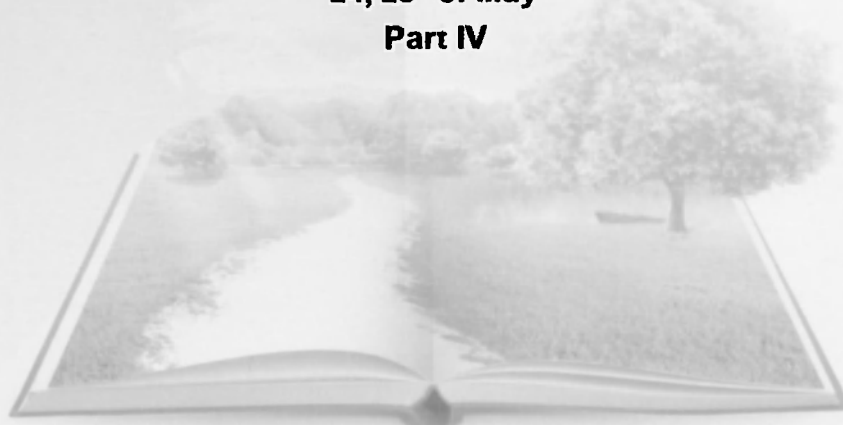
**Часть IV**

## **MATERIALS**

**of International Scientific and Practical Conference  
«Green economy is the future of humanity»**

**24, 25<sup>th</sup> of May**

**Part IV**



Өскемен  
Усть-Каменогорск  
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**Ж 33** **Жасыл экономика – адамзат болашағы:** Халықаралық ғылыми-тәжірибелік конференциясының материалдары, 24, 25 мамыр 2014 ж. = Зеленая экономика – будущее человечества: Материалы Междунар. науч.-практ. конф., 24, 25 мая 2014 г. = Green economy is the future of humanity: Materials of International Scientific and Practical Conference, 24, 25<sup>th</sup> of May 2014 y. – Өскемен: ШҚМТУ. 2014. – Қазақша, орысша, ағылшынша. – IV өәлім – 2014. – 286 б.

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Ғлімздің тұрақты даму жолына ауысуына негізделген экономиканың тұрақты әрі тиімді моделін құру шешімдерін іздестіру үшін «Жасыл экономика – адамзат болашағы» атты Халықаралық ғылыми-тәжірибелік конференциясын өткізеді.

Конференцияның мақсаты экономикалық өсу жетістіктерінің көкейтесті проблемаларын талқылау үшін ғалымдар мен мамандарды біріктіру, табиғат пен адамның үйлесімді дамуын қамтамасыз ететін, өндіру мен тұтыну модельдерінің сапалы өзгеруін алдын ала қарастыратын инновациялық модельдерді іздестіру болып табылады.

IV бөлімде «Жасыл экономика – қоғамды тұрақты дамыту кепілі және әлеуметтік проблемаларды шешу жолы» тақырыбы бойынша мақалалар ұсынылған.

Международная научно-практическая конференция «Зеленая экономика – будущее человечества» проводится для поиска решений построения надежной и эффективной модели экономики, основанной на переходе страны на устойчивый путь развития.

Целью конференции является консолидация ученых и специалистов для обсуждения актуальных проблем достижения экономического роста, поиск инновационных моделей, обеспечивающих гармоничное развитие природы и человека, предусматривающих качественное изменение моделей производства и потребления.

В части IV представлены статьи по тематике «Зеленая экономика как гарант устойчивого развития общества и путь к решению социальных проблем».

International Scientific and Practical Conference “Green Economy is the future of humanity” is aimed at finding solutions to create stable and efficient model of economy; the basis for such economy model is the country’s transfer to the stable path of development.

The aims of the Conference are as follows: to ensure discussion among scientists and specialists of vital problems to provide economic growth; to find innovation models, which ensure harmonious development of the Nature and human being and to create quantitative change of production and consumption models;

In part IV articles on subject are submitted: “Green economy as the guarantor of a sustainable development of society and a way to social problems solution”.

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## **SPECIAL CONSIDERATIONS RELATING TO THE ISSUE OF CORPORATE GOVERNANCE IN THE LIGHT OF BUSINESS ENVIRONMENTALIZATION**

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### **Abstract**

**Purpose:** the purpose of this paper is to characterize the specific features of governing a business enterprise as a complicated social economic system, and to investigate how these specific features may affect the processes of sustainable development.

**Methodology:** the methodology of the investigation relies on the system approach;

**Originality/value:** the value of the paper lies in the fact that we reveal a range of important aspects that affect the corporate governance and the behaviour of the company.

**Findings:** among the findings of the study is a suggested classification of economic entities that underscores related differences in respect of choosing appropriate governance/control methods and techniques depending on the "key system quality".

**Keywords:** Sustainable development, Social economic system, Controlling, Innovation.

### **Introduction**

Today the task of ensuring the sustainable development of human civilization is being viewed as the guiding principle of the life of the economy and of the society in general. Sustainable development is considered to be a development which "... satisfies our current needs without jeopardizing the capability of generations to come to satisfy their own future needs [1, 114]. In a most general sense, the solution of this task is linked to the shaping of "a new model of green economy"[2].

The issues that are in focus here, if we are to talk about sustainable development, touch upon the realm of the "green" politics and strategies both in the context of the future of global economy and the future of international community in general. Researchers also focus their interests on the principles of ensuring sustainable development in certain select areas, industries of companies. There are works which hold a special place as they are aimed at specifying the meaning and nature of a company's "sustainable development" [3], [4] as a notion differing from that of "financial stability" but at the same time consonant with the ideas of "green economy".

One of the essential aspects of this field of research is the investigation of the causes of companies' varied behaviour in the context of shaping the environmentally balanced economy. The topicality of this type of scientific investigation is supported



by the fact that, on the one hand, there are companies that defiantly ignore the problems of environmental protection, and, on the other hand, that a new intra-company management culture has been shaping itself which takes into account the general aspiration of the community for sustainable development (see, for instance, [5], [6]).

The reason for existence of such a behavioural "variance", from our point of view, are the special aspects of commercial companies as social economic systems, and the effect of these characteristics upon decision-taking processes and the organizational structure of governance in general.

In this paper we endeavour to consider the special aspects of running a company as a complicated social economic system and to investigate how these specific features may affect the processes of sustainable development of economy and society.

#### **The main part of the research**

##### *Governance of a business enterprise – a developing social economic system*

To investigate the enterprise governance/control processes in such complicated systems as commercial companies we first need to redefine the very notion of "governance/control". It is an open secret that "governance/control" is often identified with "management". The criticism of this approach can be found, for instance, in [7]. If we view a business enterprise as a system, it would be only natural and appropriate to consider it within the framework of the system approach. If so, governance (or control) is "a systemic function focused either on the maintaining of the key system quality, i.e. the combination of features the loss of which leads to the destruction of the system in a changing environments, or on the carrying out of a plan aimed at ensuring the stable work, homeostasis and attainment of a certain goal" [8]. Therefore, from the system approach perspective, governance is the function of a system directed at ensuring its survival in a changing environment.

Implementing the process of governance in such complicated social economic systems as business enterprises is to be done in line with the principles of economic, social and essentially systemic nature.

To these economic principles belong, as is well known, the following ones: a need for combination of production factors; following the economic principle reflecting the fact that resources a company has at hand are limited; following the principle of financial balance; following the principle of profitability of commercial enterprises.

The social nature of an enterprise generates a type of governance, in the systemic sense of this term, called "controlling"<sup>1</sup>. The key characteristic feature of controlling is that the governance process here is being implemented consciously,

<sup>1</sup>It should be noted here, that the concept of "controlling" still has not been widely accepted with a uniform, standardized meaning. The most promising of them, from the point of view of how the nature of controlling is revealed, we believe to be the systems approach. Different aspects of this concept have been elaborated by us in our previous papers: see [7], [9], [10]. In the present investigation we also proceed from the systems approach to controlling.



knowingly<sup>2</sup>.

The systemic nature of controlling entails that, first, all stages of the governance process are implemented in their entirety: goal-setting – planning – plan implementation – control – analysis and substantiation of governance decisions, which returns us one step back (implementation, planning and goal-setting)<sup>3</sup> and, second, that all intra-system links and relationships arising within the governed/controlled object (enterprise), are to be revealed and taken account of.

In relation to the above, we have to focus on a series of circumstances which are brought into existence by the social nature of a company and affect the processes of governance/control implementation (i.e. of controlling). To these circumstances or aspects belong such ones as: a) respect for the principle of undivided authority and b) responsibility, both being the key characteristics of an actively functioning system element (i.e. a human/employee); c) understanding what "key system quality" means.

The meaning of "undivided authority" is more or less clear: it means that all decisions concerning the development and implementation of governance/control instruments and mechanisms in a company are to be taken/carried out/done under the direct supervision of its chief executive officer of a relevant object/company. Naturally, it is hard to imagine a situation of a company shifting from the "sporadic" or "fragmented" mode of management to the "conscious controlling" without the political will of CEO.

None the less important factor is the problem of responsibility. Over a long period of time responsibility has been viewed mostly from the legal point of view. The psychological science also pays attention to the issue of responsibility. Recently, colleagues from different areas of research, mainly philosophers, have been demonstrating an ever more intense interest to this notion, which is probably due to the dynamics of the scientific and technical progress and to the aggravation of the problem of sustainable development [11], [12].

In the area of performance management of business entities, responsibility plays an essential role. As one of the attributes of "controlling", responsibility entails assigning certain recourses to selected segments/areas of activity; basically it is the readiness of CEO to solve tasks by way of using these recourses and to bear responsibility for the final results of it all. Obviously, in this context "responsibility" also means being submitted to control and is limited to its strictly economic nature. However, in accordance with the social cultural paradigm that has been quickly gaining popularity today [13], [14], the notion of "responsibility" is being viewed from a clearly different standpoint. Thus, for instance, R. Brown, an adherer of the institutional theory, interprets "responsibility" as a psychological state opposing

<sup>2</sup>A company's management, in connection with this, should be viewed as a convenient carrier (performer) of this function. Placing the control function upon the management (in terms of the systems theory) creates the necessity to have some other concept/institute that would guide "bosses" towards the right direction in governance. Today it is often called "Controlling Department".

<sup>3</sup>Some call this "a cybernetic cycle" or "Deming's cycle"[17].





"opportunism"[15]. P. Lukshi and M. Beloussenko in their paper [16] consider the process of shaping the system of commitments/responsibilities of individuals towards an organization as the results of their emotional attachment to each other, which in its turn is the guarantee of adaptation and of the company's further development<sup>4</sup>. Moreover, if traditionally the problem of responsibility has been linked to the behaviour of a company's management, than, in accordance with the new tendencies we rather have to talk of the responsibility of all stakeholders towards the company, including its owners.

The concept of the "key system quality", as we remember, means a combination of properties and features the loss of which leads to the collapse of the system in a changing environment; it is of great importance for the task of understanding and explaining the governance/control processes in terms of the systems approach. For a long time, however, as applied to social economic systems, the term "governance/control" has been viewed and investigated in the context of the so-called teleological approach [14,16], [18], that entails primarily the goal-oriented functioning of a company. The evolution of scientific views of the nature of business enterprises and the development of the system paradigm have led to the rising of new guiding concepts such as survival and the accommodation of the interests of motivated elements of the system: to each other and to the whole [13], [19]. The goal/objective is being regarded today as a local, interim indicator having a rather functional than essential significance.

Therefore, we consider that introduction of the "key system quality" term into scientific literature as reasonable and sufficiently substantiated for the purpose of revealing and explaining the mechanisms and nature the corporate governance/control processes. Apparently, the key quality of a system should be interpreted as the identifiable image of a system that can be formulated as a combination of the principles of its functioning, among which the common corporate values<sup>5</sup> have a special place. On the other hand, the key system quality is not simply a goal – ideal (a potential goal); it also has its effects upon the behaviour of a company including, among other things, the processes of environmentalisation in business.

#### *Controlling and the problems of sustainable development*

Environmental problems, a need for protecting the environment, multiple laws that have been recently passed in order to regulate the activities of companies in respect of the latter's' impact upon the environment – all this have logically brought about the necessity of taking all these circumstances into account for company governance. This tendency has led, among other things, to the appearance of such a term as "environmental controlling". A consistent interpretation of the meaning of it,

<sup>4</sup>As we gradually abandon the mechanistic views of the nature of an enterprise, increasingly more interest is being focused on governance based upon self-organization, i.e. the capacity of "complicated systems to go to a new level of development" [8, 605] demonstrating by this the most complex form of adaptation.

<sup>5</sup>A more detailed consideration of the meaning and role of the "key system quality" see in our paper [20].



however, is still lacking. The most widely adopted definitions of "controlling" do not give us grounds for providing an answer to such questions, for instance, as how the "environmental controlling" is related to simply "controlling"? Or why some enterprises demonstrate implementation of "environmental controlling" while others – don't?

In terms of the systemic notion of "controlling", the "environmental controlling" is regarded merely as a figure of speech, not a scientific term *sui juris* [21]. It seems to be more appropriate to talk about some companies' implementing responsible environmental policies and to instigate the problems of taking this factor into account for the "controlling" purposes. Obviously, the expression "business environmentalisation" has to be construed and interpreted in a similar way.

Aspiration for ensuring sustainable development of society has caused institutional environment, where modern companies have to exist, to be more than rich in requirements to and limitations on business activities impacting their ecological setting. In this situation, each company responds to existing institutional limitations in its own particular way. As noted above, some companies opt for a total disregard for the problems of environment and willingly pay fines, while others try to avoid such situations. There are other companies which provide support for various environmental measures on charity grounds. It often happens nowadays that implementation of social and environmental responsibility policies is viewed by businesses as another way of commercializing.

In our view, these differences are the manifestation of the forms of the "key quality" specific to each particular company, i.e. of a set of standards by which the management of a company is guided in line with the principle of undivided authority and supported by a particular degree/quality of responsibility.

The author of [21] have suggested a system of business enterprises' classification based on the degree of voluntariness with which a company opts for this or that line of action in respect of institutional and traditionally economic aspects of its work (Table 1). In this case the voluntariness degree is being viewed as the manifestation of the "key system quality".

Using the degree of voluntariness of choosing either institutional or traditionally economic aspects of corporate governance/control as 'group tags', we can single out four groups or types of commercial companies. It seems to be obvious that each of the types has an intrinsic specificity related to how governance/control problems are solved, and, consequently, how functionally specific methods of controlling are used (see Table 2). Thus, for instance, in companies belonging to Group 1, apart from the designated governance/control methods, R&D and implementation activity in the area of environmental protection or promotion of green technologies can also be used. For items in Group 2, the crucial role is played by experimentation and formation of a basis for informed choice of other governance/control method alternatives drawing on the previously taken decisions and actions. For the Group 3 companies to be successful, most important will be their capability to forecast the impact of strategic cost factors upon the cost value. In Group 4 we anticipate the



emergence of another break-even threshold level (in addition to the financial no-loss point, point of existence and growth point) – i.e. the point of securing social environmental programs. Of course, we also have to remember that the above suggested classification is by no means "rigid", so companies can migrate between categories.

Table 1 – Company categorization in relation to the degree of voluntariness of their commitment to take account of the institutional and traditionally economic aspects of business activity during implementation of environmentally responsible policies

Degree of voluntariness in compliance with institutional requirements	High	Businesses supporting environmental measures by way of philanthropy (IV)	Businesses using environmental measures as an instrument of economic effect (III)
	Low	Companies for which environmental measures are a side-work required by law (I)	Companies whose economic performance relies on whether the environmental characteristics of the control object are ensured and maintained (II)
		No	Yes
Taking account of how the fulfillment of a company's environmental commitments impacts upon its performance			

It is understandable that innovation plays a huge role in solving S&D tasks in each of the above mentioned situations. High hopes are usually placed upon innovation when the task to be solved entails fulfilling seemingly incompatible requirements, for instance, dealing with environmentally significant problems at the same time striving to reduce cost. That said, the need for learning and actively implementing systemic thinking methods becomes ever more obvious [22]. The gradual and naturally evolving process of an innovation proliferation outside of the original company-inventor and implementation of these know-how and methods by other businesses brings about a shift in the economy and society to a new and higher level of development.

We see now that the task of considering innovation processes in controlling is of the highest importance. Within the current controlling practices, innovation is mostly regarded as an object of governance/control. However, if we begin to understand the nature of businesses in terms of self-organizing systems, this also makes us view innovation as the integral part of the governance/control process itself. In connection with the above, one of the most crucial tasks of today's controlling is the development of control methods/techniques involving innovation as one of the ele-



ments of the managerial cycle [10].

The necessity to tackle problems of sustainable development has also led to certain changes and shifts of criteria used for substantiation of managerial decision-making as part of controlling. We already know that for a long period of time (when the ideas of managerial control/supervision were prevalent) a company's cost efficiency indicator had been used to assess its accomplishments.

Table 2 – Groups of Companies: Characterization

Group	Business Area	Governance problems, functional methods of controlling
Companies for which environmental measures are a side-work required by law (I)	Natural resources extraction and processing	Collection and taking account of environmentally significant data; monitoring and evaluation of environmental conditions; environmental risk insurance [23].
Companies whose economic performance relies on whether the environmental characteristics of the control object are ensured and maintained (II)	Agriculture, recreational woodland management, etc.)	Natural resources are viewed as the object of management/control. Application of the "adaptive management" methods [24], [25].
Businesses using environmental measures as an instrument of economic effect (III)	Various sector profiles	Considering the concept of strategic cost-generating factors [26].
Businesses supporting environmental measures by way of philanthropy (IV)	Various sector profiles	Analysis of a company's business-goal pattern with regard to not only traditional goals like growth, development and profit [27], but also to implementation of social environmental policies.

The concept of governance/control based on business performance measurement, which replaced the managerial control, caused nonmonetized parameters to be



ever wider used leading to the spread of such a criterion as effectiveness<sup>6</sup>.

The increased significance of environmental and social responsibility of businesses, a better understanding of how the future of companies relies on stakeholder groups and the institutional environment in general, the intention of businesses to consider these circumstances in their decision-making – all this gives us grounds to speak of the emergence of a new criterion namely institutional efficiency which means a company's ability to find a place in the institutional environment where it would have a good standing and a steady position for an extended period of time [28], [29].

### **Results of the research**

On our way to a revision of the existing model of economy as the initial stage of our shift to the proper "green economy", we have to first analyze the behaviour of a company as a social economic system whose activity affects our common environment.

Company governance/control takes the shape of "controlling", the key characteristic of which is that the proper governance process is being implemented in a conscious way and following a number of economic, social and systems principles.

"Ecological controlling" – a collocation that has been gaining recognition recently – is to be viewed as a linguistic expression rather than a strict scientific term. If a company's management uses it, it means that they are trying to pursue environmentally responsible policies.

The "key system quality" is one of the chief characteristics of a business – a social economic system – which affects the choice of intra-company management methods and, consequently, the company's behaviour.

When we analyze the "key system quality" of a company by the degree of voluntariness with which it complies with institutional environmental requirements or the traditional economic aspects of its work, we are capable of revealing a number of business types each of which has its peculiar set of adopted methods of intra-company management.

For a company to pursue environmental responsibility policies, it is crucially important that its management should strive to develop and implement innovations, which in its turn requires the role and place of innovation in the managerial process to be rethought: innovation ceases to be simply the object of control and becomes an integral part of governance itself.

The systems thinking skills also become ever more important for practical implementation of environmentally responsible policies.

The concept of "green economy" and environmentalisation of business are the factors which cause us to see that we need to develop and substantiate the ideas of institutional efficiency.

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<sup>6</sup> Today, unfortunately, we see that the notions of "efficiency" and "effectiveness" are often identified with one another.



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