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Towards the *praxis* of a sustainable knowledge-based economy

Summary

Various presentations of the current strategies for economic development increasingly stress the need to abandon the existing model of economy, its redefinition and the necessity to develop a new concept of knowledge-based economy (KBE). Consequently, knowledge is attributed an essential role in stimulating socio-economic development, including also sustainable development.

The direction of changes designated by the development of knowledge-based economy, however, carries with it a number of challenges that must be dealt with and which are gradually being included in numerous sustainable development strategies. Similarly, implementation of certain visions of sustainable development generates the need to make specific assumptions, different from the guidelines defined for the mainstream economy (e.g. taking into account global modelling and system analysis or the law of entropy) (Czaja 2011: 164). Implementation of the preferred directions of development, requires not so much efficient, but proper management, i.e. one which would translate itself onto the plane of decision-making and, subsequently, that of application. Management processes, including management of sustainable development which draws on the principles of a knowledge-based economy, require also taking into account those factors that can really support the sphere of *praxis* and hence help to shape a knowledge-based society.

This article aims at examining the relationship between a knowledge-based economy and the concept of sustainable development, especially in

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relation to its economic implications. It will, moreover, concentrate on the assessment of practical functioning of a sustainable knowledge-based economy which constitutes an important development strategy in the process of shaping an information society.

Key words: sustainable development, concept of knowledge-based economy, a sustainable knowledge-based economy

1. The economic context of knowledge

The term “knowledge” is ambiguous, therefore, it is difficult to point to one and universally applicable definition of knowledge. It is defined, among other things, as the totality of information falling into the scope of a given field. It is also acknowledged as the basis of all human activity (Aggestam 2003: 33). Knowledge can be defined in a narrow or in a wide sense. In the first case, it constitutes the sum of reliable information about the reality and the ability to use it. In turn, widely understood knowledge means the entirety of possessed information, statements, beliefs, etc., which can be assigned cognitive or practical significance (Marciniak 2008: 12).

Literature on the subject often provides a division of knowledge processing into four phases: data – information – knowledge – wisdom. Data constitute the basic link of information. They are a collection of facts which are not necessarily interrelated and which acquire meaning only after processing, and by becoming meaningful generate information. The totality of information is rationalized and explicated through knowledge. Wisdom, in turn, means an ability to use, restructure and create knowledge, getting to the heart of the problem and seeing through unclear or hidden meanings (Web 01). It is understood also as “(...) predicting and designing the future, or creating images (ideas, concepts, models) related to future needs” (Poskrobko 2011: 27).

It is also recurrently emphasized that knowledge provides the basis for individual and collective success. What is more, an “intellectual climate of development” is promoted today (Kiwak 2007: 12), as is clearly highlighted in the current development strategies. In addition,

the concept of knowledge is increasingly acquiring importance in economy. KDE, i.e. the Knowledge Driven Economy (*Our Competitive Future...* 1998) goes beyond the traditional approach to knowledge. According to the Organization for Economic Co-operation and Development (OECD), in the economic dimension, knowledge is understood in a twofold way, i.e. as information and as assets. Knowledge in the form of information allows, after it has been processed, for its use in economic models, which are then used in decision making. On the other hand, knowledge constitutes assets involved in production. In the economic aspect, we can distinguish public and private character of knowledge, which in turn implies the division of knowledge into silent – undocumented and coded – accessible only to professionals (Chojnicki 2001: 81-82). Knowledge can also be divided into overt and covert. The first term refers to structured and formalized knowledge, which translates itself e.g. into scientific models and computer programs. Covert knowledge, on the other hand, mainly refers to skills, certain patterns of thinking, paradigms and points of view that are difficult to translate into scientific or technical language. Both types of knowledge mentioned above often overlap, and undergo conversion.

When analysing the role and importance of knowledge in economy, scientists increasingly point out its quality. H. Pałaszewski perceives this new quality in the expansion of the knowledge sector manifested in a greater share in the gross domestic product of the work effects of people involved in generation, transmission and use of information. In this context, the author also draws attention to the changes in dominant technologies as well as to the importance of analysis from the area of research on the techniques and technologies in economy which evidence acceleration of scientific and technical progress (Pałaszewski 2006: 9). Using the potential of this new quality of knowledge and of the intellectual capital, and making them a key factor in the growth and development strategy can be a modern measure of success for organizations prospering in the conditions of permanent change.

Perception of knowledge in economic terms, however, raises the risk of reducing this knowledge exclusively to procedures designed to

evaluate its effectiveness and verify its practical benefits. Therefore, in order for knowledge not to "(...) become a blind instrument of economic policy, it requires humanist reflection and a firmly grounded belief that it must primarily serve the good of man" (Kiwak 2007: 14). Knowledge is the work of man, the result of his creative cognition and it offers him an opportunity to predict the future and to improve the world. Reason, in turn, constitutes a tool, which should lead man to truth. Therefore, apart from concentrating on generation of knowledge, its utilitarian perception and, finally, on pragmatic creations, it is necessary to manage knowledge in a rational way trying to preserve the balance between the material and the non-material.

2. The economy of sustainable development and a knowledge based economy

The ability to create, acquire and collect knowledge as well as process information is nowadays considered as the basis of economic success (Wiszniewski 2001: 9). This means, that knowledge is becoming a fundamental stimulus for economic development. OECD refers to a knowledge-based economy as an economy in which knowledge is a key factor in productivity and economic growth. In this type of economy, information, education and technologies play a major role (Web-02).

KBE² is an economy of excess or "excessive possibility", whose implementation involves the use of the knowledge potential as a strategic development factor (Fiddler 2012: 193). B. A. Lundvall and D. Foray define this economy as one in which knowledge is the most important resource and learning the most important process (Lundvall, Foray 1992). In turn, according to P. Drucker, it means an economic order

² In this paper, KBE will be considered from a humanistic point of view and the presented definitions will essentially comprise its immeasurable qualities. For this reason, the presented interpretation will mainly have a descriptive character and will point to the aspects of the discussed issues which are relevant from the perspective of the author's research.

in which knowledge, instead of labour, raw materials and capital, is an essential resource. KBE is also a social order whose main challenge is social inequality based on knowledge (Drucker 1999: 15).

Z. Madej contends that a knowledge-based economy (Madej 2006: 15-16) can be understood in a twofold way, i.e. as:

- a real phenomenon or a particular economy, whose assumptions are realized today and in which knowledge is attributed an essential role (e.g. the US economy);
- a theoretical term – a set of statements and ideas that focus on innovation, promote the development of knowledge and technological progress.

KBE is also characterized by specific features such as (Czaja 2011: 91):

- transformation of the economic structure through the development of the knowledge sector;
- domination of human capital as a factor generating technological progress;
- participation of information and communication technologies in the process of intensifying innovation activities.
- popularization and strengthening of the importance of creating the demand for knowledge and minimizing the role of knowledge supply in creating innovation;
- giving preference to the practices of generating knowledge in small and medium-sized organizations;
- acquiring knowledge by analysing proper solutions and results of operations between organizations;
- modernization of employment structure;
- growing importance of knowledge workers;
- development of skills and innovation, teamwork with a focus on efficiency.

The subject literature points to three aspects of KBE, i.e. methodological, empirical and pragmatic. The first refers to the search for new opportunities to identify and analyse problems in the field of knowledge management. The empirical aspect is identified with monitoring changes in a knowledge-based economy and diffusion

of knowledge in society and in enterprises. Finally, the pragmatic aspect involves creation and promotion of systems that allow the development of knowledge management in society (Fiddler 2012: 196).

A wide scope of KBE related issues requires adopting a systemic and integrated approach to the above, one that would take into account the links and interrelations that occur between its various components. The process of implementing the guidelines for sustainable development in which all planes should interact with one another other, is perceived in a similar way. It should also be noted that the concept of the economy of sustainable development is in its assumptions compatible with KBE.

The model of the economy of sustainable development is seen in economic sciences as a new approach to development. It is a proposal to view economy from, inter alia, an ecological perspective. This model emerged during the years of the economic growth collapse and it highlighted those categories which decide about progress. Its main essence lays in taking into account in the processes of economic change, natural resources, recognized as one of production elements. This model highlights the fact that depletion of natural resources brings about not only deflation of living conditions, but also measurable financial losses in the form of expenses incurred in the process of their reestablishment. It thus leads to the reduction of the gross national income (Bąkiewicz, Żuławska 2010: 84-85).

Economy, as one of the pillars of sustainable development should be seen, and then shaped, taking into account the relationship between the environment and development. Already in the 70s of the past century, there appeared ample scientific evidence and substantiation for the need to change the neoliberal theories omitting the issue of natural resources in processes oriented at economic growth. It was commonly accepted at that time that the natural environment should not impose any barriers on the development and use of technical solutions adopted within a development strategy comfortable for man (Woodhouse 2002: 140-141). That is why, within the economy of sustainable development, for example, the ecological theory of development is proposed (Payne, Phillips 2011: 158). This theory opposes

the neoliberal orientation on several key issues. First, it does not agree with the utilitarian treatment of the natural environment as natural capital which can be freely collected and consumed according to current needs. It also rejects focusing mostly on individual preferences as it creates a difficulty in measuring the “common value” of the environment and examining the relation of a given community to nature and the environment. Moreover, the neo-liberal theory of development does not sufficiently address the problem of the reducing demand which accompanies the increase in prices caused by shortages of certain raw materials. It also fails to address the issue of costs incurred due to both actual physical damage and those related with replenishment of natural resources. The problem of the impact exerted by environmental degradation on human health and life is similarly overlooked. Moreover, the model of economy based on the neo-classical approach does not take into account the issue of inequality and justice, which causes a disparity of interests in society. In result, it is mainly the leading economic and political groups that have a chance for realization of their interests. Common, long-term goals are replaced with individual goals, often defined ad hoc and concentrated on the current needs of the strongest groups or communities. This approach is also revealed in international co-operation between the rich North and the poor South. Northern countries create development strategies, whose regulations and agreements only occasionally include the needs of the communities and countries of the South and have little impact on the improvement of their lives. Despite apparent benefits stemming from agendas for developing countries, the proposed programs are imposed on those countries and, as such, restrict the possibility of real social development (Payne, Phillips 2011: 159-161).

Changing the economic model does not rely on inhibiting the growth or on outright rejection of the idea of growth. “The modern world economy should be transformed into a system combining the features of the free market, necessary to trigger human entrepreneurship and creativity, with intelligent management on a global scale

on the basis of international agreements to ensure proper conditions for future generations” (Sadowski 1998: 19).

A vision of sustainable development economy was presented, *inter alia*, in a document *Poland 2025 – Long-term Strategy for Sustainable Development*, in which it is argued that Polish economy is to achieve the level of innovation (*Poland 2025... 2000*: 77) that will ensure its competitiveness. For this purpose, we should promote dominant technologies, primarily in the field of information technology and telecommunications, provide a high level of education, modernize the economic structure and create a modern infrastructure. The Strategy stresses the need to promote integration of Polish economy with the world economy. This purpose is to be served by Polish membership in the European Union, which transforms economy to an economy based on knowledge (*Poland 2025... 2000*: 16).

Modernization of Polish economy is essential for ensuring long-term strong economic growth dynamics. The current economic trends put our country at a much lower level than that of the developed countries. This situation is significantly influenced by such issues as prevalence of areas with low growth dynamics, lack of their demand on global markets, micro-export, relatively low level of implementing the results of research and development works, as well as the structural surplus of the manufacturing capacity in heavy industry. It is, therefore, necessary to minimize employment in such areas as agriculture, mining, metallurgy, textiles, fuel, energy, food, in order to increase the contribution of areas related to high technology, automotive industry, health care and conservation. Therefore, it is advisable to promote “technological industry”, i.e. one based on and referring to the scientific achievements worked out in the framework of the so-called Tech-Sciences, including space, nuclear, aerospace, defence, electronics, telecommunications, (bio) chemical and pharmaceutical industries. Innovativeness of Polish economy consists also in implementing policies aimed at propagating consumption patterns and implementation of the production model based on the guidelines of sustainable development. It is important to promote cooperation between national or international public and private institutions for

practical implementation of the developed technical and organizational concepts, especially in the area of using advanced technology, information techniques and techniques of financing development of enterprises (*Poland 2025... 2000: 76-78*).

Development of technical infrastructure is another priority of an economy compatible with sustainable development. The importance of IT and telecommunications infrastructure cannot be questioned. Its further progress can be guaranteed by scientific and technical research in the field of ICT. Development of this economic sector is an indicator of the prosperity level of and it improves the broadly understood state security.

It is important to increase information efficiency, understood primarily as socialization of the already existing knowledge. Implementing various methods of processing information and orienting scientific development at building such specialized knowledge and simulation methods, should also be taken into account. Besides developing the socio-economic infrastructure by facilitating access to broadly understood knowledge, it will allow for gradual increase of information efficiency. In the opinion of L. Michnowski, an efficient information system based on study, verification of the occurring changes, processing knowledge and predicting events or consequences of the socio-economic policy, will ultimately exert an impact on innovation activity. To overcome the economic crisis, it is necessary to provide universal access to knowledge. Because "(...) (knowledge) that is not implemented quickly into practice, usually just as quickly (...) undergoes moral degradation" (Michnowski 2006: 198). Properly functioning socio-economic information infrastructure requires observation and analysis of the events taking place both in the social and economic life as well as in natural processes. This will allow to make those events subject to scientific debate, which in turn will enable practical use of the obtained knowledge, necessary to improve and implement a policy of sustainable development.

The proposed concept of economy makes us aware that globalization of economy must be performed in proper way so as to make it a factor of sustainable development. This aim can be fostered by the

establishment of global scientific and technical knowledge institutions specializing in specific areas. It will allow to transfer knowledge to defined minor centres to be objectified and transformed into a useful product.

Achievement of sustainable development requires thus developing, implementing and updating the strategy of permanent development, taking into account the KBE assumptions, shaping economy towards information efficiency and building a knowledge society.

3. The model of a new quality society – a society of sustainable development

The society of the 21st century is referred to as a „non-stop society”. It is a society that in its activities does not pay heed to the guidelines of sustainable development, to the timing conditions, cycles and rhythms of nature, depleting biodiversity. It seeks to accelerate economic activities, competitiveness and is, ultimately, guided by the principle of “anytime, anywhere”. A non-stop society propagates unrestricted use of energy, economic management of time and space and constant development of technology. It requires from individuals “flexibility”, i.e. constant readiness to deal with potential changes in, for example, the workplace, or even the place of living. A “flexible” man does not go beyond the present, so that in his actions he does not take into account the negative effects of either social or ecological character (Kośmicki 2005: 40-48). He got caught into “(...) a trap of short term activity, standing in the way of long term and well thought out planning” (Łepko 2003: 113).

In Poland, in the face of the non-stop society phenomenon, there appeared two models of society, i.e. a knowledge society and an information society. In scientific literature the two terms may sometimes be used interchangeably, but most often they are explained and interpreted as distinct and sometimes even explicitly opposed. A knowledge society constitutes a model in which the leading role is assigned to science and intellectual capital. Its assumptions were listed, among others, in a document *Poland 2025 – Long-term Strategy*

for Sustainable Development, which presented a vision of creating a knowledge society, i.e. a society responding in a rapid and efficient way to the changing needs of the market, ready to re-organize and continuously improve its level of qualifications. This model assumes the emergence of an innovative society, able to adapt to the changing conditions of life and work. It would be a society marked by a high level of education and culture, skilfully using information in the form of knowledge. The quality of “human capital” will increase, which will have an impact on the pace of socio-economic development. The level of economy’s competitiveness will increase, which will have an impact on the society’s wealth³. The model of knowledge society proposes to change the structure of income and assets of Poles. It assumes a stable position of the middle-income class and directing joint efforts to minimize the disparities in income. This will result in improving the situation of the least wealthy and encourage successive elimination of poverty and social exclusion. The system of lifelong learning will be propagated and education will become widely available. In conjunction with the active pro-employment policy, the indicated change will influence reduction of unemployment, especially the structural one. A knowledge society should also mark a change in the style and quality of life. It is supposed to reveal active attitudes, individualized needs, care for one’s own health, as well as care for the natural environment. Moulded in such a way, the society will understand and implement the principles of ethics on many levels. It is necessary to strive towards developing the sphere of ethics and morality in general social relations and in human attitude to nature trying to strengthen a conviction that in the face of environmental and civilizational threats it is necessary to create an ethical code of conduct. It should take into account the practical experience to date, a jointly developed system of values, a clear vision of the future and the principles to be followed. It would undoubtedly have an impact on

³ Wealth is understood here as a rise in the level of income per capita, availability of housing, modern household equipment, sufficient condition of social security and health.

the question of creating a new model of consumption. It is necessary to change social mentality, general orientation on the continuous increase of goods and unlimited use of services. The created model of society is directed at all communities, even at the most local as, for example, a family. Its implementation implies a multi-dimensional social, scientific and technical as well as economic process. Shaping of a knowledge society will be an important contribution to the realization of sustainable development and of the paradigm of social order adopted in its framework (*Poland 2025...* 2000: 13-15).

„An information society”⁴ is defined as a new quality society in which information plays a vital role in social, economic, political or cultural life. The formation of such a society can be facilitated by rapid advances in technology, allowing full use and remote processing of information. The use of new ICT comprising, in particular, computers, telecommunications and robotics can lead to co-creation of the era of information.

The assumptions of this model of society were included in numerous documents and reports of national and international institutions. Developing a concept of an information society was the subject of a two-phase World Summit on the Information Society (WSIS) in Geneva (10-12 December 2003) and Tunisia (Tunis) (16-18 November 2005). Three key areas of action were adopted during that summit, i.e. creating an international model of an information society, making all citizens cognizant of the benefits derived from using information and communication technology, and implementing technology-based solutions to achieve the objectives set out in the Millennium Declaration (Haliniak 2004: 181). The so-called Bangemann report, which assigned a key role to communication systems and advanced technologies was

⁴ The concept of an information society is not opposed here to the concept of a knowledge-based society, but it is enriched by the significance of achievements in the field of modern information and communication technologies (ICT), which today reveal the dynamics as well as the relationship of knowledge with ITC technologies and at the same time emphasize the importance of human capital as a production potential.

entirely devoted to the issue of an information society. This document contained comments relating to the changes that are induced by modern information and communication technologies, and pointed to the associated opportunities and risks. Another document, „Towards knowledge societies”, indicates the two pillars on which an information society is based, i.e. universal access to information and freedom of expression (Krzeminski 2007: 73). In Poland, the issue was responded by the government which adopted the Resolution of the Polish Sejm of 14 July 2000 on building an information society in Poland. The Act acknowledges the fact that modern technology and the use of telecommunications, ICT and multimedia services can accelerate economic development, influence the competitiveness of economy, create new jobs, support education, access to culture, etc. (Web-03). In 2000, the Ministry of Economy developed a document *ePoland. The Action Plan For The Development of Information Society in Poland in the Years 2001-2006*. The following objectives were set in the document: development of ICT infrastructure, universal, cheaper, faster and secure Internet, investing in people and skills, stimulating a better use of information technology, ICT in rural areas and the development of digital radio and television. The document emphasizes the need to prepare the public for social changes, it makes explicit the need to adapt Polish law to the changes that will involve development of ICT and promotes the idea of electronic commerce (Web 04).

Society models include the issues of education, which are oriented at further development, to provide a everybody with access to knowledge, information and could fully exploit the potential offered by mass communication and information.

4. Sustainable knowledge-based economy. Systemic approach

Both proponents of the idea of sustainable development, as well as representatives of the concept of a knowledge-based economy oppose the still dominant model of mainstream economy. Standpoints that are presented within both proposals express the need for the development of the knowledge, information and technology sector and

also assign a key role to human capital in change processes. These elements are more explicitly highlighted in the concept of KBE, while the economics of sustainable development strongly emphasizes the need to take into account the natural environment in strategies of economic development. Both concepts are essentially consistent in their assumptions and they are, certainly, not mutually exclusive. They may vary in argumentation and scope, since the category of “sustainable development”, apart from the economic plane, comprises also the social and ecological spheres which penetrate each other. Therefore, the issues of contemporary economic activity oriented, among others, on permanent enhancement of industrial production, comforts of life and widely understood prosperity, include at the same time problems of social and natural environment. Consequently, the standards of economic behaviour are analysed in connection with ecological threats, e.g. serious imbalances in nature, as well as social threats, i.e. poverty, unemployment, increased marginalization of social groups or even individual societies.

Scientists pointing to the relationship between a knowledge-based economy and sustainable development, coined the term of a sustainable knowledge-based economy. This term must be understood intuitively, namely, it is necessary to emphasize elements of KBE in the concept of sustainable development, rather than the importance of the principles of sustainable development in KBE strategies. The model of a sustainable knowledge-based economy inscribed in the new theory of growth, promotes investment in human capital, innovation and technological progress while respecting the needs of the natural environment.

A sustainable knowledge-based economy does not yet exist in practice. However, sound management based on systems thinking may help in the implementation of its objectives. It turns out that the system category is generally considered to be “(...) the only convincing and intellectually mature concept that allows comprehensive characterization of the reality, while taking into account its components and their interrelationships” (Golka 2007: 302). Adopting a systemic approach to the idea of a sustainable knowledge-based economy, it

is necessary to interpret specified subsystems in a proper way. For example, such element of the system as economy should be seen in a multifaceted way, among others, as human activity in social and natural environment. Systemic understanding of economy cannot be equated with the economic system understood as a set of institutions involved in making and implementing economic decisions. The economic system is part of the economy, which additionally includes management processes and human needs (Pajda 2001: 149).

System management requires adopting a comprehensive approach to the analysis of change determinants in defined elements of subsystems, generating the desired interactions and interrelationships. The degree of a system's complexity (taking into account the boundary elements – inputs and outputs), with its simultaneous orderly character, by implying certain impacts, can be indicative of a better quality of management.

Building a system reconciling economic activity, social life and the welfare of the environment requires a high level of flexibility of all system components. Management of such a system is a challenging task due to the diversity of subsystems – distinct system features, different ways of operation of entities, organizations and institutions, etc. It is important, therefore, that it should be based on systems thinking, which requires (Golka 2007: 306):

- acknowledging that phenomena must be considered in relation to a given situation, time and in relation to the reality;
- treating objects holistically taking into consideration their relative internal order;
- study of the diversity of system connections and interactions, both internal and external (including those with the environment or with other systems);
- acknowledging the importance of each element of the system due to the place that it occupies;
- acknowledging that systems are conditioned by a specific network of links between their elements, the environment and other systems;

- taking into account the variability of the reality, occurrence of order and chaos, consistency and inconsistency, which translates into tension between the elements inside and outside the system;
- recognition that the organization of the system components and their dependencies constantly update the system;
- constant efforts to integrate the elements of the system, e.g. by creating the conditions for positive interactions between the inside and outside elements of the system.

To conclude, the use of systems theory in management processes aimed at implementation of a sustainable knowledge-based economy, through a reliable and adequate analysis of all system components, testing their dependencies, interactions and interrelations can decide on the emergence of this concept of economy in social practice.

5. Conclusion

The vision of a sustainable knowledge-based economy constitutes a proposal to build strategies linking the assumptions of sustainable development with elements of the concept of a knowledge-based economy. In practice, it should mean implementing measures aimed at management based on the principles of sustainable development, with the use of knowledge, information and skills. This process should rely on systems theory, since each problem of a social or economic character has an impact on the environment. Thus, implementation of recommendations of a sustainable knowledge-based economy should be seen as a process, which consists of, at least, an ecological and socio-economic system. The management of such a process requires proper selection of subsystems – elements that typically have distinct characteristics. Realization of the demands of a sustainable knowledge-based economy constitutes an undertaking realized by the society and each individual. However, implementation of particular recommendations constituting a part of the adopted policy and actions carried out at national and local levels can be difficult due to their involvement in specific conditions of the technical, economic, political and social character. In view of the above, it is expedient to

emphasize the solutions provided by various scientific disciplines, i.e. environmental ethics, sustainable education, economic ethics, which are necessary in the system management of the process of a sustainable knowledge-based economy. Moreover, it may be advantageous to regulate the operation of subsystems based on philosophical principles, which may help to verify the validity of assessing the planned activities from the perspective of urgency and importance, especially when having to choose from alternative activities.

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W kierunku *praxis* zrównoważonej gospodarki opartej na wiedzy

Streszczenie

Prezentując aktualne strategie rozwoju ekonomicznego, coraz częściej podkreśla się konieczność odejścia od dotychczasowego modelu gospodarki, jego redefinicję i potrzebę wypracowania nowej koncepcji gospodarki opartej na wiedzy (GOW). Kierunek zmian wyznaczonych rozwojem gospodarki opartej na wiedzy niesie jednak ze sobą szereg wyzwań, którym należy sprostać i które stopniowo uwzględnia się w licznych strategiach zrównoważonego rozwoju. Podobnie, jak realizacja określonych wizji rozwoju zrównoważonego generuje konieczność przyjęcia ściśle określonych założeń, odmiennych od wytycznych stawianych ekonomii głównego nurtu. Artykuł stanowi próbę zbadania zależności pomiędzy GOW a koncepcją zrównoważonego rozwoju, zwłaszcza w odniesieniu do jej ekonomicznych implikacji. Została podjęta także ocena praktycznego funkcjonowania zrównoważonej gospodarki opartej na wiedzy jako ważnej, z punktu widzenia kształtowania społeczeństwa informacyjnego, strategii rozwoju.

Słowa kluczowe: zrównoważony rozwój, koncepcja gospodarki opartej na wiedzy, zrównoważona gospodarka oparta na wiedzy