**BIOECONOMY AS THE BASIS FOR SUSTAINABLE DEVELOPMENT OF UKRAINE**

***H.M. Makedon, M.P.Talavyria***

*The basic aspects of bio-economy on a scientific basis, based on three main components: info-, nano- and biotechnology. Bioeconomy developing scientifically, using biotechnology, which is served by renewable biological resources for the production of food and energy*.

***Bioeconomy, biotechnology, sustainable development***.

In modern conditions of agriculture and rural areas is particularly important to the development of the bio-economy. Overcoming the modern environmental crisis prevention and crisis likely not possible, without a clear understanding of bio-economy based on knowledge. Important areas should also be the development of bioenergy and biofuel production. Bioeconomy closely associated with the formation of appropriate legislative, institutional and social structures, the formation of which significantly affect scientific development.

***Analysis of recent research and publications***. The issues of economic feasibility of bio-economy based on knowledge, engaged leading scientists of the world: S. Johnson, GM Kaletnyk, D. Meyers, A. Thorn and others. However, the relevance of the presented issues and their lack of scientific methods of research needs to be developed.

***The aim*** - to find out the main driving forces of bioe-konomiky based on knowledge, and to identify opportunities for the development of bio-, nano- and information technology on scientific principles.

***The main material***. Bioeconomy examines the relationship between man and nature in the use of natural resources, so based on two traditional disciplines: biology and economics. The scope of responsibility bio-economy are important areas of society's life-tion, which determine its sustainable development, production and social sphere, ecology and demography.

That is, the bioeconomy is designed to solve such problems arising before the society of the XXI century:

- Global food security;

- Sustainable agricultural production;

- Production of safe food;

- Industrial use of renewable resources [3].

That is why the economy is now building a new type - the bio-economy - is a priority and strategic direction of the State of increasing number of countries. The volume of innovative bio-economy in Yevropeskomu Union in 2010 exceeded 2 trillion euros. According to the forecast of the eco-nomic Cooperation and Development (OECD), in 2030 the share of innovative bio-economy-tion will account for about 3% of GDP in developed countries and much more - in developing countries. OECD, EU, US, Ki-tai, India and several other countries identified as strategic Bioeconomy signif-bring the authority of its development in the coming decades. These countries have set up special programs to support bio-economy, conducted a deliberate government policy.

One of the problems of bio-economy is that it usually lo-tozhnyuyut of biotechnology, which are really just technological and innova-vative component bio-economy. The development of this national system of state-tem connected not only and not so much to the success of biotechnology as the solution of a number of problems such as optimization of relations between social groups within them, including the market, cos-Rennes convincing motivation for participants and systems their comprehensive protection (mainly social), forming an effective organizational structure and system of coordination at all levels, etc.

With regard to the concept of sustainable economic development, the international community has recognized its dominant ideology of human civilization in the twentieth century. Strategic direction to ensure physical, social and spiritual progress of society-tion. The need to move to a model of sustainable devel-opment of the world objectively caused by demographic "explosion" modern scientific and technological revolution and the current crisis hundred Mr. terrestrial biosphere, significant reduction in its recovery, reproduce, onshore and assimilative capacity due to excessive antropotehno -hennyh stress on nature. Sustainable development - is, first of all, eco-nomic growth, which effectively solved by the major pro-life support problems of society without depletion, degradation, pollution and the environment.

Thus, it is difficult to agree with researchers who believe that sustainable development is only possible for the entire human civilization as a whole, that is, for all countries together and at the same time. Some countries, continents and territories are indeed components and subsystems kind of earth's biosphere, which is rightly considered to be a single, coherent global system. However, this does not mean that they can not alone solve the problem of sustainable development. Indeed, different countries, continents and territories have varying levels of socio-economic and technical and technological development, antropotehnohennyh pressures on the environment, natural resources, pollution, etc. [5].

As for Ukraine, the prospects are implementing the principles of sustainable devel-opment can not be seen in isolation from the ongoing market reforms in the country. Go to the sustainable development of the country as a whole and its individual regions, should be in close relationship with the radical-STRUCTURE rnoyu technical and technological restructuring of social production based on the acceleration of NTP, especially towards comprehensive greening not only basic industries but all spheres of human activity.

It represents the bioeconomy alternative solutions that could use innovation to promote economic growth and nayholov-earlier, to produce useful results for society and the se-dium.

As one example of bio-economy in the world can be divided into bioenergy. Its structure is shown in Fig.

According to experts, proven oil reserves left for 40-50 years; gas - 80 years; coal - about 400 years. Moreover, the trend of rising gas prices over the last ten years is growing rapidly, which is a prerequisite for economic activities bioenergy.

The main factors that determine the use of renewable energy sources in Ukraine are:

- Enerhodefitsytnist;

- Exhaustion of domestic energy resources - forecasted oil and natural gas remained at 20-50 years;

- Environmental consequences of energy production in thermal power plants and radioactive contamination at-areas by the Chernobyl disaster;

- The share of renewable energy in the national enerhovy-duction of countries wishing to join the EU, must be at least me-6%;

***Conclusions and prospects for further research***. Prospects for development of bio-economy on a scientific basis in Ukraine encouraging because the development of a market economy contributes to the creation of scientific technology platforms. However, the priority is the development of bioenergy, which is a prerequisite for the development of the domestic economy as well as with international organizations.

For the development of bio-economy in Ukraine should: a clear understanding of the need for support and development of biotechnology at the state level, business and society; formation of legal, institutional and social framework that will support bioekonomitsi; demonstration of the advantages of bio-economy for man and nature; the benefits of bio-economy to improve competitiveness, environmental improvement and the development of agriculture; close interaction between participants of all levels b