

# Social Dimensions of Green Economy

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The article analyses the social approach to the concept of 'green' economy. The key features of sociology of the 'green' economy have been presented. The basic spheres, in which it is possible to trace the relationship between 'green' economy and social being, have been traced. The impact of the 'green' development on education, health, employment and population wellbeing has been explored. The main promising directions of enhancing the positive influence of the development of 'green' economy on the social sphere have been proposed.

**Keywords:** 'green' economy, social development, sociological dimensions, environment, green employment

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## INTRODUCTION

Recently, the world elite, politicians, businessmen and scientists are increasingly often thinking about the problem what future of the mankind is and what we can do for future generations, how we can help in solving global problems of the planet. In September 2015, at the Summit of the UNO, the Agenda on Sustainable Development 2030 was adopted (UN 2015), which determines 17 aims of the sustainable development for transformation of our world. One of the aims of sustainable development is development of the 'green' economy. 'Green' economy is characterised by the effective use of natural resources, environment conservation and harmonious interaction of humans and the nature, civilization development.

In December 2017, the Roman Club presented its jubilee report (Von Weizsaecker, Wijkman 2018), which gives reasons for a fundamental change of the paradigm of the development of our civilization and transition to the alternative economy. This reveals the sociological aspect of the necessity of development of the 'green' economy, since the concept of 'green' economy is a new perception of the world, new social being with the rational use of natural resources with a careful attitude to nature. The green economy is a new philosophy, aimed at overcoming and correcting errors of market economy, which had an impact on the ecological state. This is a new social attitude to the environment.

The authors of the report of the Roman Club argue that the economy of the future has to be based on sustainability principles and circle logic, the ideas of optimization of multi-use goods. Today, sociology of the new era has to rest on the integral perception of the world, humanistic, open for development, free from anthropocentrism. The central idea is synergy – a search for wisdom through the balance between the nature and the man (it is sustainable development,

ecological awareness), the balance between the individual and the social, the balance between equality and fair rewarding.

In January 2018, at the World Economic Forum in Davos, the alternative system of assessment of economic development based on the inclusive development index was proposed, which also reflects the ecological component of the economy. Thus, ensuring 'green' development as an alternative economy is extremely timely and relevant.

The concept of 'green' economy from the social point of view was considered by such authors as Hussien, Alam, Siwar, Ludin (2016), Zenchanka, Korshuk (2015), Mazilu (2013), D'Amato et al. (2017), Jacob (2015), Ehresman, Okereke (2015), Jackson (2011). However, these authors put more emphasis on the economic component of 'green' development. The aim of this article is to research the social aspects of the development of 'green' economy.

## RESULTS AND DISCUSSION

Development of the 'green' economy influences development of the society. The philosophy of the 'green' economy is aimed at contribution to enhancing the wellbeing of the population due to conservation of the environment and rational use of natural resources. 'Green' economy is environmental philosophy (Ehresman, Okereke 2015). As one of the components of sustainable development, 'green' economy influences provision of social justice and responsibility, a decrease in social inequality and layering of the society, a fair access to the limited natural resources.

The sociology of the 'green' economy includes such key features as global transformation to sustainable development (Jackson 2011), wellbeing of the population, rational use of resources, social progress, balance between individual and social responsibility. Formation of individual and collective population awareness of the environmental protection is essential for 'green' development.

There is also the concept of Green Philosophy (Scruton 2011), the sense of which is thinking about environment from the positions of future generations that they inherit. This is thinking about the future of the planet. Green philosophy is aimed at solving ecological problems, which is also related to social being.

The practice of international organizations emphasizes the need for transition to the 'green' economy, which has not only economic but also social substantiation. There are convincing arguments in favour of combining the efforts of the state and the private sector aimed at implementation of the transition to the 'green' economy. In this regard, the state faces the tasks of creating equal conditions for production of the 'green' products and services by means of the refusal from providing outdated subsidies, reforming environmental policy and creation of new incentives, strengthening the market infrastructure and market mechanisms, redistribution of the state investments and transition to the 'green' public procurement. The private sector faces the challenge to understand and use the real possibilities, offered by the 'green economy' in a number of key sectors, as well as to respond to reformation of the environmental policy by increasing the volumes of funding and investing in 'green' projects.

The 'green' economy in the social aspect is directly associated with such social areas as health care, ensuring a high quality of life, educational system and awareness of the population (Menshikov et al. 2017).

Moreover, in social terms, the 'green' economy has a certain considerable potential as for solving social problems. We imply an increase in population employment (at new 'green'

enterprises), an increase in the level of living, which is also one of the main tasks of the social economy (Simakhova 2017), and in which its relationship with the ‘green’ economy is manifested.

The relationship of the ‘green’ economy and the social aspect of social being are represented in Fig. 1, which shows a considerable social effect of the ‘green’ economy.

Preservation of the environment as one of the tasks of the ‘green’ economy affects what air the person is breathing, what foods and water he consumes; all this has its impact on the health, sickness rate and average life expectancy of the population. In transition economy countries and developing countries, environmental pollution leads to different illnesses of population. For example, in Ukraine among the number of diseases by the disease type, diseases of the respiratory system rank first and make up 46% of all diseases in 2016 (Ukrstat 2017). These diseases are directly related to the state of the environment, emissions of hazardous substances into the air. The development of the ‘green’ economy will have a positive effect of improving the state of health of the Ukrainian population.

Lately, there has been a positive tendency of an insignificant growth of the indicator of the average life expectancy of the population in Ukraine.

From 2010 to 2016, the average life expectancy at birth for women in Ukraine increased by 1 year from 75.5 to 76.5 years of age. At the same time, the average life expectancy at birth for men increased by 1.4 years from 65.3 to 66.7 years of age. These indicators are not sufficiently high in comparison with those of other countries of the world, even with the neighbours of Ukraine. Thus, in Belarus the average life expectancy for women is 78.9 years of age, in Romania it is 78.7 years of age, in Poland 81.6 years of age, in Slovakia 80.2 years of age and in Hungary 79 years of age (Ukrstat 2017: 581–582). We do not take into account the highly developed countries of the world. The same situation is observed with regard to the average life expectancy of men: in Belarus – 68.6 years of age, in Romania – 71.5 years of age, in Poland – 73.5 years of age, in Slovakia – 73.1 years of age, in Hungary – 72.3 years

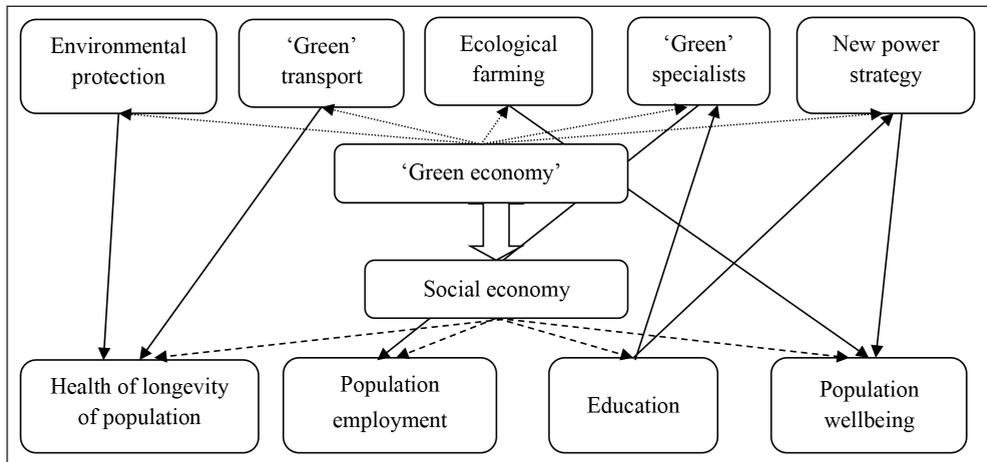


Fig. 1. Relationship of ‘green’ economy with social being\*

\* Source: authors.

(Ukrstat 2017: 583–584). The given data indicate that one of the aspects of providing a longer average life expectancy is the active attention and activity on preservation and cleaning the environment from hazardous pollution.

Nowadays the environment is polluted by toxic substances from plants, factories, thermal power plants, cars, etc. Emissions of oxides of carbon, nitrogen, sulfur, heavy metals, lead compounds, construction dust and other poisoning substances into the environment contaminate the air, soil and water, resulting in severe diseases for the population (respiratory, of cardio-vascular system, cancer, congenital anomalies).

In addition to industry, one of the main polluters of the environment (causing deterioration of the health of people) is transport, including private. In cities and outside them, automobile transport consumes more than half the oil and generates almost a quarter of the world's CO<sub>2</sub> emissions (UNEP 2011). This involves significant costs both for power carrier and for cleaning up the polluted environment. Thus, it is necessary to pursue a policy of transport 'greening' that combines the following basic components:

- exclusion or reduction of unnecessary travels, transfers due to transport planning and localization of production and consumption;
- transition to more eco-efficient, 'green' kinds of transport such as public and non-automobile transport for passengers and railway and water transport for freight transportation;
- improvement of the used equipment and fuel in order to reduce their negative impact on the environment and human health.

The 'green' economy involves not only health care, but also one important element of the social sphere – education. The basic relationship is observed in the following direction: education provides awareness of school pupils and students of the need for efficient use of resources, caring attitude towards the areas (Stukalo et al. 2018). It is imperative that since his school years a little citizen should understand the main principles and postulates of the 'green' economy and the importance of complying with them for the sake of ensuring the overall wellbeing.

Awareness of citizens of the 'green' economy leads to their ecological responsibility, to environmental friendliness of consciousness and actions of the population. Such examples can include bringing batteries to collection centers, clean-up days, planting trees by population, etc.

Despite a certain promotion of environmental protection and a healthy way of life, unfortunately, the conscious attitude towards the environment of the population of Ukraine has not been formed yet. Thus, there is no active propaganda in the mass media on the importance of fulfilling the objectives of sustainable development.

In our opinion, a shortcoming in this process is the lack of compulsory subjects in schools and universities on the basics of sustainable development and 'green' economy, the lack of permanent training for people of adult age, workers of different industries in regard to the 'green' economy.

While studying such disciplines, there should be a search for optimization of ecological and economic effects of the use of primary and secondary resources taking into account the importance of the preservation of the environment (Dynka 2014).

In addition to formation of population awareness, connection of the 'green' economy with higher education can be traced in the formation of competencies of 'greening' of would-be specialists. Certainly, it is extremely important, because in terms of development of the 'green' economy in Ukraine, there will be a structural realignment of the commercial

complex, which will require appropriate educated professionals who will be able to apply the principles of the 'green' economy to practice.

Foreign scientists see some possibilities for the 'green' transformation of the socio-economic system (Narloch, Kozluk, Lloyd 2016):

- 'Green' investments (such as renewable power sources or the social aspect in public awareness);

- 'Green' jobs;

- Increase in production and export of 'green' goods and services.

These prospects concern all countries in terms of the formation of the 'green' economy. The production of 'green' goods and services will create a specific niche of 'green' vacancies in the job market (see the Table). There arises the question what these 'green' jobs are. They are professionals in treatment of drinking and wastewater, air, forest sanitary, specialists of waste management and recycling, environmental and energy consultants, specialists in renewable power industry, engineers, technicians, mechanics, 'green' inventors, teachers and researchers in the field of 'green' economy. There arises a certain problem because it is very difficult to distinguish between the 'green' and 'non-green' jobs and we must analyse the essence of the performed work. According to the materials of the XIX International Conference of the International Labour Organization (ILO) 2013, it was decided to refer to 'green' jobs not only those that are involved in the production of 'green' goods and services, but also those that make their production processes more 'green' or use natural resources more effectively (ILO 2013).

According to the data from the Table, we can make the conclusion about importance of different courses, training and university programs for personnel retraining. That is why the relationship of the 'green' economy with the education sector is very important, since school years, it is necessary to form in little Ukrainians new approaches and new perception of the importance of conservation and cleaning of the environment, as well as the skills of the 'green' economy.

The studies of the German scientists have shown that the 'green' economy will have a short-term, medium-term and long-term impact on the employment of the population of a country (Jacob 2015: 21):

1. A short-term impact on employment of the population is a direct impact of an increase in production and a demand for 'green' goods and services. The environmental conservation policy is aimed at increasing prices for pollution and using resources, resource consuming

Table. Changes in competencies and professions with the development of 'green' jobs

Degree of change in competencies	Change of profession	Change of skills	Example
Absent	Absent	Absent or increasing training in existing profession	Bus driver of a bus, fuelled by compressed natural gas
Low	Insignificant change of existing profession	Training at work or medium-term courses	Welder in production of wind turbines, organic farmer
Medium	Change or a new profession	Medium- or long-term courses	Power consultant, mechanic for an electric car
High	New profession	Higher education or long-term courses	Technician on solar energy, biofuel technician, ecological designer

Jacob 2015: 22.

productions will suffer, which will result in redundancy of employees. However, this negative effect will be offset by an increase in production in the alternative environmental industries with the employment increase in them. There will be personnel re-training, where an important role will be played by the system of education.

2. A medium-term impact on employment will be felt after personnel retraining. New industries and markets for 'green' products and services will develop. The export of these goods and services will rally as a result of the development of the world market for green products and services. Employment will be stable. However, the prices of power carriers, pollutant emissions will rise.

3. A long-term impact on employment of the population will occur as a result of innovative and technological and inter-industry changes. Labour productivity will increase and overall wellbeing will rise.

The relationship between the 'green' economy and ensuring the wellbeing of the people is traced in the long-term prospects. It is not accidental, since poverty in itself is a significant manifestation of social injustice and inequality, caused by an unequal access to education and health care, unequal opportunities with regard to financial resources and incomes (Stukalo, Simakhova 2018). One of the features of the 'green' economy, as it was mentioned, is provision of social justice and an increase in separation and poverty of people, because it creates different opportunities for the socio-economic development of the country and decreases poverty.

For the developing countries and, to a certain extent, for the countries with transitive economy, one of the sources of income is natural resources and agricultural products. 'Greening' of agriculture, especially private farmers, would contribute to decreasing poverty and increasing the inflow of investments in the field, on which the poor layers of population depend (UNEP 2011). Given this, development of organic farming as a private initiative, aimed at the development of the 'green' economy and conservation of environment, is important. Moreover, it will increase the amount of food in the face of the current global food problem (Stukalo, Simakhova 2018).

One of the interesting ideas of the 'green' economy is creation of 'green' or environment-friendly places. They are small settlements, which are distinguished by a greater density of population and housing development, existence of trade and entertainment infrastructure, special road planning in order to avoid the problem of traffic jams. These cities are characterised by high employment and productivity. Properly designed and accessible from the standpoint of the transport system areas with population density of 100–1,000 people per hectare (up to 3,000, depending on a country and region) make it possible to achieve an effective organization of public transport and can be considered as a starting point for creation of 'green' cities (Hasan, Ahmed, Sadiq 2010: 7). At a higher population density, creation of an infrastructure, including a network of streets, public transport, railways, water supply, sanitation and other utility service, costs per one inhabitant are significantly lower. In general, during the process of urban development, there is a possibility to take into account the problems of the social system and the health of residents in the city, which, as a rule, are optimally solved under conditions of 'green' communities and areas. In order to help municipalities in realization of the potential of the 'green' economy, it is also important to give them responsibility and increase their powers to perform the role of observers in application of the national 'green' legislation at the local level, with the right to introduce, when necessary, even more severe restrictions than those required at the national level.

Moreover, except the development of ecological farming and 'green' cities there are two basic directions to increase the population welfare and involve the development of the 'green' tourism, which also contributes to the inflow of foreign investments and the transition to alternative power sources, which will significantly reduce expenditures of the population for power resources, thereby increasing the level of people's lives.

## CONCLUSIONS

Summing up, it is possible to argue that the 'green' economy is a new social aspect, innovative integral perception of the world, which ensures the harmonious development and the interaction of the society and the nature, aimed at solving ecological problems that arose under market conditions. Moreover, based on the conducted analysis, it is possible to make the key proposals for strengthening the social effect of the development of the 'green' economy on social life (Fig. 2).

According to the information of Fig. 2, the main perspective areas for strengthening the positive influence of the 'green' economy on society's life are (Stukalo, Simakhova 2018):

- Active advertising of the 'green' economy in mass media, big-boards etc.;

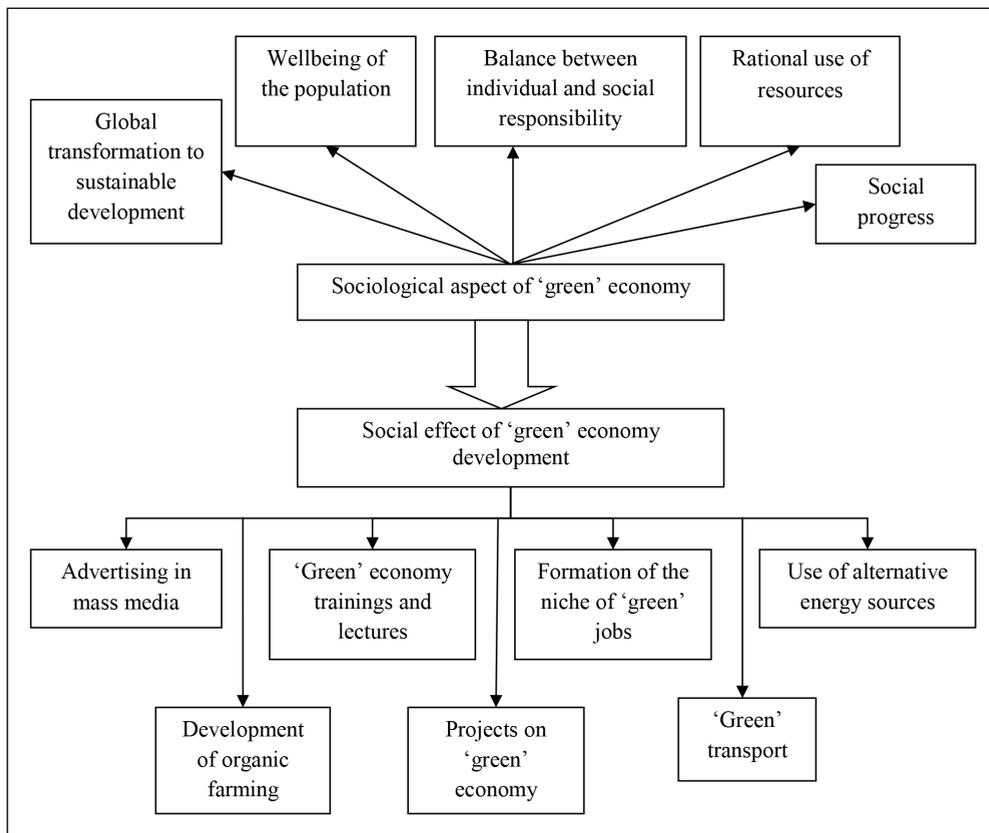


Fig. 2. Sociological aspect of 'green' economy and perspective areas for strengthening its social effect\*

\* Source: authors.

- Demonstration of basic principles and postulates of the 'green' economy at trainings, master classes for the general public, as well as for individual entrepreneurs, government officials, representatives of public organizations;
- Lectures on the fundamentals of the 'green' economy in schools to raise awareness of the population since childhood;
- Raising awareness of the population regarding the influence of the state of environment on health and the everyday actions of citizens for improvement of the state of environment;
- Formation of the niche of 'green' jobs;
- Development of organic farming;
- Development of the new energy strategy of the country, based on the use of alternative energy sources, which will decrease the expenses of people for power carriers;
- Pursuing the policy of 'green' transport;
- Support of socially significant projects on 'green' economy at all levels of public administration.

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## **Socialiniai žaliosios ekonomikos aspektai**