# Social and economic aspects of the formation of environmental consciousness

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Abstract. The problem of the interaction of nature and society is ontological in nature, and identifies the direction of the existence of humanity as a single planetary system. The actualization of the concept of "world" relative to the historical process falls at the end of the 19th beginning of the twentieth century due to the leveling of economic and cultural national characteristics, the formation of a system of labour division at the interstate level, the growth of the role of the media in intercontinental communication. In the twentieth century the existence of capitalist and quasi-socialist social and economic systems affects the development of the world community as a process due to competition and interdependence. This influenced on the directions of the implementation of the scientific and technical revolution, namely on the correlation between material overproduction and the spiritual development of a person and humanity as a whole, which in turn led to a crisis in environmental consciousness. An increase in the sphere of activity and knowledge, the formation of a new system of industrial relations, technological pollution of the environment led towards a global environmental crisis at the beginning of the 21st century. Solving the problem of ecological consciousness at the present stage has become not only the task of describing the vectors of scientific researches in the sector of societynature interaction, but is the main basis for both the development and the existence of civilization as a whole.

# 1 Introduction

Process of globalization, unification, multiculturalism, technological catastrophes affected need of revision of the settled system designated by the concepts "culture", "civilization", "natural and geographical environment", "environment", "sphere of activity". Note that any human activity has environmental aspects, affects the formation of ecological consciousness as an independent form of social consciousness. The latter is manifested in a variety of activities. For example, the promotion of environmental knowledge due to the media, the system of higher and secondary education, environmental activities of various international organizations, organizations of non-state, social environmental protection movements and so on. The development and consolidation of ecological consciousness as a form of social consciousness, we hope, can qualitatively influence not changes in the

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purpose, principles, sphere of activity of both a person and society and will lead to a new ecological dimension (progress) of modern civilization as a whole.

Modern environmental problems is a consequence of the natural and historical process, which should enter the fairway of the unity of social and natural, harmony between the activities of society and the preservation of the environment. The social and philosophical analysis of these processes encourages the delineation of means, methods and methodology for solving the global environmental catastrophe, characteristic of the beginning of the 21st century, that aims to determine the vectors and prospects for the development of mankind as a planetary social and natural system and Earth eco-civilization.

The interaction of society and nature was considered by a significant number of domestic and foreign scientists. Attention was paid to the study of the following aspects: natural and scientific (V. Vernadsky), interdisciplinary (E. Odum, S. Schwartz), social and philosophical (B. Erasov, M. Mchedalova), prospects for the ecological development of civilization (B. Devall, J. Houghton, E. Laszlo, D. Meadows, M. Mesarovich, E. Pestel A. Peccei, J. Session, Ch. Watkins) [1-7]. The problems of the genesis of civilization, antroposociogenesis, the evolution of the biosphere, the methodology of environmental protection and so forth were considered. The article is an attempt to analyze the social and economic aspects and theoretical developments in social philosophy, history, history of economics for the further systematization and practical implementation of the idea of greening consciousness and the genesis of eco-civilization of the future. Interaction of society and nature at the beginning of the 21st century is characterized by the inconsistency of the technological foundations of economic development with environmental norms and laws, the threat of an aggravation of the global environmental crisis and so forth. In our opinion, the study of ecological consciousness, as part of social consciousness, will provide an opportunity to determine the relationship of sociological relations with the development of civilization as a collective subject of environmental management. An analysis of the introduction of the environmental basis of production conditions, environmental activities, the interdependence of the existence of environmental and social space, the genesis of the global environmental problem will determine its sources and ways to solve it. It is important to determine in public consciousness the causal links between natural and social, which in turn leads to the attention of society to solve ecological problems at the micro and macro levels, depending on the shortcomings of the historical period, as well as to the formation of ecological consciousness. The latter should be a step for humanity to realize its social nature on a planetary scale.

#### 2 Materials and methods

When writing the article, the authors used the principles of objectivity, unity of systematic and structural and genetic approaches, unity of historical and logical. When considering the complex "biosphere-technosphere-society," a substrate approach is involved. The process of reflection of the mutual influence of the development of society by the public consciousness, nature and environmental legal norms was revealed through a systemic, civilizational, cultural, evolutionary approaches. To determine in social and historical development the reasons for the contradictions of natural and social and their presence and influence on public consciousness the method of interdisciplinary analysis of categories was used.

#### 3 Results

The era of trans-nationalization and globalization was the modern stage in the development of the world community, connected with economic globalization and the aggravation of the environmental factor. It affects accelerated transformation of social, technological sphere, forced imbalance in the world economy and exacerbation of environmental problem [8]. The latter is manifested in the reduction of natural resources, pollution and extensive use of the environment. These processes are influenced by both economic growth and demographic processes. Remind that in studies of the beginning of the XXI century the population was projected to increase by 50% over the period 2000-2050, and the world economy grew by 500% [9]. Most scientists noted that in 2030 population growth will lead to an increase in supplies and energy consumption by 50% (by 2050 – by 70%), clean water - by 30% [10]. But studies of the state and trends of the epidemic COVID-19 on the economic situation in the world and the determination of the social and economic losses that the world community will suffer from the pandemic of this disease even in the process of scientific discussion. For example, researcher Dolbneva D. notes that the consequences for the world economy can include "the decline in exchange indices; a significant decline in oil prices and a slowdown in the metal market; reduction of production; a significant decrease in revenues of airlines and maritime transport, shopping and entertainment centres, the tourism industry; reduced incomes of the population; increasing the revenue of the pharmaceutical industry and the global gaming, educational and other online applications industry; rising investor demand for less risky assets. In such a situation the economic growth of the world economy is already declining (from 2.5% to 0.6%). In 2020, at the global level the economic situation will be close to a recession, global economic losses can reach \$ 2,7 trillion» [11]. The Head of the European Central Bank Ch. Lagarde said that Europe could experience an economic shock like the world financial crisis of 2008, world leaders will introduce coordinated urgent measures against the coronavirus pandemic [12].

This implies the actualization of ecological consciousness at the level of interaction "economics-medicine-ecology" and highlights the importance of the environmental component in the development of international economic relations in the context of globalization. The pandemic has caused some consolidation in decision-making at the level of world government leaders, local authorities, taking into account proposals from experts, representatives of TNCs, civil society, quarantine and post-quarantine activities aimed at implementing effective social and economic and environmental policies at the micro and macro levels.

According to domestic researchers, the scale of world production and consumption has led to an imbalance in the balance of public and natural systems. The crushing anthropogenic impact on the natural environment has been doubled, and "humanity's debt to the environment equates to about \$4 trillion" [13].

The leading subject in international economic relations is TNCs (transnational corporations), which have the greatest adverse impact on the environment through competition, and the improvement of international competitiveness in the context of globalization. For example, TNCs reduce environmental costs, introduce modern technologies and increase overproduction, place production in low-cost countries, and lack control over environmental regulations and laws. TNCs are the main drivers of economic globalization, as they use macro and micro factors such as the capabilities and resources of the company itself; the level of competition in the industry; host country, synthesis of international, national and regional aspects of production. Profitable competitive positions on the world stage are gained, in particular, due to the inhumane use of natural resources and opportunities, not taking into account environmental consequences. Thus, we propose the conscious application and implementation of the principles of eco-consciousness at the following levels of work of TNCs: 1). mergers and acquisitions; use a synergistic approach for production, development, research taking into account the functioning of the regional

ecosystem. 2) Diversification of activities; integrated multiple types of production within a TNC, using a single multilevel, branched system for cleaning and controlling emissions. 3) International management; access to information and technological resources, a unified system of reporting and accounting as a mandatory basis for the formation of an effective system of environmental monitoring at the international level. 4) Innovation of the corporation; carrying out researches and introduction of specific (inherent in this industry) new production technologies, improvement of the management system aimed at cleaning the environment. The process of building eco-civilization should take into account crossborder mergers and strategic alliances. This allows additional capital attraction in foreign markets, allows TNCs to gain monopoly leadership and take full responsibility for environmental security at the global level. For example, the total amount of cross-border mergers and acquisitions transactions increased 10 times at the time of 2014 (respectively, over the last 20 years) [14]. For our research, it is important that a significant part of crossborder acquisitions and mergers took place in the banking sector, chemical industry, pharmaceutical industry, telecommunications and insurance. The main share in crossborder mergers and acquisitions belongs to TNCs. More than 80% are cross-border mergers and acquisitions of companies from highly developed countries (USA, Great Britain, France and Germany) in the global economy [14].

Cross-border strategic alliances and similar forms of cooperation facilitate the integration of foreign TNC units and increase international mobility of capitals, technologies, goods and services. It affects the modernization of the economy taking into account environmental standards.

The important role of TNCs in the world economy and their significant impact on economic and social processes reflect codes of conduct for TNCs within the UN (United Nations) and OECD (Organisation for Economic Cooperation and Development), which are complementary to existing corporate social responsibility standards developed in TNCs themselves.

An analysis of the reports of the United Nations Conference on Trade and Development (UNCTAD) on world investment, which are published annually, allows us to track modern trends in the development of TNCs, as well as the impact that the global financial and economic crisis has had on them. According to UNCTAD, TNCs control half of world industrial production, 75 per cent of commodity trade and 80 per cent of trade in technology, licences and know-how [13]. TNCs control up to 90% of the world market for wheat, coffee, maize, 85% of the copper market, 80% of tea, 75% of bananas and natural rubber [15].

TNCs will further influence economic growth and the social and economic development of the world economy by: creating new jobs with the guarantee of workers' rights, expanding exports, introducing ecological security measures and preservation environment, paying taxes, transferring capital and technologies and ensuring international cooperation. TNCs are mainly trying to become a significant part in countries with economies in transition, or in developing countries. This allows to implement different production and investment models. For example, licensing, outsourcing, franchising, subordinate industrial and agricultural production. For these countries, TNCs provide opportunities for some integration into the global economy, improving domestic productive capacity, and competitiveness in the world market.

The process of global competition encourages cross-border mergers and acquisitions of companies, leads to the formation of strategic alliances, which forces additional capital attraction and changes the rules of competition at the level of tactics and strategies of TNCs. Innovations and innovation activity are becoming key factors in the competition of TNCs, and this is of particular importance in crisis situations where TNCs try not to reduce researches and development costs. It is important at this stage to influence the investment

and innovation policies of TNCs through advertising and the introduction of ideas for the formation of eco-civilization and eco-consciousness.

It is necessary to introduce a program for the formation of environmental civilization and include it in the principles of commercial diplomacy based on the activities of organizations of the UN system. TNCs, thanks to basic dimensions of development, such as: advantages in the security and value of natural resources, skills of the workforce, wage levels; depreciation policy, in particular, in depreciation rates; antitrust and labour legislation; in the level of taxation; the stability of currencies will be involved in the development of environmental security in the context of globalization. At the present stage, it is necessary to create a system of economically profitable institutions for both states and TNCs, which solved the problems of regulating and resolving the environmental activities of TNCs at the regional and international levels. Today, a system has been formed in the system of UN institutions, which does not control the activities of TNCs but adheres to the principles of commercial diplomacy. TNCs in this system can openly defend their interests [16]. This system has an extensive structure, is multifunctional, is effective for countries that receive or export transnational capital, also allows TNCs to increase profits in those countries where the non-institutional system is unified with the UN principles in the sphere of international business of TNCs [17 p. 11-13].

TNCs are the main producers of goods, services, consumers of natural resources, but they are the most polluting environment. This is due to the transfer of "dirty" production to market conditions with political and economic consideration of condition. In order to minimize costs, environmentally hazardous products are produced and sold, harming the environment of host countries. TNCs take advantage of the legal differences between developed and developing countries primarily in investment and environmental legislation. People resort to saving investment in the environmental sphere in the third world, neglecting environmental protection requirements.

## 4 Discussion

The environmentally driven demand of conscious consumers in developed countries has become a characteristic feature of the beginning of the XXI century, it has become a stimulus for TNCs. In this regard, certain TNCs began not only to improve the production process, but also to use the environmental factor in advertising and competition, to introduce models of the international system of standards, eco-labelling of goods, environmental marketing and management, environmental accounting, environmental transparency [18; 19; 20, p. 228-234].

It should be also noted a negative factor that is characterized by lability of environmental policy of TNCs in accordance with countries with different social and economic and political potential. For example, Shell, an oil and gas company, in Canada is highly appreciated by environmentalists, and in Nigeria it is criticized by "green" activists. Domestic and foreign researchers determine trends in environmental practices of TNCs [20].

Pay attention to one of them. TNC in the host country has consistently adhered to corporate environmental programme norms and standards, ignoring the low level of environmental legal standardization in the underdeveloped region. Environmental awareness of TNC practices is developed through environmental regulation at the international, national and local levels. We note the prolonged nature of environmental investment policy in terms of dividend recovery. Therefore, strategic programmes of 5-20 years mainly include extensive funding for ecosystem support, thanks to the transition to environmentally sound technologies ("green technologies"), unlike corporations with medium-term (3-5 years) and short-term (1-3 years) planning.

At the present stage, a large number of major TNCs are guided by the criteria of environmental marketing in production. According to a report by the Norwegian Road Federation (OFV), the share of the car market in Norway increased to 54.3% in 2020, compared to 42.4% in 2019, taking into account hybrid cars, the fate of electrified cars last year amounted to 83%. In 2020, 76,789 cars were fully electric with 141,412 cars that were delivered to Norway. Sales of electric vehicles exceeded 50% in certain months, but 2020 was the first year when all electric vehicles exceeded the total volume of models with internal combustion engines for the year as a whole [21]. On January 2, 2021, Tesla released data on the supply and production of cars for the fourth quarter of 2020 and full 2020. In the fourth quarter of 2020, the company managed to manufacture and deliver a record number of cars - 179,757 and 180,570, respectively, and almost managed to achieve the annual goal – 500,000 cars for the entire year [22]. The total number of electrified cars of all categories (BEV, PHEV, HEV, MHEV) in the Ukrainian market is almost close to fifty thousand, and as of October 1, 2020 reached 49,618. Thanks to successful "hybrid" months, the share of cars with a fuel-electric transmission exceeds the share of clean electric vehicles in the ratio of 25,556 to 24,052. At the same time, the share of registrations of new cars from among hybrids increased from 5 to 10%. In Ukraine, people actively began to buy new cars with a hybrid transmission, in turn, it affected the gap between the number of registrations of hybrids and electric cars, almost twice. In the third quarter of 2020, there were significant achievements in the leaders of clean electric cars among brands, as a result of which the unconditional favourite of recent years Nissan lost about 3% of the Ukrainian fleet, which in turn received Tesla and Renault [23].

Another example of greening consciousness is the marketing strategies of TNCs (Apple, IKEA, Levi's, Coca-Cola, etc.), which are aimed at processing used goods, directing them to secondary use [24]. A large part of TNCs have begun to publish environmental reports in the media regarding the assessment of the environmental impact of corporate activities, which indicates an approved programme of strict compliance with environmental standards. The formation of environmental consciousness has led to changes in TNC strategies at the level of consumer demand for products, represents environmental properties, components and image.

According to E. Sharyan and the team of authors, the formation of the "green economy" is influenced by integrated marketing communications as a factor in the formation of conscious consumption and preservation of the environment in the world and Russia in particular [25]. Researchers A. Balabanova and N. Keshchyan note the possibilities of solving environmental problems at the level of cooperation between municipal administration, business and the public [26]. The team of authors under the leadership of M. Golubchikova analyzed the transformations of identity in environmental education in the context of personal, interpersonal and professional transformations of schoolchildren and students [27]. D. Mazhitov and a team of researchers devoted an article to the development of technologies and processes in environmental management. The latter includes the problem of management systems (laws, legislation, standards, etc.), education (advanced training), technologies (technologies, knowledge, innovations), which form the basis necessary to solve environmental problems in the long term [28].

So, with the directions in the formation of environmental consciousness at the TNC level can be attributed: an international system of standards, eco-labelling of goods, environmental management and marketing, environmental audit, environmental transparency. But their activity is largely harmful to the environment of developing countries. Environmental markings are taken into account by corporations, but are not mandatory. It updates both intra-corporate and international monitoring of the implementation of environmental norms and standards by transnational corporations, in the

context of globalization. TNCs should introduce innovations and environmental technologies to improve environmental programmes.

# **5 Conclusions**

The study analysed and proved the link between humanistic, ecological values and social ideals; it is determined that the expansion of the sphere of human activity in the natural complex affects the acceleration of the greening of consciousness; carried out a sociophilosophical analysis of economic, natural and cultural activity, confirmed the hypothesis about the possibility of building and implementing the idea of harmonizing of sociological relations and the model of future eco-civilization in the context of the introduction of the concept of sustainable development due to the phased activities of the international community in modern social and economic and political conditions. The current environmental situation requires coordination of the activities of scientific, social and human rights organizations at the international level, since there is a correlation between the inhibition of social and economic development of society and the unresolved environmental problems. Along this way the starting point is the greening of consciousness. The last as a form of public consciousness causes within a civilization on the basis of environmental management, natural recovery, the nature of transformation, introduction of an ecological component in all spheres of activity of the person. In general, the greening of consciousness leads to the realization of the sociological essence of civilization, for example, thanks to the organization of natural and artificial landscapes on the basis of the adequacy of value humanistic norms and laws. The inclusion of the environmental component in the public consciousness, both in general and separately to each component (philosophical, religious, economic, legal, moral and ethical, aesthetic consciousness) will qualitatively affect the progressive development of society, will guarantee the introduction of the state of the environment into one of the main criteria characterizing indicators of economic growth and social progress. At this stage, it is necessary to update and implement a sustainable system of environmental education at all levels, using scientific, moral and ethical, and aesthetic principles. An important aspect is the formation of ecological consciousness at the macro, micro social and individual levels using advanced scientific researches in the sphere of philosophy, biology, medicine, law, sociology and psychology, taking into account the scale and length of the process.

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