

# Environmental policy and social solidarity: the problems of interconnection

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**Abstract.** The objective of the study is twofold: firstly, to develop an ESG strategy and secondly, to implement it as a solution to global environmental problems, based on the principles of solidarity of all participants at the international level. In the study, the authors employed three methodological grounds: firstly, systematicity and additionality, which were used to analyze multilateral interdependencies and fundamental contradictions that prevent the dominance of the principles of environmental policy and ESG-governance; secondly, the substantive analysis which serves as the foundation for comprehending the interconnections between socio-economic systems and the pivotal elements that shape their evolution within the context of the environmental agenda; thirdly, the logical analysis that enables the utilization of a diverse array of data obtained through the generalization of environmental policy and ESG governance. The study is grounded in the theoretical frameworks of the public sphere research and structural functionalism. The authors' conclusions are based on empirical data obtained during the implementation of the strategic project, "ESG models for the growth of new ecoterritories," at the Ufa University of Science and Technology (Ufa, Russia). It may be concluded, therefore, that an ESG strategy aimed at social integration serves to unify the social organism and facilitate sustainable socio-economic development, while simultaneously fostering a system of values and a mode of thought characterised by solidarity. The paper justifies the proposed strategies for enhancing environmental quality. These include a focus on human-centric economic practices and the promotion of solidarity as a global and interhuman prosocial behavior.

## 1 Introduction

In contemporary society, there has been a discernible qualitative increase in the number and severity of risks and threats, which impede the ability of social communities to develop and implement effective response behaviors [1]. There are two main trends that determine the future of humanity. Firstly, the issue at hand is the detrimental impact of human activity on the natural environment, which could potentially result in a significant ecological catastrophe. Urbanization contributes to a significant load on nature in the vicinity of megacities and deterioration of the environmental situation, which leads to health problems

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of residents. Therefore, the need for green transformation of the societal system is actualized. This development implies the satisfaction of people's needs without harming the environment, the formation of ecological culture of society. The advancement of such developments is facilitated by environmental innovations, which are a category of technological and process innovations that contribute to the reduction of the destructive impact of humans on the environment. Secondly, there is a notable surge in the volume of information that engulfs individuals, leading to what is known as the "information trap." This phenomenon can be attributed to various factors, including the accelerated pace of modern life, the diversification and intricacy of social roles, the constant necessity to acquire new knowledge, the advent of digitalization, and other factors.

One of the threats is ecological catastrophe, the symptoms of which are becoming more and more visible in the situation of increasing anthropogenic impact on nature. This prospect urgently requires reorientation of consciousness, change of fundamental human values in the direction of "integral" self-determination, formation of solidaristic attitudes. On the one hand, in the conditions of globalization and the Internet era, the opportunities for direct interpersonal interaction and mutual understanding between generations have been significantly reduced. On the other hand, resources have become available for the creation of network solidarity, which can become the basis for a broad consensus to solve environmental problems. Ecologically oriented scientists and politicians in different parts of the world speak of the need to overcome the "differential" consumer approach of technogenic civilization, to make the norm of life an ecological attitude that implies the dominance of "ethics of responsibility" over "ethics of consumption". It is necessary to strive for a model of sustainable development, which implies a balance of economic, political, social and spiritual activities of people, harmoniously integrated into the natural universe. These ideas are reflected in the ESG agenda. The latter becomes the program orientation of business and state corporations. However, in many cases corporations apply these principles piecemeal, at the level of business entities, often unrelated to the agenda of global environmental sustainability and safe development of the society. It is essential to examine the circumstances under which the corporation, as a civil and socio-economic system, considers the planning and execution of social functions, including social investments, and maintains equilibrium among the interests of all stakeholders, including those of future generations.

## **2 Literature review and methods**

The authors' conclusions are based on the concepts of J. Habermas [2] and T. Parsons [3] as a methodological foundation. The authors of the study acknowledge the contribution of O. Comte [4] to the concept of solidarity in social relations. Comte understood solidarity as a relation arising from the constant division of different types of human labor. The concept of social solidarity, as described by Émile Durkheim, constitutes the central tenet of his theoretical framework. It encompasses the notion of social solidarity's organic nature and functions within the context of modern society. In examining the interrelations and additivity of environmental policy and social solidarity, it is essential to consider the aforementioned ideas. ESG strategy combines responsible environmental policy of the organization, corporate social responsibility towards external and internal stakeholders of the organization, as well as adherence to professional and ethical standards of corporate governance. The authors of this study rely on the ideas formulated in the works of a number of contemporary researchers who analyze the relationship between environmental policy and social solidarity. In particular, O.S. Anisimov [6] considers solidarity in the context of environmental culture, E. Baker [7] analyzes the ethical implications of environmental policy and practice, L. de Fontenelle and E. Annamayer [8] address the problem of

promoting solidarity for "net zero" emissions, V.G. Calvo and R.G.-A. Diaz [9] consider the problem of the relationship between economics for the common good, social and solidarity economy, G. Bazzani [10] analyzes the phenomenon of climate solidarity. The ethics of responsibility in business relations, which takes into account the environmental aspect, is in the field of research of a number of modern authors [11, 12, 13, 14]. J. Elkington identified the bases of sustainability: People, Planet, Profit [15]. H. Jonas notes that personal and collective responsibility in the use of natural resources should be based on the idea of the moral duty of mankind to the future [16]. Responsible decision-making should be based on sustainable development, which allows meeting the needs of the present generation without jeopardizing the needs of the next generations, during which the use of natural resources, the direction of investments, orientation on technological progress and institutional changes correspond to the balance of needs of the future and the present. J. Barry analyzes environmental morality, individual management and collective responsibility [17]. M.E. Zimmerman critically analyzes "radical ecology within the complex cultural and political terrain of the late twentieth century, showing its relation to Martin Heidegger's anti-technological thought, 1960s counterculturalism, and contemporary theories of poststructuralism and postmodernity" [18]. E. Katz "traces the development of an ethical policy that is centered not on human beings, but on itself" [19].

The principles of systematicity and additionality allowed us to analyze the multilateral interdependencies and fundamental contradictions that prevent the dominance of the principles of environmental policy and ESG-governance.

The principle of substantive analysis has become the basis for understanding the relationship between socio-economic systems and key factors of their development in the context of the environmental agenda.

Methods of logical analysis ensured that a variety of data were used to summarize primary and secondary information.

The authors' understanding of the principles of uncertainty (W. Heisenberg) and additionality (N. Bohr) as applied to the analysis of the modern ecological situation gives grounds to assert that the more precise the goals are set, the more uncertain the dynamics of production of new forms of life becomes.

In the conducted study, the authors are based both on the theoretical analysis of scientific sources and on the systematization and interpretation of empirical data obtained during the implementation of the strategic project "ESG models of growth of new ecoterritories" at the Ufa University of Science and Technology (Ufa, Russia).

### **3 Results and Discussion**

Industrial civilization was formed and developed up to the middle of the twentieth century as a civilization using non-renewable natural resources. Opposition to nature has already led to serious problems, calling into question the very fact of human existence. O.S. Anisimov notes that the development of the human community went in parallel with the separation from nature, the desire to conquer and subdue it. The model of alienation was extrapolated to other spheres of human life - there was a separation of society from nature, and morality, economics, politics, spirituality - from each other. This entailed confrontation with nature, violence against it, and a backlash in the form of natural disasters that have become an everyday occurrence. Ecologists justifiably state that humanity suffers from its own provoked alienation from nature, from social, technological and other problems derived from it, which require joint efforts, global partnership and world solidarity built on the coherence of interregional and interstate relations [6]. The problem of solidarity and solidarity society is beginning to be understood in a new way [20].

Today we need a profound transformation of public and individual consciousness, assimilation of the dominants of environmental ethics - the ethics of "reverence for nature", as A. Schweitzer called it, following the maxim of ecological culture. The latter implies refusal from excessive activity and consumption, from contamination with matter, energy, information, launching a program of ecological "improvement". According to the authors of the study, a person needs to recognize the limits of his or her capabilities. Researchers of the Club of Rome in their project conclude that man is able to create a society in which he can live on Earth indefinitely if he imposes restrictions on himself and the production of material goods to achieve a state of global equilibrium with a carefully selected balance of population and production [21]. Environmental protection and environmental legislation become maxims at the level of states and governments, and the subject "Ecology" becomes a mandatory component of educational programs. Nevertheless, as J. Habermas notes [22], there is a huge distance between human expectations and the effectiveness of moral evaluations, which is reflected in the detachment of theoretical concepts from the harmonization of prospective and tactical action. This suggests that the process of adopting a new model of human-nature interaction will be a long one. In this respect, understanding the dependence of the level and quality of life on the state of the environment is a component of the new thinking, a valuable ground for the formation of solidarity practices. In the conditions of freedom from global anxiety and insatiable greed, generated by modern capitalism, the opportunities for human creative activity are increasing, which signifies the need for interpersonal cooperation and cohesion.

The environmental problem is among the global problems of our time and requires efforts for joint solutions. Human beings have reason and free will. However, the human race abuses both. Without knowing the final results and aspirations, mankind improves the technogenic sphere. But mankind is simultaneously damaging the ecological environment. Today the provisions of the Moscow International Declaration on the formation of ecological culture, developed by a group of experts of the European Union under the leadership of R. Prosperini in 1998, are even more relevant than at the time of its creation. The priorities of the declaration are, firstly, global partnership, responsibility and environmental culture, secondly, environmental security, which implies the integration of national interests and global responsibility, and, thirdly, environmental culture of regions [23]. E. Baker emphasizes that environmental decision-making is a complex process involving trade-offs between competing values [7]. The urgent task is to integrate ethical frameworks into policy development, involve communities in this process, and promote environmental justice and equity. The tools for realizing these tasks are increasing transparency and accountability, introducing environmental ethics into education, and strengthening international cooperation in this area. Environmental policy implies integration of ethical considerations, empowerment of communities, addressing systemic inequalities, which ultimately contributes to democratic governance, raises ethical awareness and promotes joint solutions to global environmental problems, thus realizing the ideals of social solidarity.

The realities of modernity lead to the need for consolidation and the formation of solidarity practices. In particular, in response to the climate emergency manifested in global warming, governments and corporations in a number of countries around the world have announced programs aimed at reducing global greenhouse gas emissions. Achieving "net zero" by 2060 or earlier can stop climate change. Countries in Africa, Asia, Europe, the Americas and Australia have shown initiative and solidarity in working together to address the problem. Environmental legislation plays a key role in this process. L. de Fontenelle and E. Annamayer [8] discuss how legal and regulatory systems respond to a wide range of sovereignty, security and solidarity risks in the transition to clean energy.

From the point of view of system analysis of security, such a characteristic of a socio-economic object as its complexity should be considered. The complexity of the object as a system depends not only on the number of links between subsystems and the nature of its activities, but also on the presence of independent complex systems external to it. Increasing the degree of their mutual influence leads to the complication of the object's activity, increasing the resource intensity of measures to maintain security. The complexity of the object from the point of view of ensuring safety should be determined taking into account the content of influencing factors, the frequency of their manifestation, the links within the object and the links between different, seemingly unrelated, objects [24].

The social and solidarity economy, the resolution on which was adopted in 2009 by the European Parliament, is focused on achieving the common good, which is impossible without a focus on the environmental agenda, note V.G. Calvo and R.G.A. Diaz [9]. In 2015, the European Socio-Economic Committee gave a positive opinion on the economy for the common good and the creation of a "European ethical market". The environmental consequences of economic growth initiate the search for other models of production and consumption, principles of organization of economic activity and business. In this regard, the issue of implementing the principles of social and solidarity economy, which has autonomy from the state and is focused on social goals and moral values of well-being, cooperation and solidarity, is becoming more relevant. The realization of such a model of economy is able to reduce the consequences of negative environmental effects of economic activity, contributes to the equitable distribution of resources and surpluses. As a consequence, this model of economy contributes to the construction of social, cultural and power relations on a democratic basis and creates conditions for their humanization. The economy should be human-sized, oriented to operate in a humane, cooperative, ecological and democratic way and based on such values as human dignity, cooperation and solidarity, environmental sustainability, social justice and democratic co-determination, transparency [9].

J. Bazzani suggests that climate change mitigation is a matter of solidarity. Climate change has created a new global interdependence that requires a new form of solidarity as global and intergenerational prosocial behavior. Behavior that primarily benefits others is prosocial behavior, which can be considered solidarity at the collective level. To mitigate climate change, greenhouse gas emissions must be reduced primarily in rich countries, while the main beneficiaries of such reductions are the people in developing countries and future generations who will suffer significant negative impacts of climate change. J. Bazzani argues that low-carbon behavior has so far been mainly studied as a form of pro-environmental behavior, but not as a form of prosocial behavior [10].

Prosocial behavior contributes to the achievement of social balance. Social balance as equilibrium, equilibration in structural functionalism is the basis of social order. T. Parsons believed [3] that this order is associated with the coincidence or mutual complementarity of expectations, which are regulated by common values shared by people. In the state of social balance of a social system there is a coordinated interaction of subsystems, which results in the realization of basic functional imperatives. Changes in the course of sustainable development imply qualitative and quantitative transition of phenomena to higher positions of their existence. In general, the categories of balance and imbalance are now in the focus of research attention as stimulating, regulating and challenging ideas on the way to the realization of sustainable development practices [25].

Environmental policy and ecological solidarity are the key principles of the strategic project "ESG-models of growth of new ecoterritories" implemented at Ufa University of Science and Technology. The aim of the project is to create a transparent ecosystem with sustainable multifaceted links, functioning on the basis of systemic integration of research, innovation, educational activities, natural sciences, humanities, social sciences and

technical areas, contributing to ESG-transformation of social and industrial spheres of the Russian Federation and the countries of the Greater Eurasian Partnership. The objectives of the project are the formation of scientific and educational environment, development and implementation of modern standards for the development of ecoterritories of the region and their translation in Russia and foreign countries mainly in the countries of the Greater Eurasian Partnership, development of a set of unique scientific and scientific-methodological ESG-products. The university's interdisciplinary team engages with two distinct categories of stakeholders: ecoterritories and enterprises. In particular, within the context of collaborative work with enterprises, scientists have developed an experimental electroflotation unit for protein extraction from chicken manure, as well as obtained environmentally friendly materials from plant and organic waste as part of a closed-cycle production process. Researchers are seeking to identify strategies for mitigating both technogenic threats and environmental hazards, with a particular focus on the ESG transformation of companies across various economic sectors facing both natural and technogenic risks. This approach is reflected in the content of Table 1, which outlines the development of new ecoterritories in alignment with the principles of social solidarity.

**Table 1.** Strategy of ESG models for the development of new ecoterritories considering the principles of social solidarity.

Objective: To create sustainable, ecological and socially-oriented ecoterritories that improve the quality of life, promote inclusiveness and social solidarity.		
Key Principles	Environmental sustainability	Utilization of renewable energy sources
		Closed water use cycles
		Biodiversity conservation
	Social responsibility and inclusiveness	Job creation for vulnerable groups,
		Development of social infrastructure
		Involvement of local communities
	Social solidarity	Support for socially disadvantaged groups
		Development of volunteering
		Development of charity and mutual aid
	Effective corporate governance	Transparency
Ethics		
Responsibility to Stakeholders.		
Regulatory support	Development of special legislative acts regulating the creation and functioning of ecoterritories	Requirements for social infrastructure and accessibility for low mobility groups of population
		Measures of state support and stimulation of social initiatives.
		Specifics of taxation and preferences for socially-oriented enterprises
	Integration of the principles of social solidarity into existing legal and regulatory acts related to social policy, employment, charity	
Establishment of a system to monitor and control compliance with social standards and inclusiveness		
Organizational support	Formation of special ecoterritory management bodies considering the principles of social solidarity	Interdepartmental coordination councils with the participation of local community representatives
		Social investment funds and venture capital companies
		Competence centers for social innovation and ESG technologies
	Involvement of	State bodies, local communities, NGOs

	national and international partners, including socially oriented organizations	Leading companies, scientific and educational institutions
		Charitable foundations, volunteer movements
	Introduction of a system of monitoring, evaluation and reporting on social indicators along with ESG indicators	
	Development of public-private partnership mechanisms for the implementation of socially-oriented projects.	
	Creation of special educational programs and professional development centers in the field of social management and ESG-management	

Thus, a number of conclusions should be drawn. Ecological thinking and actions are connected with scientific, practical and moral strategic guidelines. Strategy is expressed in perspective target behavior of every person in a community. The authors' understanding of the principles of uncertainty and additionality in relation to the analysis of the modern socio-economic situation gives grounds to conclude that the more precise the goals are set, the more uncertain the dynamics of production of new forms of life becomes. The systemic crisis observed in modern society is reflected in the crisis of people's value orientations. But it is these values that determine the ecological activity of behavior, which causes new observable and latent losses of social, economic and spiritual nature. An ESG strategy must consider the social, spiritual, and economic risks associated with the increasing production of various goods and capitals. Achieving sustainable social development necessitates striking a balance between conservative and proactive behavioral strategies. The former entails preserving the outcomes of past actions, whereas the latter encompasses not only considering emerging opportunities for development but also anticipating potential negative factors, risks, and developing solutions to preempt their consequences and enhance the situation. Proactive behavioral strategy is connected with project thinking, assumes voluntary and conscious assumption of responsibility for one's actions, understanding of possible distant consequences in the future. It is predicated on the assumption that individuals, and in particular those in managerial roles, will be able to engage in reflective practice in order to identify and implement positive changes in a humane manner. The formation of strategic thinking as a form of dialogical thinking requires the participation of cultural and educational institutions, economy, politics and civil society. The social strategy of the state and business should be built on the basis of responsible behavior and thinking that creates the basis for public trust, forming common values. Thus, the level of controllability and adjustability of societal and socio-ecological economic system increases, the sustainability of the development of structural elements of the system at all its levels is ensured [27].

The decision-making process in management should be considered in the context of the idea of humanity, from the position of values of environmental ethics, which are oppositional to technocratic and scientist views on nature and society. Technocratic thinking can only relatively dominate, referring to one or another form of cognitive thinking. It is associated with the dominance of certain thinking strategies, ways of processing cognitive information in certain individuals. Technocratic thinking stands in opposition to creative thinking. Technocratic thinking distorts spatial and imaginative thinking, which is characterized by a holistic strategy that allows the comparison of holistic images, gestalts. Technocratic thinking is incapable of analytical differentiation of individual attributes. Technocratic thinking is oppositional to long-term memory, indifferent to logical contradictions and the desire to establish any form of spiritual connection between objects.

Therefore, management should include those sources that multiply creativity. The peculiarity of management is to balance the needs and interests of people included in the ecosystem, quality activities. In the perception of people there is always a moral evaluation of the parameters of activity. The problem of harmonization of social relations lies in

achieving understanding and mutual understanding between people. However, this problem can be considered from a different perspective, where human existence comes to the fore, and this existence, in turn, is associated with the phenomena of identity and self-identity. In the process of communication, new aspects of identity are mastered and produced, the semantic environment that determines the structure and character of social action.

Human activity and the exchange of its products create sustainable links within the community, as well as between society and the ecological environment. ESG strategy aimed at social integration ensures the unity of the social organism and sustainable socio-economic development, forms solidarity as a system of values and way of thinking.

## 4 Conclusions

All of the above requires strengthening the relationship between environmental policy and social solidarity. In the long term, this will lead to a reduction in the severity of the environmental problem. The strategy of action in the adopted decision is determined by ethical, cultural bases of activity, which provide, on the one hand, the freedom of this choice and, on the other hand, act as its limiter. The development of ESG principles (environmental, social and corporate governance) and their active implementation in management requires harmonization of environmental, social and corporate elements in management. Efforts to harmonize technological, socio-economic and spiritual processes ensure the sustainability of corporate and social development. The effectiveness of ESG strategy implementation should be evaluated from two approaches. One is the change in the economic well-being of corporations and their investors, and the other is the change in the well-being of the population, including the well-being, health, and ecosystem-related human well-being. When analyzing and evaluating environmental policies, actions aimed at achieving socially relevant outcomes should be distinguished from actions focused on business objectives. Based on their research, the authors conclude that the effective implementation of ESG strategy is possible on the basis of a sequence of actions and views based on the sameness of solidarity attitudes, common interests and goals of all participants at the international level. ESG strategy, aimed at social integration, ensures the unity of the social organism and sustainable socio-economic development, forms solidarity as a system of values and way of thinking.

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