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ESG-transformation of Russian regions: theoretical aspects

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ORIGINAL ARTICLE

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Abstract. The paper considers the theoretical aspects of sustainable development and ESG transformation of Russian regions. The research substantiates a systematic approach to the balanced development of regions as socio-ecological and economic systems. The concept of sustainable development and regional ESG transformation correlates to the concept of regional economic security, economic growth, human and social capital development. In our opinion, a systematic reproductive approach is the most productive in solving many problems of regional socio-economic development. Moreover, it could consider the following issues of regional ESG transformation: a six-stage scheme of social reproduction: «science – production – distribution – exchange – consumption – utilization»; natural-economic-institutional-social reproduction chain. One of the aspects of the reproductive approach is the concept of sustainable development and the ESG agenda. However, in terms of economic theory and philosophy, four types of «transformational connections» can be distinguished: interaction, relationships, institutions, and management decisions. The regional sustainable development, the achievement of high indicators of its socio-economic development is presented as a balanced interaction of three components: economy, social sphere, and ecology. Russian scientists consider regional ESG transformation in terms of economic security, regional economic growth, and increasing its attractiveness, development of technological potential, improvement of the institutional environment, and competencies of managers at all levels in the field of sustainable development and ESG.

Keywords: theories of regional development; region as a socio-ecological and economic system; sustainable development; regional ESG transformation

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Introduction

In conditions of instability (COVID-19 pandemic, its overcoming, economic sanctions, etc.), it is important to reduce regional socio-economic inequality, ensure their stable and sustainable development, strengthen their potentials, including those associated with less dependence on imports, and self-sufficiency. The main risks of regional development include increasing environmental risks, exhaustion the resource potential of existing industries within the economic space, continued degradation of social infrastructure and settlement system. According to M. Zamyatina and S. Tishkov, the increase in the pace of exploration and development of new mineral deposits is accompanied by an increase in the environmental burden, a lack of domestic companies owns technological reserve, financial resources, market instability, and increasing geopolitical opposition. All above cause the environmental agenda has become the strongest factor of influence and requires solving the problem of accumulated environmental damage to regions and degradation of the natural environment. The policy of the European Union, strengthened by the 2015 Paris Agreement on reducing the «carbon footprint» in the economy, has activated large Russian companies working for exports to implement the Sustainable Development Agenda (SDA) and ESG.

However, maintaining the development of regions and companies require large-scale investments in industrial and infrastructure projects, attracting and consolidating human capital, especially peripheral ones, diversifying regional economies, etc. [13]. Many scientists concern on the human capital regional development, increasing its investment, innovation activity and attractiveness, strengthen state support measures for the regions, especially peripheral ones, etc.

In Russia, the implementation of sustainable development concept and ESG is becoming more popular (E – «environmental», environmental factors; S – «social», social factors and G – «governance», corporate governance factors). There was established a system of institutions supporting the Sustainable Development Agenda (SDA) and ESG at the federal level (legislative and executive authorities of the Russian Federation, the Bank of Russia, Bank for Development and Foreign Economic Affairs, Moscow and St. Petersburg Stock Exchanges, National ESG Alliance, Skolkovo School of Management, etc.) [6].

However, the main issues for following the ESG agenda for regions are: values and interests of their own development, political interests, international economic cooperation, changing consumption patterns, etc. [30, pp. 7-8].

In the future, it is necessary to actively implement ESG principles into public administration standards at the regional level.

Research shows as follows:

– almost all regions are involved in ESG transformation and implement the principles of sustainable development in the strategic planning process;

– about 80% of regions and cities interact with businesses in terms of ESG factors;

– the number of Russian cities included sustainable development in strategic planning documents in 2011 was 32, currently there are more than 700 [23].

According to HSE experts, by the end of the 2010s, the SDA and ESG had been established into an ecosystem including at least four levels:

1) the conceptual level is formed by new theories of capitalism: neo-communitarianism and the theory of stakeholder capitalism, etc.;

2) the regulatory level is represented by international documents (the UN Sustainable Development Goals, the 2015 Paris Climate Agreement, etc.); it also includes supranational and national documents (i.e., the Directive on Corporate Reporting in the field of Sustainable Development of the European Union, the Requirements of the US Securities Commission). Currently, the regulatory framework for regional ESG transformation is being formed in Russia at the federal level – the following legislative acts have been approved: Decree of the President of the Russian Federation No. 440 on 04.01.1996 «On the Concept of Transition of the Russian Federation to Sustainable Development», Decree of the President of the Russian Federation No. 642 on December 1, 2016 «On the Strategy of Scientific and Technological Development of the Russian Federation Decree of the Government of the Russian Federation on 14.07.2021 No. 1912-r «On Approval of the Goals and Main Directions of Sustainable (Green) Development of the Russian Federation», Decree of the President of the Russian Federation on October 26, 2023 No. 812 «On Approval of the Climate Doctrine of the Russian Federation», etc. There has been approved the Strategy of socio-economic development of the Russian Federation with low greenhouse gas emissions until 2050. Moreover, there was established the goal of achieving carbon neutrality by 2060. Since 2021, the Bank of Russia issued 13 Information Letters and Recommendations on Sustainable Development (as of 20.04.2024);

3) the assessment and monitoring level consists of two main components: international standards (the most famous are GRI, SASB, CDP, CDSB, TCFD and IIRC) and ratings (there are already more than 600);

4) the project level includes ESG initiatives of specific countries, companies, and regions [30].

In this article, we will consider the theoretical aspects and main conceptual approaches of SDA and regional ESG transformation.

Main part

The study of sustainable development and regional ESG transformation is based on the use of general

scientific methods of analysis and synthesis, induction and deduction. Also we use the special research methods: the method of content analysis of economic publications, the method of economic comparative studies, the monographic method (comparative analysis of methodological and theoretical positions in scientific literature).

In our opinion, a systematic reproductive approach is the most productive in solving many problems of regional socio-economic development. For instance, At Ivanovo State University, Professor B.D. Babaev and his students conducted a comprehensive analysis of the reproductive process. This analysis includes various reproductive chains, for example, the triad: «productive forces – the economic basis (complex, multilevel, diverse, and contradictory economic relations of economic activity) – superstructure (social, cultural, political, legal, and similar relations)»; chain within the framework of synthesis political economy and institutional economics «economic activity – economic relations – institutions – demand – use of goods» [2; 3]. Regional ESG transformation correlates with a following reproductive chain (a six-stage scheme of social reproduction): «science – production – distribution – exchange – consumption – utilisation» [24]. It emphasises the requirement for comprehensive recycling. Indeed, in our country the issue of recycling and treating waters are also relevant ones.

The natural-economic-institutional-social reproduction chain is quite interesting one. However, within the framework of the «natural processes» bloc, it assumes the study of «natural productive forces» – the substance and forces of nature providing a positive effect for people; the need for widespread use of nature-saving technologies and the transition to a nature-saving type of reproduction. Within the framework of the «transformation of natural processes into economic ones», the focus is on a person as a performer, organizer, controller providing a targeted orientation to natural processes (natural processes themselves are spontaneous and uncontrollable). The result is the formation of anthropogenic productive forces created by man himself. Moreover, the man occupies a central place in this model. On the basis of nature and economics synthesis, there is a continuous formation of new types of human activity. It is a result of deeper human penetration into the world of things (nanotechnologies, biotechnology, space exploration, oceans, etc.). A person is forced to join the socialised world; the problem of his interactions with other actors acquires a fundamental character, and comes out on the topic of harmonising the interests of participants, coordinating individual and public interests. In this case, coordination of activities, motivation of people, and a common national idea acquires outstanding importance. The system of institutions forms an institutional environment adequate to the requirements of economic laws. Therefore, the key point is the degree of institutional compliance with the tasks of socio-economic development, predetermined by economic laws, and requirements of nature itself (laws of nature). The social sphere acts as the final stage of the reproductive chain of «natural-economic-institutional-social processes». In this regard, the emphasis shifts towards the concept of «moral economy» (the framework of social processes) and «moral personality» concerning a person with developed moral traits (qualities), environmental education, and behaviour.

In terms of the above reproductive analytical chains, the aspect of the reproductive approach is the concept of sustainable development and the ESG agenda.

Sustainable development is interpreted in different ways. Some researchers consider this concept in terms of the changing nature of civilization economic growth. Others consider the essence of sustainable development from the point of view of preserving biospheric equilibrium. The third analyse sustainable development from the perspective of modernisation of relations between developed and developing countries. The fourth focus on the global nature of the socio-ecological processes management [12; 25]. However, A.D. Ursul and V.A. Los understand the similarity of the numerous interpretations of sustainable development strategic goal. It requires to «combine the dynamic socio-economic development of civilization with maintaining the balance of historically established natural ecosystems, the traditional natural resource potential of the biosphere as an unconditional factor of survival and development of both man and civilization in general» [27, p. 123].

Nowadays the concept of «sustainable development» is used at the mega-, macro-, meso-, and micro-levels [6]. E. Letyagina and V. Perova refer it to «creative tools for managing economic development» [21, p. 93].

However, V. Gilmundinov, Yu. Pankova, and T. Tagaeva highlight the urgency of significantly strengthen state role in the implementation of the SDA and «green economy» in terms of the global challenges [10].

E. Vostrikova and A. Meshkova associate regional ESG-transformation with economic security [9]. T. Spitsyna – with the provision of sustainable regional development with regional economic growth [26]; V. Kulibanova and E. Litvinova – with the increase of its attractiveness [19].

Balanced regional development has been the issue of research by both domestic and foreign scientists for many decades. Considering international and domestic experience, 3 main models of regional policy can be distinguished: the policy of poles (centers) of regional growth, the policy of alignment, and the spatial model of regional development. The implementation of this policy contributes to the reduction of socio-economic inequality of the regions, their attempts to achieve sustainable development goals (17 of them).

For many years, the approach to regions as socio-ecological and economic systems functioning in dynamically changing conditions of the internal and external environment has been widespread in scientific publications. Nowadays, the approach is accompanied by regional ESG transformation. However, in terms of economic theory and philosophy, four types of «transformational connections» can be distinguished: interaction, relationships, institutions, and management decisions. The interaction plays a crucial role in understanding the functioning of the regional and national economy. Relationships are, primarily, relations of ownership and relations of management. Institutions, according to D. North, are formal and informal norms and rules that business entities must adhere to; they are mechanisms to ensure the implementation of these norms and rules through the use of incentives and sanctions measures against producers and consumers. Indeed, management decisions are made by people based on the information they have and, taking into account the tasks, specific decisions to be implemented. There is a certain procedure for making a decision, registration, communication to performers, control, etc.

For instance, V. Kulibanov, T. Teor, I. Ilyin, and L. Sharakhin emphasize regional sustainable development and the achievement of high indicators of its socio-economic development in terms of balanced interaction of 3 components: economy, social sphere, and ecology. According to the authors, this particular approach will contribute to strengthening the technological sovereignty and security of Russia as a whole [20]. Moreover, the authors consider the issues of ESG transformation as a factor in increasing the regional brand and accumulating social capital to a diffuse group of regional stakeholders [15].

O. Kiselyova considers the balance of the region with regional stability or «regional resistance». It implies regional resilience, its ability to withstand and adequately respond to various challenges and shocks [17, p.72].

N. Barseghyan, S. Kudryavtseva, and V. Sopin consider regional sustainable development and ESG transformation within the framework of economic systems theory and cluster the Russian Federation regions according to the integral components of ESG policy. They identified «contradictory» clusters for the implementation of ESG policy. On the one hand, there is a high level of management (G-component), the environmental friendliness of the regional management system combined (E-component) with high social tension (S-component). It refers to Bryansk, Smolensk, Novgorod, Perm, and Trans-Baikal regions, etc. [5, p.132].

A modelling method is used in the study of regional ESG transformation. S. Borodin implements a model and methodology for analysing the regional economy based on ESG principles with the calculation of the sustainable development index based on statistical indicators included in the ESG standard [8]. S. Izmalkova and A. Sabinina propose ESG model in the form of a digital platform [14].

E. Letyagina and V. Perova provide the analysis of regional sustainable development using cluster data analysis based on neural network modelling and information technologies. This study showed an uneven distribution of regions in clusters, a difference in the levels of average indicators across clusters, etc. It indicates the uneven regional development in the Russian Federation in terms of ecology and investment [21, pp. 97-100].

The research made by K. Kalitseva presents a transformational model of the management system for sustainable regional development. In this case the subsystems of regional development (economic and social

ones) are interconnected with the ecological subsystem updating within the framework of ESG transformation. Moreover, institutional superstructure is under development. Additionally, the technology of managing regional SDA within the framework of the proposed model is a complex of techniques and ways to ensure regional sustainable balanced development through the interaction of three organizational subsystems. They are as follows:

– the management subsystem. It related to the activities of the regional government authorities;

– the target assessment subsystem. It is a system for assessing regional functioning through the analysis of target indicators of economic, environmental, and social subsystems development;

– the supporting subsystem. It consists of legislative conditions, resource capabilities, institutional, and infrastructural support for regional development.

This approach, according to the authors, should be based on technologies of rolling budgeting, indicative planning, development of sustainable balanced strategy based on a system of target indicators [16, pp. 86-87].

Considering SDA and ESG, O. Kiselyova suggests an ecosystem approach based on establishing interaction between participants in regional ecosystem. It should involve authorities, officials, government, business and the social sphere representatives [17].

The analysis and regional development of SDA and ESG are accompanied by an analysis of agenda implementation by large companies in the regions. Additionally, partnership with local authorities and communities is considered an important factor of companies' activities to achieve regional development. Analysing the region's positions in ESG ratings, scientists compare the rating results with the presence of companies in the region that are included in ESG ratings and pursue a policy of responsible investment. For example, M. Shamsutdinova analysing the sustainable development of the Republic of Tatarstan considers the following ESG-rated companies: SIBUR, Tatneft, Lukoil [28].

M. Zamyatina and S. Tishkov – Severstal, SIBUR Holding, and Segezha Group. For instance, in 2020 Severstal concluded cooperation agreements in 8 regions of its presence; SIBUR Holding (represented in 22 regions) concluded agreements on socio-economic cooperation with the leadership of the Amur region, Yamalo-Nenets and Khanty-Mansi Autonomous okrugs, the Tyumen region. Segezha Group operates in the Republic of Karelia, the Krasnoyarsk Krai, Arkhangelsk, Vologda, Irkutsk, Kirov, Kostroma, Moscow, and Rostov regions. Indeed, as a primary scientific goal the authors note «conceptual, methodological, and analytical support for the transformation of ESG management from a challenge to an opportunity and a starting point for an overdue change in the model of innovative development of companies and regions» [13, pp. 504, 508].

Many authors conclude regional ESG depend on the composition and industry affiliation of regional enterprises, the speed of their transition to technologies in terms of ESG principles [22].

The concept of SDA and ESG approach in regional management is associated with the effectiveness of environmental and social risk management. It is important for society and potential investors [28], and implies a transition from the formation of regional socio-economic potential to assessment the possibilities of realizing its promising socio-economic potential [16].

An important role is assigned to increasing the competences of regional management and generally improving the efficiency of public administration in order to coordinate the efforts of multiple stakeholders in the process of implementing the concept of SDA and ESG. For example, A. Babkin and N. Egorov recognise the strategic management of sustainable ESG development of economic entities is currently one of the most important factors in terms of regional digital economy transformation [4].

The scientists assess the integration of the SDA and ESG into the reformation of the Russian economy. Many authors note challenges of regional ESG transformation and companies in Russia. For instance, T. Spitsyna emphasises an emerging stage in the implementation of the ESG agenda. Indeed, the process of ESG principles integration has more punctual than comprehensive nature [26].

Indeed, V. Gordeev and A. Belov highlight the challenges of insufficient financial support for the regions, the discrepancy of financial resources to the scope of authority. Therefore, it prevents the realisation of the sustainable development agenda. The authors recommend the development of high-tech industries, formation

of a regional economic council, constantly search for new sources of the regional budget replenishment, etc. [11]

For instance, S. Shkiotov, analysing the spillover effects, shows not only their positive effects (labour productivity growth, the influx of foreign direct investment and knowledge into the economy, infrastructure development and an increase in GDP), but also their negative impact on the economy (increased volatility in markets, the risk of job losses, increased problems of income inequality in society and etc.) [29].

In turn, T. Altufyeva notes the negative relationship between the levels of ESG and regions economic development (on the example of the Republics of Tatarstan and Bashkortostan) and puts forward proposals to improve the indicators for assessing regional ESG transformation for block G [1, p. 127].

The researcher O. Korobova dwells on the issues of developing ESG competencies among managers. According to the example of the Skolkovo School of Management in the field of sustainable development and the ESG agenda, we can distinguish the following competencies: ESG transformation, ecology and climate, circular economy, sustainable operational activities; sustainable development of territories; sustainable finance [18].

Our analysis of the research trends of regional ESG transformation concerns with the precise analysis of the ESG agenda environmental regional components. The development of regional ESG transformation is considered in conjunction with innovative development, the «green» economy, and the digital transformation. Business and universities play an important role in promoting the ESG agenda in the regions. Regional ESG transformation is associated with the ESG transformation of the public administration system (Table 1).

Table 1 – Development of certain aspects of regional ESG transformation in the papers of Russian scientists

Researchers names	Research topics
Vostrikova E.O., Meshkova A.P., Letyagina E.N., Perova V.I., Berendeeva A.B., Nikolaeva E.E., etc.	Theoretical aspects of regional ESG-transformation
Gilmundinov V.M., Pankova Yu.V., Tagaeva T.O., Sytnik N.A., etc.	Regional differentiation of regional ESG-transformation
Bedenko S.N., Wegner M.A., Nikonorov S.M., Pshenichnikova P.V., Zinoviev I.S., Azarova N.A., Nebesnaya A.Yu., Tsentkovskaya A.A., Polyakova E.A., Prokshits E.E., Mingaleva J.A., Nikitina I.A., Kruglova I.A., Chuksin I.V., etc.	Ecological subsystem of regional ESG transformation (E-component)
Akhmadeev A.M., Malitskaya A.O., Zamyatina M.F., Tishkov S.V., etc.	«Green» technologies and innovations as a driver of regional ESG transformation
Popodko G.I., Nagaeva O.S., Shishatsky N.G., etc.	The social component of regional ESG transformation (S-component)
Babkin A.V., Egorov N.E. Balaboiko A.V., Spitsyna T.A., Volkov A.R., Golubeva A.S., etc.	ESG-transformations of the public administration system (G-component)
Bushueva M.A., Izmalkova S.A., Sabinina A.L., Verenikina A.Yu., Ochilova M.A., Finley D.T., etc.	Synergy of digital regional ESG transformation
Kalitseva K.A., Narolina T.S., Smotrova T.I., Purgaeva I.A., Nekrasova T.A., Trachenko M.B., etc.	Monitoring and evaluation of regional ESG transformation
Abdullina L.G., Valeeva R.R., Sushkova A.R., Vasiliev V.L., Grenaderova M.V., Perekrest N.V., Zatepyakin O.A., Rasskazova A.A., Pravdina O.A., Solovyova O.A., Shamsutdinova M.R., Shishkina E.A., etc.	Regional ESG-ratings

Researchers names	Research topics
Barseghyan N.V., Kudryavtseva S.S., Sopin V.F., etc.	Clustering of the Russian Federation regions according to the integral components of ESG policy
Boldyreva T.V., Belyaeva O.V., Ershov Yu.O., Fedotova O.V., Tabekina O.A., Dudina V.Yu., Yurchenko T.V., etc.	Financing of regional ESG transformation, investments in regional ESG transformation
Zamyatina M.F., Tishkov S.V., Kulibanova V.V., Teor T.R., Ilyina I.A., Sharakhina L.V., Parushina N.V., Morozova N.S., Morozov M.M., etc.	The role of regional business in the ESG transformation agenda
Arkhipova N.V., Volkova T.V., Kuzmina E.V., Potashova V.A., Startseva O.P., Nuzhina I.P., Kaverzina L.A., Egorova O.V., etc.	Regional ESG-transformation: industrial aspects
Golubeva A.S., Volkov A.R., Chuzhmarov A.I., Chuzhmarova S.I., etc.	ESG-transformation of the Northern territories and Arctic regions
Abramyan G.A., Yeletsky A.N., etc.	The role of universities in regional ESG transformation
Babkin A.V., Egorov N.E., etc.	Rating assessment of the leaders of regional ESG transformation within the framework of strategic management

Source: composed by the authors based on e-library publications, 2022-2024

The authors propose the adaptation of international ESG-principles and metrics for assessing «green» development to the current conditions of Russia and its regions. Also they propose the completion of the national infrastructure of sustainable development and ESG assessment metrics in order to improve the effectiveness of state support for «green» development of Russian regions [1, p.127].

Conclusions

In our opinion, a systematic reproductive approach is the most productive in solving many problems of regional socio-economic development. Moreover, it could consider the following issues of regional ESG transformation: a six-stage scheme of social reproduction: «science – production – distribution – exchange – consumption – utilization»; natural-economic-institutional-social reproduction chain.

One of the aspects of the reproductive approach is the concept of sustainable development and the ESG agenda. However, in terms of economic theory and philosophy, four types of «transformational connections» can be distinguished: interaction, relationships, institutions, and management decisions. The regional sustainable development, the achievement of high indicators of its socio-economic development is presented as a balanced interaction of three components: economy, social sphere, and ecology. Russian scientists consider regional ESG transformation in terms of economic security, regional economic growth, and increasing its attractiveness, development of technological potential, improvement of the institutional environment, and competencies of managers at all levels in the field of sustainable development and ESG.

In the study of regional ESG transformation, the method of modelling and clustering of regions of the Russian Federation according to the integral components of ESG policy is widely used.

Currently, the practice of implementing SDA and ESG modernization policies in the regions is punctual one. The main reasons are as follows: the insufficient provision of the regions with the necessary financial resources, the unavailability of sufficient experience, knowledge, and competencies to implement the policy, insufficient motivation for regional ESG transformation. At the regional level, it is necessary to achieve a balanced development of all three components of ESG – E, S, and G.

Business and universities play an important role in promoting the ESG agenda in the regions. Regional ESG transformation concerns with the ESG transformation of the public administration system. It should provide the development of ESG competencies among the leaders of regional ESG transformation and a

rating assessment of their activities within the framework of strategic management.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHORS' CONTRIBUTION

Elena E. Nikolaeva – conceptualization, project administration, writing – original draft.
Alla B. Berendeeva – formal analysis; writing – review & editing.

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