ESG standard’s as the basis for sustainable economic development

Abstract. ESG standards are based on the philosophy of sustainable development of economic activity, which follows the principles of a responsible attitude to the environment, high social responsibility, and high quality corporate governance. In Russia, the principles of ESG are less common than abroad, but they are already gradually being introduced into business. At the same time, the three categories of ESG are increasingly being integrated into investment analysis, processes and decision making. Many Russian companies are firmly integrated into the agenda by implementing numerous projects, as developed countries are pushing domestic companies to implement such standards to improve the image and investment attractiveness of companies. And here we should not forget about the importance of both climate change issues and corporate governance practices, as well as the efforts and achievements of companies in the field of ecology and social responsibility, which, on the one hand, is the matter of being responsible for the well-being of employees, and, on the other hand, is contribution into the development of the territories where such companies are located.

1 Introduction

An increasing number of investors, especially in the West, when making decisions about investing in a particular company, take into account its impact on the environment and society. The United States is expected to introduce mandatory requirements for issuers to disclose financial information on climate risks and greenhouse gas emissions, and is also expected to introduce, following the example of some European countries, mandatory standardized disclosure of ESG information [1-8].

Russian business is also increasingly interested in the principles of responsible investment. ESG stands for Environmental, Social, and Corporate Governance. In 2022, President of the Russian Federation Vladimir Putin instructed the Government of the Russian Federation to consider determining the criteria for classifying investment projects as projects that meet the requirements of the concept of environmental, social and corporate responsibility (ESG).

A significant increase in interest in this agenda is directly related to such factors as environmental problems, a sharp aggravation of social and economic inequality. The global competitiveness of the country’s economy and the ability to achieve sustainable...
2 Methods

Methods

2

3 Research (analysis)

The abbreviation ESG can be deciphered as "environment, social policy and corporate governance" (Fig. 1). In a broad sense, this is the sustainable development of commercial activities, which is based on the following principles:

1. environmental responsibility (E — environment);
2. high social responsibility (S — social);
3. high quality corporate governance (G — governance).

In Russia, the principles of ESG are less common than abroad, but they are already gradually being introduced into business. One of the topical issues is the reduction of carbon dioxide emissions from the extraction and processing of fuel, as well as the development of new energy sources. As part of the national project called 'Ecology', the task was set to send 100% of waste for sorting by 2030 and to halve the volume of waste disposal. In addition, a third of the country's largest banks have already introduced ESG-assessment of companies into the lending process, and another 20% are planning to. This means that banks will test each borrower for compliance with the principles of sustainable development.

Climate dominates discussions on the ESG agenda, but there is no single list of goals, and concepts often overlap. At the same time, the three categories of ESG are increasingly integrated into investment analysis, processes and decision making (Fig. 1).

The demand for ESG standards in Russia, despite the difficult relations with the West, will continue, and these standards will be adjusted depending on their compliance with real tasks and priorities. Many companies are firmly integrated into the agenda, having implemented numerous projects, as developed countries are pushing domestic companies to implement such standards to improve the image and investment attractiveness of companies. And here it is important not to forget about the responsibility for the well-being of employees and the contribution to the development of the territories in which they work.
At present, Russia has formed its own rating of sustainable development of Russian companies. The rating consists of four components:

1. Social policy and personnel:
   - Staff turnover
   - Involvement of personnel in the learning process (improving the professional level of employees)
   - Formation of a personnel reserve of university graduates and trainees
   - Voluntary medical insurance programs
   - Health
   - Improving treatment of employees
   - Indexation of wages to a level not lower than inflation
   - Investment in work safety
   - No injuries at work

2. Ecology:
   - Environmental costs
   - Implementation of the processing of all waste
   - Implementation of secondary processing of raw materials
   - Voluntary programs in the field of ecology that are not related to direct production activities

3. Development of the region of presence:
   - Programs for the formation of a comfortable urban environment
   - The number of regions of the Russian Federation where social programs are being implemented
   - Donations to charity

Fig.1. Philosophy of ESG standards
availability of programs and investments that are in line with the SDGs (sustainable development goals).

3. Working with small and medium-sized businesses

The share of purchases from small and medium-sized businesses in the total cost.

The most important indicator of the development of an innovative economy is human capital, the country index (human capital index) of which depends mainly on the level of education and health of the economically active population. The level of this indicator directly affects the productivity of people involved in the development of an innovative economy.

According to the latest data from the World Bank, Russia is among the countries with an average level of the index at 0.68 (a high value starts at 0.7). And although the level of education of specialists in the Russian Federation is higher than in some countries with high HAI values, Russia is still inferior to them in terms of the health of specialists. That is why corporate healthcare initiatives now play a special role.

The most important area for investment in human capital is the development of professional educational programs and support for educational institutions in the preparation of future highly qualified specialists.

ESG standards are not only the quality of education and healthcare, but also the development of the urban environment with which local residents interact every day. Therefore, favorable conditions must be created everywhere in order for highly qualified specialists not to seek to change their place of residence for the sake of a more comfortable urban infrastructure. In Russia, the national project "Housing and Urban Environment" is devoted to achieving this goal. The key goals of the national project are to provide affordable housing for middle-income families, including creating opportunities for them to purchase (construct) housing using a mortgage loan, increase the volume of housing construction, improve the comfort of the urban environment, create a mechanism for direct participation of citizens in the formation of a comfortable urban environment, ensuring a sustainable reduction of the uninhabitable housing stock.

Successful cases of the largest Russian companies implementing ESG principles and projects in their practice are presented below (Fig. 2, 3, 4).
1. Attracting investments to the region by creating its attractive image
2. Increasing economic and tourism potential
3. Implementation of tourism projects (Murmansk region), due to this, stimulation of the development of small and medium-sized businesses, transport, hotels, trade, catering
4. Volgograd region - projects to increase the cultural and tourist attractiveness of the region (the birthplace of Stepan Razin, the site of the Battle of Stalingrad)
5. Support for city initiatives and participation in various federal targeted programs
6. Support for initiatives coming from people (urban development projects, cultural projects, volunteer and environmental initiatives)

Fig. 2. ESG projects in terms of support and development of the regional economy

EUROCHEM
Phosagro
MMK (Magnitogorsk Iron and Steel Works)
SUEK
OMK (United Metallurgical Company)

1. Human resources management with good care (management with a human face)
2. Comfort and quality of workplaces
3. Wage increase
4. Development of methods of long-term motivation
5. Funding for charitable projects
6. Corporate housing programs
7. Rehabilitation of employees' children
8. Support for local educational institutions in preparing for future industry specialists, organization of career guidance tours
9. Creation of educational and industrial clusters (integration of education with production)
10. Creating conditions for the development of schoolchildren's talents and support for talented students
11. Rehabilitation programs for veterans (coal industry)
12. Implementation of active longevity practices

Fig. 3. ESG projects in terms of social policy development
1. Production of ecological fertilizers (from ore of volcanic origin, unique in its purity)

2. Creation of carbon polygons and farms designed for monitoring greenhouse gases (planting trees near industries)

3. Protection of water resources (installation of the most modern industrial wastewater treatment systems, an innovative system for storm and wastewater treatment)

4. Emission reduction programs and recycling

5. Introduction of water-saving technologies, regulation of water demand

6. Closed cycle of use of water resources within the framework of production processes

7. Conservation of biodiversity (TMK released 28.5 thousand sturgeon fry into the Sea of Azov basin)

8. Involvement of employees and volunteers in the cleanup of territories and settlements

9. Reforestation, landscaping

10. Environmental education projects

11. Solving problems of soil pollution

12. Selection of partners with an ecological approach to production and high social responsibility

Fig. 4

To calculate the synergistic socio-ecological and economic effect from the implementation of ESG projects, it is proposed to understand the ratio of the effectiveness of these projects and the costs associated with them. Due to the significant amount of information and the complexity of calculations, it is proposed to use an indicative method to determine the synergistic socio-ecological and economic efficiency of the implementation of ESG projects.

The complex economic index of social, environmental and economic efficiency of the implementation of ESG projects is proposed to be calculated according to formula 1:

\[ I_{EK} = k_1 i_{in} + k_2 i_{comp} + k_3 i_{br} + k_4 i_H + k_5 i_{in}, \]

where:
- \( k_1, k_2, k_3, k_4, k_5 \) are specific weights of the contribution of each chain index to the economic complex index of socio-environmental and economic efficiency of the implementation of ESG projects;
- \( i_{in} \) is the growth index of potential income received by employees from the increase in their labor productivity due to the improvement of their working conditions;
- \( i_{comp} \) is the index of competitiveness of enterprises in the region;
- \( i_{br} \) is the index of complex competitiveness of industries in the region;
- \( i_H \) is the index of the proportion of families that have the opportunity to purchase housing using their own and borrowed funds.

The complex social index of socio-environmental and economic efficiency of the implementation of ESG projects is calculated according to formula 2:

\[ I_{soc} = m_1 i_H + m_2 i_{NF} + m_3 i_{br} + m_4 i_{ΔC}, \]

where:
- \( m_1, m_2, m_3, m_4 \) are specific weights of the contribution of each chain index to the social complex index of socio-environmental and economic efficiency of the implementation of ESG projects;
\[ m_1, m_2, m_3, m_4 \rightarrow \text{specific weights of the contribution of each chain index to the social complex index of socio-environmental and economic efficiency of the implementation of ESG projects} \]

\[ i_H + i_{NF} + i_P + i_{∆C} = 1; \]

\[ i_H \rightarrow \text{index of the level of provision of the population with housing (at the end of the year)} \]

\[ i_{NF} \rightarrow \text{index of the number of employees who have improved their level of education or improve their qualifications on a permanent basis} \]

\[ i_P \rightarrow \text{index of labor productivity increase when using long-term motivation methods} \]

\[ i_{∆C} \rightarrow \text{index of reduction in the cost of treatment and maintenance of health} \]

3. The complex environmental index of socio-environmental and economic efficiency of the implementation of ESG projects is calculated according to formula 3:

\[ I_{eco} = \varphi_1 i_d + \varphi_2 i_{ECN} + \varphi_3 i_{esh}, \]

\[ \varphi_1, \varphi_2, \varphi_3 \rightarrow \text{specific weights of the contribution of each chain index to the environmental complex index of socio-environmental and economic efficiency of the implementation of ESG projects} \]

\[ i_d \rightarrow \text{index of the share of environmentally friendly products output from the total volume of commissioning per year} \]

\[ i_{ECN} \rightarrow \text{index of ecologization of production processes} \]

\[ i_{esh} \rightarrow \text{index of the share of ecologization of the living environment} \]

Next, the final comprehensive index of social, environmental and economic efficiency of the implementation of ESG projects is calculated.

\[ I_{total} = \tau_1 I_{ek} + \tau_2 I_{soc} + \tau_3 I_{eco}, \]

\[ \tau_1, \tau_2, \tau_3 \rightarrow \text{specific weights of the contribution of each complex index to the final complex index of social, environmental and economic efficiency of the implementation of ESG projects} \]

\[ \tau_1 + \tau_2 + \tau_3 = 1. \]

Table 1. Evaluation scale of complex indices for evaluation of social, environmental and economic efficiency of the implementation of ESG projects

<table>
<thead>
<tr>
<th>Index name</th>
<th>Meaning</th>
<th>Grade</th>
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<tbody>
<tr>
<td>( I_{ek} )</td>
<td>( I_{ek} \geq 1 )</td>
<td>great</td>
</tr>
<tr>
<td>( I_{ek} )</td>
<td>( 0.8 \leq I_{ek} &lt; 1 )</td>
<td>good</td>
</tr>
<tr>
<td>( I_{ek} )</td>
<td>( 0.5 \leq I_{ek} &lt; 0.8 )</td>
<td>satisfactorily</td>
</tr>
<tr>
<td>( I_{ek} )</td>
<td>( I_{ek} &lt; 0.5 )</td>
<td>unsatisfactory</td>
</tr>
<tr>
<td>( I_{soc} )</td>
<td>( I_{soc} \geq 1 )</td>
<td>great</td>
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<tr>
<td>( I_{total} )</td>
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<tr>
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4 Conclusions

ESG standards should become part of the corporate culture, an element in shaping the mindset of employees. Understanding this will give companies new opportunities for development. The ESG agenda has the deepest roots that reflect the contradictions that humanity has accumulated to date and that need to be addressed.

As a result of the irregularity of the capitalist form of economic relations and the dominance of profit as the goal of activity, mankind has faced an extraordinary problem - the loss of nature. The problem of biodiversity loss is much larger than climate change. Scientists say the planet has entered its sixth mass extinction and nature is disappearing before our eyes. Only this process occurs through the fault of man. The solution to this problem reflects the environmental aspect of ESG standards.

Despite the most powerful geopolitical crisis in 2022, the ESG agenda in Russia continues to evolve, as evidenced by some facts:

1. Issues of green, social bonds took place, for example, they were issued by the largest issuers, VEB.RF, DOM.RF, Rostelecom, Atomenergoprom.
2. The volume of bank ESG loans, according to expert estimates, has grown.
3. The largest companies continue to disclose non-financial statements. Almost all companies that received the ESG rating came to its confirmation in 2022.
4. All issuers raising money through green, social, transitional bonds have fulfilled their obligations to place a report on the intended use of funds on the Moscow Exchange.
5. In 2022, the first deal with carbon units was made and the first verified climate project appeared. Despite the fact that only 20 carbon units were sold, this event demonstrated the readiness of the Russian carbon units market in terms of technical feasibility and availability of conditions for its further development.
6. The labor market is recovering from a turbulent downturn, and the demand for experienced graduates in sustainable development and ESG is gradually returning.

The main tasks for 2023 are:

- To gradually return the environmental decisions and requirements postponed due to the economic situation;
- To adopt a federal law on non-public reporting with revised positions taking into account the new time;
- Revision of corporate strategies for sustainable development in the direction of increasing attention to the problem of biodiversity reduction and loss of nature;
- Ensuring transparency of the green portfolio of the banking market, the largest banks can agree on a voluntary reporting format to disclose the general parameters of the green or ESG portfolio by volume, dynamics, industry profiles.

So, the following year ESG will evolve further in various ways, penetrating deeper and deeper into all areas of human activity.

5 Acknowledgement

The article has been prepared within the framework of initiative research work No. 203175-0-000 entitled “Tools for Developing the Russian Oil & Gas Complex in the Changing Conditions”, carried out on the basis of the National Economy Department, Faculty of Economics, RUDN University.

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