

ESG financing instruments in the context of sustainable development of regional infrastructure

*Daria Chernykh**, *Irina Ezangina*, *Anna Khryseva*, *Margarita Kozhukhova*, and *Olga Vorotilova*

Volgograd State Technical University (VSTU), 28 Lenin Avenue, 400005, Volgograd, Russia

Abstract. The work proves the importance of the ESG approach in implementing the goals and objectives of the sustainable development strategy of a modern bank, which is an integral element of its overall strategy. Attention is paid to the basic tools and principles of responsible financing in the practice of Russian credit institutions. It has been proven that, following their own model of corporate social responsibility, banks participate in the development of infrastructure, industries and areas of activity at the regional level, helping to increase the investment attractiveness of territories and their spatial development.

1 Introduction

In the modern economic paradigm, responsible financing comes to the fore as a key factor contributing to sustainable development and efficient functioning of the banking industry. Not only the growing public attention to issues of sustainability and social responsibility of companies, but also the desire of financial institutions to comply with high ethical and environmental standards make the topic of responsible finance relevant and important today.

Within the Russian economic environment, it becomes especially important to analyze the extent to which responsible financing practices are widespread among companies in the banking sector. Banks, as key players in the financial system, have a special responsibility to society and the economy as a whole.

The ESG approach has different interpretations depending on the context and goals:

- The ESG approach is a systematic approach to financial risk management, which includes an assessment of the environmental, social and governance aspects of the business.
- The ESG approach is an investment strategy based on environmental, social responsibility and governance factors, in addition to traditional financial indicators.
- The ESG approach is a set of criteria by which companies evaluate their activities from the point of view of sustainability and social responsibility.

* Corresponding author: dashacher611@mail.ru

- The ESG approach is a framework used to integrate sustainability into the strategy and operations of companies so that they can balance financial goals with social and environmental values.

In this study, the ESG approach is understood as a methodology for analyzing and managing investment risks and opportunities based on the assessment and consideration of factors related to the environment, social responsibility and governance. It aims to integrate these aspects into the decision-making process of investors and financial institutions with the aim of promoting sustainable development, reducing investment risks and enhancing long-term financial sustainability.

This article attempts to assess the current state and dynamics of development of responsible financing instruments in the banking sector, with a focus on regional aspects. The importance of analyzing and summarizing the content of official documents of strategic and tactical planning, reporting forms of companies in the banking sector in order to achieve their goals in this area is emphasized.

2 Materials and methods

As part of the study, methods of analysis and synthesis, methods of scientific knowledge (abstraction, data synthesis, dynamic and static methods) were used. The information base for the study was reports on the sustainable development of the largest Russian banks, analytical materials and reports of expert analytical platforms in the field of ESG, consolidated information from official ESG rankings, indicators, the calculation methodology of which complies with international standards, directives, and the sustainable development agenda.

3 Results and discussion

The bank's corporate social responsibility is aimed at positive changes in society, corresponds to the strategic guidelines of the credit organization, and is implemented in the interests of generations of the present and future.

The ESG approach does not contradict the fundamental principles of the banking business; on the contrary, it strengthens its technological sovereignty, allows one to find creative solutions and confront new risks. ESG banking takes into account the green taxonomy, strengthens business chains, and makes it possible to present reporting adapted to the requirements of global sustainable development standards.

From the ESG approach there is a natural transition to a green economy, where the principles of sustainability and responsible financing become key pillars of economic activity.

The definition of "green economy" in modern conditions is reflected in three key areas:

1. ensuring environmental protection to create conditions for sustainable development of the economy and society in the future;
2. support of the technical and technological level to ensure the economic development of companies;
3. ensuring economic security and social principles [1].

The "green" economy is based on "green" technologies and projects, the success of which largely depends on the ability to attract significant financial flows.

Responsible finance is a key element in the transition to a green economy. Various aspects of responsible finance include:

1. Socially oriented finance: an approach in which financial institutions actively support projects and enterprises aimed at solving social problems such as poverty, unemployment, access to education and health care.
2. Sustainable financing: The focus is on investing in projects and companies that promote environmental conservation, reduce emissions, improve energy efficiency and develop renewable energy sources.
3. Sustainable Corporate Finance: Focuses on supporting companies that demonstrate high standards of governance, transparency and ethics in their operations, and actively implement practices that promote sustainable development.

The implementation of “green” projects, especially large-scale ones for private investors, is associated with a number of risks, the main of which are: political, macroeconomic, technological and operational, risks of not achieving the target production and financial indicators of economic entities as a result of the lack of infrastructure necessary for the implementation of projects (for example, electrical and water networks, etc.) or its unreliability, specific risks due to the characteristics of «green» projects - a lower internal rate of return (IRR) and a longer discounted payback period compared to projects in other areas. It should be noted, that in order to mobilize private investment, the risks of investing in “green” projects must be minimized to the level of the risks of investing in projects implemented using traditional technologies. To this end, world practice uses tools and levers to support private investors to stimulate financing of “green” projects, which are shown in Table 1. [2]

Table 1. Tools and levers to support private investors for financing green projects.

Support measures	Tools and levers to support financing of green projects	
Government regulation	Tools	Tax credits, implementation of standards, abolition of support for “anti-green” companies
	Levers	Preferential tariffs (Feed-in Tariff); renewable energy quotas
Government funding	Tools	Grants, subsidies, environmental programs
Lending	Tools	Project finance, debt funds, green bonds
	Levers	Preferential loan rates
Risk reduction	Tools	Loan guarantees, guarantees, insurance, protection against exchange rate and interest rate volatility

Thus, by responsible finance we mean a strategy for providing financial services that is based on the principles of taking social, environmental and governance factors into account when making capital allocation, investment and lending decisions. This strategy aims to support sustainable development, social responsibility and risk reduction, taking into account the needs and interests of both current and future generations. Responsible finance strives to create value not only for investors, but also for society as a whole, taking into account the long-term consequences of its decisions.

The research made it possible to identify the key tools and products of responsible financing:

1. Green bonds. The key features of green bonds are their use to finance projects and initiatives aimed at environmental sustainability and reducing environmental impact. [3].
2. Social bonds - bonds, the proceeds of which are used to finance projects and programs aimed at solving social problems, such as fighting poverty, improving access to healthcare or education.

3. Loans taking into account ESG criteria - loans provided to companies taking into account their production and social performance, as well as their compliance with management standards and principles of sustainable development.
4. Specialized investment funds – funds that invest in projects and companies that meet certain sustainability criteria and relevant ESG standards.
5. “Green” projects. Traditionally, “green” projects are based on the principles of public-private partnership. [4].

In Russia, the development of green financing is supervised by the Ministry of Economy, and VEB.RF has been chosen as the methodological center. Since 2021, criteria for the selection of green projects that can attract preferential financing through special bonds or loans have been officially established.

At the same time, the “greening” of the banking sector occurs in two stages. At the first stage, banks introduce ESG principles into their own activities. This includes saving water, resources, and reducing waste, as well as increasing employee motivation, training and the quality of corporate governance. The second stage is much more difficult - the use of ESG metrics in working with clients and investors. Types of “green” projects by area of investment objects and the goals of sustainable business development they implement are presented in Fig. 1.

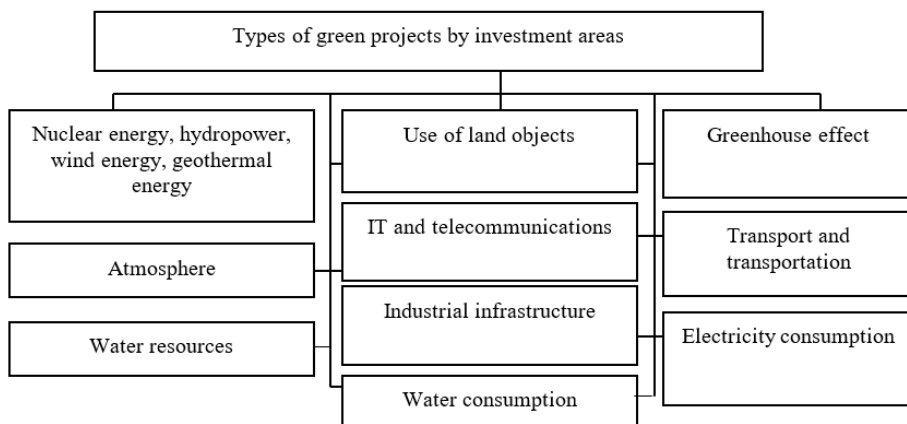


Fig. 1. Types of green projects by investment areas.

Currently, most countries in the world are striving to move away from predominantly government financing of “green” projects and are actively encouraging the attraction of private capital in this area. According to experts, the ratio of public and private investment should be 1:5. [4].

The implementation of the principles of responsible financing in the practice of the Russian economic system is noteworthy. The main subjects are financial organizations, in particular banks.

It should be emphasized that key interest, competencies and actions in the field of ESG are concentrated in banks from the top 20. The leaders of Russian ESG banking are presented in Fig. 2.

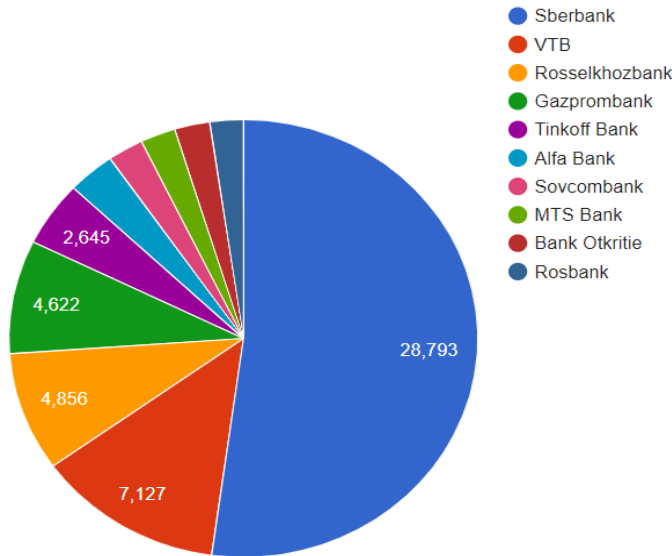


Fig. 2. Frequency of references to ESG banking in connection with the largest banks in Russia in 2023, number of mentions.

The leader in mentions of the ESG agenda among banks is PJSC Sberbank (28,793 mentions from January to September 2023). The second most mentioned bank in connection with ESG is VTB (PJSC) (7,127 mentions from January to September 2023).

Among the leaders in the ESG agenda, it is also worth highlighting Gazprombank JSC (4,622 mentions from January to September 2023), which finances more than 60% of domestic projects in the field of renewable energy. These projects play a key role in combating climate change, reducing greenhouse gas emissions and providing a sustainable and clean source of energy for future generations. The importance of such projects also lies in their ability to promote economic growth, increase competitiveness and improve the quality of life of society, while providing a greener and more sustainable energy system.

Objectively, not only banks, but also Russian regions are showing increasing joint interest in ESG issues. There is an increase in the number of constituent entities of the Russian Federation that are systematically working on their own ESG transformation and implementing sustainable development initiatives. Let's consider the above banks in the context of responsible financing policies in the regions.

1. Sberbank.

In the context of Sberbank's interaction with the regions of the Russian Federation, the main tool for implementing the ESG strategy is the development of the ESG approach methodology, as well as the use of various tools, the main one of which is project financing based on public-private partnerships (PPP).

In 2024, as part of joint initiatives of Sber with a number of constituent entities of the Russian Federation, a line of tools is being developed - ESG ranking, ESG profile of constituent entities of the Russian Federation and ESG strategy of regions (standard regional ESG model), allowing to take into account the individual characteristics of regions on the path of ESG transformation.

Sber's participation in the development of the PPP institution allows for the accelerated construction of socially significant facilities in the areas of housing and communal services, medicine, education, sports, transport infrastructure and other areas.

To attract private investors to regional projects, there is an online service "Concession Agreement Constructor", which allows you to create a draft agreement with conditions pre-

approved by the Bank and works in 11 industries: healthcare, sports, housing and communal services, transport, tourism, culture, lighting, agriculture, social services, hydraulic structures, toll and free roads.

In 2022, PPP funding was approved for 75 projects in the amount of more than 60 billion rubles in such sectors as housing and communal services, education, municipal waste and other urban infrastructure (Fig. 3).

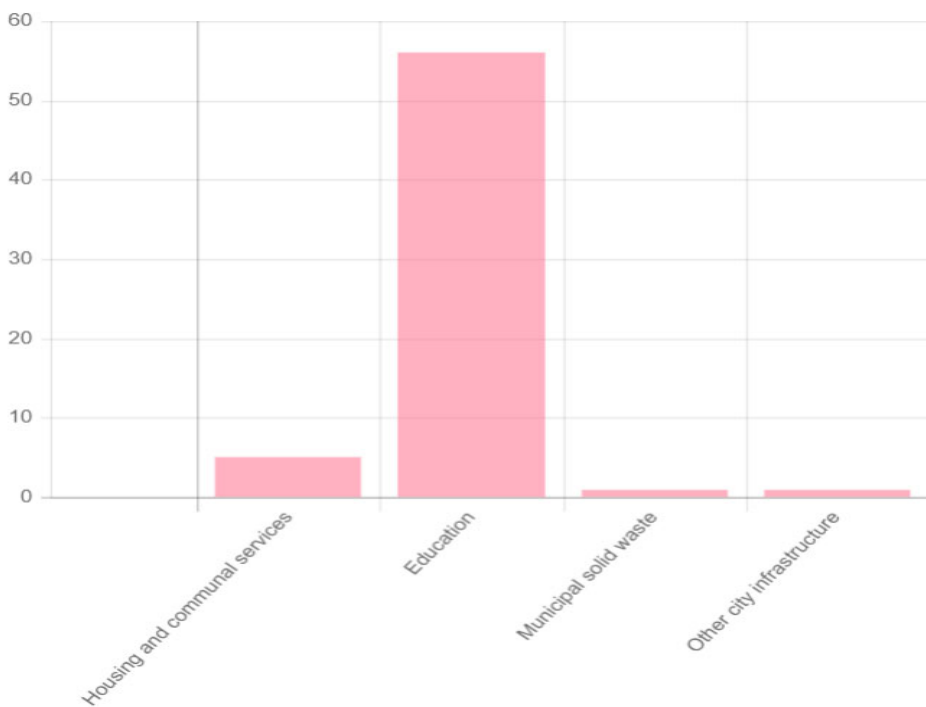


Fig. 3. Structure of financing of public-private partnership projects, billion rubles.

2. VTB.

When providing borrowed funds, the Bank gives preference to projects that improve environmental and social indicators, reduce the consumption of natural resources and help improve the standard of living of the population. The Bank actively interacts with regions on ESG financing issues:

1. Republic of Bashkortostan: An example of a sustainable investment project is the “Eastern Exit”, a road tunnel construction project that began to be built in Ufa.
2. Leningrad region: VTB Bank, as part of its activities, takes an active part in the development project of the Pulkovo airport in St. Petersburg. This project represents the second phase of airport development until 2060. The project is financed through private investment, including from VTB Group. As part of the second phase of the project, it is planned to build new boarding galleries, equip modern passenger areas and other infrastructure facilities, as well as improve the environmental efficiency of the airport.
3. Republic of Udmurtia: The construction of toll bridges over the Kama and Bui rivers in the area of the city of Kambarka is the first regional PPP project in road construction in Russia. The project is extremely significant for the region and is designed to ensure the development of transport and economic ties of the regions of

the Central, Volga and Ural Federal Districts, as well as year-round transport accessibility of the settlements of the Kambarisky region of the Udmurt Republic.

- VTB financed a number of measures to improve the energy efficiency of enterprises in the electricity grid industry - the installation of smart electricity metering systems that reduce commercial losses during the transmission of electrical energy in distribution networks, which in turn makes it possible to maintain (reduce) tariffs. The project is being implemented in the Arkhangelsk, Vologda, Murmansk, Novgorod, Pskov regions, the Republic of Karelia and the Komi Republic.

Supporting the sustainable development of regions and their production sites, increasing the volume of knowledge-intensive production in the country, and developing new areas of industry are the key tasks of VTB as a systemically important financial institution. VTB Bank's contribution to the implementation of National Projects of Russia is presented in Fig. 4.

Total: 15.3 billion rubles

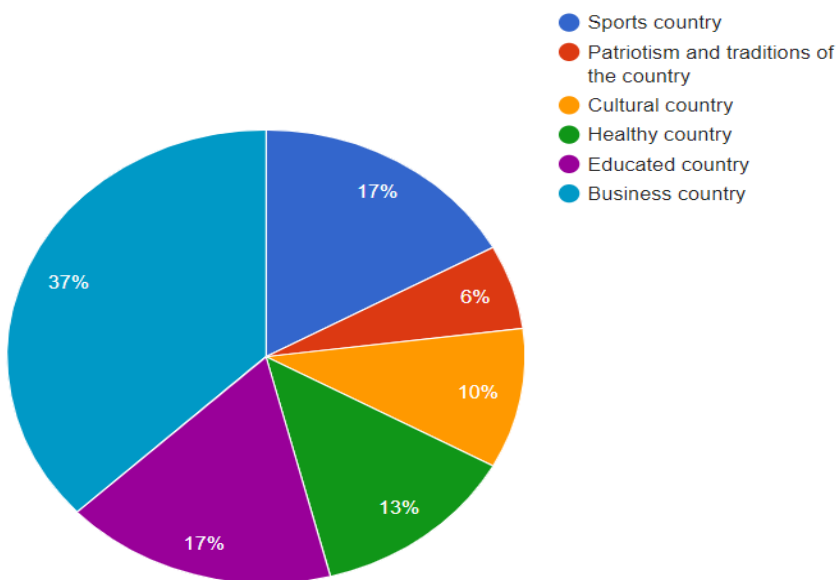


Fig. 4. VTB Bank expenses for target programs in 2022, %.

3. Gazprombank.

At the end of 2022, the total budget of infrastructure projects financed with the participation of Gazprombank amounted to more than 2.2 trillion rubles. In 2022, the portfolio of financing for green energy projects remained approximately at the level of 2021 and amounted to 228 billion rubles, but was replenished with lending projects for the production of equipment for green energy by 7 billion rubles.

Gazprombank's share in the Russian renewable energy market remained at two-thirds of the total volume of loan funds issued. In 2022, projects for the construction of solar power plants with a total installed capacity of 227 MW were financed. This included funding for the South Sukhokum solar power plant with a capacity of 15 MW in the Republic of Dagestan. The solar power plant consists of 40 thousand solar modules and covers an area of more than 30 hectares. The cost of the project is 1.5 billion rubles, and 80% of this amount is financed by loans from Gazprombank. Currently, Gazprombank's credit limits in the energy sector, consistent with the principles of sustainable development, exceed 360 billion rubles. Since 2015, Gazprombank has financed the construction of about 40 solar power plants in 12 regions of Russia. The total capacity of solar power plants is 1,070 MW.

In addition, credit and security documentation was signed for a project to finance the construction of production and technical complexes for the management of waste of hazard classes I and II for a total amount of 26 billion rubles. and shareholder documentation.

The bank, as part of the infrastructure #MEGA PLAYER strategy, acts as an integrator in the implementation of 80 largest infrastructure PPP projects, almost all of which have a pronounced social or environmental focus. These are road and logistics infrastructure, educational, medical, cultural infrastructure facilities and facilities for processing solid municipal waste, digital projects aimed at safety and protection of consumer rights.

It should be noted that the PPP mechanism is one of the most effective tools for implementing sustainable development projects, promoting “green” interaction between the state and the market in order to achieve common goals; attracting extra-budgetary funds to socially significant projects; improving the quality of infrastructure project management at all stages of implementation.

The infrastructure #MEGAPLAYER strategy has made the implementation of PPP projects with the participation of the Bank even more effective for the population and the state: an ecosystem has been created that allows the #MEGAPLAYER to connect to the implementation of an infrastructure project at any stage. The implementation of projects within the framework of this strategy is not limited to attracting financing from Gazprombank; other banks and development institutions are involved. As part of the Infrastructure Strategy #MEGAPLAYER, it is planned to move further in synchronization with state policy to create new necessary infrastructure in all regions of the country.

Thus, having examined the policy of responsible financing of the three largest banks in Russia, we can draw the following conclusions from a regional perspective:

1. The policy of responsible financing is not always implemented evenly, covering only certain regions, but even on this limited scale it has a significant impact on the economic, social, technological, and infrastructural development of the regions.
2. PPP should be recognized as a key tool for banks to implement a responsible financing strategy in the regions, which is primarily explained by the interests of the state in attracting extra-budgetary sources of financing for national projects and government programs.
3. An important achievement is the active participation of banks in the development of infrastructure and industries in the regions. By investing in transport, road, industrial and social sectors, banking solutions contribute to improving the quality of life of the population and the development of key sectors of the economy.
4. An example of the effective implementation of the ESG approach is the experience of Sberbank, which is actively developing the methodology of ESG solutions for regions, helping to increase the investment attractiveness of territories and their spatial development.
5. Banks are actively introducing new instruments, in particular, bonds related to sustainable development goals; climate transition bonds, adaptation bonds, ESG factoring by Gazprombank, which confirms the commitment to continuous improvement and development in the field of responsible financing.

4 Conclusion

The conducted research allowed us to formulate the following conclusions.

Banks and regions are showing a cautious approach to issuing green bonds and debt, mainly due to economic circumstances. In this context, we consider practical solutions to reduce the cost of funding for attracting ESG loans compared to the cost of conventional loans and bonds to be important. In addition, it is important to ensure the access of unqualified investors to the market of sustainable instruments, to work out the possibility of offering them

undervalued instruments for securitization of project finance and PPP, and to think over a system of benefits that motivate them to purchase such securities. The practice of issuing green mortgage securities, as well as green bonds, to refinance a portfolio of project finance loans should be developed in the regions. We emphasize the importance of these tools, since the construction industry occupies a high share in terms of CO₂ emissions and energy consumption. The joint work of key ministries, regional governments, and the banking community should be strengthened to develop, in particular, climate reporting, rules for the implementation of climate projects, updating the Green Taxonomy, ESG rating methodology, a unified national system of investment monitoring of climate active substances and a national ESG assessment system. Finally, ESG risks in the methodology of rating agencies should be recognized as financial.

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