

PROSPECTS FOR GREEN FINANCING OF CONSTRUCTION IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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Abstract

The 'green' agenda is becoming an increasingly urgent issue for countries to address, and since the construction industry causes significant damage, it is important to focus on 'greening' it. Effective financing is necessary for 'green' construction, since the initial costs are higher than standard. At the same time, the successful experience of other countries demonstrates the wide range of opportunities available to market participants. The article concluded that foreign countries, particularly China, have successfully introduced 'green' financing instruments that could be utilized in a similar way in Russia. The study identified prospects for developing 'green' financing and analyzed the possibilities for implementing it in Russia. The existing practice of issuing 'green' bonds was evaluated and it was concluded that this practice should be expanded by encouraging financial institutions and developers to issue bonds. The necessity for banks, financial institutions, and developers to introduce 'green' lending has been proven. This would facilitate the growth of green financing in Russia. The study revealed that creating an ecosystem offering tax benefits, reduced loan rates, and government subsidies for market participants implementing green construction projects would be advisable. This would enable processes in the housing market to be structured and systematized, as well as increasing the effectiveness of interaction between participants. All processes involving participants in the housing market, including financing procedures and instruments, should be clearly defined within this system.

Keywords: ecosystem, housing market, financing, financial instruments, "green" construction; ESG rating

I. Introduction

The construction industry is an industry that causes one of the most significant damages to the ecological state of the country and the world as a whole. Currently, countries have increasingly begun to focus on the need and importance of implementing the "green" agenda. And of course, changes are also taking place in other industries and spheres, and many states include achieving carbon neutrality by 2050-2060 in their development strategies.

We would like to emphasize that, in particular, the BRICS countries and especially in Russia, the importance of the "green" agenda is increasing every year. China is one of the leaders in the introduction of "green" technologies and the use of "green" financial mechanisms in construction. Moreover, China was the country that began to introduce them in construction, and continues to spread it.

At the same time, Russia has been closely involved in the implementation of this agenda for several years, and in particular, companies in construction are advised to act based on the need to

reduce their carbon footprint. The government and financial institutions are taking steps to involve companies in the implementation of the principles of the "green" agenda. In particular, the extent to which the company acts within the framework of the agenda and implements the principles of the "green" agenda depends on what kind of financing and under what conditions the company can receive.

The introduction of "green" technologies and "green" financial instruments makes it possible to bring Russia closer to achieving a "green" economy and reducing the negative impact of industries on the environment, which indicates the relevance of this topic.

The purpose of the study is to determine the prospects for the development of "green" financing of construction in Russia in modern conditions, which is especially important in the context of the need to achieve carbon neutrality by 2060.

II. Methods and Materials

Mortgage lending occupies a fundamental place in financing the purchase of housing and, in fact, for the construction of real estate. For many years, the population has been using this tool to buy housing, and developers are building real estate using, among other things, the money they receive from buyers. It is important to note that according to the results of 2024, mortgage lending accounted for about 4.8 trillion rubles. Despite the fact that this is almost 39% less than in 2023, it is still practically the main source through which the population buys real estate.

Analyzing the financing of construction, it is worth noting that it is mainly conducted through shared-equity construction, mortgage funds and funds held in escrow accounts.

In 2024, there was an increase in the key interest rate, and as a result, loans for developers became quite expensive. This led to the fact that it was difficult to maintain the processes as intensively as it was before. As a result, difficulties arose in implementing the Strategy for the Development of the construction industry and Housing and Communal Services of the Russian Federation for the period up to 2030 with a forecast up to 2035, which was not a very good prerequisite for the growth of the industry and the country's economy as a whole.

In addition to the fact that in 2024 there were already more significant financing problems, developers needed to pay more attention to the implementation of the principles of the "green" economy and environmental protection. After all, as previously noted, the construction industry causes serious harm to the environment, both at the stage of production of any materials, and in the housing construction processes themselves. And only those companies that already use "green" technologies help to reduce this damage. It is also important to note the presence of an old housing stock. If, for example, a program for demolishing dilapidated and dilapidated housing is actively being implemented in Moscow, then this has become a real problem in the regions and a significant proportion of such real estate still remains.

The issue of greening industries is on the international agenda, and Russia is no exception and is actively moving in this direction. It should be emphasized that the economic development of any country can no longer be achieved without countries implementing ESG principles in industries and implementing the principles of the "green" agenda in the activities of business entities.

Experts in the field of "green" construction and "green" financing speak about the importance and necessity of preparing a concept [1] that allows achieving the goals that are specified both in the framework of sustainable development and in the development strategies of countries.

In foreign countries and in Russia, there is a trend where financing conditions directly depend on how well a developer implements ESG principles in their activities, and how actively the volume of "green" technologies used in construction is increasing.

It is important to note that back in 2017, the Environmental Safety Strategy of the Russian Federation for the period up to 2025 pointed out the need to use environmentally friendly materials and develop environmentally friendly industries. And more than once at the St. Petersburg Economic Forum, at the government level, emphasis was placed on the development

of the ESG agenda in Russia.

The list of national interests and strategic priorities of the Russian Federation includes interrelated items: human capital development; environmental protection and adaptation to climate change; sustainable development of the Russian economy [2].

All this confirms that Russia is paying quite significant attention to the "greening of the economy" and in the future this agenda will only grow.

In the course of the work, a list of research methods was used that allowed us to draw reasonable conclusions about the prospects for the development of "green" financing and "green" technologies in Russia. These include deduction, induction, comparative analysis, data analysis, and situation modeling. It was an integrated approach to the use of research methods that allowed us to obtain a systematic vision of the development of the situation on the housing market in Russia.

III. Results

During the analysis of the available materials, it was revealed that in modern conditions, with a high key interest rate and certain restrictions on lending, it is important for companies to have such tools that will allow them to continue their activities effectively. And it is the implementation of ESG principles in their activities that will help developers use profitable "green" financial instruments [3].

However, an assessment of the current situation has led to the conclusion that developers themselves often do not want to move towards higher performance and are ready to build energy-efficient housing because they believe it is expensive. At the same time, the demand for such housing is not high enough, due to the higher price compared to ordinary housing.

The ESG transformation in construction in Russia is at an early stage and it is necessary to form not only the concept of "green" construction itself, but also a list of financial instruments that will make it possible to more effectively implement ESG principles, improve the quality of construction and move towards the country's global goal of achieving carbon neutrality by 2060.

There are only a limited number of Russian developers who implement ESG principles and are included in the domestic ESG rating. However, when formulating the results, the implementation of ERP in construction is complicated by the lack of specific strategies, as well as by the fact that ESG principles for construction are not specifically disclosed.

If we decompose ESG into components and analyze which of them companies devote more time to, then the environmental component is not so developed and companies pay more attention to social and corporate governance. However, it is the implementation of the environmental component that is more relevant for investors.

Currently, only four Russian developers are included in the ESG ranking of Russian companies by the end of 2024: LSR Group (40th place), Airplane Group (54th place), A101 Group (70th place), Etalon Group (77th place) (Table 1).

Table 1: Construction companies in the ESG ranking by the end of 2024

Company name	E-rank	S- rank	G- rank
LSR Group	39	77	20
The Airplane Group	57	63	52
GC "A101"	71	61	82
The Etalon Group	113	73	45

Source: [4].

The low number of developers in the rating indicates a lack of dissemination of the ideas of the "green" agenda in the industry. In this case, it is necessary to actively spread the principles of the "green" economy in industries and provide them with appropriate "green" financial instruments.

As a result of the analysis of the practice of the BRICS countries, and especially China [5], it is precisely the active implementation of the principles of the "green" economy in construction that allows not only to increase the efficiency of the industry, but also to influence the macroeconomic indicators of the country and increase the growth rate of the country's economy [6]. After all, it must be emphasized that construction is a driver of economic growth. Currently, it is also important to ensure continuous economic growth in Russia, including through the construction industry, despite the rising cost of lending, although we are already seeing certain trends towards a reduction in the key interest rate.

In Russia, a regulatory legal framework is being formed that regulates "green" construction, "green" standards [7-15].

Since August 2024, GOST R 71392-2024 "green" standard for individual housing construction began to operate, which includes 45 criteria by which a house can be considered environmentally friendly [8].

Another significant step in Russia was the creation of the Clover system. This system is implemented using a Methodology for evaluating and certifying buildings for new construction projects¹ [9].

In addition to all these, there are certain environmental certifications, but almost all of them are voluntary and do not oblige companies to perform them.

Gradually, you can see the formation of the necessary base. However, financing the construction of such housing is extremely important. And a sufficient number of mechanisms and tools have not yet been formed in this direction.

When assessing the financial effectiveness of projects, they are often rejected by calculating only the initial high costs from their point of view, without analyzing the prospects, including the possibility of obtaining government support. The payback period for "green" projects averages about 6 years, which is, in principle, a fairly good indicator [10].

According to the World Bank, "green" construction requires additional costs. However, I would like to note here that the cumulative positive effect that should be achieved through the implementation of such projects should significantly exceed the costs and bring Russia closer to achieving carbon neutrality.

Depending on the industries, additional costs can range from 1-5% (Fig.1), which generally makes it possible to calculate how to increase the profitability of projects in order to recoup these costs.

The results of the analysis showed that an important area for ensuring the recoupment of additional costs and reducing the payback period is the development and implementation of a list of effective financial instruments and mechanisms. At the same time, such tools can already be found in the BRICS countries. In Russia, it is still at the stage of formation.

For developers, it is necessary to understand that these mechanisms will speed up the payback period, reduce costs and increase public demand for eco-friendly housing options.

When developing options for "green" financing, it is important to take into account their alignment with the standards of the "green" taxonomy developed by VEB.RF. Moreover, individual mechanisms can be linked to absolutely "green" projects, as well as to those that partially perform this function.

¹ANO "National Center of PPP". URL: <https://rosinfra.ru/library/metodika-ocenki-i-sertifikacii-zdanij-dla-obektov-novogo-stroitelstva-new-construction>.

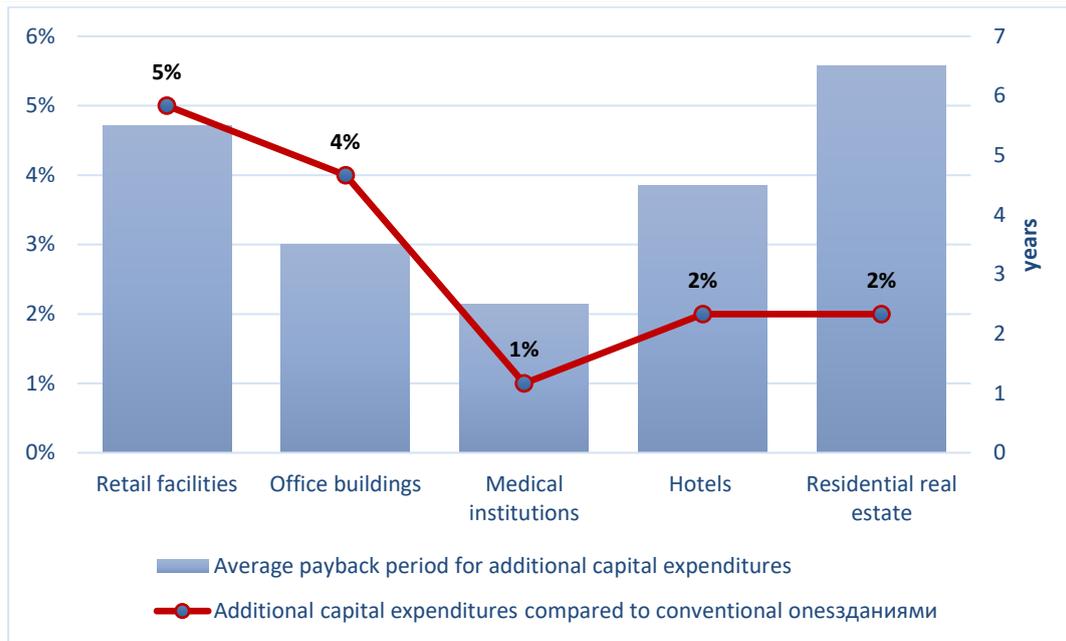


Figure 1: Additional costs of "green" construction and their average payback period in emerging markets
 Source: The International Finance Corporation (World Bank Group) [11]

IV. Discussion

Currently, one of the financing options is "green" financing, which involves a range of methods for financing the green economy. One of the forms is a "green" loan. A loan that fully or partially finances projects that meet "green" standards. Usually, "green" loans are provided to legal entities. A "green" mortgage is usually issued to a borrower for the purchase of housing that meets "green" standards, that is, aimed at protecting the environment [12].

The difference between a "green" mortgage and a "green" loan is what the financing will be used for. In the first case, for a specific housing facility. In the second case, different options are possible. Also, the recipients in the first case are individuals, and in the second – legal entities.

Currently, in Russia, the tools for the "green" agenda are quite scattered, and it is important to provide a common system that will allow achieving the goals of the "green" agenda.

The "green" bonds available on the market, which have already become widespread, can become a source of funding. The mechanism for issuing and distributing bonds as a whole has already been worked out and this will accelerate the achievement of common goals.

Russia has already issued "green" bonds. The first issue took place in 2018 by the KhMAO Resource Conservation company. Later, the bonds were issued by the Moscow Government, and it was the first Russian region to carry out such a procedure.

It is essential to involve banks in the issue of "green" bonds, as well as the spread of such a process for the construction sector, where such a practice is just being formed [13]. In 2023, the Legend company together with the Dom Bank. The Russian Federation has issued green bonds in the amount of 3 billion rubles with a maturity of 4 years. In 2024, the same company has already signed an agreement with Sberbank on the "green" project financing of the first Moscow project of the company.

VEB.RF issued 40 billion rubles worth of "green" bonds in November 2023.

If we talk about the issue of "green" bonds by banks, then this process is only in its infancy. In the process of "green" securitization, the underlying assets can be, for example, mortgage loans or consumer loans that are used to purchase housing.

Currently, various strategies for the development of "green" financing are being discussed,

however, from our point of view, it is important to thoroughly work out the project of issuing "green" bonds by different entities so that they are of interest to investors and there is a steady demand for them [12 - 39].

To increase the interest of investors and developers in the construction of "green" facilities, it is important to show the advantages that each entity can receive.

This may be a reduced loan rate. This practice has already been introduced by Dom.rf, when the rate could be lowered by 1-2%, depending on how well the "green" standards are met.

It is important to consider options for tax incentives and government support for "green" projects. In foreign practice, investment funds are actively involved in the development of such projects. This is still a new direction in Russia, but it is extremely promising.

However, for developers, both tax optimization and obtaining land at a lower-than-market value, as well as various government support options, are important.

This can be beneficial for the state, since, in this way, it will be possible to step up the implementation of the "green" agenda, which is extremely relevant at the present time.

It is essential to create an investment-attractive market for "green" bonds, so that an increasing number of investors can participate in it.

In order to increase the number of companies that will be included further in the ESG rating, it is important to consider options for issuing "green" bonds and increasing the number of "green" projects.

For private investors, it is necessary to understand the advantages of "green" bonds. This includes not only obtaining a fixed income, but also improving the infrastructure of cities and improving the quality of life of the population. Subsequently, this will lead to the formation of a holistic, effective ecosystem of green finance in Russia.

For a "green" mortgage, only a reduction in the rate for the borrower is not enough to achieve a multiple increase in the volume of its issuance and, accordingly, an understanding for developers of the need to build "green" housing. A set of measures is important to encourage all market participants to be interested in the development of "green" financing.

V. Conclusion

"Green" financing of construction in Russia is at the stage of formation. There are a number of tools and mechanisms that are already being implemented. However, so far this is not enough to accelerate the process of implementing the "green" agenda and achieving carbon neutrality by 2060. The main problem is the lack of an ecosystem that allows you to involve all market participants and create a list of tools and mechanisms that will achieve your goals.

Individual actions of market participants do not lead to scaling of processes, make them one-time and do not show uninvolved participants the advantages they can get.

It is necessary to form an ecosystem, work out the processes of distributing the issue of "green" bonds, link them with different issuing entities and ensure that certain advantages are obtained for those participants who participate in the process. It is essential to consider options for tax incentives for developers involved in the issuance of "green" bonds, as well as the provision of various benefits and subsidies.

It is necessary to form a regulatory legal framework, which is lacking. Accounting and assessment of risks that may be borne by market participants, as well as the development of measures that can minimize them. It seems that the direction of "green" financing within the framework of the "green" agenda is extremely relevant and market participants can help solve some of the problems that currently exist and are associated with expensive lending.

CONFLICT OF INTEREST.

Authors declare that they do not have any conflict of interest.

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