Innovative Investment Technologies in Agro-Industrial, Forestry and Chemical Complexes as Stimulation of Rational Environmental Management

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Abstract. The article deals with the issues of the legal mode of responsible investment as an important means of implementing measures to control environmental pollution, particularly in the agro-industrial and closely related complexes. The article analyzes the development of green finance system in Russia; it describes the main current regulations in the field of responsible investment. It is proved that proper legal support for investment, taking into account ESG factors, could solve the problems described in the article and ensure the introduction of economical, ergonomic and environmentally friendly technologies in the long term. Proposals were formulated to provide investors, including unqualified ones, with the opportunity to invest in green bonds, as well as to establish a mandatory minimum share of green bonds in the portfolio of institutional investors.

1. Introduction
Rational use of natural resources has now become a leading trend in world politics and the most important criterion for assessing the economy. Environmental objectives are increasingly prioritized over profitability and return on assets. This trend is especially evident in the energy sector, where the leading world powers have given it a planned and legitimate character. As a result, producers-exporters of energy resources are forced to join the programs developed without their participation. It is obvious that the fight against the carbon footprint will embrace the agro-industrial and chemical complexes, i.e. all agriculture, including technologies for the production, processing and storage of all types of agricultural and livestock products, and the adjacent chemical complex. At the same time, the forestry complex is potentially capable of taking on the burden of compensation in the balance of carbon pollution. Equally obvious is the need to take into account the experience of tightening anti-carbon regulation and, in this regard, the early and purposeful development of principles for management and regulation of financing in the field of chemical and biotechnology, agriculture and forestry, as well as a reference regulatory support. The priority in the development of regulations will provide producers with...
obligatory standards and allow focusing on their possible participation in the credit balance of hydrocarbon emissions.

2. Research methods
This research is aimed at studying the state of art and prospects of responsible investment as an innovative technology in relation to agriculture, i.e. a sphere for which this issue has never been relevant. At the same time, there is the axiomatic hypothesis that in the agro-industrial, forestry and chemical complexes, the technologies of responsible investment are especially important due to the need of stimulating rational nature management. Research on ESG investment issues aimed at systematizing the existing facts of responsible investment through the emission and placement of green bonds revealed the initial level of the economic practice development; it necessitates the analysis of the latest foreign and domestic scientific research, the study of the existing domestic regulations; there is a clear need for its purposeful development in the very near future.

Scientific research of the theory and practice of responsible investment is determined by the criteria:
– identifying the latest global trends in social responsibility in the investment sphere,
– systematizing the regulatory process and the results of its application;
– developing the proposals based on the identification of the current state.

Thus, a legal sociology method and a comprehensive assessment of reality help predict the trends for the further development of responsible investment and develop recommendations for its regulatory provision and support. On the one hand, the tightening of environmental regulation creates new principles and opportunities in the field of financing and investment. Priority is imperatively created by the obligatory tendency of responsible investment. On the other hand, an important factor in shaping responsible investment is the idea of ownership, which stabilizes social relations and generates a positive resonance of acceptance in different social strata.

We use the experience of scientific development and approbation of regulation technology in regards to producers’ corporate social reporting, which now concerns investors in terms of regulating responsible investing; the effect of social approval for responsible investing has been also taken into account.

3. Research
Responsible investment involves a policy of stimulating the interest of issuers, primarily to the so-called “green” and social bonds, through which the accumulation of funds is carried out for the implementation of various projects in the environmental and social spheres, as well as for eliminating the consequences of the pandemic. Socially responsible investing (hereinafter - SRI), sometimes referred to as “ethical investing”, is the practice of making decisions about financial investments based on social, environmental or ethical criteria [1]. While conventional investments focus on the return and financial risk of a stock and bond offering, SRI considers the nature of the source, not just the size of the financial return. Some authors note that the ethical aspect of investment is a key one in this practice, an ethically more perfect way of investing [2].

Green and social bonds are viewed as an integral part of a global approach to responsible investment, which includes the mandatory consideration of such factors as the issuer’s impact on the environment, social development and corporate governance. Consideration of ESG factors is widely used today by investors when making an investment decision. The corresponding trend has existed for a relatively long time in Western countries, and in recent years has become relevant for Russia since foreign investors take into account the ESG factors.

ESG investment grew more popular even before the outbreak of the pandemic, which served as a powerful catalyst for investors to approach their portfolios more selectively, to increase their portfolio with companies corresponding to their ideas about the need to care for the environment and social problems [3]. According to the report of the Global Investors for Sustainable Development Alliance (GISD), there is a steady growth in the volume of assets that are professionally managed and invested taking into account the ESG factors discussed above [4]. In Russia, the investors’ interest in green bonds
is also confirmed by statistics and information from the Moscow Exchange, according to which the range of green and social bonds included in the sustainable development sector is regularly expanding.

At the same time, the importance of green investments for achieving the goals of reducing greenhouse gas emissions for building a climate neutral world by the middle of the XXI century, indicated in the Paris Agreement on Climate Change [5], is recognized at the international level. For example, the emergence of green bonds on behalf of the UN was positively assessed by Secretary General Ban Ki-moon, who characterized this event as “one of the most significant developments in financing low-carbon and climate-resilient investment opportunities” [6].

Foreign sources touch upon various aspects of green investments. Thus, I. Miola et al note that from a legal point of view, green bonds do not differ significantly from ordinary bonds, while the debt arising from the subscription to green bonds is not only financial, but also social and environmental [7]. For example, Clarence Tolliver et al discuss a green bond financing policy for renewable energy assets critical for achieving emission reduction targets under the Paris Agreement [8]. Owen Sanderson touches upon the issues of verification of green bonds issuers’ reporting, including the confirmation of carbon emissions reduction by such entities [9]. Issues of pricing in the issuance of green bonds were raised by Serena Fatica et al, who underline that there is no difference in the yield of green bonds compared to conventional bonds [10]. Corporate green bonds are discussed by Caroline Flammer, who indicates that investors are responding positively to the announcement of the issue, and this reaction is stronger for new issuers and bonds certified by third parties. After issuance, issuers improve their environmental performance (i.e., increase environmental ratings and reduce CO₂ emissions), and their ownership share is increased by long-term and green investors [11]. Regulatory and policy issues related to green bonds are reviewed by L. Freeburn and I. Ramsay [12].

The legal content of the concepts of “corporate social responsibility” and “sustainable development”, which forms the foundations of the legal concept of the theory of responsible investment and the issuance of green bonds, is given by O.K. Kremenleva [13–17]. Some aspects of legal regulation of green bonds were considered by M.E. Kosov, T.M. Rogova, and A.E. Zotov [18], who highlighted the need to form a special legal mode for this type of securities. The economic aspects of issuing green bonds were considered by O.V. Bogacheva and O.V. Smorodinov [19], N.N. Yumanova, M.A. Bolgov, S.A. Panova [20], L.S. Hudyakova [21].

The regulatory and methodological basis of the green investment market in Russia is formed by acts adopted in a relatively short period of time. The development of a green finance system in Russia was initiated by the adoption of the Diagnostic Note “Green Finance: an Agenda for Russia” and the Concept of Organizing a Methodological System for the Development of Green Financial Instruments and Responsible Finance Projects in Russia, developed by the Expert Council on the Long-Term Investment Market at the Bank of Russia. For the first time, these documents approved a roadmap for the development of a responsible investment system in Russia.

At the regulatory level, the specifics of issuing bonds with the targeted use of funds received from their placement were first enshrined in Bank of Russia Regulation no. 706-P dated December 19, 2019 “On Securities Issue Standards” (hereinafter referred to as Regulation no. 706-P). This Regulation was adopted in order to bring the Bank of Russia regulations governing the procedure for issuing securities in line with the provisions of Federal Law no. 514–FL dated December 27, 2018 “On Amendments to the Federal Law “On the Securities Market” and certain legislative acts of the Russian Federation in terms of improving the legal regulation of the issuance of securities” (hereinafter - Federal Law no. 514-FL), which was aimed at simplifying and shortening the procedure for issuing securities, as well as eliminating administrative barriers in the implementation of the issue. In addition, the amendments provided for by Federal Law no. 514-FL are also aimed at further implementation of electronic document management between the registering authority and the issuer.

For the first time, subsection V.4 of Regulation no. 706-P included chapters on the specifics of issuing bonds with the targeted use of funds received from their placement. The Russian financial regulator classifies these bonds as green, social and infrastructure bonds. In particular, among the features of green bonds, the Bank of Russia determines the presence in the Decision on the Issue of
Bonds a condition on the targeted use of funds received from their placement in projects aimed at preserving and protecting the environment.

In July 2020, the Bank of Russia sent market participants an Information Letter dated 15.07.2020 no. IN-06-28/111 “On Recommendations for Implementing the Principles of Responsible Investment”, which stated that when choosing companies with similar financial performance, investors should give preference to those characterized by responsible policies in the field of environmental protection and human capital development.

Among the acts of advisory nature, it is worth mentioning Methodological Recommendations for the Development of Investment Activities in the Field of Green Finance in the Russian Federation with the Main Directions for the Implementation of Green Projects in the Russian Federation (Taxonomy), developed by the state development corporation “VEB.RF”; the plan of measures to improve the energy efficiency of the economy developed by the Ministry of Economic Development of Russia, which describes activities for developing mechanisms including the active use of green financial instruments to stimulate energy conservation. The analysis of these acts shows that today the legal regulation of green bonds does not differ from the regulation of ordinary bonds, and there is no significant difference in price between them. This problem, in regards to the need of developing and popularizing these types of securities, is discussed in the research literature.

Moscow has become the first Russian region to issue green bonds. The money raised from the placement of green bonds is planned to be used for the purchase of about 400 electric buses and the construction of 18 new stations and 43.8 km of metro lines, as well as the reconstruction of a number of stations and lines of the circular metro line. At the same time, in the current conditions, despite the fact that investors are interested in such securities, the placement of green bonds looks more like an image step for the issuer, since for these bonds, a rate comparable to that of federal loan bonds was set, it did not allow saving on the rate, while additional costs were incurred for their verification.

4. Conclusion
The article proves that proposals have been formulated to provide investors, including unqualified ones, with the opportunity to invest in green bonds, as well as to establish a mandatory minimum share of green bonds in the portfolio of institutional investors.

Having considered the issues of the legal mode for responsible investment as an important means of implementing measures to control environmental pollution, particularly in agro-industrial and closely related sectors, it should be stated that due to the actual absence of a special legal mode for green bonds, the Russian market is not ready for their placement yet. Besides, in present-day Russia, there are practically no ESG investors who could form a significant part of the demand for green bonds, which allows the issuer to lower the rate compared to usual issues. To solve this problem, it is necessary to take measures for development of a full-fledged market for green bonds; proper legal support for investment taking into account ESG factors will solve the problems described in the article and, in the long term, will ensure the introduction of economical, ergonomic and environmentally friendly technologies.

However, the implementation of the strategic environmental goal of developing a green finance system in Russia solely by administrative measures is not effective unless it is combined with the stimulation of emission and investment measures to support a technological breakthrough in the transition to environmentally friendly development. It seems that one-time or even systematic, but narrowly targeted, measures are not enough to achieve the goal. Analysis of the current regulatory framework in the field of responsible investment shows that subsidies, anti-bankruptcy measures, concessional lending to groups of producers of certain types of agricultural products, as well as support for organizational and legal forms of activity typical for these producers (cooperatives, farms) result in a short-term and insignificant effect.

At the same time, the emission method of accumulating financial resources, in addition to the existing for an issuer-agricultural producer or processor advantage of borrowing in the open market, allows investors, in addition to earning income, to feel their involvement in a socially significant project.
Taking into account the criteria set out in the law that an individual must meet to be recognized as a qualified investor, unqualified investors can invest only in the least risky assets (government securities of the Russian Federation, bonds of Russian issuers with a certain level of credit rating, etc.). In this regard, it is possible to include an indication of the green nature of bonds into the criteria for attracting funds from unqualified investors in structural green bonds. Moreover, additional means of protecting the investor’s interest in the implementation of an environmental project should be envisaged, for example, the obligation of the issuer to pay an increased coupon rate if it is impossible to implement the project.

It is also expedient to establish a mandatory minimum share of green bonds in the portfolio of institutional investors - legal entities, as well as bodies authorized to manage state and municipal property, which, by the nature of their activities, have long-term large balances of funds invested in securities. Innovative investment technologies with the obligatory consideration of the social responsibility index would effectively stimulate issuers to rational use of natural resources and attract assets to the agro-industrial, forestry and chemical complex. In addition, the implementation of the idea of involvement in socially responsible investment technologies stabilizes and streamlines public relations, which per se has an important effect of the formation of green finance that is necessary for the agro-industrial and affiliated complexes.

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