

Formation of mechanisms for state regulation of environmental investment activities in the region

Salima Makhosheva^{1,*}, *Marina Kandrokova*¹, *Zaur Ivanov*¹, *Anzor Sabanchiev*¹, and *Saida Shardan*²

¹Institute of Informatics and Regional Management Problems of KBSC RAS, 360006, 20 Pushkin str., Nalchik, Russia

²North Caucasus State Humanitarian and Technological Academy, 369001, Kosmanavtov, 100, Cherkessk, Russia

Abstract. The modern development of the Russian economy is characterized by conditions of socio-ecological and economic development, which create the preconditions for the formation of such a system of using natural resources in the processes of industrial production and consumption, which will be distinguished by rationality, ensure not only environmental, but also economic security of society, the well-being of the present and future generations of the population, assume the creation of necessary and sufficient conditions for sustainable development, which, in turn, will require the introduction of not only economic, technical, technological, social and other transformations, but also changes in the mechanisms of state control and regulation of investment processes of environmental orientation. In our opinion, the greatest improvement should be subject to the regulatory and legal mechanism of both state regulation and, in particular, local public self-government. This need is explained by the fact that in the territories of municipalities, there are sources of environmental pollution and industrial enterprises implementing eco-efficient investment projects. However, as the analysis of the regulatory framework has shown, almost all documents regulating the activities of municipal government bodies in the investment and environmental spheres are approved by laws and resolutions of the governments of the regions in which the municipalities are located. Hence, it can be concluded that the improvement of the regulatory mechanism of state and public regulation should be carried out in a comprehensive manner for both the regional and municipal levels of government.

1 Introduction

The works of the following scientists are devoted to the problems of the formation of mechanisms of state regulation of environmental investment activities in the region: V.I. Gurmana [1], E.V. Ryuminei [1], A.A. Gusev [2], A.N. Lyukshinov [3], N.V. Pakhomova

* Corresponding author: doptaganka@yandex.ru

[4], V.N. Lopatin [5], V.V. Kovalev [6], B.A. Koltynyuk [7] V.D. Fabisovich [8], including the work of foreign scientists dealing with this issue: K. Richter [4], T.E. Graedel [9], G. Birman [10], J.P. Evans [11].

At the same time, the problems of forming such a system of state management of investment activities, which allows creating rational, effective mechanisms for monitoring and regulating investment activities at industrial enterprises in the regions of the Russian Federation, contributes to the prevention of further environmental pollution, ensures the development and implementation of eco-efficient projects, as well as the formation of sustainable and competitive development of industrial enterprises in the regions, have been little studied and not worked out so far.

The purpose of the study is to develop recommendations for the formation of mechanisms for state regulation of environmental investment activities in the region.

2 Main part

The first step towards the formation of effective mechanisms of state control and coordination of investment processes in the region, based on a clear definition of goals and objectives for the implementation of productive investment activities, is the preparation of an integral long-term program of social and economic regional development, the equal components of which are industrial policy, investment policy and environmental policy, each of which sets its key task to improve the living standards of the region's residents and, accordingly, forms its target state programs containing specific goals, plans and projects that require their implementation within the specified time frame.

Regional policies in the field of industry, investment and environmental protection include a set of measures of paramount importance, affecting the main spheres of life of the population, which are subject to accurate and timely implementation in 4 years. Nevertheless, in all the strategic tasks, program goals and targets, we were able to identify identical components, which can definitely be attributed to the development of the industrial sector of the economy, to the investment segment, and to environmental protection (Fig. 1).

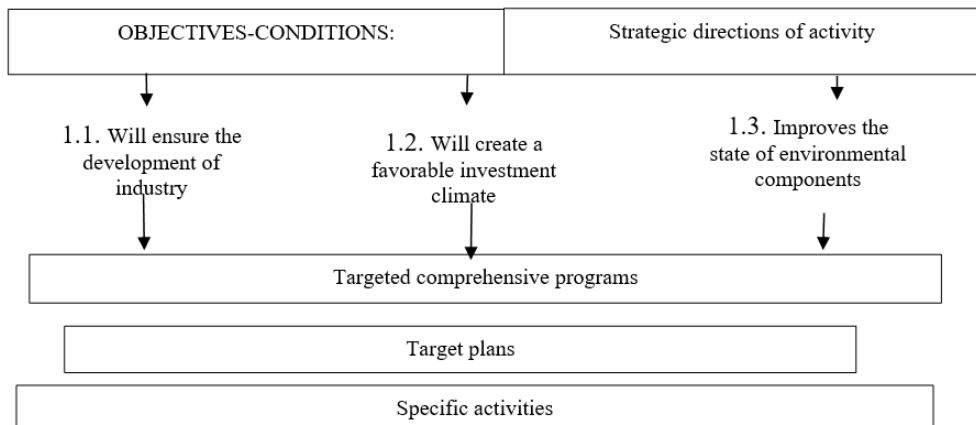


Fig. 1. The structure of building a regional policy in the field of industry, investment and environmental protection.

According to the above figure, industrial policy is interconnected with investment and has common projects, plans and development programs; for its part, the investment policy provides for the implementation of environmentally oriented projects related to the area of

responsibility of the environmental policy, at the same time, some state target programs integrate target settings in three directions, implementing the development of industry with the attraction of investments by preserving the natural environment.

Therefore, in order to improve the mechanisms of state control and regulation, it is necessary to clearly identify these joint planning projects on the basis of the criteria of transparency, priority and complexity. The criterion of transparency in this context means the publication in the media of the main target programs, plans of industrial development, attracting investments and their spending in the region, as well as protecting the natural environment, using new environmentally friendly products, technologies, reducing emissions, discharges, waste generation and their further use. In addition, this principle presupposes the determination of the amounts of costs for carrying out specific activities and the sources of their financing, as well as the expected results, which may be subject to public discussion and adjustment by stakeholders.

The priority criterion based on the analysis of costs and benefits, including the environmental and economic effect and economic efficiency, suggests the possibility of identifying the most significant eco-efficient projects recommended for priority implementation according to the criteria of optimization, maximization or minimization.

The complexity criterion is illustrated in figure 1 and means the implementation of such a project, which is comprehensively aimed at introducing industrial, investment and environmental policies at the same time.

Practical use of these principles, in addition to the above results, will also allow determining the boundaries of improving the regulatory mechanism at the federal and regional levels of government, the degree of their influence on the activities of municipal bodies.

The mechanism for coordinating and managing investment activities carried out by the state is a means of implementing targeted strategic programs and is a set of methods of state and municipal management [12-14]. Consequently, the implementation of state industrial, investment and environmental policy depends on the rationality and efficiency of building a regulatory framework. The improvement of this mechanism should be carried out as a process of development and implementation of strategic and current plans in the territory of municipalities.

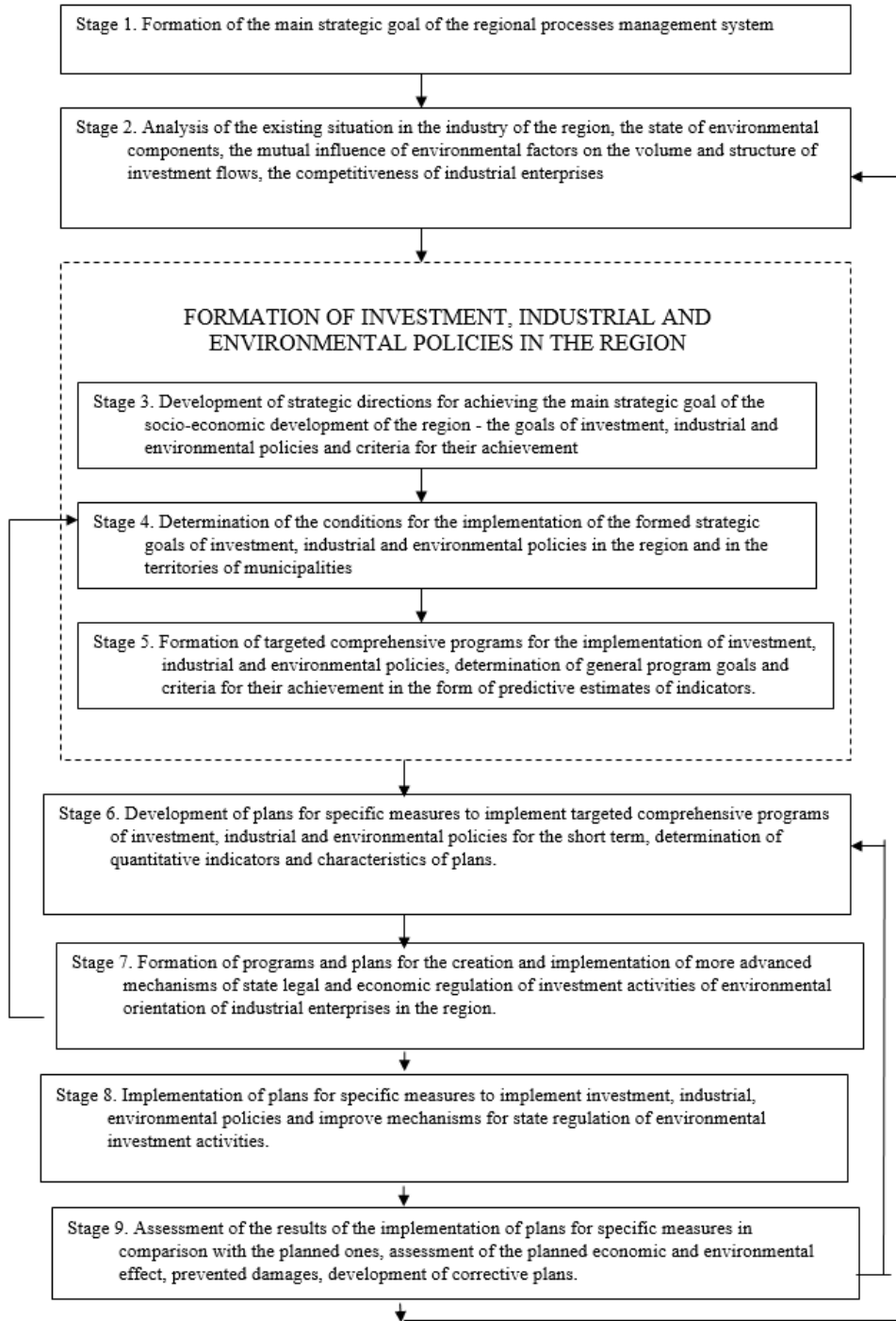


Fig. 2. Algorithm for improving the system of state control and regulation of environmental investment activities.

Hence, the algorithm for improving the system of state control and regulation, which includes the mechanism for coordinating investment processes with an environmental bias

in industry, we have brought together in a single series of successive steps taken to expediently implement management tasks (Fig. 2).

Stage I presupposes the precise designation of the key goal for the sake of which the work of the regional system of control of socio-economic processes is carried out. For its implementation, the goals of the policy in the field of industry, investment and environmental protection are accumulated.

Stage II is characterized by a variety of analytical studies using the following generally accepted tools: strategic analysis, analysis of mutual influence, investment and material investments, interviews, environmental audit, scenario building. These analysis tools are part of the cost-benefit methodology, including cost-effectiveness and environmental impacts.

Stage III, from which the formation of policies in the field of industry, investment and the environment directly begins, their internal goals are formulated, aimed at implementing the fundamental setting of the regional management system for socio-economic development. Here, qualitative characteristics and quantitative indicators are established that serve as criteria for assessing the likelihood of achieving general goals, which have the form of predictive estimates.

All activities carried out at this stage are subject to the Federal Law “On Environmental Protection”, the provisions of which require the preparation of forecasts of the socio-economic and industrial development of the territory, regarding the environmental situation in the region and the proposed investment infusions. Most often, such indicators can be identified through long-term expert forecasts [15].

Stage IV consists in the development of options for the implementation of policies in the field of industrial production, investment and environmental protection, for example, investment sources that require mandatory incentives are directed to the implementation of investment policies, and the provision of a suitable investment environment in order to attract them without interruption.

For industrial policy, sectors and sub-sectors are determined that have become priorities, which can provide an increase in GRP, significantly increase the production of products that are in high demand among the population, have the opportunity to open eco-production and produce products that are clean from an environmental point of view, etc.

For environmental policy, the main options for improving the quality of the components of the natural environment are determined, for example, those that reduce the dumping of the territory of municipal territories. The criteria for achieving this goal are also predictive estimates and can be in the form of relative indicators reflecting a decrease in the volume of waste generation, for example, unused automobile tires that have not been used as a raw material [6].

Stage V provides for the creation of targeted programs, the main task of which is to assist in the implementation of key guidelines for the formation of an enabling environment for industrial, investment and environmental policies. Target programs should include, first of all, comprehensive consolidated measures to improve the mechanisms of state control and regulation, to improve all types of support for the operation of the management system - information, personnel, material, financial. The results of the implementation of target programs are also forecasts, which, however, are determined not by intuitive methods, but by means of extrapolation methods revealed as a result of the analysis of trends in changes in indicators characterizing the state of the studied processes over a long period of observations. Among the entire set of available target programs, the choice for individual policies is focused on those that are mixed, including a comprehensive solution to environmental problems based on the development of investment projects for industrial development. In addition, programs for improving information support, the formation of more rational economic and legal mechanisms of state regulation and control of investment

activities focused on the use of environmentally friendly technologies in industrial production should be of the top priority.

At the VI stage, plans for the near future are drawn up, which are the means of achieving targeted programs. For example, in order to improve information support, we recommend drawing up plans for state monitoring of the state of the natural environment, investment flows, the formation of new industrial enterprises, the environmental cleanliness of all existing industrial enterprises in the territory of municipalities.

These plans should include such specific measures as: monitoring the state of the main objects of nature, including in the locations of sources of anthropogenic impact; determination of the impact of these sources on environmental components, living conditions and health of local residents; provision of state control and regulation bodies at the regional level and municipalities, industrial enterprises, the population, interested groups of the public with reliable, timely information necessary to prevent and/or reduce the adverse effects and consequences of pollution; creation of an integrated system for the collection and subsequent analysis of information obtained in the course of observations; organization of permanent storage of observation results for each component of the natural environment, the level of pollution of this environment by each industrial enterprise within the boundaries of municipalities [16]; maintenance of databases on the state of health of the population, on emergency pollution of the environment, environmental and economic damage. Subsequently, the accumulated data should become the basis for the creation of a unified data bank on the territory of the region.

For each of the listed planned measures, at this stage, coordination is carried out by the following indicators and characteristics: dates of execution, performers, planned costs, sources of financing (investment) costs, planned results of the implementation of measures, including economic efficiency, forms and frequency of current control, controlling bodies, officials exercising comprehensive control. Hence, it is quite obvious that plans, including information support, are associated with financing (investment) plans for such indicators as costs, sources of funding for programs and plans to improve information support, and planned financial results.

Improving the investment system as part of financial support is also being developed at the considered stage of the proposed algorithm and includes specific measures to attract investment, first of all, in eco-projects, the priority of which has been identified based on the analysis of reliable and timely information on the state of environmental components in the region and municipalities, on the level of implementation of policies in the field of investment, industry and environment [16-18].

The formation of plans for state regulation of environmental investment activities is carried out on the basis of studying the amounts of current costs and capital investments in accordance with the Order of the Federal State Statistics Service of July 21, 2020 N 399 (as amended of 08.02.2021) "On the approval of forms of federal statistical observation for the organization of federal statistical observation of agriculture and the environment". Thus, it is a generalizing indicator of forecasts for the development of investment and environmental protection processes, which are determined, as a rule, using methods of extrapolation of trends identified as a result of analysis of data from state environmental monitoring and reporting on investments in fixed assets of industrial enterprises in the region.

Plans for state regulation of investment activities should be divided into the following types according to such a classification criterion as "sources of financial resources": own financial (investment) resources and intra-economic reserves of an industrial enterprise; borrowed and attracted; funds of creditors and foreign partners; funds of the state regional budget; funds of the state federal budget, etc.

The analysis carried out by the author of this study showed that, first of all, it is necessary to develop plans for regulating the development of such sources of investment as own funds of industrial enterprises and funds of the state regional budget. However, the implementation of plans for state regulation of investment activities aimed at increasing the volume of investments in the construction of environmental facilities is possible only as a result of the creation of a better regulatory framework for the activities of local self-government bodies.

So, for example, in order to stimulate the inflow of investment in environmental objects and processes on the territory of municipalities of such a region as the Kabardino-Balkarian Republic, we are convinced that a list of Orders of the head of the Kabardino-Balkarian Republic should be developed, including the following: on the procedure of collection, storage and disposal of vehicle waste, including car tires; on the development of recommendations for determining the norms for the accumulation of solid household waste and industrial waste, including worn-out car tires; on keeping separate records of accumulations of solid industrial and domestic waste by types of main waste, including automobile tires; on the introduction of environmental passports of industrial enterprises and municipalities; on the development and implementation of rules for the formation and implementation of sanitary cleaning schemes for the territories of municipalities.

The next – seventh stage includes measures to create better control and regulation mechanisms. So, the regulatory framework is the basis for the development of an appropriate regulatory or, otherwise called organizational and administrative, mechanism that, firstly, organizes control over the implementation of orders of the head of the republic, and secondly, forms proportions in investment flows aimed at introduction of eco-efficient processes in various municipalities, components of the natural environment, in order to improve the condition of territories and components provided by environmentally oriented activities of industrial enterprises.

The economic mechanism of state regulation of investment activities is also based on regulatory support [12, 18], which should consolidate tax incentives for the placement of environmental facilities. These benefits include the amount of payment in the form of property tax and income tax in accordance with Law No. 23-RZ dated 16.04.2001 with the latest amendments dated 29.12.2006 “On investment activities in the Kabardino-Balkarian Republic”. In addition, such a Decree of the Government of the KBR is needed, which will approve preferential or preemptive rights to conclude contracts for the construction of facilities implementing investment projects of an environmental focus. Also, it is necessary to envisage changes in the law N 27-RZ of 22.12.1998 “On payment for land in the Kabardino-Balkarian Republic” associated with a decrease in the amount of this payment for industrial enterprises implementing eco-efficient projects, at least for the payback period of these projects. These changes must be coordinated with the relevant decrees of the Government of the Kabardino-Balkarian Republic of May 18, 2015 N 90-PP “On the rules for determining the amount of rent, procedure, conditions and terms for making rent for land plots state-owned by the Kabardino-Balkarian Republic and the ownership of which is not delimited”.

Hence, the economic mechanism of state control of investment in environmental projects affects the degree of efficiency of the investment project, namely, reducing costs and increasing profits, which significantly reduces the payback period of the investment project and, accordingly, stimulates investment.

As can be seen from the diagram shown in figure 2, the following – the eighth and ninth stages of the proposed algorithm consist in the implementation of plans and mechanisms of state regulation and analysis of the observed environmental and economic effect, after which, based on the final results, the state plans and rationalization programs in the regions of the mechanisms for stabilizing investment activity are corrected.

Thus, state control of investment in environmental projects will lead to the optimization of the procedure for developing a system of state regulation measures aimed at increasing investment in highly profitable environmental-oriented activities with minimal payback periods, as well as a legislative framework that meets the objectives of state policy in the field of investment, industry and ecology.

In addition, thanks to state regulation, there is a real opportunity to choose from the whole variety of environmentally-oriented investment projects the best options according to criteria specially developed for these purposes. If the investment projects submitted for consideration do not meet the specified requirements, it is necessary to prepare optional criteria for the selection of backup options, while giving preference to investment projects that have at least minimal economic efficiency.

State regulation of investment processes will make it possible to single out indicators that determine the general direction of improving regional policy in the field of investment, industry and environment, revealing the magnitude and methods of government influence on investment decisions based on economic benefits and taking into account the outflow and inflow of financial resources, the cost of which constantly varies depending on the time and situation in the economy.

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