

RESOURCE CONSERVATION AS A BASIS FOR ENVIRONMENTAL MANAGEMENT: ENVIRONMENTAL AND LEGAL ASPECTS

Elena Luneva,

Kazan Federal University, vilisa_vilisa@mail.ru

Abstract: based on the analysis of the works of Russian and foreign economists, legal scholars, and representatives of various natural sciences, the article examines the environmental and legal aspects of resource conservation as the basis for rational environmental management in the Russian Federation. In the Russian environmental and legal reality, resource conservation is given an independent place in the regulation of environmental management. The field of legal support for resource conservation includes not only the economical use of natural resources, but also energy conservation. We analyzed the international documents, in which the Russian Federation is involved, within the area of our study. We showed the expansion of international cooperation in the application of the latest resource conservation and energy conservation technologies in the interests of the entire world community. We revealed that the legal regulation of resource conservation in the Russian environmental legislation is poorly developed. We made a conclusion about the feasibility of introducing the legal principles of resource conservation in the legislation on environmental management. The support of complex investment projects involving the mechanisms of public, municipal and private partnership in the resource conservation orbit is significant. Unlike resource conservation in general, energy conservation is characterized by an extensive regulatory framework. The set of legal norms on energy conservation is a comprehensive legal formation. Many bylaws and departmental documents have been adopted in the field of energy conservation. Positive experience on domestic legal regulation of energy conservation should be extended to similar public relations on resource conservation.

Keywords: environmental management, resource conservation, energy conservation, resource conservation technologies, environmental legislation, legal regulation

1. INTRODUCTION. Resource conservation is relatively often mentioned in various Russian political and legal documents. They recognize the importance of resource conservation technologies. Thus, according to clause 12 of the Fundamental Principles of the State Policy in the Field of Environmental Development of the Russian Federation for the Period up to 2030 (approved by the President of the Russian Federation on April 30, 2012) in solving the problem of ensuring the environmentally-oriented growth of the economy, the innovative *resource conservation* technologies are being introduced with the active participation of the state, business, scientific and educational communities, public associations, and non-profit organizations. Similarly, clause 14 of the Fundamental Principles of the State Policy in the Field of Industrial Safety of the Russian Federation for the Period up to 2025 and the Future (approved by the Order of the President of the Russian Federation No. 198 dated May 6, 2018), the introduction of *resource conservation* and environmentally friendly technologies as a priority is one of the principles of the state policy in the field of industrial safety. Clause 20 of the Strategy of Scientific and Technological Development of the Russian Federation (approved by the Order of the President of the Russian Federation No. 642 dated December 1, 2016) indicates that in the next 10-15 years, the areas that will ensure the transition to *resource conservation* energy will be the priority of the scientific and technological development of the Russian Federation. Thus, the cited documents clearly show the direction of the Russian state to obtain a resource conservation effect in all activity areas. Therefore, the problem of legal regulation of resource conservation relations is relevant, timely and acute. Its importance is determined by the fact that resource conservation has a positive impact on the quality of the natural environment, which affects not only the economy, but also the health of the nation [1]. *The purpose of this paper:* to reveal the field of resource conservation as the basis for environmental management in Russia from the standpoint of environmental legal aspects.

2. MATERIALS AND METHODS. The study of environmental and legal aspects of resource conservation as a basis for environmental management was carried out on the basis of an analysis of international documents, Russian legislation and papers of the lawyers specializing in the most efficient resource management, including resource conservation and energy conservation (*L. O'Donnell Erin, G.M. Durán, R.J. Heffron, Pontin Ben, Vaughan Steven, I.A. Ignatieva, E.V. Luneva, E.G. Shablova*, et al.). In addition, the findings were based on the papers of economists (*A. Kiladze, M.V. Sabanova, D.V. Chikishev*), as well as representatives of various natural sciences (*P. Zhang, N. Duan, Z. Dan*, et al.). The methodological basis of the study was formed by the dialectic method, which enabled us to know, in inseparable unity and in general connectedness, the essence of resource conservation as the basis for rational environmental management. Logic techniques in the form of analysis and synthesis, induction and deduction, comparison and synthesis, analogy and typology also contributed to the achievement of the purpose set in the introduction. Formal legal reception contributed to the understanding of the essence and significance of environmental legal norms aimed at increasing resource conservation, including energy conservation.

3. RESULTS AND DISCUSSION. The legal concept of "resource conservation" is not fixed in the legislation of Russia. Its definition is contained only in the technical documentation. According to clause 5.16 of GOST R 52104-2003. National Standard of the Russian Federation. Resource Conservation. Terms and Definitions (approved by the Resolution of the State Standard of the Russian Federation No. 235-st dated July 3, 2003, edited dated November 30, 2010), resource conservation is an organizational, economic, technical, scientific, practical and informational activity,

methods, processes, a set of organizational and technical measures and activities accompanying all stages of the life cycle of facilities and aimed at rational and cost-effective use of resources. Resource conservation consists of energy conservation and material conservation (including natural resources). According to "GOST R 55103-2012. National Standard of the Russian Federation. Resource Conservation. Effective Resource Management. Basic Provisions (approved and enacted by the Order of the Rosstandart No. 804-st dated November 14, 2012, the document was put into effect on January 1, 2014), energy conservation includes the implementation of legal, organizational, scientific, industrial and economic measures aimed at rational and cost-effective use of fuel and energy resources and involvement of renewable energy sources into economic circulation. Hence, energy conservation is a part of resource conservation, therefore, the identity of most of the used means of legal influence should be observed here. It is not by chance that the terms "resource conservation" [2, 3] and "energy conservation" [4, 5, 6] are often used either as analogues of rational environmental management, or when describing its features, in the legal science. According to clause 41 of the Concept of Foreign Policy of the Russian Federation (approved by the Order of the President of the Russian Federation No. 640 dated November 30, 2016), Russia stands for expanding international cooperation in order to ensure environmental safety and combat climate change on the planet, based on the need to use the latest energy and resource conservation technologies in the interests of the world community. Such cooperation is expressed in the international documents in which Russia is involved. Thus, the Treaty between the Government of the Russian Federation and the European Bank for Reconstruction and Development on the Establishment of the Technical Cooperation Account of the Russian Federation and the European Bank for Reconstruction and Development (Bulletin of International Treaties. 2014. No. 2. P. 37-76) pays particular attention to improving energy efficiency. There, energy efficiency is recognized as one of the key challenges facing Russia, for which the goal was to reduce the energy intensity of the Russian economy by 40% by 2020. The Directive 2006/66/EU of the European Parliament and of the Council of the European Union "On Batteries and Accumulators, on Waste of Batteries and Accumulators and on the Repeal of the Directive 91/157/ EEC" (<http://eur-lex.europa.eu>) in the field of resource conservation relies on recycling. The latter will ensure optimal resource conservation in the operation of batteries and accumulators and the resulting waste.

In economics, resource conservation is considered as a process of eliminating losses and activating unused reserves [7]. This approach is very broad and covers not only the economical use of natural, but also other resources. In such a broad understanding of resource conservation, the Russian legislator primarily links it to technical regulation. The purpose of technical regulation is to ensure energy efficiency and resource conservation. In accordance with clause 3 of Article 7 of the Federal Law No. 184-FZ dated December 27, 2002 (as amended on July 29, 2017) "On Technical Regulation", the technical regulation should contain requirements for energy efficiency and resource conservation. However, legislation on technical regulation is not applied to public relations related to the development, adoption, use and fulfillment of requirements in the field of environmental protection, although it has a tangible impact on it, in the Russian Federation. There should be a special legislation. However, the Federal Law No. 7-FZ dated January 10, 2002 (as amended on December 31, 2017) "On Environmental Protection" contains a single law on resource conservation.

Based on the content of clause 1 of Article 36 of this Law, it follows that resource conservation contributes to environmental protection, restoration of the natural environment, rational use and reproduction of natural resources. It can be seen from the above circumstance that resource conservation through the restoration of the natural environment, the rational use and reproduction of natural resources forms the basis of rational environmental management in general. Indeed, the use of resource conservation technologies leads to a reduction in the consumption of natural and other resources and, consequently, to a reduction in the negative impact on the environment by minimizing waste, discharges and emissions. Such a scarce legal framework for resource conservation relations requires the introduction of the legal principles of resource conservation into the legislation on environmental management. Resource efficiency will allow sustainable environmental management moving into the category of rational as the most effective way of interaction between the society and the nature. It is important to thoroughly work out the legal issues of implementing the projects of public-private partnership in the field of resource conservation. Various support of complex investment projects involving the mechanisms of public, municipal and private partnership in the resource conservation orbit is consistent.

In natural resource legislation, incentive legal measures should be provided for business executives to reduce energy intensity, water intensity, etc. to the indicators of previous years. Intensive resource conservation type of production will not only contribute to the preservation of the natural environment, but also allow withstanding the competition between the enterprises [8]. Resource conservation is associated with the introduction of the best available technologies. We should recall that the requirements for the best available technologies apply only to the objects of the 1st category, as well as to objects of the 2nd category of negative impact on the environment, if there are relevant information and technical reference books on the best available technologies in the case of exercising the right to receive a comprehensive environmental permit - switching to the principles of the best available technologies. The Order of the Ministry of Industry and Trade of Russia No. 1742 dated May 31, 2017 "On Approval of Methodological Recommendations on the Formation of Industry and Corporate Programs on the Transition to the Principles of the Best Available Technologies, Including Those Related to Informatization, Energy Efficiency and Resource Conservation, Reducing Negative Emissions to the Environment" (the document was not officially published) indicated that such recommendations were developed for the purpose of methodological and consulting support to the federal state unitary enterprises, federal government agencies, public corporations, organizations with state participation in the transition to the principles of the best available technologies and the introduction of modern technologies. The best available technologies help to save energy resources, establish environmentally friendly production of goods and performance of

works, as well as stimulate investment to introduce the resource conservation plants. Green production is one of the most important tools for promoting sustainable development [9]. Due to the cost reduction caused by the resource saving, the corresponding environmentally friendly technologies are more easily accepted by the enterprises. For example, they include technologies for the disposal of cattle manure with the production of environmentally friendly organic fertilizers in the biogas plants. They allow agricultural producers creating energy conserving autonomous production. Resource conservation technology for the production of bio-fertilizers from cattle manure brings to the agricultural enterprises an average of 4.69 tons of mineralized organic fertilizers per day, the proceeds from the sale of which amount to 0.056 million US dollars [10]. Consequently, the implementation of eco-innovation activities in the system of the agro-industrial complex seems to be quite profitable [11]. The regulation of energy conservation as compared with resource conservation is generally based on a massive regulatory framework in Russia. The key law here is the Federal Law No. 261-FZ dated November 23, 2009 (as amended on August 3, 2018) "On Energy Conservation and Energy Efficiency Improvement and on Amendments to Certain Legislative Acts of the Russian Federation". This law is aimed at creating a legal, economic and organizational basis for promoting energy conservation and energy efficiency. Many legal acts of various branches of Russian law are aimed at legal support of energy conservation, which indicates the complexity of the relevant legal formation [12]. In addition, a number of bylaws and departmental documents have been adopted. The problems related to inconsistency of legal norms of different sectoral affiliation arise in the field of legal regulation of relations on energy conservation and energy efficiency improvement. A significant amount of judicial practice has been accumulated in complying with the requirements for the introduction of metering devices for energy resources. Due to this circumstance, *I.A. Ignatieva* points to the need for a systemic vision of the mechanisms for implementing state policy in the field of energy conservation and energy efficiency [13]. It should be noted that, despite the existing shortcomings of legal technology, the legislation on energy conservation has been relatively developed and tested in practice. Positive experience on domestic legal regulation of energy conservation should be extended to similar public relations on resource conservation in general.

4. CONCLUSIONS. The legal regulation of resource conservation in the Russian environmental legislation is poorly developed. In order to increase the effectiveness of the relevant legal impact, it is advisable to fix the legal principles of resource conservation in the legislation on environmental management. The support of complex investment projects involving the mechanisms of public, municipal and private partnership in the resource conservation orbit is also necessary. Unlike resource conservation, energy conservation is characterized by a developed regulatory framework. The set of legal norms on energy conservation is a comprehensive legal formation. Many bylaws and departmental documents have been adopted in the field of energy supply. Positive experience on domestic legal regulation of energy conservation should be extended to similar public relations on resource conservation.

5. SUMMARY. Resource conservation as a basis for environmental management is associated with the sustainable development of the Russian people. Therefore, the area of resource conservation will be one of the most promising and attractive areas of not only legal, but also other sciences for a long time.

CONFLICT OF INTEREST. The author confirms that the data presented does not contain any conflict of interest.

ACKNOWLEDGMENTS. The work is performed according to the Russian government program of competitive growth of Kazan Federal University.

References

1. *Luneva E.V.* The Concept of Ecosystem Services in Ensuring Environmental Management: Economic and Legal Aspects // *Revista Publicando*. Vol. 4. № 13 (2). 2017. PP. 961-970.
2. *O'Donnell Erin L.* At the Intersection of the Sacred and the Legal: Rights for Nature in Uttarakhand, India *Journal of Environmental Law*. 2018. № 30 (1). PP. 135-144.
3. *Pontin Ben, Vaughan Steven* Environmental Law: A Very Short Introduction // *Journal of Environmental Law*. 2018. № 30 (1). PP. 174-177.
4. *Durán G.M.* Sheltering government support to 'green' electricity: The European Union and the World Trade Organization // *International and Comparative Law Quarterly*. 2018. 67 (1). PP. 129-165.
5. *Serkin C., Vandenbergh M.P.* Prospective Grandfathering: Anticipating the Energy Transition Problem // *Minnesota Law Review*. 2018. № 102 (3). PP. 1019-1076.
6. *Heffron R.J., Rønne A., Tomain J.P., Bradbrook A., Talus K.* A treatise for energy law // *Journal of World Energy Law and Business*. 2018. № 11 (1). PP. 34-48.
7. *Chikishev D.V.* Resource Conservation as an Economic Category // *Transport Business of Russia*. 2011.No.3. P.118-120.
8. *Sabanova M.V.* Evidence of Cost Analysis in the Need for Resource Conservation // *Economic Analysis: Theory and Practice*. 2009. No. 30. P. 56-62.
9. *Zhang P., Duan N., Dan Z., (...), Shi F., Wang H.* Impact of Different Factors on the Pollution-Reduction and Resource-Saving Effects of Cleaner Production // *ACS Sustainable Chemistry and Engineering*. 2018. 6 (7). PP. 9480-9487.
10. *Petrovna D.-V., Alekseyevna P.-S., Konstantinovna O.-M., Valerievna S.-A., Antonovich S.-Y.* Resource-saving technology for manufacturing of environmentally-friendly organic fertilizers // *Dyna (Spain)*. 2018. 93(4). PP. 398-403.
11. *Kiladze A.* Economic Indicators of Resource Saving in Agriculture // *Agricultural Business: Economy - Equipment - Technology*. 2011. No. 8. P. 39-40.
12. *Shablova E.G.* Legal Support of Energy Conservation Policy: Domestic and Foreign Experience // *Business, Management and Law*. 2015. No. 2. P. 78-83.
13. *Ignatieva I.A.* Some Issues on the Practice of Applying Legislation on Energy Conservation and on Energy Efficiency Improvement // *Law*. 2015. No. 1. P. 62-67.